Title:

Developing an Adaptive Design of Financial Training for uptake in Small Enterprises.

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Declaration

This thesis is an original work and contains no material which has been accepted for the award of any other degree or diploma at any university or equivalent institution and, to the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

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Abstract

The research's overall aim was to investigate whether a methodical training development process could improve the uptake of financial management training aimed at non-specialists working in small enterprises.

Invitations were issued to non-financial specialist members of small enterprises to take part in financial management training and provide relevant feedback over an extended period on the impact of the training. The training course was adapted and developed in later versions through an iterative adaptive process based on feedback, resulting in a successive approximation training model that improved uptake of the training programme's key learning aims. The feedback process allowed a grounded methodical approach to find recurrent themes and match these with key underlying theories that are associated with training development and management accounting applicability. These relevant theories were incorporated into the build process to aid the improvement of the uptake of the training.

The research concludes that when a successive approximation of a financial management training model is developed using an adaptive iterative design process, the result will be that the subsequent financial training will enhance self-assessments of financial competency. Furthermore, there will be improved adoption of the training when key applicable theories are incorporated into the model design maximising the effectiveness of the financial management training aimed at small enterprises.

This research is informative as it contributes to the process needed to build a perceived effective financial management training programme for non-finance specialists working in small enterprises.

Key Words: Small Enterprise, Financial Training, Iterative Constructionist Design, Contingency Theory, Absorptive Capacity Theory.

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1.1.1: The History of the Research Problem.

In 1919, a small business entrepreneur by the name of Jack Cohen set up a stall in a London East End market selling groceries that were surplus stock from other traders in the market. At the end of his first day of trading, he sold £4 of groceries and made a profit of £1. One hundred plus years later Jack Cohen's modest enterprise is a public limited company listed in the FTSE 100 list of major UK corporations. It generates over £60 billion in annual revenue, employs around 330,000 people worldwide, and produces approximately £6,000 in profit every single minute of every single day. This enterprise is TESCO Plc., (Vikas, 2022).

Though Tesco's fortunes have fluctuated in recent years, the story of the company illustrates how a small sole trader enterprise with a modest revenue base can blossom into a major contributor to a country's economy. It can also provide huge employment opportunities in the company, as well as in the supply chain and it can stimulate wealth creation through shareholder ownership, (Lobel, 2017).

However, with every small enterprise success story that grows into a Tesco there are thousands that fail. Sixty percent of UK based small enterprises fail within their first three years and 20% simply stop trading within their first twelve months of existence, (Horne, 2022).

With the COVID-19 pandemic hitting early in 2020 the pressure on UK small enterprises became more acute. The number of UK businesses that ceased trading in 2020 was almost three hundred and twenty thousand, as reported by the Office for National Statistics (ONS).

This was 11% of all trading UK businesses in 2020. The once-in-a-lifetime global pandemic contributed to this exceedingly high rate of failure despite government support and aid, (Horne, 2022).

But since the Covid-19 pandemic, an economic downturn has resulted in continually challenging conditions for UK small enterprises. Therefore, as the pandemic crisis ended, the number of small business failures remained at a ten-year high in each quarter of 2022, with small enterprises struggling to recover from the disruption to their trading conditions the pandemic caused. These post-pandemic other external factors are collectively known as the 'cost of living' crisis and have contributed to more than 6,700 small business insolvencies in Britain in the second quarter of 2023, (Hinton, 2023). This is a significant increase in the rate of insolvency that took place during the pandemic and could be due to small businesses being offered substantial financial support during the pandemic to avoid business failures and mass job losses during a national crisis, (Hinton, 2023). What is concerning, though, is that the number of small business failures over the second quarter of 2023 is fifty percent higher than the same quarter pre-pandemic in 2019, where the average small business quarterly year failures in the last ten years were 4,199, (Hinton, 2023).

These failures of small enterprise affect the UK economy significantly. According to the government regional commerce statistics, there was 5.51 million small enterprises in existence in the UK in the year 2023. The government's statistics also show that Small Enterprises employed 16.7 million people in the UK in this year, (Office for National Statistics, 2023).

Therefore, small enterprises are a critical part of the UK economy in terms of absorbing employment and creating wealth, as well as providing essential local business services as an alternative to large corporations such as Tesco. When a small enterprise closes, not only do the owners lose their livelihoods, but employees lose their jobs as well. With many small enterprises based in areas of weak economic development it could be a long time before these small enterprises ex-employees find alternative work or are required to relocate out of the area, further accentuating the economic impact of small enterprise failures on a regional basis. Though these small enterprise job losses do not grab the headlines to the same level that happens when large organisations close or announce redundancies, their multiplier effect on UK employment rates and the economic performance of the country is more pronounced as they are not focused on one region, (Hinton, 2023).

The outlook for small enterprises in the UK continues to look bleak in 2024 as the UK skirts with recession, with stubbornly high inflation, high interest rates and energy prices remaining high with the retail and hospitality sector particularly affected with a high rate of them ceasing to trade on a quarterly basis, (Monaghan, 2023).

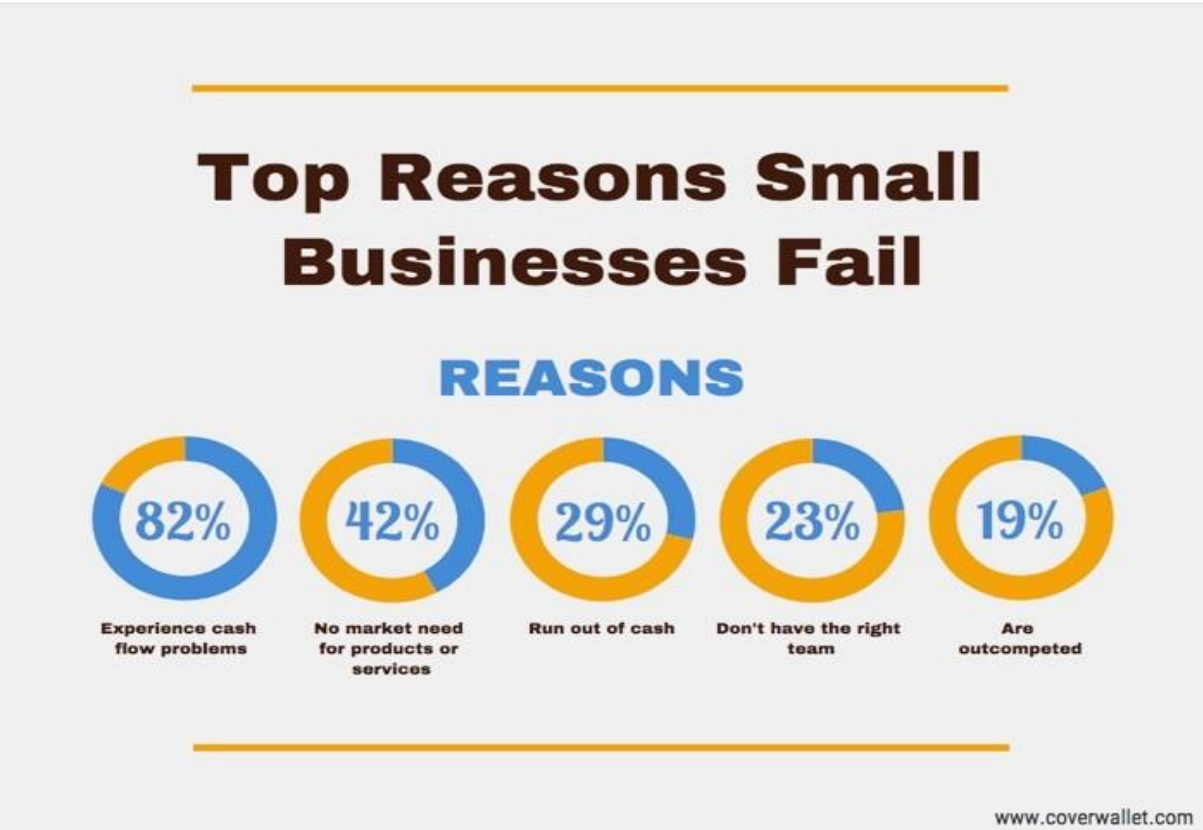
Therefore, there is an acute need to understand the underlining causes of these failures, which go beyond the uncontrollable macro-economic factors, (Monaghan, 2023). Small commercial businesses comprise 99% of all private sector business in the UK, employing up to 15.7 million people in 2016, (Rhodes, 2016). As the adverse global macro-economic factors that negatively impact small enterprises survival continues then there is a greater need to understand the controllable factors that affect small enterprise failures and a greater need to find some solutions to these, (Monaghan, 2023).

The macro-economic factors that have led to the recent spate of increased levels of UK small enterprise failures can be largely attributed to a range of a set of unique economic conditions.

These are such factors as high borrowing costs, inflation running higher than in recent years, the global geopolitical situation, and the continual need to adapt to the reality of Brexit. These are unlikely to change soon as the underlying causes of these failures, such as the Ukrainian war and other factors, continue to adversely affect global supplies, (Monaghan, 2023).

However, there are a variety of micro reasons and causes of small enterprise failures, that this study looks to provide solutions to. These are the structural causes of small enterprise failures. Figure 1 sets out the core reasons for UK Small Business failures according to Santa Maria, (2021).

Figure 1: **Why Small Enterprises Fail:**



Source: Santa Maria, LinkedIn 2021.

There is a clear sign from Figure 1 that running out of cash is a main reason small enterprises fail, much more so than other key factors such as being outcompeted or having a lack of interest from the market. In other words, small enterprises that run successfully in terms of commercial popularity still end up ceasing due to continual cash problems, (Gerber, 2021). Small Enterprises suffering through the inability to use cash efficiently and invest effectively are key causes of many small business failures and could be a result of a knowledge gap on the part of small enterprise owners and workers, (Dahmen, et al, 2014).

There has been considerable attention paid in academic literature of the lack of competence in key financial skills within the small business sector that may have an impact on the number of small enterprise failures. These studies are international as well as UK focussed. There is a consensus that financial management skills are critical for small business owners and managers to help them sustain and grow their enterprises. An example of the lack of financial management skills is that small businesses have poor cash management. Small enterprises do not fully appreciate that money needs to be flowing into the business before they buy goods and pay for certain business expenses, (Dahmen, et al, 2014). Many small enterprise owners realise they have cash flow problems almost from the onset so they borrow money from friends, family, banks or other funding sources to cover the first one or two months of expenses and then there is no real understanding on what to do after this if the enterprise is not self-funding at that point, generating enough cash to pay its way, (Dahmen, et al, 2014).

The ICAEW, in their 2023 report ‘Skills Gap in the UK’ stated that small businesses' lack of competence in key financial management, such as cash flow management and effective budgeting, is having a major impact on these entities’ ability to survive past the key first eighteen months. Only those small businesses that have large reserves of accessible cash can carry through this learning curve period of financial management competence that seems to come about through experience rather than structured training or learning, (ICAEW, 2023).

Therefore, current scholarly and policy research suggests that if small business owners and their relevant employees were more financially skilled, it could improve their survival, growth potential, and financial performance levels, as they could make more basic and astute financial management decisions. In 2014, Dahmen et al undertook an extensive study to find any correlation between formal financial skill qualifications and the success of the small businesses they owned and ran. Their research concluded that those business owners who raised their financial management skills through formal training improved the performance of their entities in terms of profitability and sustained growth.

In 2017, Studler stated that small enterprise owners and managers do not have to be financial wizards, however, they do need to understand the basic financial terms and techniques. In particular, he said, they need to be competent in receivables control as well as other key management accounting disciplines such as cash flow management, budgeting, forecasting, capital investment appraisal and control review.

Overall, scholarly research evidence suggests that a lack of financial acumen on the part of small enterprise owners and managers is a significant contributor to financial mismanagement within small enterprises, leading to unnecessary liquidity issues. In their study, Dahmen, et al (2014), found that managers of small businesses do not understand the relevant financial risk allowing their businesses to fall into severe financial problems and their lack of understanding is preventing them from making the optimal management decisions that will allow their enterprises to survive and prosper, (Dahmen, et al 2014).

An absence of fundamental financial skills needed to run a business is a reason for poor financial decisions. These financial skills are essential because they help the small business owner to be able to respond properly to commercial opportunities and improve their overall competitiveness.

The financial management competence skills needed are other personal development skills, occupational skills, and information technology skills that are fundamental to have to support the running of a strong, growing small business, (Studler, 2017). However, there is a lack of awareness and enthusiasm on the part of small enterprises owners and managers to the idea of increasing their competence in basic financial management and planning, or at least there is a lack of enthusiasm to do what is necessary to improve these skills. Therefore, there is little willingness to invest in increasing the skill base around financial competence. This has had a detrimental impact on the financial running of small enterprises, (Horbach, et al, 2021).

As early as 2006, Fuller-Love pointed out that despite the barriers that exist, it is important that small businesses overcome these obstacles and take on extra key and essential management skills training, including financial management training that could play a pivotal role in improving the financial performance of the small enterprise. These barriers are a lack of funds to pay for the training, time, and general inclination to go on accounting training as the benefits are not obvious to people working in small enterprises, (Storey, et al, 1997).

However, over time, government-sponsored schemes have supported small business start-ups and to help stimulate small firms' growth potential, which promotes the importance of management training, including financial management training, (Fuller – Love, 2006). In general, in comparison to larger organisations, small enterprises carry out less business and management training than larger organisations even though it could be argued that smaller enterprises need more management style training than larger organisations as smaller enterprises lack the relevant staff skills in these areas, (Storey, et al, 1997).

Earlier studies have found it challenging to find the exact statistical level of impact that a lack of financial acumen has on small enterprise failures, but there is enough academic and non-academic evidence to suggest it is a factor that leads otherwise successful small enterprises into financial problems.

1.1.2 - Status of Small enterprises importance to the UK economy.

The following section lays out key recent statistical facts in relation to small enterprises in the UK as well as literature-based narrative that explains how important small enterprises are to the United Kingdom (UK) economy. This shows how critical it is that small enterprises survive, prosper, and grow to fuel the UK economy, boost job creation and investment in innovation raising tax revenue and enhancing the overall quality of life in the UK. For the purposes of this research small enterprises include non-profit organisations of all types where the key components of management accounting also provide essential information to aid these types of enterprises to be sustainable.

First there is a need to set up what is meant by a small enterprise in the UK. A review commissioned by a UK House of Commons committee to analyse the impact of small enterprises on the UK economy defined a UK small enterprise as any private or public enterprise with between 9 and 50 employees. Anything less than nine employees classified as a 'Micro Organisation,' (Ward, et al 2014). Micro businesses are not the targeted population for the purposes of this research study as their need for in-depth financial management is not as an acute as the 'small' sector, though the still have a need as well.

The European Commission defines a small enterprise within the following small medium sized parameters. Figure 2 sets out these parameters:

Figure 2: EU Categories of Organisations.

Company Category	Staff Headcount	Turnover	Or Balance Sheet Total
Medium Sized	<250	< 50 mill Euro	<43 mill Euro
Small	<50	< 10 mill Euro	< 10 mill Euro
Micro	<10	< 2 mill Euro	< 2 mill Euro

Gov, UK, (2022)

Small commercial businesses in the UK in the first quarter of 2024 represented 61% of all private sector jobs – and a 1.7% increase compared to the 2022 average. In 2024 there were 1.4 million employing all types of small enterprises, profit and non-profit, and 16.7 million people employed in these enterprises, (Lennox, 2024).

In terms of how commerce, the UK exports from small enterprises, as of 2023, 45% of goods and services exported internationally from the UK was from small businesses with the average value of each item exported below £2,000. Despite the disruption caused by Brexit Europe is still by far the highest destination of small business exports with 93% of all small business exports to European customers. The United States of America is the second highest destination of exports from small businesses, (FSB, 2023).

Overall, small enterprises are critical for job creation and economic development within the UK and the UK government recognises this by continuing to support them to boost small enterprise entrepreneurism that will fuel growth and overall productivity, both of which have suffered in recent years, (FSB, 2023).

The significance of small enterprises to western economic development has been discussed and recognised in literature extensively for the last century, with small enterprises providing more private employment to the United States of America economy than any other sector and as such were a critical factor in sustaining the fledgling economy of the United States in the early 1930's contributing up to fifty percent of the gross national product, (Ward, et al 2014).

The European Union (EU) have said that small enterprises 'are the backbone of Europe's economy, representing 99% of all businesses and driving the continent's green and digital transformations.' In 2023 The EU has significantly increased financial support to small enterprises in the face of global challenges by providing huge financial investment to boost competitiveness and resilience of European small enterprises, (European Commission, 2023). There is a clear recognition by the EU that small enterprises are a too important sector to the economic prosperity of the European Union leave to fend for themselves and so there will be prolonged increased support to them to help them prosper in an ever-competitive commercial world, (European Commission, 2023).

The importance of small enterprises to the UK has increased in last few decades due to the change in the UK industrial landscape. In this post-industrial period in the UK the significance of small enterprises in fuelling the economy has gained increased recognition and perceived importance in providing employment and wealth. In 1979 when Margaret Thatcher became the UK's prime minister there were 6.8 million people employed in UK manufacturing both in the main large manufacturers and those in the supply chain. By 2010 there were less than 2.5 million, a drop of 63%, (Prime, 2016). For those affected an alternative to long term unemployment was self-employment either using their transferable skills in a similar smaller manufacturing ability or in unrelated less skilled service orientated small businesses. Hence came the rise in Britain of the 'Self-Employed Man,' (Prime, 2016).).

In 2014 Carter et al noted that small enterprises were a significant player in the internationalisation of business in the 20th century with up to 35% of the world's manufactured exports deriving from small enterprises by the 1970s boosting living standards in developed and developing nations contradicting the perception that globalisation was fuelled by large multinationals alone.

Small enterprises impact on the UK economy was driven by the rise of the service sector from the 1980's with the contribution to GDP rising from 59 to 72 percent over that decade. These new emerging service enterprises were initially smaller enterprises, (Carter, et al, 2014).

In 2016, Prime R said that small enterprises are now a major driver in the UK economy, fuelling growth, innovation, and productivity. Simply put, small enterprises are vital for the UK economy.

Not only have small enterprises been vital to the continuing growth in post-industrial UK economy but will continue to be in the future with their importance set to grow in an ever-de-industrialised UK. As a result, any research that looks to prove factors that will aid their survival and growth is justifiable and indeed necessary.

1.1.3 – Status in Literature of Small enterprises current position within the UK economy.

The next section, (1.4), will look at the internal reasons why small enterprises fail. These are the direct causes of small enterprise failure that this research is trying to address. It will do this by developing a solution using relevant theories.

However, it is worth covering the wider, external factors that affect small enterprises performance and their ability to survive, grow, and prosper. This is to illustrate why it is important for UK small enterprises to financially manage themselves within controllable factors so that they are able to adapt and cope with any uncontrollable external pressures that arise.

In January 2023, Sweney reported that the main threats to UK small Business post pandemic was the cost of the living crisis brought about from various international factors. There is the threat that this will lead to recession and further downturn in consumer spending, higher interest rates making it more expensive to borrow to invest in the business to improve consumer appeal of the business, labour shortage brought about post Brexit and new restrictions on immigration as well as an embedded skills shortage as a result of an unsynchronised education systems that doesn't seem to be educating and training young people to current business needs. The geopolitical situation as of 2023 is having a serious detrimental effect on the global supply chain leading to small businesses being unable to supply their customers leading to an evaporation of customer loyalty, crucial to small business growth and survival. There is also the threat of rapid developing technological advances such as Artificial Intelligence that could push some small businesses into obsolescence quickly, (Sweney, et al, 2023).

Additionally, there are the emerging threats from cybersecurity which is becoming one of the biggest threats businesses operations post pandemic. The specific issue with small enterprise in relation to cybersecurity is that they are not as targeted as much as big business, but the problem is they do not have the resources to protect themselves from cyber threats or deal with it when it does happen and allow them to revert to full operational level quickly, (Sweney, et al, 2023).

The prospects for small businesses in the UK as of 2024 are looking bleak with the heightened macro external pressures they are facing. A report in February 2024 the Enterprise Research Centre, a UK government sponsored organisation, revealed that UK small business growth has slowed over the last decade with unique macro-economic forces having a negative influence on the prospects of small enterprises in the UK such as Brexit, covid 19 and various international tensions causing disruption to global chain supply. The last decade showed a forty percent drop in the number of UK small enterprises who increased their workforce, with these small organisations reducing their workforce to cope with the new tougher trading conditions they must face (Sweney, et al. 2023).

A comprehensive report: PayPal's Business of Change: Wellness & Empowerment Report 2022 found that more than seventy percent of small enterprises stated that they are struggling to cope with the cost-of-living crisis, and that more than thirty three percent of these small enterprises believe they may cease trading within the next twelve months. This comprehensive study of 1,000 small enterprises in the UK found that around half of them felt very pessimistic unsure about the long-term future of their business, a factor that is not only affecting them financially but also affecting them negatively on their wellbeing. Forty percent of small enterprises surveyed by PayPal also said that their customers spending habits have reduced which is impacting negatively on their cash liquidity flow. Another thirty percent of those surveyed said energy costs rises have had a catastrophic impact on their prospects especially when they are put on new fixed tariffs that are sometimes 250% of their previous fixed contract. There is also the impact of having to offer higher wages to attract staff and staff turnover is high as staff move onto more ‘glamorous’ jobs with bigger organisations where perceive that job security and career progression opportunities are better. The report concluded that sixty two percent of small business owners are considering declaring themselves insolvent and ceasing to trade, (PayPal, 2022).

However, on a positive the report highlights how small enterprises have been adapting and changing in a quick agile way to the new tougher prevailing macro-economic conditions which is a virtue of British small business fortitude and versatility. The report empathises the need the for the UK government to continue to allocate significant sums of resources to helping and supporting UK small enterprises in these tougher conditions, but that support needs to be better targeted based on the type of support small business are saying they need and to provide that support specifically on these areas, (PayPal, 2022).

The funding support to small enterprises presently is too scattered and widespread, and as such is not supporting small enterprises where they need the help now. Small enterprises need more investment and support on accessing new overseas post Brexit markets, improving innovation and help with their green targets and with supporting the welfare of their employees to reduce long term staff absence that is proving to be a significant burden on small enterprise operations, (PayPal, 2022).

This section covered the key external macro factors that affect UK small enterprise’s growth and survival. This section is to illustrate the toughening environment that UK small enterprises operate in and the increasing risks to their survival. It is to further emphasise the importance to contribute towards mechanisms that will help small enterprises navigate these toughening conditions. This research is working towards developing effective financial management training for UK small enterprises that will better equip them to manage their finances internally and which should place them in a stronger position to deal with the tougher wider economic conditions.

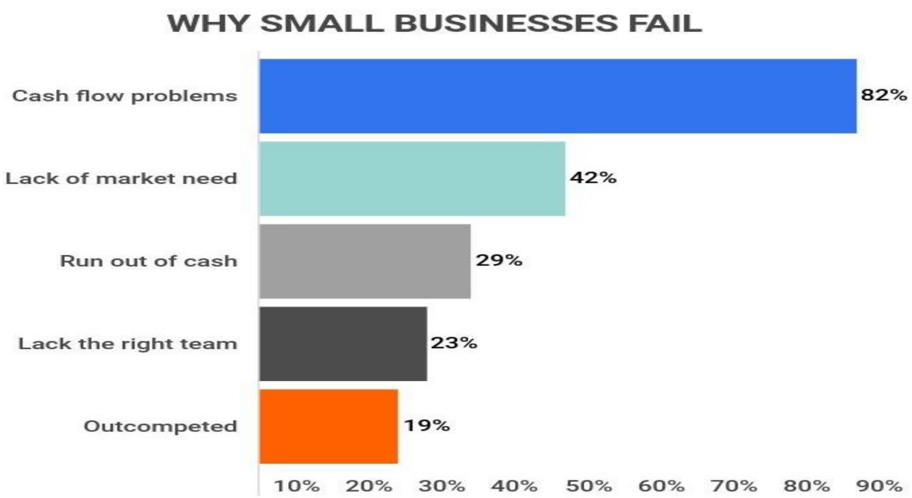
The next section investigates the internal organisational issues and pressures impacting the survival and growth of UK small enterprises. The next chapter also investigates how much of a factor a lack of an appropriate level of skills in internal financial management in UK small enterprises contributes to their problems and to their ultimate failure.

1.1.4 The status in literature of the impact on Financial Competence on UK Small Enterprises.

This section covers the key reasons for small enterprises failing within the UK that are internal factors. These are the factors that are within small enterprises own control. Specifically, this section focuses on the impact of small enterprise's supposedly lack of internal financial competence on the prospects of UK small enterprises.

Though this research focuses on the underlying impact of the lack of financial management competence as one of the key drivers for the number of small enterprises that fail each year there are a variety of factors that impact UK small enterprise prospects and contribute to the reasons for those that fail. In 2022, Mazur said that in the last decade in the UK, 22% of small enterprises fail in the first year and 50% in the first five years. His research revealed that small enterprises who fail make common mistakes that lead to their demise with lack of financial acumen contributing significantly to these failures. Figure 3 sets out the reasons for business failures in the last:

Figure 3 – Reasons for Business Failures.



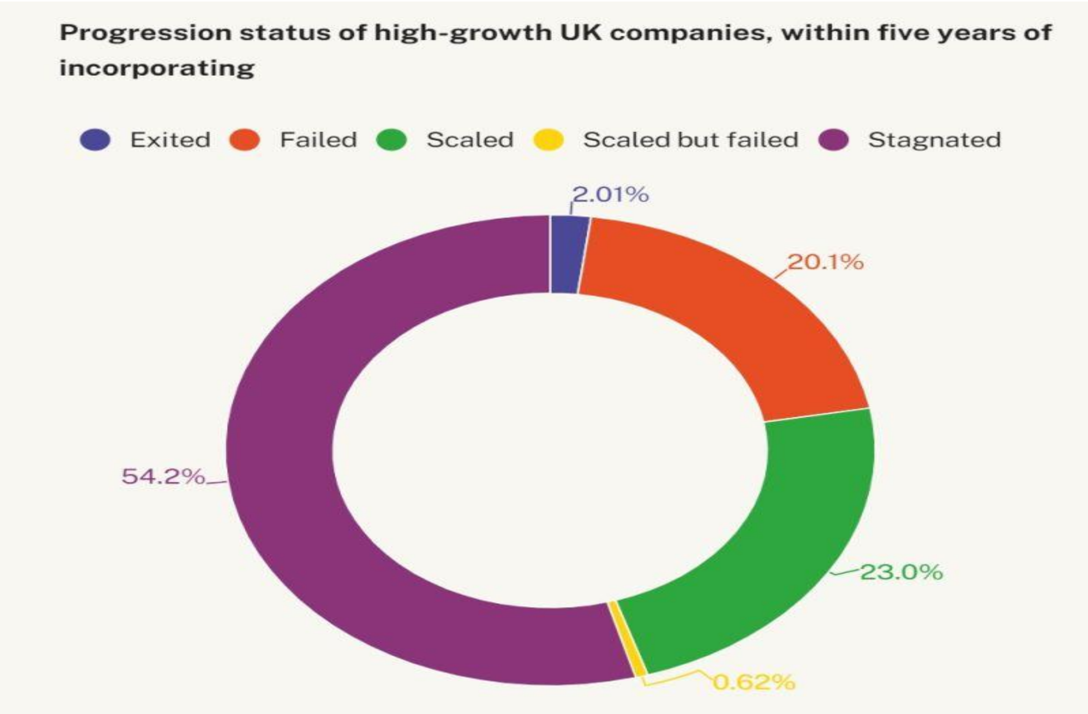
Source from Mazur (2022)

As seen from figure 3, a lack of cash management competence is a significant driver of these failures. Enhanced financial acumen could improve such issues as cash flow problems and common liquidity issues, (Mazur, 2022).

There has been analysis done that looks at the progress of small; start-up small enterprises in the UK that were in high growth industries where demand was high (pre pandemic) so the foundations for success were strong. According to the Office of National Statistics in 2023 the fast-growing industries for small enterprises were amongst others, consulting, social media management, financial services, web virtual assistants, cleaning service and childcare. A post pandemic survey done by Yip, 2022, found that of the 2,582 UK small new start up enterprises surveyed in fast growing industries that started operation in 2017 over twenty percent failed within the first five years of operation with only around twenty percent of these successfully scaling up their first business in this time. Out of the remaining startups that still existed after five years over half of them have stagnated with no prospects of commercial growth or increasing employee recruitment, (Yip, 2022)

Yip's analysis illustrated in figure 4.

Figure 4: Status of New small start-ups in UK after five years.



Source: (Yip, 2022)

Yip's study main conclusion of the underlying causes of the significant UK Start up failures and lack of growth included the macro external reasons that have worsened in the last few years and set out in the earlier section. Internal management issues especially poor financial management are the structural reasons for small business failure. These internal management failures are for example, not having a good understanding of how to access the best finance or how to plan and invest in the best areas that would maximise the potential for growth, (Yip, 2022).

The most recent literature has again highlighted the lack of financial acumen is adversely impacting what should be successful small enterprises. As a result, rather than growing and succeeding, they stagnate. Commentators stress the need for better financial management skills in the light of the tougher economic conditions that prevail post pandemic with the cost-of-living crisis unlikely to dissipate any time soon. In the light of this business commentators have stressed the need for small enterprise owners and managers to improve their internal financial management of the enterprises. In early 2024, Waltower said that one of the main deficiencies that is killing UK small enterprises in these tougher times is poor cash flow strategies, and with small enterprises having no cash management strategy leading to solvency issues quickly. Waltower also stated that small enterprise managers struggle with creating robust budgets that will allow them to proactively deal with the shifting external environment and as a result many small enterprises are not prepared for the adverse conditions they find themselves in such as having to deal with higher energy tariffs and higher interest rates, (Waltower, 2024).

Globally there is a substantial amount in literature that covers the influence of the lack of financial management competence on small business failures and growth problems. An analysis of United States of America small enterprises failures by a US bank found that 82% of these failures were a result of a general lack of understanding of financial and especially cash management skills. It also found that 77% of these failures were due to specifically to budgeting incompetence, or lack of budgeting and other financial management factors such as ineffective pricing and poor working capital management. This research said that small enterprises need to take out the guess work to financial management and instead either engage financial consultants or start training to improve these skills to run their enterprises with increase financial ability, (Flint, 2020).

Other current scholarly and policy research suggest that if small enterprises owners and their relevant managers were more financially skilled it could improve their survival, growth potential and financial performance levels. They would then be in a better place to make more basic and astute financial management decisions. Again, cash flow and pricing management are key attributes of management accounting discipline lacking in small enterprises, (Jackson, 2022).

In the UK studies have shown lack of financial management competency is a significant cause of small business failures, (Patton et al, 2002). Less than a quarter of small enterprises use any financial management techniques to influence their operations. But research also says that small enterprises in general would value and appreciate this type of technique to improve the insight of their business, (Miles, 2011). Research has also shown that most UK small enterprises that prevailed have managed to continue successfully with little use of internal financial management in the operation of their enterprises. However, this should not distract from the fact the high number of small enterprises fail in their early years with a lack of financial competency a significant contributory factor, (Pelz, 2019).

In his 2022 book; 'Entrepreneurship and Small Business: Start Up, Growth and Maturity', Paul Burns summarised that the key management accounting skills needed by UK small enterprises as a minimum requisite to surviving and growing were those relating to managing cash flow. He says that new start-up small enterprises struggle with cash flow and find it difficult to gain the necessary level of credit to run safely over the short period where they are waiting for cash to flow into them regularly. A lack of a reliable source of cashflow is a common problem for small new enterprises. Cash is fundamental to the smooth running of the organisation's operational functionality. Without it, suppliers will remain unpaid, and thus small enterprises will find it challenging to put supplier credit facilities in place. The company will find it challenging to grow quickly as they will not be able to increase and diversify their inventory range to take advantage of commercial opportunities. Also, if small enterprises continue to fail to pay suppliers on time or rake up high credit without reducing it, they may find credit terms removed from key suppliers and with a subsequently poor credit rating they may find it difficult to find credit from other suppliers. This would result in foreclosure due of lack of saleable stock, (Burns, 2022). There are substantial references in literature that refer to the importance of small enterprises regularly checking their cashflow carefully and that this failure to do so contributes significantly to the number of small enterprises that fail annually.

Burns also said that keeping a healthy balance sheet is critically important for small enterprises if they to grow and prosper, something owners and managers of small enterprises are not aware of in general, (Burns, 2022). The balance sheet is an important financial statement that those in small enterprises must understand to identify opportunities for funding for growth as well as helping them to understand their working capital situation. They can also use the balance sheet to identify opportunities or issues, something most small enterprise owners and managers fail to understand and take advantage of, (Francis, 2023). Small enterprises should produce an income statement regularly, at least once a month so that they can check their income and expense regularly as well as producing a cashflow statement. Small enterprises need to produce and use these basic financial statements regularly to have a good handle of their finances, (Burns, 2022).

A recent investigation found that 93% of small businesses in the UK prepare a monthly balance sheet as well as a monthly profit and loss as part of their financial statements. Those who currently do not produce financial statements will do so with the new legislation. The small businesses will produce these statements, and they will be verified as well, (Pedron, 2022).

Another key financial management skill that Burns states is critical for small enterprises to undertake to survive and prosper is budgeting. For most small enterprises growth is a key motivation. To grow they need to maximise revenue streams and either scale up gradually or quickly.

Even successful small enterprises can lead themselves to major problems resulting from a lack of critical understanding of the short and long terms implications of the decisions that fuel fast growth. They need to be able to undertake comprehensive projections that incorporates all variables attached to major investment decisions, so being able to do full projections because of the strategic decisions and what pressures it could have on short term liquidity and as such helping to avoid any short-term cash pressures. It is essential that small enterprises understand the concept of overtrading, and that only by undertaking comprehensive cash forecasts can companies avoid the perils of overtrading, (Pedron, 2022).

In 2017, Studler investigated the level of adoption of strategic planning elements of financial management techniques by UK Small Enterprises. The results revealed that those small enterprises that used financial management planning techniques had a tangible correlation with improved performance in the areas of profitability and sales growth and for not-for-profit enterprises they improved financial sustainability. This illustrates the impact that improved financial internal management has on the prospects of small enterprises when they are run by managers with a higher standard of financial acumen.

In 2010 Yazdifar et al, undertook comprehensive research of UK Small Enterprises and the level of accounting innovations that are used by these entities. The survey found that most small enterprises respondents were interested in adopting new financial management techniques such as financial benchmarking, but just over 50% of those small enterprises replied that they used no accounting techniques. The research concluded by saying that management commitment within these enterprises is a key factor in the adoption of financial management techniques and that a financial background of a key manager improves the adoption of more advanced financial management techniques.

In 1999, Gorton surveyed a choice of UK based small enterprises on their use of management accounting techniques. His sample was over a wide inter county geographical area to avoid localisation and used twenty-three socio-economic indicators to derive as a wide representative sample as possible.

The findings of this research revealed that approximately half of the respondents stated that they used some aspects of the most basic management accounting techniques such as producing a financial budget. However, many of those same respondents stated that they had only done a financial budget for the purposes of the original financial plan to gain the monetary lending to start their enterprises. Only twenty five percent overall stated that they used any kind of advanced management accounting techniques. However, those twenty five percent that had used management accounting techniques to influence the operation of their enterprises said they valued and appreciated this type of data and that it had a positive impact on their performance. This statistic is more interesting in that the survey only included UK small enterprises that had been in existence for more than five years showing that most UK small enterprises successfully functioned with little use of management accounting in the operation of their enterprises. So approximately seventy five percent of these enterprises that had survived did so with use of the most basic management accounting techniques.

The conclusion of this research suggested that UK small enterprises do not use even the most basic management accounting techniques but still manage to function as successful going concerns and yet the researched evidence also states that small enterprises would perceive these management accounting techniques to be useful once adopted. This could support the concept that specific management accounting training could have a material benefit for small enterprises ongoing success. As said, this research did not include small enterprises that had been in existence for less than five years, an important gap in fully appraising the demand and need for management accounting training.

In 2002, Stonehouse et al surveyed 159 UK small enterprises across sectors on the practical acceptance of management accounting practice within UK small enterprises and whether once adopted it changes or influences their strategic thinking. The research was based on questionnaires sent to the surveyed companies asking them specifically their approach to management accounting planning, the importance they attach to it and questions on the frequency of use. From the 21% response rate the research found that 92% stated they do adopt strategic planning using budgeting and forecast techniques, with these organisations using this information to concentrate on short-term targets rather than longer-term goals with little evidence that smaller firms used more long term strategic financial management tools.

This research concluded that even where management accounting is used in manufacturing small enterprises, the traditional home of management accounting, the full range of management accounting techniques are not adopted especially the long-term strategic elements of management accounting, this suggest that a financial skills gap exists in these small enterprises.

Beyond the UK, in 2014, Dahmen, et al, extensive observational research in the USA found a strong correlation between those small enterprises that displayed financial literacy and competence through actively and regularly reviewing financial statements.

The sample literature researched suggests that the impact of financial management techniques adopted by small enterprises is positive, but overall, only the basic financial management techniques are used, and this lack of financial management competence does seem to contribute to the demise of small enterprises. More sophisticated and innovative financial management techniques tend to be used by larger small enterprises who have the relevant specialised trained personnel running within them, (Muneer, et al, 2017). But most small enterprises use little or no financial management techniques, and this fact has an adverse impact on the survival and growth of small new start-ups, (Studler, 2017).

The literature reviewed suggests that there are significant gaps in financial competence within small enterprises and that if this gap is filled then it would be appreciated by the small enterprises key players and could lead to a positive impact in the performance of the small enterprise.

It should be noted that as of 2023 there is legislative requirement for small companies to report key financial report information to Companies House. This now requires all defined small enterprises to file accounts for public scrutiny as well as an accompanying Directors report. The accounts should include full transparency on revenue, costs and assets and liabilities. Small enterprises can no longer give summary financial accounts that exclude detailed information that would be of public interest such as information relating to money laundering and investment activity that does not best serve the public interest. The new law that covered these requirements was the economic crime and corporate transparency act 2023, (Hattersley, 2023).

Therefore, the need for UK small enterprises owners and managers to be more financially competent is in effect now set in UK law. Even though third-party experts audit these financial statements the small enterprise owners need to take ownership of what is sent to company house and be confident it shows their position accurately and does not have anything fraudulent, (IAB, 2023).

1.2: Background to Research Solution.

Literature has acknowledged that the lack of financial management acumen is one of the reasons for the high amount of small business failures. There are investigations in literature to find ways of remedying this. There is a consensus in recent literature that increased awareness and knowledge of management accounting would support and improve the overall financial management of small enterprises. Unfortunately, the level of management accounting adopted by small enterprises is not significant and sometimes non-existent. This would seem to be an issue as internal financial management is the bedrock of management accounting and allows managers to run their organisations more efficiently and effectively by providing added transparency beyond the statutory accounts, (Pierce, et all, 2003). Management accounting plays a crucial role in strategic decision-making within an organisation as it allows for the collection, 'analysing, and reporting of financial information that is used by company leaders to make informed business decisions,' (Kaplan, 1984).

In 2023 Scott said that management accounting techniques are essential for small enterprises looking to grow and be sustainable long term. The management accounting practiced, he states, will help to focus the small enterprises on making more competitive and profitable pricing decisions as well as help them to improve cost efficiency and help to identify the life cycle of a product and forecast the viability of proposed new products or services.

All small enterprises should have strong planning processes in place as even small miscalculations can have a severe effect on a small enterprise where the scale of disruption threshold is low. Management accounting provides the best means for the small enterprises to identify leaks and where the business is haemorrhaging money that could quickly bleed the small business into bankruptcy, (Ylä-Kujala, et al, 2023).

The question is how to increase the use of management accounting techniques and concepts to drive better internal financial management that could lead to a tangible decrease in small business failures and an increase in small enterprise growth and prosperity.

There has been a significant level of recent literature investigating the relationship of financial competence and survival and growth of small enterprises within the UK, with a prevailing level of evidence that suggests that increased financial literacy of small enterprises can lead to a positive impact on the small enterprises' financial competence and hence growth and survival, (Hussain, et al, 2018). Other studies have shown that most small enterprise owners do not have the basic financial management skills to suitably manage financial control and improvement, and therefore rely on accountants, or paid finance consultants, to prepare their financial statements. However, the small enterprise owners and managers struggle with the complexity of the financial information provided by these experts and as such this potentially useful financial information is at best ignored or worse misinterpreted. This has a detrimental impact on the financial management of these small enterprises, (Sian, Roberts, 2009).

In 2019, Boyd recommended that the most effective way of improving management accounting skills within the small enterprises is to train staff who are numerical and have strong quantitative skills in the core disciplines of management accounting. These core skills of the current staff would augment their understanding of the key commercial decisions within the enterprises and allow first-hand experience of what financial information the managers, owners, and key stakeholders, of the small enterprises need.

This would be one of the key elements to delivering financial, management accounting training to small enterprises that would be deemed to be effective for persons; to identify the right persons (staff, managers or owners) from the small enterprises with the right skill sets that would be able to impact the finances partied in the small enterprise in an advantageous way, (Prihastiwi, et al 2018).

This targeting of the financial management / management accounting training to the right person within the small enterprise to enhance the chances that the training will be more effective is consistent with the idea of absorptive capacity theory and is therefore a theory that needs to be considered when developing financial management training courses for small enterprises.

A solution to this could be from research investigations that found that enhancing financial self-efficacy, or the confidence of an individual to use information for making effective financial decisions, has significant impact in managing the finances of a small enterprise, (Kirsten, 2018). Financial self-efficacy leads to financial literacy and therefore is a potent tool for small business owners in that it provides them with the confidence to have invaluable insight to their business which in turn improves financial control and provides a better understanding of the small enterprise financial position. This helps them improve planning for a more secure financial future. This enhanced self-perception of financial understanding will improve the small enterprise financial stability, allowing business owners to plan and stay competitive, (Dahmen, 2014).

The overall suggestion is that relevant financial training is important in developing self confidence in financial management skills, and that this would affect the financial management of these small enterprises in a positive way, (Kirsten, 2018).

Not only is it assumed to be essential that the training of financial management skills for small enterprises is effective to positively impact the financial management of the small enterprise, but the training must enhance financial self-efficacy so that the training will enhance the desire to persist in the proper management of the finances of a small enterprise in the first place, (Kirsten, 2018). In 2011, Amatucci & Crawley 2011 found financial self-efficacy as the crucial link between financial knowledge and implementing confident financial decisions that will enhance the financial management of the small enterprise.

Absorptive capacity is “the ability of a firm to recognise the value of new external information, assimilate it and apply it for business purposes,” (Cohen and Levinthal, 1990) and is an area that has attracted significant interest from business management researchers and academics. Therefore it is important to recognise absorptive capacity is a set of organisational routines required to identify and utilise knowledge, Therefore identifying any individuals who are the lynchpin, and the driving force of the small firm’s absorptive capacity is key to taking advantage of this phenomena to render the financial management training more effective, in that they are the individuals who attend the training as they have the best chance to recognise the value of financial management training, absorb and adopt it for improved business management purposes, (Chang, et al, 2012).

In relation to making management accounting / financial management training more effective to enhance the financial management performance in small enterprises, another aspect that literature covers that will influence the effectiveness of the management accounting training is the contingency theory of management accounting. This is the view that there is ‘no single management accounting system that is acceptable to all organisations or any system that is satisfactory in all circumstances in a single organisation,’ (Otley, 2016). When businesses face high levels of environmental uncertainty, their management control systems must be adaptable and flexible to effectively coordinate operations during unforeseen events, (Reid, et al. 2000). The main contributors to environmental unpredictability are changes to the wider economy, more intense competitiveness appearing, and changes to the internal and external supply value chain, (Otley, 2016). Therefore, businesses must make initiative-taking internal and external decisions and respond quickly to market changes and the management accounting, financial management information used within the organisation must adapt quickly with these changes to remain relevant and useful to the managers of these organisations, (Reid, et al. 2000).

The contingency theory of management accounting impact on any financial management training for small enterprises will mean that the content and focus of any training will have to meet the prevailing contingencies of the small enterprises at that time to be relevant and useful. These could be based on management accounting content that is relevant to smaller enterprises or / and content that is relevant to the sector they run in and whether they are profit or non-profit making organisations, (Reid, et al. 2000).

By making training more relevant and topical to small enterprises there is a greater chance of uptake of the training, including financial training, (Gibb, 1990). Training programmes that are clearly related to current aims of small enterprises will make the training more relevant and therefore effective in meeting their needs, (Barret, 2015).

The small enterprises training needs require distinct approaches by trainers and a level of competences for the trainer to deliver effective training. There is a need to focus on those competences in small business training that are critical to their success and importantly making the small enterprise owner and managers aware of the importance of certain fundamental business competencies and then have a clear structured mechanism to allow these competences to develop. By doing this the trainer is making the training programme relevant but this relevance must be emphasised to the trainee for them to apply the benefits of the training to their work environment, (Lans, et al, 2008).

With these two theories, absorptive capacity theory and the contingency theory of management accounting, there is a clear theoretical approach to build financial management training for small businesses that will allow the training to be more relevant, more useful and more easily adoptable for persons attending the training from small enterprises. In other words, if the training is targeted to persons within the small enterprise that 'recognise the value of new external information, assimilate it and apply it for business purposes' and the training content is aimed at meeting the prevalent management accounting contingencies of the small enterprise at that time then the financial management training is likely to be perceived to be more relevant to their current financial management needs. This will result in the level of adoption being high as the training is highly relevant to the operations of the small enterprise, they will be able to recognise this relevance and be able to adopt and use these newly taught techniques to improve the financial management of the enterprise.

There continues to be small enterprises that fail every year and new start-ups who do not last longer than one to three years. Out of the reasons why so many small enterprises fail each year is the lack of internal financial management acumen, and this deficiency contributes towards these small enterprise failures. A solution to the problem has been identified through providing a suitable financial management training programme for small enterprises that will meet their current financial information needs. This cane be done by tailoring this programme to persons from small enterprises who can recognise the value of the training and be able to implement any new financial management learning to the benefit of the organisation.

Literature has suggested that the best way of developing a training programme that will be as effective as possible is to undertake constructive adaptive iterative process in training programme design, (Await, 2023).

An adaptive iterative process of development is a continuous process where the trainer develops the training programme through planning, analysis, implementation, and evaluation.

Each part of the cycle will influence the development of the next stage of the cycle, (Greene, et al, 2003).

The iterative cyclical process allows changes and improvements in each iteration so that overall, the product improves on each new version that appears. At the end of the iteration process there will be a functioning product that is more satisfactory to the end user than it was at the start of the iterative process, (Await, 2023).

The alternative to an iterative process is a 'big design upfront' and then launch the product as the final version to assess it on the end user and change it based on feedback. The design will involve the consultation of relevant stakeholders, but there is no way of knowing for sure how the product will be until live launch. Any major issues with the product then there will have to be redesign changes considered that could be very disruptive to the users. An assessment at each stage of the build process leads to a much more satisfactory product, (Gonzalez, et al, 2019).

An iterative design process is suitable to be used for training programme design as many traditional design models like the ADDIE model that were designed in the 1970's are no longer considered the most effective training design models and many other traditional instructional design processes are no longer serving their purpose, (Cennamo, et al, 2019).

Therefore, there are advantages of iterative design for training programmes. Issues detected after each phase rather than discovering these issues at the end of the process. There are a significant number of revisions made that would involve a radical overhaul that could be overwhelming. By undertaking a staged, phase alteration to the product then this approach prevents the same issues from repeating in other future sessions of the training, (Zarrondania, et al. 2007). Iterative design gives the chance to gather feedback and make modifications after each phase. This process also allows the delegates on the training to have a sense of ownership in the course build and see their inputs incorporated into the design of the course, (Gonzalez, et al, 2019).

By doing a deep review and modification of the training course periodically allows for a more comprehensive high quality training course. This also allows the trainer not to be overwhelmed or demoralised with the amount of revision and modification that is required in the iterative process, so avoids the concept of cognitive overload when the entire training course is required to make widespread changes. Then there is a danger of missing some important aspects that are essential to change as there is so much to change in the course if it is left to the very end of the process to gather evaluations and start to act on them. By undertaking an iterative adaptive build process the trainer designer can focus on each stage in detail and refining that aspect before moving on to the next stage of the course that needs improvement based on feedback, (Jonassen, 2008).

The final product of the iterative process will not be a perfect or an ideal model of financial management training. But it can be an approximation model of effective financial management training. This is a realistic aim of the process. Anything more would involve venturing into realm of consulting; customised to individual needs. Consulting, any aspect to it, is not within the remit of this research. Therefore, the iterative process aims to provide a financial management training course that is as good as it gets, or a 'Successive Approximation Model' of training programme. A Successive Approximation Model (SAM) is part of the iterative design of learning model's approach where the SAMs are the working models that have evolved at each 'successive' stage of the phased build. An approximation of the final training model developed over time, a so called 'prototype' model that can be easily changed going forward based on the interim feedback, (Yung, et al, 2019). These prototypes of SAMs reinforce steps of desirable behaviours which are getting closer to the targeted behaviour. In other words, by adapting the training model so that it comes closer to what the trainees wants, so the trainer developer is rewarding the trainees for doing something that is close to the ultimate desired behaviour, (Wolverton, et al, 2022).

By undertaking an iterative constructive process in the design of the financial management training programme for small enterprises the trainer can structure and shape the training programme to the viewpoint of the delegates as they are providing feedback at each stage of the development of the programme. So logically the product will be a training program that meets the needs and expectations of those who take the training. This is why the constructive iterative design process was chosen in this research as a mechanism to design the financial management training for small enterprises, so that it meets the trainees needs and thus increase their financial self-efficacy. As a result, this will increase the likelihood that the key concepts and disciplines of the training will be adopted to help improve the financial management of small enterprises and thus increase the chances of the entity of surviving and prospering.

1.3: Overview of the Research

This research aims to address one of the main issues relating to the significant number of small enterprises that fail, being specific issue of a lack of financial management acumen within small enterprise owners and managers.

The research assesses the process involved in developing a successful training programme of financial management for small enterprises within the United Kingdom (UK) that improves the uptake of learning from these courses. By doing this a financial management training model that incorporates the key relevant aspects of management accounting provides an increase in self-efficacy of financial management skills and as a result an increase in internal financial management skills within this sector.

1.4: Research Aims.

1.4.1 – Situating the Investigation

– Research Question:

Does an adaptive constructivist iterative process undertaken for training programme design of financial management training for non-finance managers who work in small enterprises, increase the level of financial management self-efficacy of the participants of the training and hence the level of adoption from the training?

1.4.2 – Research Aim

To develop an effective programme of Financial Management Training on UK Small and Medium Sized Social Enterprises from relevant theoretical practice perspectives

1.4.3 – Research Objectives

To review the existing literature on the level of effectiveness of financial management training on small social enterprises performance from a theoretical perspective.

To undertake primary research that augments the existing literature resulting in the development of an effective programme of financial management training for UK Small Enterprises that will result in the improvement of uptake of key learning from the training.

1.5: Contribution.

To the researcher's knowledge, there is little research that finds the process involved in developing a training programme that will improve financial self-efficacy.

This research sets out the process assessed and refined to maximise self-efficacy of financial management skills from training and explains through key theoretical approaches, how to maximise the effectiveness of training of financial management skills to the relevant individuals in small enterprises. As such, this research contributes to the improvement of financial management of small enterprises by advocating an improved process of developing financial training for these entities.

The research outcomes will include the provision of a model for practitioners to refer to construct an effective programme of financial management training for non-finance managers in small enterprises that enhances financial management skills and increases adoption from the learning outcomes of the training.

This research will contribute to the terms of reference to providers of such training on the process of building effective financial training for small enterprises that will improve the provision of this type of training. It is also contributing to the evidence of the importance of such training to small enterprises in improving their financial management and therefore improving their survival and growth potential.

The evidence from this research also highlights the importance of this type of training and how it is important that it is widely available to small enterprises. This helps to prove the importance of government agencies providing financial funding to the provision and the availability of such training.

With academic journal publications confirming the findings and the research conclusions then the research outcome will be presented to government agencies responsible for funding and supporting small enterprises. This will be a validated effective model for financial management training for small enterprises in the UK. As such, this training model could provide a practical ready to deploy training model for government agencies to work with training providers to support small enterprises in improving their financial management and as such lead to improved small business performance.

One area for impact is that Universities provide this training for local small enterprises. This research was delivered by the researcher as an employee of the University of Dundee. The resources were provided for by the University of Dundee, School of Business and the participants attended the University of Dundee campus to receive the training. The training was free to attend for the participants of the research, so no revenue was gained from the provisions of this research, but it provided excellent links with local small enterprises and raised the University of Dundee's profile of engaging and supporting local organisations and consequently raises the profile of the University of Dundee, School of Business in general. Other Universities could replicate this process throughout the United Kingdom.

1.6: Personal Interest in Research.

The researcher has had an academic and personal interest in this area of research for years. The fact that so many small enterprises / businesses fail few years after starting up resonates personally. The researcher engaged in a family business that was owned by the researchers' mother and elder brother. This was a small high street pharmacy shop, which became bankrupt two years after launching that resulted in great financial issues and emotional issues for loved ones of the researcher. The researcher also worked in the Pharmacy part time, so was invested personally as well.

What was frustrating for the researcher and his family was that the pharmacy shop was commercially successful, as it occupied a prime position on the high street next to a commuting bus and train station and had parking available next to the shop. The shop was constantly busy and employed local people to work there on various hourly contracts.

Despite this commercial popularity the pharmacy went into bankruptcy due to the debts to creditors and lending facilities being withdrawn by the bank. At the time it seemed baffling why the pharmacy failed. Many years later after studying Accounting and Finance at university and becoming a qualified Management Accountant and working as a Management Accountant for many years the researcher realises that the lack of financial knowledge and specifically the lack of financial management skills by his brother and mother contributed significantly to the pharmacy failure. They both had very little understanding of the importance of cash flow management and of cash budgeting and the dangers of overtrading, extending too much credit and agreeing to repayment of credit terms that had very short repayment schedules as opposed to the credit due coming in which was months, mainly the payments from the NHS for the prescriptions that made up large parts of the monthly income for the pharmacy. The failure of the owners, the researcher's mother and brother, to have any form of formal budget plan in place had a significant impact on the control of the business and the failure to review regularly using simple management accounting control techniques meant the business continued to fall deeper into the red and the owners did not have the skills to identify the causes in time. They did not have financial management plans in place in advance to mitigate this slide. This experience had a lasting impact on the researcher.

Later in life while studying MSc Finance the researcher specialised on the Education levels of small business owners and the ability to be aware of the different finance options available to them. This research revealed that there was a distinct lack of awareness from small business owners of the differing finance options available and the lack of education and knowledge on what these different finance options meant. This revelation left another impression on the researcher that made the researcher want to look for solutions to the overall issue of the lack of small business owners and managers financial management skills that are contributing to the large number of small business failures in the UK. The study especially looked at the number of small business start-ups that fail within their first three years even though they potentially could be a very successful business such as the researcher's family pharmacy.

The researcher is a qualified management accountant and an accounting lecturer with about twelve years' experience in both roles. He understands the challenge of making accounting and finance seem relevant to those that need specific finance related skills for their employment role and the challenge to understanding how to provide relevant finance training to people who need those skills for specific purposes.

The researcher worked with the Association of Accounting Technicians (AAT) from 2017 to 2020 (up to the Covid 19 pandemic disruption) as a participating trainer on their pilot project to produce effective finance training for non-finance managers from small businesses. This work reinforced the researchers' earlier research that much of what is trained on these courses is of limited use to the participants, based on the feedback that the AAT gathered from the participants post training and was made privy to the researcher. The feedback on whether anything could be used in the trainee's working role scored exceptionally low. Most delegates on this pilot programme fed back that the volume of what was taught to them, and what they used in the workplace was low. This is set out in detail in the analysis section. This researcher at that point decided that their doctorate studies would focus on financial training and specifically for non-finance specialists owning and working in small enterprisers and how to make that financial training as useful as possible so that the participants could adopt at least some of the training and help them to run their small enterprise more financially efficiently. By doing this the researcher was undertaking research work that would contribute to an area they have studied and worked in for many years, financial training for persons from small enterprises and help to address a sad issue in the researcher's own personal past, the failure of a family business because of poor financial management. As such the researcher has a strong personal passion for this subject matter.

1.7: Rationale for the Research.

This section summarises the rationale for the research and why the research is important. It will also emphasises the significance of the methodological approach that provides the credibility to the results of the research. Lastly, the relevance of the study will again be emphasised and summarised.

1.7.1 Background of the Research/ Study.

The main rationale of the research is the need to enhance financial management skills within the UK small enterprise sector. Studies have shown the survival chances, and the growth opportunities of UK small enterprises will increase as a result. As this sector is now a key element of the UK economy any research that adds to the understanding of how to strengthen the financial health of this sector is critical.

In Section 1.1, in the background of the research section, the basis of why the research can be classified as crucial was set out. In that section it was explained 'that as many as 60% of UK based small enterprises fail within their first three years of operation and 20% of small enterprises simply stop trading within their first twelve months of existence', (Horne, 2022)'. It also said that 'UK small enterprises will continue to experience very tough conditions for the near future, with bleak economic forecasts in 2024 / 25, with stubbornly high inflation, high interest rates, and energy prices', (Monaghan, 2023).

With these challenging economic conditions any research that can aid small enterprises to survive and grow will have positive social impact. Recognising the current tough economic conditions for UK small enterprises does not distract from the longer-term structural reasons for UK small enterprise failures, it only makes any work that tries to mitigate these problems more important. A common problem that is driving small enterprise failures and covered in Section 1.1 is 'the inability to use cash efficiently and invest effectively that could be result of a knowledge gap on the part of small enterprise owners and workers and lack of understanding of basic cash management. This trend is a result of a general lack of financial management skills with business owners and key managers in small enterprises,' (Dahmen, et al, 2014). The Institute of Chartered Accountants in England and Wales (ICAEW) in their 2023 report the 'Skills Gap in the UK,' stated that small businesses lack of competence in key financial management such as cash flow management and effective budgeting is having a major impact in these entities' ability to survive past the key first eighteen months, (ICAEW, 2023). Therefore, research that helps to address the fundamental financial skills shortage of small enterprise owners and managers would be recognised as both theoretically and practically beneficial.

Later research found a relevant solution to the issue of increasing the financial management skills of non-financial owners and managers of small enterprises. This solution involved delivering effective work-based financial management training that is embedded in the principles of management accounting theory. As said in section 1.2, the 'most effective way of improving the financial management skills within the small enterprises is to train staff who are numerical and have strong quantitative skills in the core disciplines of management accounting. This training would help current staff to augment their understanding of the key commercial decisions within the small enterprise, leading to improved financial management decisions and later improved financial management performance,' (Boyd, 2019).

This research will provide a framework for effective financial training for small enterprises. This will lead to improved financial management, which will in turn will lead to improved financial performance of small enterprises. This will help safeguard a sector that in the UK ‘comprise 99% of all private sector business, employing up to 15.7 million people in 2016’, (Rhodes, 2016).

From the perspective of the researcher, the research is very satisfying and rewarding due to the personal interests in the subject set out in section 1.6. Therefore, anything that is investigated to derive a solution that could help small enterprises not go to the wall, as my family business did, is personally rewarding.

The goals and the aims of the research are set out in section 1.4.

The goals and aims were deliberately set to be stretching and ambitious, purely from the point of view that if achievable the benefits of the output would be significant. The key points to achieve in the study, as set out in section 1.4, are ‘to increase the level of financial management skills of the participants of the training programme.’ This would be shown through an improvement of learning and later uptake of key elements from the training.

Though ambitious, these aims and goals show that the increase of financial management skills of non-finance managers in small enterprises, can be achieved through a rigorous training programme that will deliver on that ambitious aim. This aim is legitimate, as effective financial training can have a positive impact on the financial management of the small enterprise and would help them to self-manage their businesses better, (Kirsten, 2018).

The aims of the research set out are challenging to achieve as they lend itself to high quality work. The conclusions of the research can lead to a powerful narrative on how high quality; effective financial management training supports small enterprises. As a result, it is reasonable to conclude that the applied research project is significant.

1.7.2 The Academic Significance of the Research.

There has been a considerable number of professional and academic publications on the importance of work-based training and the techniques and means to develop these to meet the professional needs of the training recipients. A sample of this literature was covered in chapter 2.6. In this section the benefits of effective work-based training were reviewed, with a consensus in literature that; ‘well-planned and well executed work-based training will see immediate uplifts in staff productivity and usefulness as well as discernible improvement in staff morale,’ (Bramley, 2019). When developing a ‘work-based training programme it should be a granular process so that the training developed improves the tasks that are performed by those who work in the areas trained. By linking the training outcomes with improving those tasks that directly support the achievement of organisation’s strategic goals then the work-based training has the potential to be highly effective,’ (Knowles, et al, 2014).

The eventual training model will be based on the established evaluation development training models that are widely made available in academic and professional literature. Training evaluation models have the benefits of ‘determining the effectiveness of the learning from the training session and whether performance and business objectives were met as a result of it,’ (Moreau, 2017). Training evaluation models can therefore support the aim of making the training programme highly effective from the perspective of the participants of the training.

There are details of training development and training evaluation models in the literature review. This goes into detail on the types of training evaluation development models and how they support the development of training programmes that are useful in that they meet the needs of the work-based recipients of the training. Training evaluation models help to shape and mould training programmes to the needs of the training participants needs. There is extensive research into this area.

The next step investigated in literature was the impact of financial management type work-based training on organisations in general and small enterprises in particular. In literature chapter 2.7, covers a focus on management accounting practice training for small enterprises. Evidence suggests that due to the specific characteristics of small enterprises they do not use management accounting to the extent larger firms do. Smaller firms' management information techniques are not sophisticated, (Wiedemann, 2014). But where financial management training takes place in the smaller organisation sector, then 'there is a strong positive relationship between enterprises that were experiencing good financial growth and those that had external financial advice and training that 'was targeted to improve performance,' (McKenzie, 2021). Therefore, in general literature concludes that the 'financial literacy of the small enterprise is augmented when the financial training is targeted to meet the financial training needs of the small enterprises and will have a positive impact on their financial performance,' (Chepkemoi. Et al. 2017).

In chapter 2.8, it is explained that training providers work with industry bodies in an ongoing consultation process with relevant interested parties such as the UK chamber of commerce and other relevant bodies that represent the interests of small enterprises in the United Kingdom. This consultation process allows for the identification and the collaborative development of relevant training courses and materials for UK small enterprises that includes the provision of finance training, (Hathaway, et al. 2008). What is key from the documented evidence, is that training providers develop training that the employer, through the relevant trade bodies, identify as the skills they need from employees.

This section also detailed the content and structure of current finance training provisions for this sector. It was documented that the financial training aimed at small enterprises in the UK tend to be short courses that are specifically designed to provide ongoing support and to function as a how-to guide for small business finances, (Hathaway, 2008).

The current suite of courses that exist, provide a resource for small enterprises to refer to for guidance as the venture grows. The courses provide guidance on how to build better financials as well as training on how to avoid the issues that often lead to business failure, including over expenditure, over burdening tax liabilities, poor budgeting, and lack of reporting.

This section describes the related subject matter from academic literature, and therefore this research will add to these established academic concepts and apply them to a specific explored scenario.

- *1.7.*3 *The Knowledge Gap.*

As the title of the research suggests, the specific knowledge gap that this research is trying to address is how to develop a framework of design for a financial training programme for uptake in small enterprises.

As said, confirmed through an investigation of literature that well developed work-based training is effective when referencing training evaluation models. Financial management training aimed at small enterprises developed this way is effective and meets a skills gap named by employers.

Where there is a gap in the knowledge covered in literature is a documented process of evidence method of building a financial training course aimed at current managers of small enterprises who have finance duties but with no prior discernible finance training. The key aim of this build process is to improve understanding and adoption of the finance training provided. In other words, to build a financial management training package that will result in more participants of the training using the techniques taught in their work duties to improve the financial management of the small enterprise.

This training programme process uses a constructivist adaptive iterative process to develop the training based on the active feedback participation of the small enterprises managers who undertook the financial management training course.

This is the extension of knowledge that this research looks to explore; how to undertake a process of training programme build based on theoretical sound principles that will increase adoption of the techniques taught. The main gap that the research aims to fill is the methodological approach needed to develop the training programme to meet that aim. The details of the methodology developed is set out in the next section. This section explains why the key methodology to the research was important to the overall outcomes of the research. The methodology chosen ensured the research was rigorous so that the claimed outcomes can be seen to have been reached after a detailed and logical process was undertaken. These outcomes are that the training course developed would increase understanding of financial management of non-finance managers in small enterprises and increase adoption from the training to improve the financial management of these small enterprises. By showing the process was incredibly detailed based on proven methodical process it ensures that these ambitious outcomes were not arrived at haphazardly or without a sound foundation in place.

The core foundation to the methodology of the study was the iterative constructivist grounded process approach. This is covered in detail in literature chapter 2.10.1, where it was explained that this approach 'finds recurrent themes within the training programme design process that appears from an iterative process. This process involves continuously improving a concept and design, of the training programme. This iterative process allows a prototype, the training programme, to be developed, evaluated, adapted, and repeat the cycle process with the goal of getting closer to the solution of best outcome,' (Jonassen, 2008). The advantages of an iterative design process, as explained in this section, is that it removes any deficiencies about the training programme quite early in the design process. It also helps to ensure the product is fit for purpose and meets its functionality, usability, and reliability aims, (Kern, 2011). This method of training design allows confidence to be high that the training programme designed will meet the desired outcomes of increased understanding and crucially adoption of the training programme delivered. This is logical as the changes, modifications and improvements made to the training programme are driven directly by the feedback of the participants of the programme.

The constructive grounded approach adds to the strength of the training model design in that it gives an effective way for participants to 'explore complex topics, encourage creativity, and allow participants to make sense of their own experiences,' (Urquhart, et al. 2010). The constructive grounded approach is a method for developing theory that is buried, grounded in the data, and can be systematically gathered and analysed, (Glaser and Strauss, 1999). This method was adopted to maximise the effectiveness of the iterative approach so that the feedback from the participants at each iterative stage would allow open responses. From these responses theoretical conclusions could be found that would contribute to the build of the next iterative stage of the training programme, (Urquhart, et al. 2010).

The cyclic development process that is the core of this research method lends itself to categorising the research significant. This is because the iterative cyclic process explained in the literature chapter, is an established, transparent, and logical process of training course development. The participants shape the training programme development based on what they need from the training. The feedback from the participants focused on how financial management training met a financial management information need that was prevalent in their organisation. Therefore, the training programme that appeared in later iterations defaulted into one that the participants felt that a material part of the course can meet a financial management information need in the small enterprise.

By incorporating a constructivist grounded approach these conclusive outcomes are based on the emergent theory from the feedback data from the participants. So, the final model was customised in a thorough stepped process to meet the financial information needs of the participants, and that process went through a defined theoretical approach.

As such the methodology is core to proving the research outcomes as significant. The literature suggests that relevant financial training is important in developing self confidence in financial management skills, and that this would affect the financial management of these small enterprises in a positive way, (Kirsten, 2018). By undertaking comprehensive research that sets out in detail the methodological process that derives a financial management training programme for small enterprises then this makes the study significant due to its positive impact on the small enterprise.

1.8: Chapters Overview.

The dissertation's chapters lay out the research investigation in a logical manner.

Chapter 2 covers a summary of the main academic and industry related research on the topics on the research area. The literature investigated looks at the question of employment training to businesses and the specific area of financial training to businesses and how professional accounting bodies align their training to business needs. More investigations will be made on how the lack of financial acumen in UK small enterprises contribute to the level of small enterprise failures in the UK especially amongst new start up small enterprise.
The literature section also covers how effective financial management training could alleviate the problem of small enterprise financial literacy with many references to similar studies made globally that outlines how relevant targeted training can help to support the financial management skills of small enterprises and hence contribute to their overall financial wellbeing and reduces the risk of failure. This supplements similar referenced work that was covered in the introduction chapter.

The key theories in relation to the study are covered as well in more detail in the literature review. The absorptive capacity theory and the contingency theory of management accounting are covered in detail and their relevance to this study clearly explained. There is also the theoretical approach to the course build, the constructive iterative design approach to training covered extensively in the methodology section but also reviewed here against other literature. The literature reviewed looks at how using this adaptive design approach is to be designing a financial management training course for non-finance managers in small enterprises, the benefits of using such an approach and the issues surrounding it as well.

The literature review chapter then goes on to explain how established training models were used in this study to formulate a suitable unique training methodology model for effective financial management training for non-specialist managers from small enterprises.

This model will be the aim of the research but devising an innovative, new model the final model will be a hybrid of established training models, modified to fit with the specific requirements of the purposes of formulating an effective financial management training course for non-finance managers from small enterprises.

Chapter 3 covers the methodology of the study. This research involves the qualitative research approach and the reasoning behind this are clearly given in the methodology section. However, there was quantitative data. As said, the methodology section outlines step by step the constructive iterative design approach of training programme builds and clearly explains how this approach is done in a practical way that influences the training programme design. How the qualitative data was analysed using a mixed method approach is set out and how it affected the model design is explained. The quantitative data it will be analysed using simple percentage analysis to show trend over the period of the research. A percentage change analysis is where the proportional change is measured and then any discernible variables that contributed to those changes are found and explored, (Trieman, 2009).

On a practical level, this section explains who the participants to the research were, their background, the response rate and similar logistical details will be set out.

Chapter 4 is an extensive and large section of the Analysis of the data collected. This has full details of the responses and explains exactly how the training course evolved over the four iterations of the build process. Detailed summary analysis is presented in this section.

Chapter 5 is the discussion section that looks at the impact the study will have on wider society and guess about future implications or related opportunities from the research as well as discussing the limitations of the research.

Chapter 6 brings together the conclusions of the study which have been logically detailed in the analysis section but summarises them concisely and links them back to the findings in the literature section to have logical summary position that is validated and supported by previous studies and theories in literature. This section ultimate answers the research question in a concise way.

Chapter 2: Literature Review.

The literature review will summarise key publications to support the research aims, from identification of the problem, the literature in relation to the solutions to the problem and the literature surrounding the key theories behind the study.

This section provides the background information contained in literature that justified this research; that amongst the reasons that small enterprises in the UK are failing are the lack of suitable internal financial management skills are a significant contributor to the number who cease to trade or fail to grow leading to risk of failure later.

Before going on to investigate what literature says about the possible solutions to this problem specifically to provide, better, more effective financial training to UK small enterprises we need to clarify the role that financial management information plays in small organisations, especially the use of management accounting which is the mainstay of financial management information.

2.1- The status of current literature on the main aspects of Management Accountancy Practice.

This section of the literature review will look at the specific area of Management accounting practices to explain the main elements and disciplines that would form the main components of the training given. The research refers to the training programme as 'Financial Management' training for non-finance managers of small enterprises. But the content of the training programme is taken from the key disciplines of management accountancy. Why is the training not called; 'Management Accounting' training for non-finance managers of small enterprises? This reason for this is purely not to deter, to 'scare off' people from signing up to the training. In their 2011 book 'Finance without Fear', Hettinger, et al said that people who are not trained or educated in any aspect of accounting or finance will find the idea of accounting and finance overwhelming. It is the adage 'I am scared to death of numbers.' This could be a form of 'chromophobia' which is defined as a fear of money and all its associations, (Hettinger, et al, 2011). Other studies have shown that small enterprise and their owners are less likely to engage in accounting training as they see it as the most arduous part of owning and running a business. As such they will only engage in training in disciplines such as accounting or management accounting if they see it as being directly applicable to their operational management of their small business, (Walker, 1998).

Therefore, as stated that though the training is promoted as 'Financial Management' training, it is in essence management accounting training, customised for the needs of non-finance managers of small enterprises, both profit and non-profit making organisations and the training is named as such to make it more appealing to the target recipients.

So, what exactly is Management Accounting and how is it used by organisations?

The UK Chartered Institute of Management Accountants (CIMA) defines management accountancy as gathering information on revenue, cash flow, and outstanding debts to proving trends.

In 2006, Cooper et al said that beyond the critical elements of management accounting of planning and controlling, management accounting most tangible benefit is information and data that facilities the decision-making process. One main benefit is information relating to non-routine decision making of an organisation is that it allows excellent transparency to support decisions relating to whether an offer of business from a customer or supplier based on their quote or significant structural proposed changes such as whether to expand or retreat from a market. Cost analysis is also of great importance to help management choose between the available alternative courses of action.

In 2017, Botes, et al asserted that organisations can rely too heavily on management accounting information leading to enterprises making decisions that set them down the wrong strategic path. Managers need to use the management accounting information in a critical manner to use it effectively as management accounting can have an over-emphasis on quantitative information and can ignore factors that cannot be measured quantitatively. For example, important factors that affect small enterprise success and value such as local people's' loyalty and goodwill cannot be measured accurately. "Management accounting is very rational, but sometimes being entirely rational can be a disadvantage," she says.

Overall, when commenting on the benefits of management accounting (BPP, 2024), states that it is essential for an organisation to have management accounting information to compliment and supplement the mandatory financial accounting information as management accounting uses financial accounting information and adapts it so that it is tailored for internal decision makers and therefore more useful to the organisations' specific needs.

Management accounting practices are essential to improve performance as they act as a mechanism for control and motivation by focussing the enterprise on the need to define objectives, provide controls, establish strategies to address deviation from objectives by re-setting targets and providing feedforward highlighting inefficient behaviour and providing quick resolutions to these deviations, (Otley, 2016).

In terms of dealing with the challenging trading conditions that exist for UK small enterprises in 2024 then management accounting can help small businesses to focus on more profitable product or services, and through a comprehensive profit analysis that can allow them to adjust their product portfolio in the light of changing conditions. This will allow the small enterprises to focus on ever tightening resources on areas that deliver the highest contributions per limited resource and as such not waste resources especially during times of economic downturn , (Botes, 2017).

However, it is important to introduce the concept of contingency theory of management accounting which will be explained fully later as this theory helps to explain what needs to happen with management accounting for it to be as useful as possible in helping organisations and especially small enterprises to navigate through tough economic conditions.

Commentators have said that management accounting is a highly effective tool when there is a high degree of environmental uncertainty. In this way, organisations need to adjust the management accounting information they use to the current contextual factors, to achieve the greatest decision-makers' effectiveness and hence satisfaction with management accounting information that is used, (Botes, 2017). In other words, if the management accounting information used by organisations is adapted to what is needed by them to support them with more insightful decision making in relation to new commercial pressures that have affected them then it is appreciated and highly valued by managers. This is consistent with the contingency theory of management accounting that will be covered in more detail later. The problem for small enterprises owners and managers is that they may not have the insight to understand what management accounting information they need to best help them with the current commercial pressures that are facing, (Kelly, 2016).

There has also been substantial research on how management accounting is a key tool for business entrepreneurs socially for entrepreneurial start-ups. In this context management accounting can be an invaluable crutch to have when trying to overcome initial problems with setting up in markets and having information at the ready that key stakeholders need in conjunction with the growth opportunities. Management accounting is key for entrepreneurs for them to reach their strategic goals of their start-ups. These start up as smaller enterprises, (Pelz, 2019).

In 2017 Mitter, et al reported that management accounting is a powerful facilitator for small entrepreneur organisations to break into and set up themselves into foreign markets by offering the sophisticated planning and scenario building techniques that can mitigate the risk of such a venture. However, reliance on this facilitator is contingent on the stage of international entrepreneurship the type of internationalisation embarked upon, (Mitter, 2017). Again, this is an example of the application of contingency theory of management accounting when relating it to how management accounting is used for smaller enterprises wishing to expand into international markets as the management accounting used should incorporate the financial information requirements of the international market the entrepreneur is investing in.

The above presents underlying evidence within the contemporary literature researched that Management Accountancy is now considered an essential discipline to aid the improved running of all organisations, including small enterprises who are the targeted sample of this research study, in terms of how they financially manage the internal operations of their organisations. Therefore, any work that investigates how to improve the quality of the management accounting used by small enterprises has wider benefit.

2.2 – The status of current literature on how management accounting practices are set up within small enterprises.

This research is looking to develop a process to improve financial management, or management accounting, practiced in small enterprises by the process of intervention using financial management training as a mechanism used to support the issue of lack of management accounting competence in small enterprises. The financial management training will need to be adapted to make it more relevant and effective for the small enterprises management accounting needs. To be able to achieve this there needs to be an understanding of the small enterprises management accounting practices needs and how this practice changes within the organisation and what the conditions are to make those changes happen. This will involve knowing the steps and processes of this training and their ethical implications of these steps and how it effects on practice and a full understanding of how practice, in this case management accounting practice, is altered within the organisation after this training process.

This research has looked at contingency theory of management accounting and absorptive capacity theory in relation to the practice of management accounting, but it will be useful for the robustness of this research to understand how management accounting practices are established within smaller organisations and what processes are needed to change that practice if it is deemed necessary to improve the performance of the small enterprise.

Literature on how management accounting practices have already been covered. This section is to increase the understanding of how to increase the effectiveness of the management accounting training to produce better management accounting practices in smaller firms.

It is important to show what is considered best management accounting practice for smaller organisations. Modern management accounting practices used by smaller companies in the

United States must be questioned for their effectiveness as a survey undertaken in this research found that within US based small firms many managers do not really understand the different management accounting practices as disciplines, in other words, they are unqualified in management accounting as a discipline. It is suggested that one of the causes of this is that though there are several modern management theories such as quantitative theory, systems theory as well as contingency theory in addition to older theories such as the scientific management theory and bureaucracy theory there is not a one-size-fits-all that stresses the importance of internal financial management skills for the modern business manager, (Bloom, et al ,2010).

In 2010, Bloom and Van Reenen undertook a significant piece of international research on why management accounting practices differ across firms and countries. They surveyed hundreds of different firms globally and tracked their management accounting practices over a decade and watched how these management accounting practices are conducted, evolve, why they evolve and the impact of that evolution of management practice. One of their main conclusions of this research was that that significant improvements in productivity levels was exclusively due to different management practices, including ‘better’ management accounting practices. These differences in management accounting practices were influenced by factors such as cultural, infrastructure, economic, legal, or other relevant factors. The authors concluded that though changing management accounting practices can be expensive in adjustment and agency costs they emphasise that more effective management practices lead to more productivity, faster growth and, pertinently amongst smaller firms, an overall higher survival rate.

For the UK, how management accounting is practiced in general within smaller organisations in the UK, Zeitz, et al (1999), did research project on in what management accounting practices are conducted within small enterprises. They concluded that management accounting practices tend to be done in two ways. The first type is adopted practices that are not yet embedded within the organisation are referred to as 'fads' and these will in time be replaced by other management accounting techniques that are the 'latest thing' to make the firm use better. The other type of management accounting practise is 'entrenched' management practices that are likely to overcome any belief that they have become irrelevant and outdated.

This research is testing whether management accounting training leads to an improvement in management accounting practiced with the ultimate outcome of an improved overall performance for the organisation in the form of, how Bloom and Van Reenen measured, 'more productivity, faster growth and, amongst smaller firms, they have overall higher survival rates.'

However, the authors did acknowledge that contingency theory plays a significant factor on how management accounting is practiced within these successful firms with managers adapting to the best management practice that suits the circumstances the firm finds itself in usually to comply with an evolving and adapted strategic approach. The authors also stress that contingencies are not the whole story on why management accounting practices differ from firm to firm. They came to this conclusion after they analysed the performance of firms within the same industry and in the same country so being subjected to the same competitive factors and country specific socio-economic factors. They found that though smaller firms adapted their management accounting practices to the changing conditions these firms were exposed to, firms who did not adapt to these factors but adhered to their own prescribed methods of management were the bests performed in their field. So, contingency does affect how management accounting is practiced but does not always result in best performed practiced in the sense of measuring accounting best in how it transforms into successful organisation performance. Bloom and Van Reenen state that with all the small firms that they surveyed in all the countries over the decade they identified the main factors affecting management accounting practice are the strategic positioning of the firm, the competitive environment, the macroeconomic factors within the country they operate in and the level of technology they are utilising. As said, smaller firms adapt their management accounting practices to the changing contingencies but not always to the best benefit of the firm. If management accounting practices help to make a firm successful in the first place, it is unlikely that they will be adapted to changing market contingencies.

To prove specifically how management accounting practices are used by non-corporate multi nationals, Granlund & Lukka, (2017) undertook an excellent global research of management accounting practices. They started their research project by simply asking 'do management accounting practiced by smaller organisations differ across countries?' They argued that there is now a prevailing belief that management accounting practices must be developed in symmetry globally so that all markets are using the same management accounting practices, in other words there is a global convergence of management accounting practices. They described this as tendency 'to move towards global homogenization of management accounting practices.' They explained this from a practical perspective of being that most management accountants use the same conceptual techniques such as activity-based costing, throughput accounting and variance analysis as well as more technical forms of budgetary techniques. This homogeny of practice, they argue, can be attributed to similar behavioural patterns and styles of information used, like budgetary-related behaviour. In other words, all firms, including smaller firms, globally are increasingly requiring their management accountants to conduct their management accounting behaviour to align with the common industrialised strategic goal of cost rationalisation, increase productivity and for-profit orientated firms' wealth maximisation.

The authors’ overall conclusion was that management accounting runs in a small world. They cited the fact that they met appearance of similar managerial ideas or system designs in written management accounting materials, management accounting consultancy activities, management accounting executive seminars all over the industrialised world. However, they do not argue that the impact of cultural differences on management accounting practices has entirely vanished, but they argue from their global research the role they play is currently diminishing. Global factors are having an ever-increasing impact on the management accounting practiced within the organisation. Therefore, the significance of the global similarities’ perspective is ever increasing they conclude.

To relate this significant research to this research project it suggests any attempt to ‘change’ management accounting practice within firms will be challenging as there are solid set practices in place globally. Significant and considerable ‘nudges will need to be developed within the training and consultancy programme to try and encourage change of behaviour. It may be that this can only be done within the small firms participating in this research who do not yet fully utilise the globally accepted management accounting practices that Granlund & Lukka refer to in their research and therefore more likely to adopt and use these globally accepted management accounting practices once they become are of them through the training.

2.3- The status of the current literature on the impact of work-based training on small enterprise performance.

This section investigates the impact of business training on small enterprise performance. The aim of this research is to devise an effective financial management training programme for small enterprises, and so the following section sets out the established literature that the research is built upon.

2.3.1. An evaluation of work-based training for its relevance and usefulness.

The section covers a comprehensive critique of the main established training models, such as the Addie model, Kirkpatrick's model, Stufflebeam 's Context, Input, Process, Product (CIPP) model, Birkenhoff Six Stage Model and Phillips Evaluation model.

Training evaluation models are the critically reviewed prescribed methods of evaluating training. The models are a well authenticated method of assessing training effectiveness and offer a clear mechanism for improvement of the training, (Tamkin, 2002). After a detailed study of these models a customised model of training evaluation was developed for this research which is set out in section 4.2 and illustrated in figure 27.

Training evaluation models help the training course deliverer to find both strengths and weaknesses in their training initiatives after delivery, (Basarab, et al. 1992). The evaluation process is done by collecting and analysing data at various points of the programme. Organisations can pinpoint the aspects of the training that are working well and where improvements are needed. This process allows for quick improvement in the training outcomes of the programme, (Basarab, et al. 1992). Evaluation models offer a mechanism for effective evaluation of training, driven by the very people who would benefit from the outcomes of the training, (Salas, et al. 2005).

However, other writers have proposed other methods of evaluating training, for example by adopting an inferred approach. The inferred approach tries to narrow the gap between the trainee's expectations from the training and what they see as the outcomes of the training. Inferred measures calculate this gap and the aim is to narrow the gap. This is a complex approach and can be quite subjective. The direct approach, by contrast, requires direct consultation with the trainees on the gap of expectation and realisation. Their responses define a scale of measurement of this gap, (Salas, et al. 2005).

Another method used by organisations to measure the effectiveness of their work-based training programmes is the measuring while doing approach. This approach will use formal tests periodically in the programme development to measure how the trainees react and how they taught as the course develops. It is important to include understanding check tests into the fabric of the course, (Dahiya, et al. 2011). However, using simulated exercises during training to assess the learning of the session is no substitute from assessing how the training has affected performance back in the work environment post training, (Salas, et al. 2005).

The latest technical developments can also be used to assess and value the effectiveness of the work-based training programmes. Modern training evaluation procedures use data analytics to assess the effectiveness of training by drilling down and seeing patterns and meaning to the responses as the training is live. Using these analytical tools then real-time tracking of how the trainees is interacting with the training and how they use the techniques in their roles can be undertaken. This allows for immediate adaptations of the programme to keep it relevant. This method allows companies to quickly assess how the training impacts business performance, (Blanchard, 2019). This is an untested field, but it is a mechanism to assess the impact of training on the work of the recipients of the training once they return to their work roles. The data capture technology allows for a more correct assessment of the impact of the training on the day-to-day duties of those who undertook the training. As such the subjectivity of assessing the value of the training is reduced as the volume of relevant data is substantial allowing for a more correct and detailed assessment of the impact, (Blanchard, 2019). However, it is important that when assessing work-based training that organisations are not 'slaves to the data' when assessing the effectiveness of it. First hand feedback from the participants on how positive the training was and how it helped them in their roles should still be central to the evaluation of the training programme, (Pastore, et al. 2020).

It can be argued that these methods of evaluation are part of training evaluation models. These training evaluation methods that are used in industry are an important consideration when involving a new training programme such as the one developed in this research.

Training evaluation models are covered extensively in the literature chapter.

2.3.2. An evaluation of how to improve work-based training.

For work placed training to be engaging, interesting and useful it needs to meet the four basic criteria of good training practice: pace, relevance, value, and participation. These are the fundamentals of a work-based training course that is fit for purpose. In addition, the trainer must collaborate with the managers of the organisation to identify the key aspects of the environment so that the training can be best moulded into dealing with the pressures and demands of these commercial environments, (Foley, 2018). The trainer must also have a broad understanding of the work profiles and educational backgrounds of the trainees to shape the training as best possible to these capabilities. If that is absent then there is a high risk the training will be ineffective, (Gray, 2001).

These are the starting points to improve work-based training that must be met to meet the fundamentals of effective work-based training. Once this is achieved, research supports the idea that work-based training can have a significant immediate and long-term positive impact on employee behaviour. With well-planned and well executed training there will be immediate uplifts in staff productivity and usefulness as well as discernible improvement in staff morale, (Muhlemann, 2016). Post training, staff feel that they are being invested in, but for this to happen it is very important that the training is seen as a reward for the staff member for their hard work and crucially a recognition of their potential to contribute more to the organisation in the future, (Cunningham, et al. 2016).

The key to improving work-based training programme is to understand how it influences behaviour of the participants within the organisations post training. This should be a careful thorough process that finds those to be trained, why they need training and then build that training programme around them that will be consistent and support the strategic aims of the organisation, (Clark, 1998). This training development process should aim to help the trainee to improve the tasks that are performed and by supporting the achievement of organisation's strategic goals, (Knowles, et al, 2014).

An important method of ensuring that work-based training is effective and improved going forward is to publish and make clear the results of the pre training needs assessment. This will allow the trainees to see that the training programmes developed is as tailored as possible to their training needs. By doing so the trainer is naturally instilling a sense of ownership to the trainees that should help to improve enthusiasm and willingness to learn from the training. This is because the trainee can clearly see that the training programme developed is linked to their current roles and their professional development needs, (Blanchard, et al, 2019).

Another means of improving the work-based training delivered is to provide active demonstration. This involves proving the skills are applied in a practical manner through a live simulation or case study method, (Clark, 1998). These demonstrations ease the transfer of skills and knowledge as the trainee is more ready to adopt the desired behaviour change as the trainee can see the practical application as opposed to a conceptual idea. Therefore, active demonstration is a powerful way to make the training more interesting, understandable and as a result more impactful, (Grossman, et al, 2012).

Evaluating how the training delivered is developing as an effective training session there must be opportunities during the session to allow for practice either as exercise, role plays or simulations. By incorporating practical application exercises throughout the training workshops, the trainer is providing an opportunity for trainees to try out these new skills and provide a platform where they can make a mistake without the consequences that would come with making errors with the new techniques in a live work situation, (Casey, et al, 2021).

A key element to ensuring that the training session is as effective as possible is to provide ample platforms for the trainees to provide feedback regularly. This feedback should be given both when the practical exercise is taking place as well as after the practical exercise has finished. The feedback should focus on how the trainee performed in relation to the skills delivered and not on any characteristics of the trainee, (Noe, et al. 2014).

When the training is completed, it is important to manage the post-training environment properly and not miss the opportunity to assess what went right with the training and what did not go to plan. Therefore, it is critical that the trainee can practice what was taught in the workplace and that the trainer is able to assess the impact of this. This will allow an assessment of the training, in conjunction with the employer to assess as accurately as possible the return on investment of the training, (Rafiq, et al. 2023).

The experiences and the opinions of the trainer of how the training went are as crucial as the feedback and opinions of the trainees. The trainers view will be shaped by the feedback of the trainees, but their own reflections and reactions are crucial in finding what went wrong and where improvements can be made, (Siniscalchi, et al. 2008).

All aspects of improvement that are implemented in later versions of the training programme, should be documented properly and in detail to allow reference for future similar work-based training programmes, (Bächmann, et al. 2019).

The sample literature outlined provides a basis and a term of reference for building and effective training programme for employee-based training. These foundations include core characteristics such as regular feedback and evaluation opportunities that will consistently result in an improved training experience for the trainee and as a result, according to literature, will see improved outcomes in terms of a positive impact on behaviour and employee productivity as well as organisations key performance measures. Though not an end to itself to build an effective programme of training for small enterprises, these are the building blocks to start the process. The final elements that are needed to construct an effective financial management training programme for small enterprises will be investigated in the next chapters and is the basis of this research study.

2.4- The status of the current literature on the impact of business and financial training on small enterprise performance.

2.4.1. The level of uptake benefit of financial training on small enterprises.

This area of research looks at the effect that business and finance training have on small enterprises performance. As the specific type of training that is delivered in this research project has the fundamentals of management accounting, then as its core this investigation will focus on this type of training. The aim of this is to gain a conceptual understanding of what impact management accounting type training would have on small enterprises. This analysis is built on from the general concepts of effective work-based training investigated in chapter 2.3.

In relation to the impact of specific management accounting training has on small enterprises, research in 2014 by Wiedemann stated that due to the specific characteristics of small enterprises they in general use management accounting less than larger organisations and their management accounting information techniques are not well developed. This leads to the question if these organisations would gain from specific targeted management accounting training. Her conclusions include a recommendation that small enterprises undertake training that will help them to use the full benefits of management accounting within their firms, (Wiedemann, 2014).

In 1987, Hess undertook significant research on the relevance of financial and accounting courses to the needs of small and medium enterprises. This was American research that sampled over 800 small enterprises in the United States of America, involving 19 pertinent questions. The survey asked the participants from small and medium enterprises to rank the usefulness of certain types of business training with accounting been ranked alongside Marketing, Management and Production. Accounting and Finance training was ranked three behind Marketing and Management studies as courses that were most useful. The finance topics that were regarded as the most useful were working capital management with financial planning and budgeting ranked second above the other disciplines of tax management, banking, insurance, and pension management. Working capital management with financial planning and budgeting are key elements and disciplines of management accounting. Hess concludes that these findings suggest that there is a need for greater coverage of these management accounting disciplines in training offered. This was confirmed in the feedback by the SMEs surveyed. Hess draws attention to the fact that small enterprises training courses in the US at the time have only approximately 10 – 15% coverage in these finance related disciplines, reinforcing the perception that management accounting type training is not undertaken extensively by small and medium enterprises.

However, when looking at whether small enterprises would be inclined to undertake management accounting type training a different view appears. In 1999, Matlay undertook extensive research based in the UK that investigated UK small enterprises attitude to financial training in general. The respondents' attitudes were very much in favour of this type of training at around 93% of small enterprises responding positively to the concept of finance training with less than 2% responding negatively in their attitudes. Matlay, also revealed that those respondents with negative attitudes were exclusively from the micro level of small enterprises, but that all medium type entities had extremely high positive attitudes towards finance training, (Matlay, 1999).

The survey then went on to ask the participants about the actual amount of training their small enterprises had undertaken over a twelve-month period prior to the interview. The results of these questions proved a breakdown of correlation between the surveyed small enterprises attitudes towards dedicated training, which overall was positive, and the level of finance-based training they provided for their employees or undertook themselves.

Matlay, concluded his research by saying that there is a need to bridge the gap between UK small enterprises positive attitudes towards finance-based training and the practical active adoption of this type of training. This difference of the positive attitudes towards finance work-based training and the actual amount that small enterprises in the UK undertake illustrates the challenge presented to enthuse small enterprises to undertake finance-based training that they themselves acknowledge they would receive help from.

Trying to prove whether external management accounting training could have a beneficial impact on small enterprises, Robson, et al (2001), undertook research that looked at the impact and any correlation of government backed finance training and advice on small enterprises growth and survival. This research proved that there was a correlation between the external financial training and advice received and small and medium enterprises improved operational success, (Robson, et al (2001).

The findings of Robson et al study was also that in general only successfully growing small and medium enterprises realise the benefit of external financial advice and training. This was supported by later research in 2007 by Johnson, et al. This research also said that there was a strong positive relationship between firms that were experiencing profit growth and those that had external financial advice and training. However, this research found ‘push factors’ that result in small enterprises seeking external financial advice and training. These push factors tended to be previously successful small and medium enterprises experiencing an onset of financial problems or a slowdown in growth so that external advice and training was looked for by these small and medium enterprises to help address and correct these issues.

A finding of this research is that small and medium enterprises use informal networks to gain financial advice and training such as peers and family with the requisite skills. But the key finding of this research, which again is confirmed in many other studies is that external advice and training was only sought by the small and medium enterprises surveyed when they are experiencing a downturn in sales and profit growth and there is also a belief that the external advice and training purchased will lead to this decline being addressed and improved. The research also concluded that the firms who are successful but are planning a new growth strategy also seek the financial advice to help to increase the success of this new strategy, (Johnson, et al. 2007). The research did not cover the actual impact or success of external advice and training but only the reasons why it was received.

In 2014, Wiedeman, said that due to the specific characteristics of small enterprises they use financial management techniques less than larger organisations and the financial management information techniques employed are not well developed. Her conclusions include a recommendation that small enterprises should be encouraged to undertake finance training so that they can adopt the full benefits of financial management techniques that would help them to self-manage their businesses better, (Wiedeman, 2014).

In 2004, Simpson, et al undertook extensive research on the impact of financial training on small businesses. They concluded that there was significant evidence that small businesses relied on prior taught knowledge to support the financial management of the enterprises, but where training and education was targeted to improve performance measures it was considered successful and worthwhile, (Simpson, 2004).

Further research in 2017 by Chepkemoi, et al, suggested that financial training for small enterprises is beneficial in improving the financial literacy of the small enterprises. This is especially the case when the accounting training is targeted to meet the training needs, especially training that will have a positive impact on their financial performance, (Chepkemoi, et al. 2017).

Research suggests that training that is focused on the business needs of the small business improves financial management skills and financial self-efficacy within the enterprise, (Kirsten, 2018).

This evidence suggest that small enterprises tend to access and receive help from accounting training when they are experiencing problems that push them into accessing the relevant niche financial training and advice.

2.4.2. How to improve financial training for small enterprises.

The steps and process of evaluating and improving financial training for small enterprises is covered in chapter 2.3 a) and 2.3 b). These sections explained literature's established methods of undertaking evaluation and improvement process of work-based training using established and authenticated training evaluation models.

However, literature evidence also suggests an added consideration is that financial training to small enterprises should be customised as much as possible so that the learner can see the potential of the application from the training, (Foley, 2018). This suggests that the training programme must address the underlying pressing financial management information needs of the organisation to fulfil a sense of purposefulness of the training.

In 2014 Bayrakdaroğlu, et al paper on the impact of financial training for small businesses found that effective financial training resulted in an increase in confidence levels in financial literacy. This will happen if the training is providing financial skills to address business problems that the trainees can recognise and seem relevant to them. Again, this would suggest that financial training for small enterprises would need to be targeted to the financial information needs of the small enterprise participants to be seen to be effective, (Bayrakdaroğlu, 2014).

In 2021, Abduljawad, research assessed how much of the financial management practices taught in training resulted in enhanced levels of financial literacy and what impact that had on their business development and growth. Their investigation focussed on the design of a financial mentoring course for small businesses that would be seen to be effective in improving the financial literacy levels of the small business managers. The conclusions of the study were that the design of these courses must consider the strategic goals of the organisations trained and that this would help to enhance the financial literacy of the recipients of the training, (Abduljawad, 2021). This would again suggest that financial training for small enterprises needs to be customised towards their reporting needs to be considered effective by the participants. In the case of Abduljawad' research these were the small business owners, again consistent with the concepts of contingency theory of management accounting.

Widespread research that investigates the extent financial training has helped to support small enterprises found that the financial training developed needs to be 'funnelled' towards targeting small businesses strategic needs to have effective impact on their financial fortunes, (McKenzie, 2021).

For financial training to be considered effective it needs to be shown to help small business owners learn how to manage the money their businesses generate effectively, (Kirsten, 2018). Finance training to be believed useful for small business owners and managers needs to include training on budgeting, cash flow management, and tax management. Knowing how to manage finances helps small enterprises to avoid costly mistakes and free up time dealing with commercial problems, (Foley, 2018). Financial training must also show how business owners understand where their money is coming from, where it is going, and how they can use it most efficiently, (Simpson, 2014).

Financial training is also believed effective and useful when it allows small enterprises to practice decision-making skills safely before implementing those decisions in real-life scenarios. Small enterprises need to deal with unexpected and challenging aspects within their finances. So, it they can draw on the lessons taught during training this could help them make the best decisions for the future financial wellbeing of the organisation, (Dahmen, 2014).

Finance training should be structured to be self-paced with an instructional goal to provide techniques that would allow the small business owner to apply proper business financial management practices to their business. This would improve the levels of financial literacy and support business development and growth of the small business. A training evaluation model such as the Addie model would then allow the training programme to be paced at the level required that would be shown in this evaluation process, (Abduljawad, 2021).

2.4.3. How does this research contribute towards a gap in the literature?

Overall, research has shown there can be a positive impact of financial training, not only on financial management skills, but it also has a positive influence on employee performance which leads to higher job satisfaction level, with evidence they will fulfil their duties with a greater deal of responsibility and better performance, (Wong, 2016). Evidence suggests that where right in content and context, financial management training is effective if that training meets the financial management information needs of the small enterprise. This can be achieved through using training evaluation models to show these information needs in the feedback process. As such common trends can be shown in the feedback and be linked to key theories in relation to effective training to the sampled literature. There is extensive literature on how to use training evaluation models to improve the positive impact of training and create positive outcomes from the training.

Overall, what needs closer study to fill a specific gap in the literature is an analysis of the process involved in building a financial management training programme for non-finance specialist in small enterprises. This process overall aim would be to build an effective finance training programme. How to make work-based training effective, including finance-based training has already been investigated and analysed and summarised in the earlier sections. These studies have shown that training evaluation models should be used to find the financial management needs of the managers and owners of small enterprises so to customise the finance training to their financial information needs.

For this research project the common theme that was prevalent in the feedback matched the contingency theory of management accounting. This theory appeared from the data analysed in the responses of the participants of this training programme development project as seen in the Analysis chapter.

But what is lacking in literature is the granular level of detail needed to achieve the process of developing an effective financial management training programme for non-specialist managers working in small enterprises. So, this research attempts to address this gap by developing a process of training programme development by using a constructive grounded iterative approach to develop a "successive approximation model" (SAM) (Allen and Sites, 2012) of the training programme. The main contribution of the research lays in looking to incorporate work-based practice into the definition of learning in SAM. This will show that by adopting a collaborative approach, using the community of practice to help to develop the training design, there is confirmation of the theoretical concepts that underpin the practice of training programme and evaluation.

In summary, this research main contribution is that it details how undertaking a longitudinal participatory research project using an iterative design process, the underlying theory of training programme design is confirmed.

2.5- A review of the financial training that currently exists for UK Small Enterprises.

The last section covered the theoretical scholarly views on effective financial management training for small enterprises. For the purposes of completion and to have a robust approach to building an effective financial management training program for UK small enterprises it is necessary to undertake a short practical This is to ensure their approaches and rational for what is currently offered is taken into account and key relevant elements of this offering is considered and possibly incorporated into the devised financial management training model where appropriate.

LinkedIn in 2019 said that effective financial management training for all types of small enterprises should cover the following basic elements: a business plan that covers how to budget for cash inflows and outflows for the first six months of the enterprise's operation. These types of training should also cover how to forecast cash flow for the small enterprise, how to undertake basic financial analysis steps to improve the small enterprises profitability and how to undertake how to develop techniques to find faster growth for the small enterprise, (LinkedIn, 2019).

The Association for Accounting Technicians (AAT) run essential financial training courses for non-finance managers of small enterprises for the last decade. Based on consultation with the chamber of commerce and other interested bodies that are the interests of small enterprises in the UK the AAT developed these courses that met the basic requirements and essential requirements of financial management competence needed to run a small enterprise. The day courses run face to face and attract a considerable fee of on average two hundred pounds per delegate. The course covers the key aspects of financial planning and control and techniques to allow for analysis of the results and to be able to act on these results to the organisations benefit, (AAT, 2023).

As the title suggests these essential financial training courses cover the essential areas that those who run or manage small enterprises should have to run these organisations solvent and to build for growth, the skills being; understanding basic financial documents used in business, interpreting the information in these documents, and using the documents to manage day-to-day business activity to produce more insightful reports based on financials. In addition, the training covers how to prepare budgets and make informed budgeting decisions and the difference between profit and cash as well as how to manage different methods of liquidity. Lastly, the training covers how to make better business decisions based on finances, to manage different methods of liquidity, (AAT, 2023). However, it should be noted that these courses offered from the AAT are non-accredited so carry no professional award or certificate.

It will be explained in the methodology and the analysis sections that these AAT Essential Finance Training for Non-Finance Managers courses were the courses that were delivered in the pilot programme that formed the pre cursor to the main the research and then also formed the first iteration of this research project. Therefore, this is a clear sign that what was being delivered now as financial management training to small enterprises in the UK was referenced and used as a starting point for this research of building a process of effective financial management training for UK small enterprises.

These non-accredited courses suit small enterprises who need short, focussed training covering the basics but there are courses available for non-accountants working in the small business sector who need more in-depth training. The Chartered Institute of Management Accountants (CIMA) have an accreditation process for financial and accounting training aimed at small businesses. This is through their apprenticeship programme. Upon completion of these courses, an industry recognised continuing professional development certificate is awarded. These type of accredited courses will help the trainees from small enterprises to develop skills, confidence and knowledge of the basic financial management skills needed to add real value to the organisations that works for and provide them with a certifiable accounting competence qualification to the delegates from the small enterprises that will not only improve their internal financial management skills but will also give greater leverage to any small enterprises looking to attract more funding as the potential investors can have the confidence that the prospective business investment has been financially managed by someone who has had verifiable training, (CIMA, 2024).

Universities throughout the UK provide short courses aimed at supporting local small and medium enterprises. The universities may set them up as commercially viable courses with a commercial fee, or as many universities do in the UK offer them as part of a strategy to engage and support the local community by offering to the local business community the staff expertise and the other capital that universities have to offer to support local small enterprises, (THE, 2024). These short courses vary in structure, content but the common theme covered are specifically designed to provide ongoing support to anyone who is self-employed, within their own small business or who works in finance to an extent. These courses tend to function as a how-to guide for small business finances. They also help by providing a resource for small enterprises to revert to for guidance as the venture grows. The courses provide guidance on how to build better financial structures with the business entity as well as how to avoid the issues that often lead to business failure, including how to avoid over burdening tax liabilities, poor budgeting and lack of reporting and poor fundraising decisions, (LinkedIn, 2019).

However, current financial pressures on UK universities are now affecting the sector's ability to collaborate with industry and provide this type of invaluable support top small enterprises. UK universities loss of vital support from the European Union's European Regional Development Fund that had played a critical role in fostering collaboration between UK small enterprises and universities has not been adequately replaced since Brexit, as such this negatively impacted the university sector's ability to provide this type of invaluable support to UK small enterprises. This void is being filled by commercial institutions who do not always provide the suitable quality of financial management training to small enterprises as these are non-accredited, unregulated courses and as such do not always offer the most suitable value for money experience in relation to financial management training for small enterprises. As such the financial management training on offer to small enterprises could significantly reduce in quantity and quality, (THE, 2024).

The section provided an overview of the financial management type training that is currently offered to UK small enterprises to provide a term of reference for building a customised financial management training course for this sector and to provide a broad overview of what is offered and an acknowledgment that what is currently offered as financial management type training for recipients including non-specialist in small enterprises has been referred to and where relevant used in the build of the training model relating to this research project .

2.6- A literature review of Training Evaluation Models.

The research augments existing literature on training programme development underpinned by theory. To recap the goal of the research is to develop a financial management training model for non-specialists working in small enterprises that will enhance self-evaluation of financial management skills and hence increase uptake of the learning outcomes of the training. A process of training evaluation is used to measure the impact of each iteration stage of the training and the results analysed from the results of this evaluation directly lead the build process of the training model that evolved. The concept of the training evaluation model finalised in this study is a hybrid of existing evaluation models moulded to suit the purposes of this research.

As a significant part of the literature review for this research, those established training evaluation models are now reviewed so that best practice from each is taken on board and so that the final training model developed has taken the most relevant elements from established training evaluation models that have proven to work and are accepted as best practice. This will add to the robustness and credibility of the unique model developed for this study.

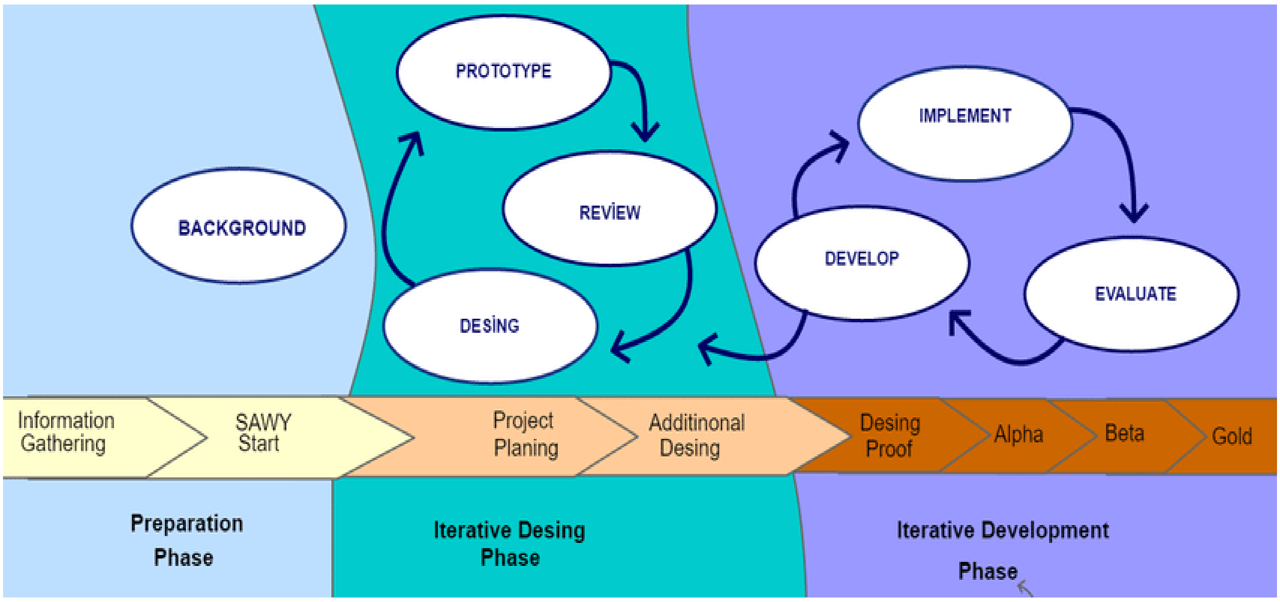
2.6.1 - Successive Approximation Model (SAM).

The ultimate outcome of this research project will be to produce a successive approximation model (SAM) of best practice of financial management training for non-specialist from small enterprises.

The SAM is a training evaluation model developed by Doctor Michael Allen of Allen Interactions, specifically to elicit evaluation feedback and build improved training courses earlier in the process to reach a final version that as close as possible to best outcome. What is particular about this model is that it uses a linear approach of eliciting feedback data rather than a recursive approach which can involve constantly referring to earlier versions to develop a best result. This means the courses evolves and develops at each stage with the earlier versions left behind even if there are elements that are still used in the latest version, what is changed before is set to the final version. The model consists of multiple level stages, consisting of analysis stage, design, development, implementation, and evaluation stage. The two main stages are a design phase and a development phase, with all phases going through an iterative cycle process to produce different development version of the training programme to eventually formulate an approximation of best practice model, (Allen and Sites, 2012).

The basic premise of the successive approximation model is illustrated in figure 5.

Figure 5: The Successive Approximation Model.



Source: (from Guney, 2019).

The process involves a recursive process where there is a recurrence of a problem and constant adjustments based on continuous feedback to find the perfect method by making continual incremental improvements, (Pirie, et al, 1989). In other words to find solutions to what is not working, fix it by possible multiple means and move on to find a solution from feedback to the next problem that is blocking the improvement and refinement process. The SAM is a final 'approximation' of what is best fit without it necessarily being the best fit. Linear process model is suitable for those projects, that need to be completed relatively quick, as with this research project, and where there is not an inexhaustible amount of feedback but rather there is a limited opportunity for feedback that needs to be utilised to its fullest to be effective, (Schimm, 2001).

The SAM is a model to reach the outcome for this study as the build process will analyse feedback, all feedback at each stage, in a process of continuous refinement based on constant reflection on feedback. This will be explained in more detail in the methodology section but involves continually analysing the feedback data at all points to form an evolving sense of what is best fit of the training model that best meets the needs of the training recipients.

The overall advantages of deriving a successive approximation model are flexibility, cost-effectiveness, and an iterative approach to training development. By applying SAM to the-training development, organisations can ensure that their training content is relevant and meets the needs of the learners. The model fits very well with the iterative design process training model that will emerge from the iterative process will 'approximately' meet the trainees' needs over a short period of time and is agile enough that allows for a quick change of improvement, (Allen and Sites, 2012).

The disadvantages of the successive approximation model are that it may not be an easy model to work towards when the environment it is operating in has little facility to allow people to feedback in satisfactory way quickly. Or conversely there is so much feedback over a short period of time that it can be contradicting and lack an overall agreed theme of response so that it can be difficult to identify the key common aspects to be adopted from the feedback, (Khan, 2023). The SAM could also be misleading and can be misinterpreted in a different way, but this is a generic problem for all evaluation models. SAM requires frequent testing and evaluation, and enough time and resources given for these activities, to ensure they are done properly and systematically. There is also a need to avoid too many changes and additions which can be quite easily done with the SAM build process, (Wolverton, et al. 2022). Another disadvantage of SAM is that it can be challenging to implement and manage. As the SAM is a dynamic and flexible process, there needs to be a clear vision and direction for the project and communicate it effectively to the team members and the stakeholders.

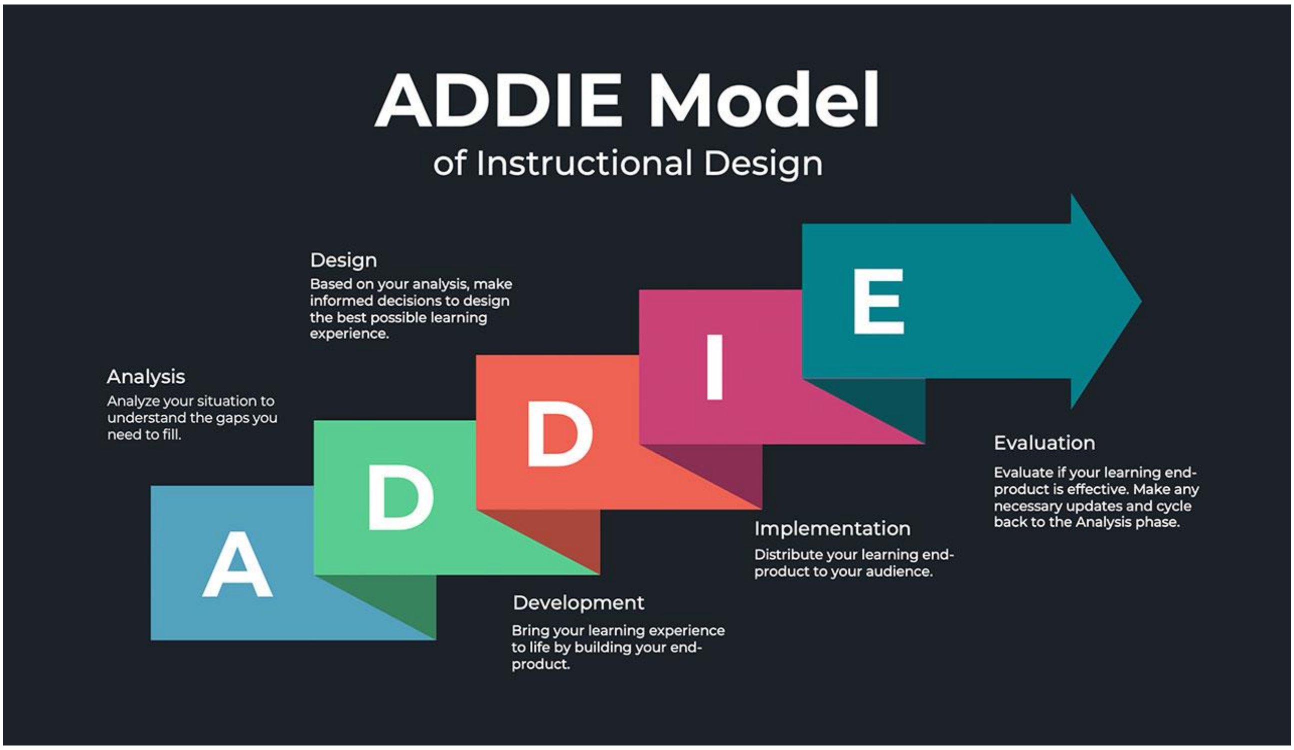
There is also a need to have a strong project management and leadership skills, and be able to manage uncertainty, ambiguity, and complexity. There is also the issue that the SAM is more concerned with engagement than effective learning, (Van der Heijden, A, H, C. et al. 1997).

Overall, the successive approximation model was considered the right approach to base the formulation of the training model for this research project objectives being an effective financial management training model for small enterprises for the key aspect being that each stage incorporates the feedback of the key stakeholders of the model, the recipients of the training.

2.6.2 – The ADDIE Model.

The ADDIE model was first introduced in 1975 by Florida state university to help the US military develop an interservice military training programme. Since then, the ADDIE is a model used for instructional design training and is still commonly referred to in this field. The ADDIE stands for each main stage of the model, which is for Analyse, Design, Develop, Implement, and Evaluate. It is a structured process to help a training course coordinator and designer to think through a course's design. The ADDIE model has a logical sequence of steps that fits well into the iterative process, (Davis, 2013). The ADDIE model is illustrated in figure 6.

Figure 6: The ADDIE Model.



Source: (Bell, 2020)

The sequential order of the ADDIE models starts from Analysis all the way to Evaluation. However, the ADDIE is flexible in the way it is designed and can be used as a continuous cycle of improvement. Valuable feedback would be collected at the evaluation phase can then be used at the next iteration at the Analysis phase and continue with that process until it is finished. At the completion of the evaluation process there should be enough feedback data to allow for improvements to the training course, (Bell, 2020).

The advantages of ADDIE are that it is adaptable and flexible in that in can be used for large scale training projects and can be used to be tailored towards individual one to one training. The key, as stated, is that it follows the iterative process that fully incorporates the trainees' feedback in the objectives of building a training model that is fit for purposes in terms of meeting the learning objectives of the target audience as that target audience feedback is incorporated into the final design, (Van Vulpen, 2023).

However, in 2012, software developer and educator Michael Allen challenged the ADDIE method in his book *Leaving ADDIE for SAM*. ‘The ADDIE process is past its prime,’ (Allen and Sites, 2012). One of the critical limitations of the ADDIE model is its inherently linear and sequential approach. This inflexible approach can lead to inefficiencies and missed opportunities to modify the training model from feedback that came earlier in the development process so missing something that couldn’t be seen to fit before but now would add value to the model once it has gone through some additional subsequent developments, (King, 2024).

The inherent sequentially of the ADDIE model, where each phase must be fully completed before moving to the next, significantly slows the development process. This extended timeline is particularly harmful where change need to happen quickly. The slow pace of the ADDIE model does not just impact time to market; it also inflates the costs associated with developing training programs. It can be inflexible so can be particularly detrimental in a fast-evolving business context, where the ability to quickly adapt and update training materials in response to new information or changing needs is crucial. But a key critique of the ADDIE model is that is that it often keeps those creating the training instructional designers and those stakeholders and learners who are the recipients of the training provided apart, (Özkıvanç, 2023).

Overall, the ADDIE model captures the feedback from the training programme participants at an early stage by analysing their change in behaviours as well as any uplift in skills and knowledge. By doing this the design of the course very much involves the trainee’s views and impact of the early stages of the feedback. The ADDIE other main advantage is that it provides a straightforward, logical to follow training programme design framework for new practitioners in training programme design. There are templates of design mechanisms to use for the new training programme designer and an easy-to-follow process to develop relevant learning materials that meet the user's feedback needs, (Molenda, 2003).

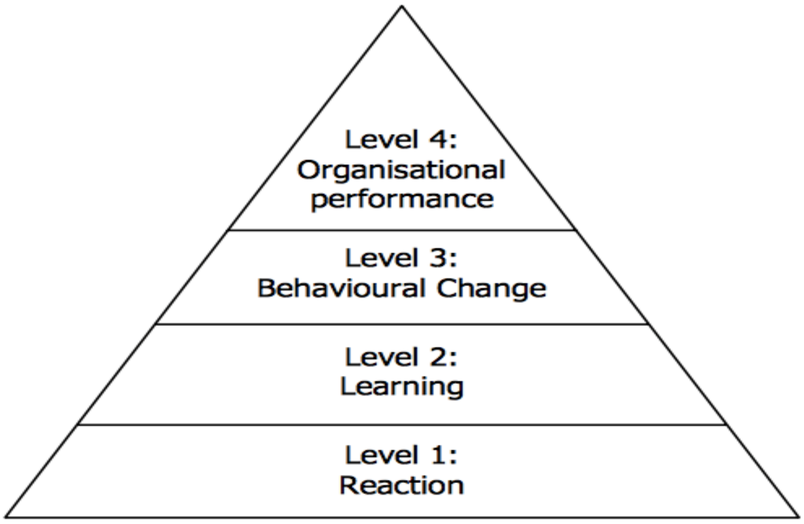
There are questions raised about the modern-day suitability of the ADDIE model since it was first conceived by the US army for its purposes in the 1970's. These criticisms centre on its lack of flexibility especially in the light of the highly dynamic nature of the modern organisation that undertakes frequent and significant changes in their make-up. So there is a need for training evaluation models that follow a more agile iterative process that can provide faster and more responsive changes to the work-based training programmes on offer, (Kurt, 2017).

With the key limitations of ADDIE considered, and the fact the ADDIE uses the continuous principle of improvement then this makes it inappropriate for this research project.

2.6.3 – Kirkpatrick's Training Evaluation Model.

One of the key models that needs to be referenced to ensure the robustness of the evaluation of the training from an action research and iterative approach is Kirkpatrick's four levels framework of evaluating training model. This model is the hallmark of evaluating learning spaces. It is illustrated in figure 7.

Figure 7 – Kirkpatrick's Training Evaluation Model.



Source: from Kirkpatrick, 1996

This well-established training evaluation model works on four main levels. The four levels of Kirkpatrick's model are:

Level 1: Reaction – measures how people reacted to the training allowing for gaps to be found and remedied for future training.

Level 2: Learning – as said this measures the degree of learning that has taken place. This measured learning should be measured the learning that was specifically and measurably set out in the planning stage.

Level 3: Behaviour – measures how the trainees have changed their behaviour based on the training they have received, specifically the on-the-job behaviour. This also must consider how much of this new learning is allowed to be used in the workplace by the managers /owners.

Level 4: Results– this is the level that analyses the results from the Organisation's perspective. This includes results that the learner has considered good for their enterprises such as a contribution to cost reduction or quality or quantity improvements, (Kirkpatrick, 2006).

The Kirkpatrick model allows for the results of training feedback to be measured against those results that were planned, focussing on the resulting areas that made the most significant impact for the trainee and the organisation. By undertaking a process of analysis at each defined stage there are clear demarcation lines that allows for the maximum benefit at each stage of the training model development. The ultimate element that is measured is impact and behaviour. This is the key advantage of the Kirkpatrick model that every aspect of it is focussed on impact on the organisation, something not all other training evaluation models do, (Rajeev, et al, 2009).

In 2004, Bates said that Kirkpatrick's model has served as the primary organising design for training evaluations over the decades since he first conceived and published it. However, he points out that one of the key flaws of the model is the assumption of causality, in that the information gained from the training will result in improved outcomes of performance without any other external factors contributing to the overall success. This is a key factor that needs to be set up in the evaluation of the management accounting training for this research and it will be critical to have robust detail methods to conduct levels 1 – 4 of the models.

To summarise the key benefit of Kirkpatrick's model must be the fact that it is a highly agile but also a comprehensive model suitable for work environments that are looking to develop suitable and effective training. It is also a simple approach to training evaluation-based design for trainers to follow, resulting in training that is valued by those who matter the most with the training, the organisation, (Tamkin, 2002).

However, in terms of the problems with Kirkpatrick's model, in 1996, Holton highlighted two main flaws with Kirkpatrick's evaluation model; firstly, the assumption of linearity of the relationship between the training and the outcomes in that the validation process does not into account other underlying interests that could and probably do affect the outcomes measured. Linked to this he also criticises the quantifiable measurement of results level 4 and suggests a more proper evaluation of the training would be a combination of level 1, 2 and 4 which would be qualitative measures.

This could be a more specific level 4 or even as a level 5 measurement of Kirkpatrick's model being a return on investment (ROI) where monetary benefits of the training are measure in the form of a cost benefit analysis. Once again, any external causality factors would have to be factored in and this could prove challenging, (Galloway, 2007).

In 2017 Reio Jr, et al made a balanced critique of Kirkpatrick 4 level evaluation model. The main criticisms of the model were the interdependency of each level or how they are causally linked. The research also comments on how the 4-level model is used by organisations in that they tend to focus on levels 3 and 4 as they are more tangible but these are more open to more external causality impacts, they suggest organisations focus more on the level 1 and 2 levels as a means of evaluating the impact of the training as this would be a more immediate response to the impact of the training and as a result be less susceptible to external casualty.

Criticisms of Kirkpatrick's model are that they lack detail on how to measure the impact of the training, as the process is set out but not enough details on how to conduct the evaluation. In 2017, Moreau in her review of evaluation models said such practical elements of evaluation such as the period of the feedback evaluation and whether it should be formative or summative or a combination of both. They also said that the detail of the feedback needs to be addressed as too much requested from participants could result in lack of participation, (Moreau, 2017).

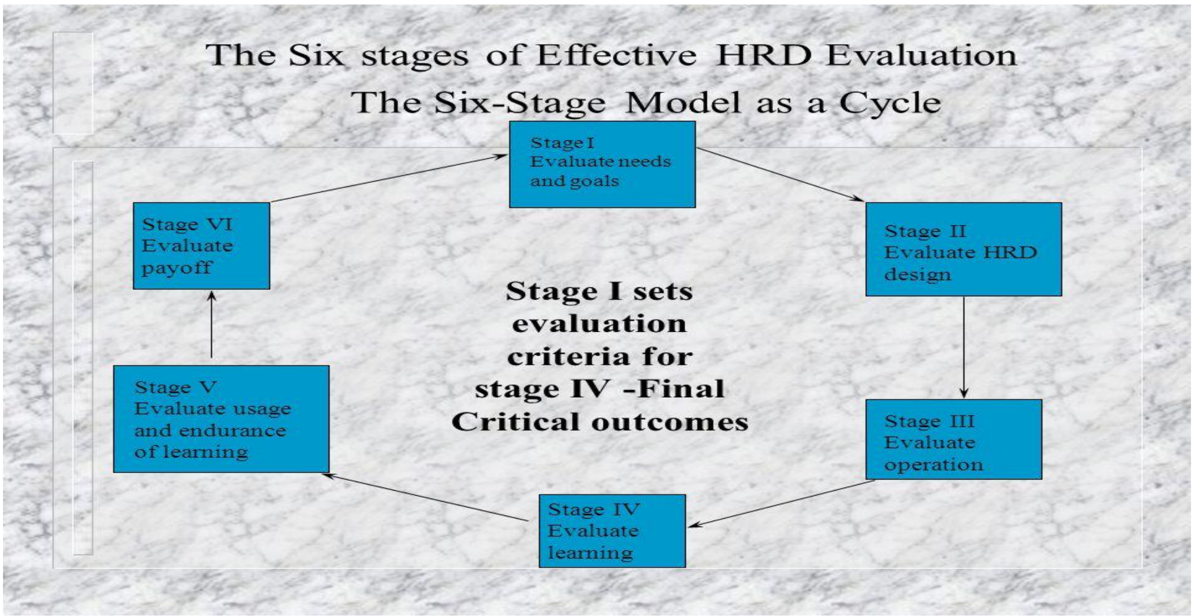
For this research project that looks to build an effective financial management training programme using an evaluation process then it is imperative that Kirkpatrick's evaluation model is considered as this is the classic and accepted model. Level 1 and 2 measures are applicable for most, if not all evaluation models. But it is the level 3 behaviour measurement which is the key relevant element of Kirkpatrick's evaluation model for this research project rather than the level 4 organisational performance. This is because in terms of impact of the financial management training programme this will be measured by the level of adoption into the work practice of the techniques and concepts taught on the course, a change in behaviour, rather them measuring any tangible impact on organisational performance which could have any number of other causality factors influencing the performance. However, Kirkpatrick's model is used in the final training evaluation model which is a testimony to its importance.

However, it is important to look at other evaluation models to make sure that the training evaluation model developed for this research project reviews and takes into consideration other models that are capturing attention in the field.

2.6.4 - Brinkerhoff six stage model.

A more extensive evaluation model that was developed by Brinkerhoff in 1987 where he developed a six-stage model, as opposed to Kirkpatrick's model four stage model. Brinkerhoff embarked on this after he criticised Kirkpatrick model as lacking in instructional design, planning, and implementation, (Reio Jr, et al, 2017). The model is outlined in figure 8.

Figure 8: Brinkerhoff six stage model.



(Source: Brinkerhoff, 1987)

As broken down in figure 10, Brinkerhoff six stage model involves stage one which involves evaluating needs and goals of the training developed, there is an evaluation of the design of the model at stage 2. This is to meet as much as possible the needs and goals of the training, stage three evaluates the operation as in assessing how the training is performing again referring to the needs and goals of the training. Stage four evaluates the learning that has taken place and whether the outcome of the training result in usage in the working environment. Stage five evaluates the endurance of the training specifically looking at what aspects of the training and learning are still being used and being sustained long term so that they are becoming part of the work practices uses. Stage six evaluates the payoff of the training in that it compares the benefits of the training form what is lost in terms of additional problems that now occur because of the training and whether the payoff was worth it, (Brinkerhoff, 2008).

Brinkerhoff model is like Kirkpatrick's model with the stages in the evaluation process like Kirkpatrick's model. The key difference is the approach which focusses on a success case method using qualitative data. The model also focusses on tangible incremental impact of performance as the key factor behind achieving results. The impact measured of the training is more holistic with Brinkerhoff model as the evaluation looks at how the training affected areas of the organisation and what factors were affected by the training, (Brinkerhoff, 2008). While Kirkpatrick's training evaluation model focuses more on the impact on humans. Brinkerhoff's aims to "inquire more broadly into the performance management context." A key difference between Kirkpatrick's evaluation model and the Brinkerhoff model is focus on the gaining meaning from qualitative data captured in the evaluation process and making intuitive interpretations from that model that directly shape the future model build, while Kirkpatrick's model will not implement the final version of the training model until quantitative data is collected and analysed. Kirkpatrick's model also tends to use large volumes of data if implemented properly, while Brinkerhoff model relies more on smaller groups relating their impression and views relating to the training. A fundamental difference in approach, (Brinkerhoff, 2008).

Brinkerhoff model assumes that any training initiative, will never be perfect, but it will never be deeply flawed either so finding something that is the best outcome from the training is what is aspired from the model. It looks to uncover an initiative's most impactful achievements and gain a deep understanding of the background to this driven by evidence.

An organisation can use these stories to find how to be more successful in the future, (Brinkerhoff, 2008).

Brinkerhoff six stage model has appealing aspects that are considered as part of this research project. For example, it is do-able: data is needed to be collected but can be done in a cost-effective manner. The six-stage model's sampling process is done on very systematic process and not random. It is therefore must better at finding key information, trends, and themes in the feedback data than it would be if the sampling were random. Much more in-depth analysis is done with the qualitative data that is collected through the interviewing process, interviewing participants in more depth. This means the trainee's dialogue that forms their feedback is interwoven into the structure of the redesigned training course, (Passmore, et al, 2014).

Brinkerhoff's model will be leant on heavily for the development of the training model for this research project for the following reasons. The fact the model developed for this research project will be kept simple by restricting it to a four staged level model there is a need to use the measuring levels 1 - 3 of the Brinkerhoff's model and mainly assess how much of the management accountant training impacts future behaviour of the participants. This would reduce the external causality elements of any identifiable change of behaviour by the participants after the training by conducting surveys and questionnaires and follow up interviews that purely focus on the impact of the training on the participants and their small enterprises consequent behaviour. For these reasons these are aspects of Brinkerhoff's model that need to be considered in the training model developed for this research project. Another pertinent aspect of Brinkerhoff six stage model is the use of 'the surveys and interviews may uncover additional, unexpected business results.'

This research project will utilise this approach, explained in more detail in the methodology section, that will undertake post training interviews with a sample of participants to bring more detailed clarification to the survey results and to derive that ‘additional information’ that give some unexpected guidance and direction on how to make the training more effective to aid understanding and increase the likelihood of adoption of what was taught. Lastly, another key element of Brinkerhoff’s model that will be pertinent to the training model developed for this research project will be the stage four and five of Brinkerhoff’s model which evaluates the usage then the endurance of the training in terms of the adoption of what was leaned on the course. On reflection stage five of Brinkerhoff’s model will not be directly used as will be explained in the methodology, as the participants of the training will only be questioned on their usage of what was taught on the course up to three months maximum after the training was delivered. This is not enough to really prove endurance. Neither will stage six of Brinkerhoff’s model be used. Though an interesting approach to assessing effectiveness of the training by looking at the ‘pay offs’ of the training in terms of the impact of the training, that is not something that is not within the remit of this study but may be something that could be valid in the next stage of the research.

2.6.5– Stufflebeam 's Context, Input, Process, Product (CIPP) model.

Stufflebeam's Context, Input, Process, Product (CIPP) model is another well-established training evaluation model as depicted in figure 9. This is an evaluation model that may be used to augment Kirkpatrick's model in this research to develop a better understanding of the feedback of participants and hence utilise it more effectively to fulfil the ultimate objective of the research of designing an effective model of management accounting training for small enterprises.

Figure 9 – Stufflebeam's Context, Input, Process, Product (CIPP) model

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From (Stufflebeam, 1984)

The CIPP approach focuses on constant improvement and a view that you should not settle for a prototype of a 'best do' approximation of a training model but rather the focus should be on looking to constantly improving the training delivered in an ever-continuing cyclic improvement process. It also moves away from the idea of being punitive that exposes faults and deficiencies in the training that the trainer designed. The focus of the CIPP model is to offer a mechanism that supports the training programme coordinator to enhance and customised the programme to the needs of the targeted participants. Stufflebeam defines this approach as the "systematic collection of information about the activities, characteristics and outcomes of programs to make judgements about the program, improve program effectiveness and inform decisions about future programming." At every point long and short-term outcomes of the training programme are judged from the viewpoint of the stakeholders with their feedback extensively analysed on how the training affects the group or subgroup, (Stufflebeam, 1984).

The main overriding assumption of the CIPP model is that training will never be fully effective, and such must go through a continuous process of improvement based on the stakeholder's feedback with goals, plans, actions, and outcomes all influenced by this feedback, (Tan, et al, 2010). In 2011, Zhang et al said that without an evaluation model like the CIPP model oversight or failure could easily occur in the training leading to a diminishing in the quality of the training delivered.

In this review of evaluation models, it was said that the period of the feedback of the evaluation needs to be finite and there should be combination of formative and summative assessment feedback. The research also said that the level of details requested of the feedback needs to be addressed as too much requested from participants could result in lack of participation.

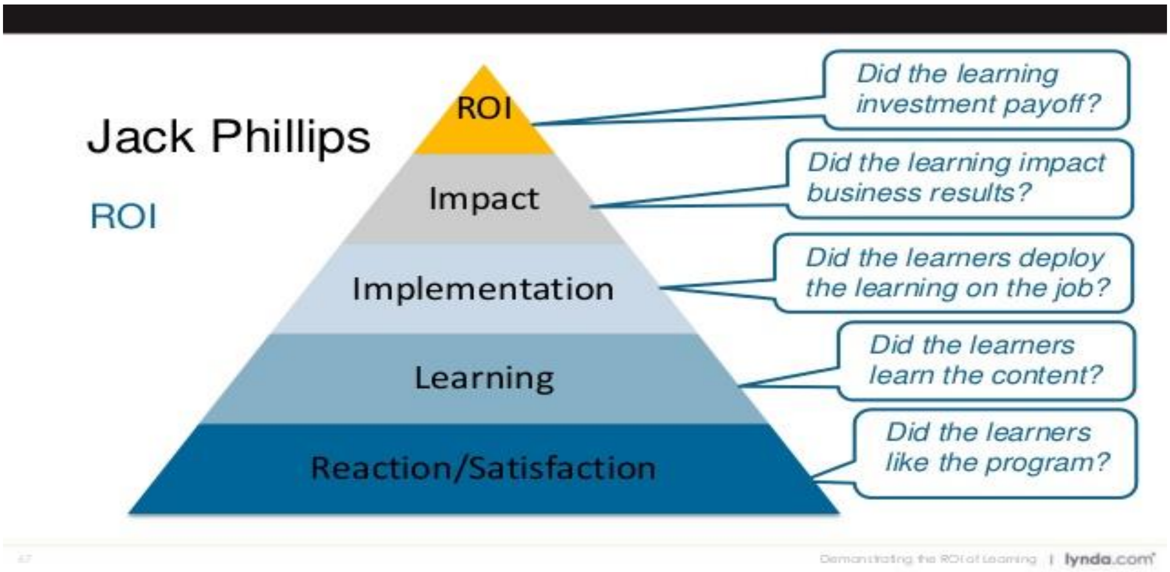
These factors will be incorporated into the evaluation model used in the research. However, as the main overall aim and objective of this research project is to derive an effective training model for management accounting Stufflebeam model would not be fully appropriate as the underlying principle of this model "is that training will never be fully effective, and such must go through a continuous process of improvement." There will be a point where the most effective model is established even if not completely perfect as the practical aim is to allow training providers a model to use without having to go through the continuous feedback process from users, which as stated it is not practical to be constantly asking for feedback and at some point, diminishing returns result from the feedback as to render the process near worthless. Additionally, criticisms of Stufflebeam and Kirkpatrick's models are that they lack detail on how to measure the impact of the training, as the process is set out but not enough details on how to conduct the evaluation.

Other criticisms of the models are that organisations are sceptical of the actual results as the measurements of these results is very interpretative apart from the level 4 of Fitzpatrick that looks at quantifiable benefits of the training. In 2014, Passmore & Velez undertook an overview of the main evaluation models to recommend HR departments on the most effective training for organisations. This was comprehensive research drawing on the available literature about evaluation models. They concluded that most models especially Kirkpatrick's' can oversimplify the evaluation process as they do not take enough account of causal variables either externally or more importantly the causality influences of the training within the organisation. However, they have stated that later models developed beyond Kirkpatrick that in effect have additional levels that considers and measure the impact of the external and internal consequences of interventions on the training given with a key additional factor to be incorporated being the availability and quality of resources and efficiency they are used after the training, (Passmore & Velez, 2014).

2.6.6 – Phillip’s Learning Evaluation Model.

To address these issues about Stufflebeam and Kirkpatrick’s models, Jack Phillips devised the Phillip’s Learning Evaluation model, though this was to consider the benefits of e learning training compared to conventional training. See figure 10.

Figure 10 - Phillip’s Learning Evaluation Model.



From (Phillips, 2012)

Phillips developed a fifth level of the evaluation model, an extra level from Kirkpatrick, with this additional level that includes the process of collecting data to measure the impact of the benefit of the training. But it also tries to isolate the effects of the training and eliminate any other factors that may be misinterpreted as creating benefit for the organisation as a direct result of the training. Phillip’s fifth element was a specific quantifiable return on investment of the training as percentage measure. He stated that this would translate the impact of the training in monetary terms by comparing the cost of the new training with cost of the old training and if the previous levels still had positive result, then this could be an acceptable quantifiable measure, (Phillips, et al 2012).

It is the fifth element that is the key element that sets this evaluation model out from others. The ROI of the training is the unique element to this model. To add credibility to the accuracy of this measure the model requires the organisation to measure the key components of the ‘return’ element of the ROI measure before and after the ‘investment’ on the training. This would involve measuring sales, profitability, increase in productivity and other relevant components before the training happened and then after it has been delivered, (Phillips, et al 2012).

As said, the Phillips Model attempts to remove any other causality influences at all levels of the training program's ROI evaluation. This allows correct net monetary benefits from the various training programs to be proven with confidence, (Herrholtz, 2020).

A key criticism levelled at Phillip’s model is that the ROI is calculated after the training has been delivered. In other words, if the ROI is low or even negative it is too late to change the training. This could be training that could have cost hundreds of thousands of pounds depending on scale and scope. However, the investigation of why this happened can be used for the next round of the training so that the main deficiencies of the training delivered can be rectified resulting in a higher ROI in the next round of training, (Herrholtz, 2020).

Though the accurate ROI element of Phillips model filters out other causalities to derive an accurate ROI of the training, it is not considered necessary for this research project, but it is important to note that these evaluation models are becoming more accurate and result in assessing their usefulness. But ultimately the main unique selling point of this research, being the ROI element of Phillips model, is out with the remit of this research project mainly due to the lack of confidence that all other causality factors would be removed from the measure of ROI on the training and so would undermine the credibility of the ROI results and as such lead to possible incorrect conclusions of the value of the training.

2.7- The Theoretical Concepts Underpinning the Research.

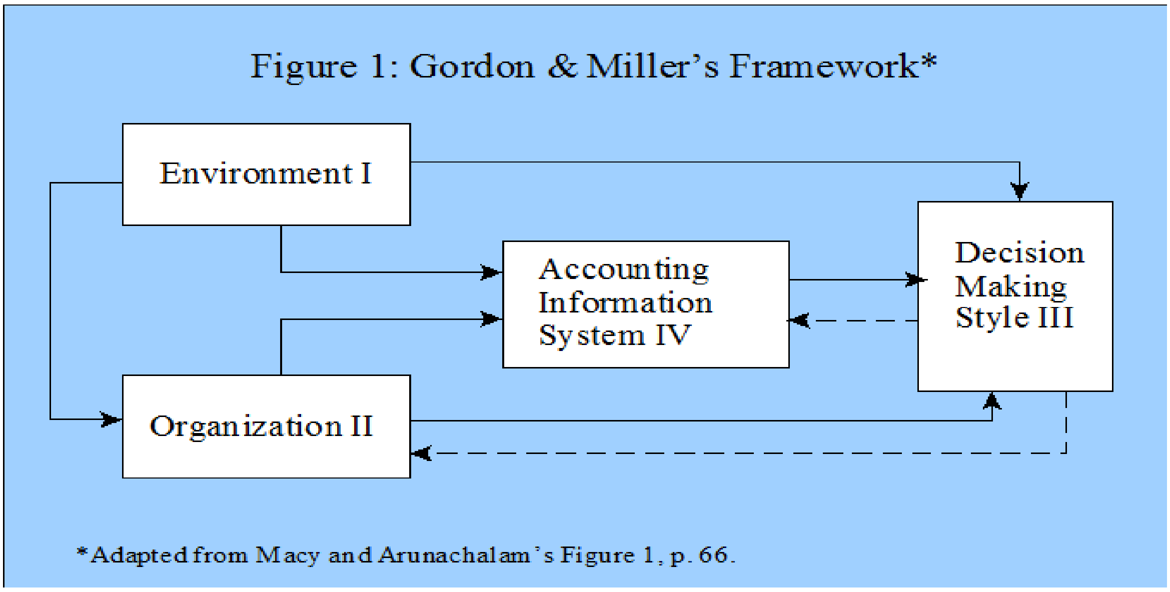
This section investigates in literature the main theoretical concepts to consider and underpin the basis and the finds of the research and briefly explains how these concepts apply to this research. Their full relevance will be fully explained in the methodological section and the findings sections. This section explains each relevant concept.

2.7.1 Contingency Theory of Management Accounting.

As will be shown in the findings and discussions section, the responses that are grounded in the data, collected from the participants during the training evaluation process, have shown a similarity to contingency theory of management accounting. It is essential that this theory is considered in detail for the training programme to be rendered as effective as possible, especially in terms of the goal of maximising adoption of the techniques taught on the training programme. Therefore, the contingency theory of management accounting is critical in the training programme build and the theory needs to be investigated thoroughly within literature.

Contingency theory of management accounting suggests that a financial management system should not be rigidly set in place but should be designed to be as flexible as possible to allow for any changes in key organisational factors. It was first conceived in 1976 by Gordon and Miller et al. They said that financial management systems change in line with certain key movements in organisational environmental factors. These factors were changes in management structure, technology, and other organisational human factors. They conclude that the overall findings of their research are that financial management systems are designed to have an adaptive framework by default due to the environmental uncertainty that all organisations work in. As the environment changes the financial / accounting information needed to address these changes will adapt to respond. So, in effect a change in accounting information used within an organisation is needed because of any environmental changes the organisation works in, (Gordon and Miller, et al 1976). This is outlined in figure 11.

Figure 11: The Contingency Theory of Management Accounting.



Source: (Gordon and Miller, et al. 1976)

Contingency theory has been used to explain how accounting systems designs must adapt to environmental contingent variables to keep high quality financial information that will help to achieve good financial performance. Fixed, proved measures of financial performance become less useful and less relevant to the environment the business is running in and therefore must be adaptable to the changing environment to still be useful and relevant. There is no one best design for management accounting systems but the system of management accounting used is one that best fits the situational factor, (Drury, 2004).

This theory would be recognised by anyone who work in financial management and understand through experience that the financial management techniques used varies in accordance with the management priorities within that organisation at that point, and that these can change over time, (Otley, 2016).

(Hopwood, 1989), cited in Ahern (2007), explained management accounting as specific set of contingencies from the perspective of the organisational members, and these contingencies decide for what purpose the management accounting information is used. Therefore, specific management accounting techniques used are dependent on the circumstances they are been used for. This was the basis of contingency theory of management accounting which draws heavily on the contingency theory of management.

Accounting in general cannot be explained on a purely functional level as it overlooks the importance accounting has on the way strategic decisions are made by shaping organisational motivations. They also and influence the co-ordination of intentional action within the organisation. In fact, accounting and organisational aims are interdependent, (Ahern, 2007).

In 2016, Otley in his analysis of the contingency theory of management accounting questioned on what aspects of management accounting Gordon and Miller were trying to explain; was it an arbitrary selection of techniques that are to be explained or is there some science behind the selection of the techniques? He also questioned how the defined circumstances in contingency theory are selected. Finally he questions the process of matching the management accounting techniques used and the purpose they are being used for. He argues that management accounting practices used in organisations are dependent not just on the user needs but on other factors such as the level of technological facilities available within the organisations as well as other internal and external factors such as enterprises process, available resources and competitive environment. He concludes his research by stating that contingency theory of accounting must be more dynamic than previously thought and not a conclusive explanation of how management accounting is practised. This leads to the need to view management accounting as a more process-based discipline that is adapted based on the needs of management accounting control techniques.

In 1998, Fisher studied the robustness of contingency theory by comparing it to the situation specific model of management accounting, the so called the "universalistic view of management accounting” first raised by (Copley, 1923) cited in (Fisher, 1998), that stated that management accounting control was a centralised idea of management control that was extended into the specific discipline of management accounting. In general, certain management accounting techniques are consistently used for certain classes of enterprises. The empirical evidence suggests that contingency theory is multi layered as the management accounting techniques used are based on one overriding contingent such as maximising short-term profits and that may be at the detriment of another contingent such as long-term investment in assets, product development or investment in research for example, (Fisher, 1998). It would therefore suggest that contingency theory is a more customised version of the universalistic theory of management accounting in that an accepted view of management accounting is used within organisations that fits the strategic priorities of that organisation at that time. But this could change if the strategic goals of the organisation change. Management accounting techniques practiced within organisations come about because of a cultural change within the organisation and that the management accounting techniques adopted are to help the realisation of the organisation’s new strategic aims, (Otley, 2016). Whatever the reasons for management accounting techniques being adopted and how they evolve within the organisation the essential necessity is that management accounting is firmly embedded within the culture of the organisation and will therefore change and evolve as the culture of the organisation evolves. This is a practical explanation of how management accounting adopted becomes a priority as it is contingent on what the organisation is hoping to achieve with its strategic goals. At that point, the management accounting practiced in that organisation becomes the universalistic position of that organisation, at least the position at the time of the cultural and strategic priorities at that time, (Ameen, et al, 2014).

This requires further research to evaluate this theory. In 1989, Gresov, cited in (Fisher, 1998), noted that when an organisation had contingency factors that were a priority simultaneously then the management accounting controls used resulted in these organisational priorities being sacrificed in terms of the management accounting controls that were prevalent. However, Gresov, concluded that the contingency relationship with management accounting controls used may not be pure and that a 'trade off' approach for management accounting controls used based on satisfying all the conflicting contingencies tends to be what occurs in practice.

(Fisher, 1998), also highlights the concerns on how contingency theory is evaluated in practice. He questions if all contingencies are considered and states that the relationship between the contingency variables needs to be further explored. He believes that this seriously questions the reliability of the contingency theory of management accounting. In 2016, Otley first started his thesis that Management accounting adopted by organisations were contingent on their particular circumstances at any particular time. He proposes that to re-enforce the theory any questionnaires that are completed by participants in how they use management accounting should not only ask about the effectiveness of a particular package of management accounting controls used by the organisation but should also gather information on the particular context that the organisation is using the management accounting information for.

Contingency has become the dominant theory in the approach to management accounting adoption in organisations. There is a need for further research to improve the strength of contingency theory for management accounting.

Despite reservations in the literature of contingency theory, the literature researched on this theory is robust enough to suggest that it has influence on how the data for this research will be collected. In order to recognise the contingent element of how effective management accounting training is used in the organisation it will be necessary to incorporate questions into the feedback surveys that relate to the circumstances of why they were they seeking the management accounting skills trained, what was the financial information problem, did they use these new set of skills to try and solve the problem, did the utilisation of these skills result in a successful resolution or at least a partial resolution of these problems? What management accounting skills that were delivered in training course proved to have no use in relation to the circumstances that the organisation needed them for?

It will be essential to incorporate these questions into the questionnaires to gain a clearer understanding of the impact of the management accounting training. The iterative process of feedback from training will lend itself well to this form of feedback. This will be discussed in more detail in the methodology chapter.

But overall that the results of the data analysis, as detailed in the analysis chapter, grounded within that feedback data is a clear resemblance of the contingency theory of management accounting and so this theory is fundamental to the success of the overall objectives of this research project.

2.7.2 – The status of current literature on Absorptive Capacity Theory.

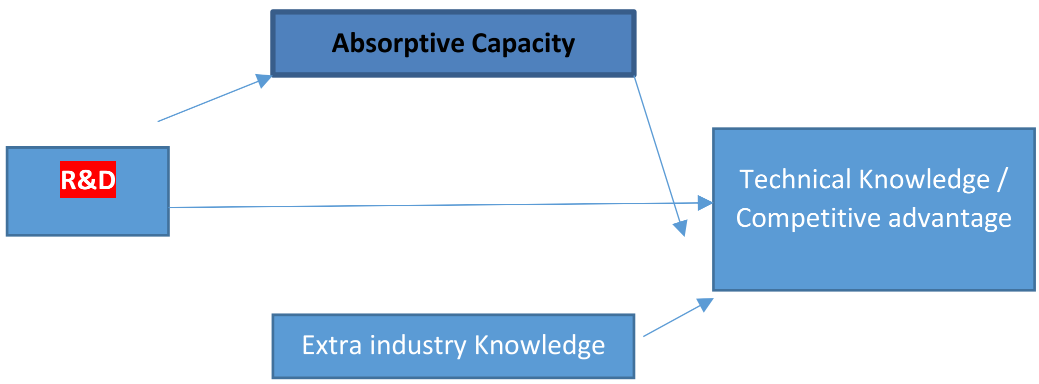
From the previous section of literature review it would suggest there is evidence that the management accounting practiced in the small enterprise, as with other types of organisations, is what is needed at that time to fulfil a financial information need that is critical for the strategic objectives of the organisation. But to cater for this need these contingencies must be recognised and, more importantly, be dealt with by the key people within the organisation who have the capacity to absorb this relevant new management accounting practice information and adopt it and use it within their work leading to an improvement on how management accounting is practiced in the organisation. There must also be mechanisms in place in the organisation to allow this new management accounting information to be implemented. No matter how relevant the new management accounting information is to resolve a contingent financial management information need it will not be implemented within the organisation if the persons absorbing the information does not have the capacity to recognise its relevance and importance and then be able to implement the new techniques. This requirement was clear and pertinent in the feedback data analysis and discussed more in the analysis chapter.

This phenomenon is consistent with the key aspects of absorptive capacity theory. As such this theory has again been recognised from the feedback data as a key theory to understand on a conceptual basis and to use and apply to the training course development on a practical level.

Absorptive capacity theory, according to (Cohen and Levinthal, 1990), is "an ability to recognise the value of new information, assimilate it, and apply it to commercial ends." They suggest it relates to a firm's prior knowledge, as they define it, and this can include basic skills or something innovative that they have developed in the field of technology, marketing, or their operations both production and administration. It can be based on any aspect of what an organisation already knows that allows it to recognise the value of new information that will have a relevant impact on the progression of the organisation. On the strength of that they argue that if an organisation invests in related research and development, it can increase its absorptive capacity.

Absorptive capacity theory is illustrated through a model as shown in figure 12, where the organisation generates new knowledge through R&D and extra relevant industry knowledge drawn from competitor's practices and extra industry practices. The key feature of this theory that this extra industry knowledge will only be fully utilised effectively resulting in effective increased technical knowledge if the firm invests in its own R&D so that it can gain a competitive advantage by exploiting extra industry knowledge and using it to its fullest capacity. This is the hallmark of absorptive capacity.

Figure 12 – Absorption Capacity Theory



(Source, Cohen and Levinthal,1990)

It will also lead to increased level of entrepreneurship as the absorption capacity has the basis to not only push the boundaries of knowledge but have the structure in place to create new competitive practices. This is the idea of absorptive capacity, creating an entrepreneurship spirit that will enhance the operations of the organisation. There is a strong incentive to cater for this phenomenon in the training programme design as it could lead to a significant improvement in the prospects of the small enterprise.

In 2013 Qian and Acs introduced the notion of entrepreneurial absorptive capacity. They defined it as the "ability of an entrepreneur to understand new knowledge, recognise its value, and subsequently commercialise it by using it to provide a competitive advantage." The idea of absorption capacity and entrepreneurial enhancement is that when new knowledge is accessed it has the potential to be highly transformational. At first the potential of this new information may not be recognised for its innovative potential even when the foundation of overall absorption capacity exists. But as new technologies are bought by the organisation the strength of this new information is fully relayed once it is interacting and used by the new technology. Innovation is then realised with all the commercial benefits and advantages that entails, (Qian and Acs, 2013). Qian and Acs absorption capacity and entrepreneurship is depicted in figure 13 by how new knowledge is converted quickly into entrepreneurial behaviour when absorptive capacity exists.

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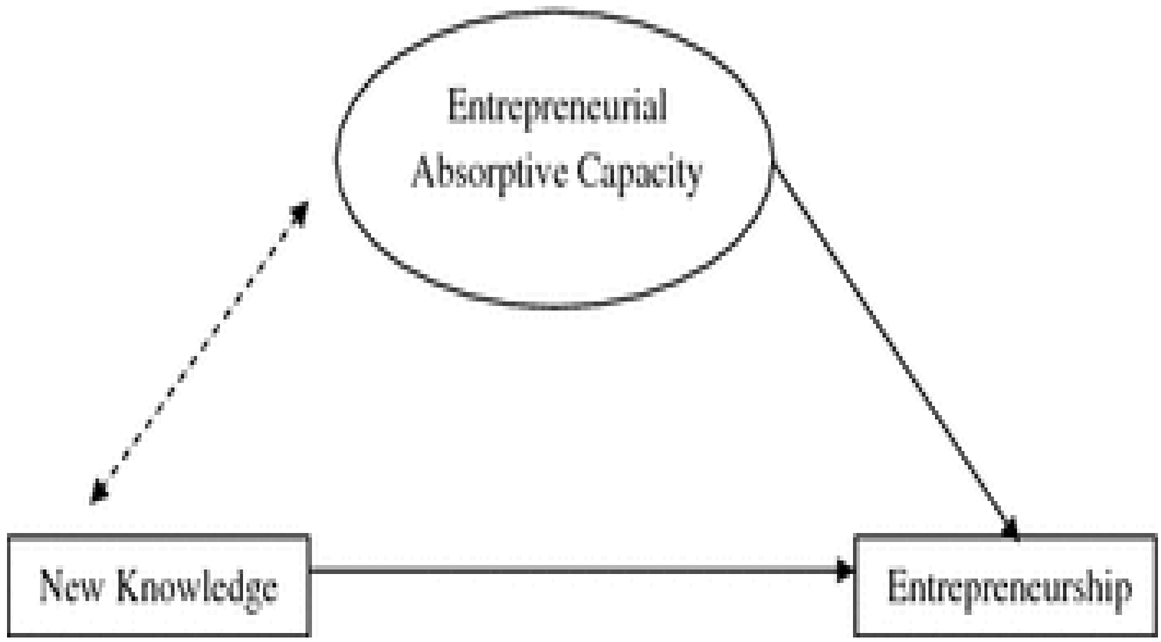
Figure 13 – Absorption Capacity and Entrepreneurship.



(Source, Qian and Acs, 2013)

The relevance of this to the management accounting training programme is that it illustrates the importance of sending the correct staff on the training programme. This will increase the absorptive capacity for the management accounting skills taught and could lead to entrepreneurial behaviour utilising the new financial management information taught on the course. This could create new work practices that are entrepreneurial and that could in turn lead to a competitive advantage being gained by the organisation as a direct result of the financial management training delivered.

The key is to send the correct staff on these training courses and that these selected participants have prior relevant knowledge that will enhance their absorptive capacity. This would suggest if the management accounting courses were to be effective then they should have participants who at least been exposed to management accounting practices in their current or their earlier workplace if they have not studied any management accounting techniques previously. This would seem a practically logical assumption as there would be no point owners and employees of small enterprises investing time and money on management accounting training if there is no relevant use to them in their current or future job roles. Therefore it is a fair assumption that the participants will have to some extent prior relevant knowledge which in itself according to Cohen and Levinthal increase their adsorptive capacity and therefore by that account the training has a higher chance of succeeding in its main aim of being effective, (Cohen and Levinthal,1990).

Cohen and Levinthal conclude their research by saying that organisation's overall absorptive capacity is highly dependent on the individual employee, and this will depend on the investment of its individual members. However, they also say that the benefits of firms having absorptive capacity are difficult to measure as they are quite undefined. They also warn that when an organisation is looking to absorb new information that is removed from its ongoing activity then it must look to commit more effort and resources to getting beneficial gain from that new knowledge. By doing so the organisation must dedicate effort exclusively to creating absorptive capacity as the likelihood of absorptive capacity happening is materially reduced if this added effort to dedicate extra resources does not happen, (Qian, et al, 2013). Again this would argue that for the management accounting training courses that are the core of this project to be effectively adopted within the organisations the participants should have some form of relevant prior knowledge and, importantly based on Cohen and Levinthal's main assumption, there must be an outlet and an avenue for the management accounting training for it to be absorbed properly. In other words the participants must have the opportunity to use the management accounting training taught in their workplace or else the absorption capacity of the participants will be reduced as they could have the mind-set of ‘what is the point of this training if I am not going to be able to use it when I get back to my work?’ Of course, the converse of Cohen and Levinthal argument is true and indeed is stated by them that the absorption capacity of the participants will be higher if they have the background to the research the areas taught in the training, specifically that their work will allow them to utilise the topics taught so they are more inclined to be more absorptive.

In 2014, Harvey et al tested Cohen and Levinthal theory that those organisations with a high absorption capacity led to the adoption of new practices that leads to performance improvement. They evaluated this by using a case research approach of health care organisations within the UK. They confirmed that those organisations with highest absorption capacity displayed the highest and quickest performance improvements. They measured this through using a method of quantitative and qualitative measures such as improved strategic priorities, better quality and better use of management information, better communication, and better engagement with external stakeholders all leading to improved overall performance in a highly competitive and challenging market.

This research confirmed Cohen and Levinthal findings that investment in staff that came with a high absorption capacity and who attended the training had a mind set to learn for improvement and that these individuals added to the overall organisational absorption capacity and hence this should improve the effectiveness of the training their staff were subjected to.

Before fully embracing the concept of absorptive capacity theory into the research study we need to investigate the limitations of the theory.

The limitations of absorptive capacity theory include a lack of a clear and operationalised definition of how to construct it, specifically there is no clear definition of the stepping stones of absorption capacity. There is also limited focus on external knowledge: as the theory primarily focuses on the assimilation of external knowledge but does not consider the internal knowledge and capabilities that organisations already have, (Selmi, 2013).

Another criticism of absorptive capacity theory is that the theory implies that knowledge acquisition is a linear process, but it is often more complex and non-linear. There is also too much generalisation and lacking detail on a wider specific environment it can be applied to. The theory has mostly been applied in technology-intensive industries, and it is uncertain how well it applies to other types of industries and settings, (Cuervo, et al. 2017).

There is also criticism aimed at the limited attention to the individual level of the theory as it mainly focuses on the organisational level, it largely ignores the role of individuals and teams in the knowledge acquisition process and how they can influence the absorptive capacity of the organisation, (Koch, et al. 2008).

There is also limited attention to the role of culture and social context as the theory does not consider these in shaping the way organisations acquire, assimilate, and exploit external knowledge. The theory mainly relies on quantitative methods for research, which may not be able to capture the complexity of the knowledge acquisition process, Lastly, there is limited attention to negative consequences in that the theory mainly focuses on the positive effects of absorptive capacity, but does not consider the potential negative consequences of an organisation's ability to acquire and exploit external knowledge, (Sancho – Zamora, et al. 2022).

However, even with these important limitations absorptive capacity theory is worth incorporating into the course plan build for the fact it can create an additional added valued entrepreneurial force within the organisation if properly captured and utilised. This could have a significant impact on the small enterprise’s growth potential, the ultimate aspired indirect benefit of this research project. The other driving reason that absorptive capacity theory is incorporated into the research project is that there are clear distinct elements of absorptive capacity theory that are grounded in the qualitative feedback data, specifically on the qualitative data that focussed on the background of the individual participants and so it needs to be included or else it would be a serious omission.

To summarise absorption capacity relevance to this research means that the people who would most suit the financial management training for non-specialist in small enterprises would be people who have some relevant background in finance in that their current work or worked previously in a position that involves some form of management accounting /financial management work. They have been recognised as the right person and invested in by the small enterprises to absorb this new information and have the potential within the organisation to implement this new learning and from this they will have the potential to be entrepreneurial utilising this new knowledge. By considering all these factors the literature suggests that the financial management training will be more effective and result in an improved outcome.

2.7.3– Summarisation of the literature and its relevance to the research project.

This literature review was set out in way to make it logical in terms of the whole purpose of the research project and why it is research that has value and will make an impact beyond an informative piece.

First there was the background to how important small enterprises have been, remain and will be in the future to the wider UK economy in terms of their levels of employment and contribution to economic growth and levels of innovation.

It was explained the annual high fail rate of UK small enterprises that have become more severe since the Covid19 pandemic and that worsening wider macroeconomic conditions have created an even tougher economic environment for them to survive and grow in. It was also explained through research the structural permanent internal causes for so many small enterprises to fail are multiple, but the lack of financial management acumen has a significant bearing on small enterprise failures. The background to this was explored in literature as this forms the main motivation for the research that by addressing the lack of financial acumen of owners and managers in small enterprises would contribute to addressing the high failure rate of small enterprises in the UK.

This literature review sets out the prior research relating to this research project. It then looks to go beyond what has been investigated so far by looking at how to build an effective financial management training programme for non-finance managers in small enterprises that will increase self-valuation of financial competence and increase the level of adoption from what is taught on the training course.

By doing so there will be a process in place built on the foundations of prior research that can continue to protect small enterprises from failure.

Chapter 3: Research Methodology

3.1 Restating the Aim of the Thesis.

As set out before, the overall aim of this research is to develop an iterative adaptive design of financial management training. This process will incorporate key theories to promote uptake in small enterprises. The training programme developed would allow non-finance managers within small enterprises to enhance their self confidence in financial management matters, which would in turn lead them to adopt these new techniques taught in the training to the betterment of the financial management information used in the small enterprise. Based on literature researched this improvement in financial management skills used within the small enterprise should result in an improvement in how the small enterprise performs financially placing it in a better position to survive and grow.

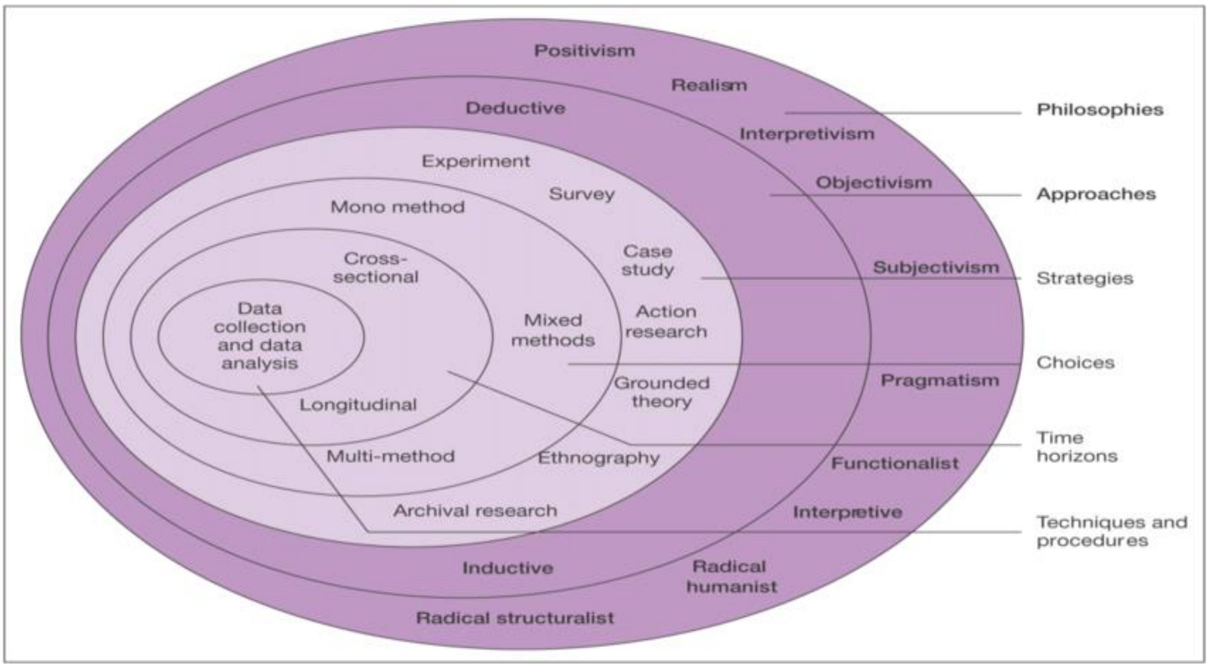
The key conceptual approach attempted to achieve these objectives is to undertake an iterative constructive process of training programme development. This iterative process will closely analyse mostly qualitative data collected through staged feedback from the participants of the training to identify any common recurring themes grounded in the data. This data would signpost the overall direction of the training course planning build that would reach the overall objective of a financial management training course for non-finance managers of small enterprises that enhances self confidence in financial management skills and leads to a subsequent increases in uptake in the skills taught on the course.

This chapter lays out the research philosophy, approaches, strategies, research choices, time horizons as well as the design of the questions and the process of analysis that will be used to undertake the research project. This is the basis of reaching the research objectives. This chapter will finish with the limitations of the research approach as well as referring to the ethical considerations of the research and the ethical approval approach.

To explain the methodology to be used clearly and logically the study will follow the research onion approach recommended by Saunders et al. (2007). The research onion is illustrated in figure 14.

The research onion starts out by telling the philosophical research approach which influences what is adopted in the second stage. The main strategic method of research is set out in the third stage with the fourth method showing the time horizons involved. The fifth stage shows the actual data collection method and last stage describing how the data is analysed.

Figure 14 – The Research Onion.



Source: Saunders, et al, (2019).

3.2 The Research Philosophy.

3.2.1 Understanding the Nature of the Research.

The first stage of deciding the methods involved in undertaking the study is to show the philosophical approach and this can only happen after the broad nature and concept of the research is understood. Research can be broadly split into two distinct concepts known as 'Epistemology' and 'Ontology.'

Ontology is the study of how things are figured out and try to prove the facts from things that are abstract, (Goertz, 2012). Whereas epistemology is concerned with all aspects and dimensions of knowledge in a subject area that is researched. It involves the study to show what is true. The fundamental underpinning of epistemology is that reality is socially constructed, and that no external reality is independent of human consciousness, (Darlaston – Jones, 2003).

This research by its nature is more of an epistemological study as the findings of the research will in essence be based on the feedback views of the participants of the training programme and the interpretation of what they, the participants, believe is true about the benefits or the issues with the training programmed delivered.

There are two main assumptions of epistemology, these are positivism and interpretivism. Positive epistemology is defined as a mechanism to measure a phenomenon through a measurable process that allows an outcome to be interpreted and proved with reasonable certainty and from this process knowledge appears. Positivism excludes anything that cannot be measured with reasonable certainty, (Junjie, et al, 2022).

Positivism would not be a suitable method for this research project as the nature of the research data is principally qualitative in nature and so will involve interpreting the qualitative data collected from the participants.

Therefore, interpretivism is the chosen research philosophical position of this work and is explained in section 3.2.2. Using an interpretative philosophical approach will allow the training course participant's belief of the training to be set up through a recognised process where the results of this process will be the vitals building blocks of the solution to the research problem.

3.2.2 Interpretivism Philosophy

As the overall nature of the research is proven as an epistemological approach, the philosophy element of the research onion is proved as an interpretative philosophical approach.

Interpretivism, encapsulates the human's impulsive need to find facts and understand them relating to a particular subject matter. Interpretivism recognises how humans see and understand and interpret a topic and this is how the conclusions of the study are reached, (Darlaston – Jones (2003). Interpretivists believe that all that is real is based on how society see it and as such objectivity in its purest sense is lost, (Bryant, 2011). The approach suggests that the people involved in the research study should be the central focal point of interpreting the impact of the study by allowing them to observe and comment on that impact., (Ryan, 2018).

Therefore, qualitative data is the key of the interpretivism philosophy and it also fits perfectly to what is being attempted in this research project, to find solutions to the research problem by assessing the interpretations of the delegate feedback of the training, how they felt about the training and how they feel the training delivered will impact them personally and what could be done in future versions of the training to increase the positive impact of the training.

The conclusions of the goals will be based on the interpretation of the responses of the participants, as said, exactly the nature of this research project. This will be providing the conceptual depth required to reach the summative conclusions on the research project study.

Criticism of interpretivism point to the issues with validity and reliability of the data collected if it is purely qualitative as most interpretative approaches are, as the key aspects of it are open to interpretation due to the accusations of generalisations, (Bryant, 2011). However, the qualitative research that will be collected in the survey questionnaires to the participant's findings can be strengthened by more detailed interviews of the participants and to back up any summative findings with documented similar examples to cross check validity of the findings. This is exactly the methods that was used in this study. Participants were interviewed to the necessary depth to remove any doubt about the specifics of the responses and therefore remove generalisation to the interpretation and conclusions to the responses.

Therefore, the interpretivist approach was used in this study for the qualitative data collected in this study. The qualitative data is used to assess and to find the key learning points and impact of the study. The questioning was specific to mitigate the risk of generalised interpretation. The specific details of the questions and the interviews and how they are interpreted and analysed are set out later.

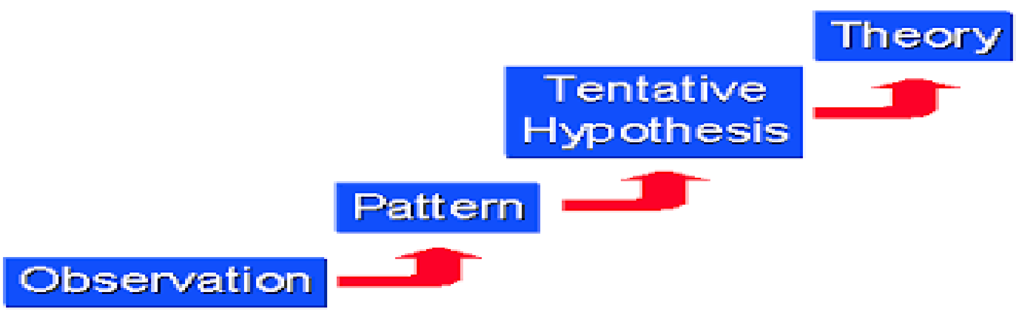
3.3 The Methodological Research Type Explained.

3.3.1 The Inductive Approach.

The main type of research principal of the design of this research was an inductive form of research. Inductive research allows theories and concepts to happen from data that is seen and analysed. It requires a deep analytical process to take place that digs deep into the data to find hypotheses on meaning. The overall goal of inductive research method is to develop a theory that can apply to the solution of a research problem set, (Bryant, 2011.

The inductive process of research was highly suitable for this research project as the training programme, observations, interviews and questions were all be designed to test the impact the training has on the individual participants with the analysis of the responses being grouped into themes of responses that can be linked to established theories that will shape the solution to the question that is being investigated: how to develop an effective programme of training of financial management for small enterprises. Figure 15 sets out simply the steps involved in inductive research.

Figure 15 – Inductive Research.



Source (Liu, 2016)

The general hypotheses are that all these theories apply and indeed need to apply for the management accounting training for small businesses to be effective. However, the overall objective is to develop an effective financial management training programme for small enterprises and though the above theories may have to apply for that to be the case, as the evidence in the literature suggests, to understand how exactly to formulate that programme will involve developing a hypothesis that will result from the patterns of the responses from the participants and this will come from inductive research, (Liu, 2016).

However, the three principal theories were assessed in a unique scenario; financial management training specifically for small enterprises and to test whether if these three factors were in place the management accounting training was as effective as possible. As a result, a new tentative hypothesis was developed that used the results of the feedback from participants based on the theoretical concepts that appear from the feedback data that told the ideal conditions required for the financial management training to be effective. It may be a cocktail of inductive reasoning that forms a new overall theory of how best to plan and deliver the most effective form of management accounting training for small businesses, or it could be that it confirms the existing theories.

However, an inductive process of research will naturally appear during the research as these three theories have not been assessed before in this context and therefore the whole research is inductive, conclusions made after seeing and analysing feedback from research of action. This which will lead itself to using a grounded theoretical style approach of research, (Liu, 2016).

One of the main advantages of an inductive type of research is that it is highly suitable to finding meaning in that it is grounded in the data, and this allows the analysis to closely to align itself to the context of the study and support the generation of new theory. Another key advantage of the inductive approach is to be completely open minded to what theories can emerge from the data that is analysed. In other words it allows the researcher to be open to surprise at what they discover and be willing to accept and adopt what is discovered through the analysis and interpretation process, (Eisenhardt, et al. 2016).

This is an important consideration in this research project as the risk of over complication what is interpreted and also relying on what was previously considered the solution to the research question is a risk. To be candid this is because the researcher is a very experienced finance and accounting tutor who has taught financial management, management accounting at all levels for many years as well as being an experienced management accountant who was the recipient of management accounting training for many years. So the impulse to think; 'I know what best practice is here and how to achieve it' is high. This phenomena is known as researcher bias. As Eisenhardt, et al stated in 2016: 'the inductive approach provides a convenient and efficient way for researchers to analyse qualitative data and avoid pre biasness in the results, as much as it can possibly be.' This acknowledges that preconceptions are always there on the part of the researcher and are unavoidable. But the inductive approach mitigates the impact of these preconceptions.

However, the main weakness of note of inductive reasoning is that there is no way of being confident that what is interpreted is correct which also means any alteration in the influencing variables can lead to incorrect conclusions, (Eisenhardt, et al. 2016). Secondly, research on aptitude and intelligence lacks strong theoretical foundations based on knowledge of human cognition, (Armat, et al. 2018). There are also the practical limitations of inductive reasoning in that a small sample tends to be used, there can be incorrect original assumptions made that could set the research direction off in the wrong direction almost immediately, there is an inherent risk of bias or original premise, as stated, leading to presumption without basis or validity, and ultimately opinion instead of pure interpretation of the observations, (Haque, 2022). However, this an unavoidable risk of all research approaches and must be acknowledged as such and measures put in place by the researcher to mitigate these pre assumptions.

This approach sits perfectly with this research project as it is the established approach for social research design such as this research project. This because the data analysed is mostly qualitative and it includes interpretation from observation when an inductive process of interpretation is suited, (Haque, 2022).

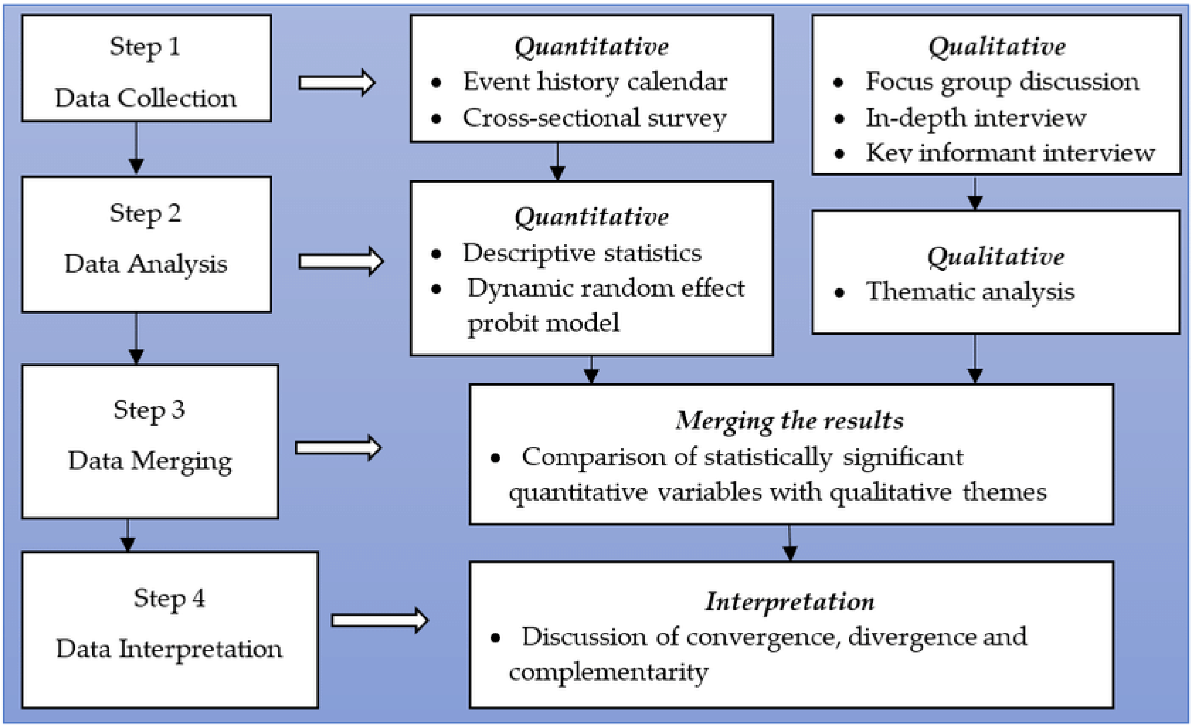
This was used to find meaning from the data, a mixed method approach. Therefore, the inductive research design is most suited type of design for this research project.

3.3.2 The Mixed Data Collection Approach.

Using the inductive approach, to derive the solutions to the main research question involved collecting data that is mixed in its nature. Having these two types of data provided a fuller picture of the solutions to the research question as it will be challenging to identify the overall patterns and themes leading to the refinement and improvement of the training model. Therefore, as data and type of data should be collected as possible. Therefore, the data collected will involve a mixture of qualitative and a small amount of quantitative data.

The mixed method is illustrated in figure 16.

Figure 16 – The Mixed Method of Research.



Source: (Etana, et al. 2020).

A mixed methods research design uses multiple sources of data that would involve both qualitative and quantitative data in whatever suitable balance that allows a triangulation of qualitative data with quantifiable data that supplements, confirms, or adds to the qualitative insights. This integration of data provides a fuller picture to the solution of the research question investigated, (Etana, et al. 2020).

From a practical perspective, a mixed method approach provides a platform for a higher response rate leading to more data that enhances the belief of how valid the interpretations and conclusions of the data are, (McKim, 2016). For example, in the case of this research project the researcher needed to study the effectiveness of a new training programme by collecting quantitative data such as test scores, or as in this research project case the number of participants who responded positively to a particular aspect of the training, as well as qualitative data through interviews or surveys to understand the training participant's perceptions and experiences. Overall, mixed-methods research provides greater clarity to solutions to complex questions. It also enables researchers to answer research questions from multiple angles and triangulate findings to enhance the validity and reliability of their results, (Almalki, S. 2016). This approach was key to finding the critical solutions that lie deep in the responses of the training participants.

There are concerns with the mixed-methods research type that need to be considered before fully adopting this approach. The key challenge of the mixed method of research is that it can produce a mixed message that can lead to contradictory and meaningless conclusions. To avoid this the two different sets of data should complement each other rather than looking at different areas of the research. However, using two different data types reinforces the validity of their findings if they confirm each other, (Caruth, 2013). This is because the mixed method approach will be critical for this research project as it helps to 'gain a more complete picture than a standalone quantitative or qualitative study, as it integrates benefits of both methods,' (McKim, 2016).

This is why a mixed method was employed in this research project. It should be noted that the level of quantitative analysis is neither extensive nor highly technical due to the nature of the quantitative data analysed, which is merely comparing numerical responses to survey questions at the beginning of the iterative cycle with the same responses to the same questions at the end of the iterative cycle.

3.4 The Methodological Research Strategy and Design Explained.

The next consideration in building a method of research, according to the research onion in figure 17, is to look and decide on the overall strategy of research to follow and embed this strategy into the design of the research. The overall research design methods are set out in figure 17.

Figure 17: Research Design Strategies

Source: (Devers, et al, 2000)

Referring to figure 20, there are options for integrating strategic design approaches. The strategic approach of this research will be to use an iterative design process that employs a grounded theory approach to analyse and extract meaning grounded in the data by working in a participatory action research manner.

The general strategy of this research was to help develop a clear sustained journey direction to reach the overall goals. A research strategy is no different in that it helps shape the journey the researcher must take to reach its goal. A key element of this is the research design, (Devers, et al, 2000). The Research design involves choosing the correct research techniques from data collection to analysis and interpretation that will best aid answering the research question, (Salkind, 2010).

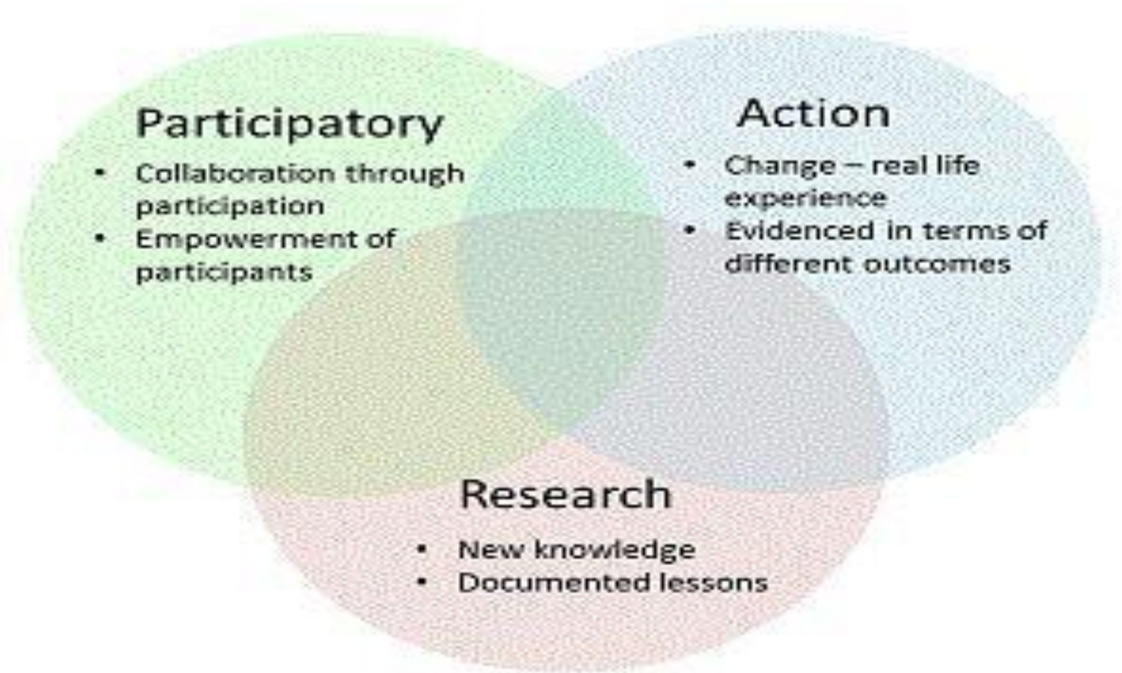
The overall strategic aim of this research project is to develop a financial management training programme for non-finance managers of small enterprises that will increase understanding and uptake of the financial management techniques taught. The key strategic decisions in relation to this aim are what involvement and the scale of the involvement the participants in the research have on the design of the training programme and how their feedback responses are used to design the training programme.

In terms of how the participants in the training programme engaged in the design of the training programme, their involvement was paramount to reaching the overall research aim. The data from the participants will gradually build the training programme through a constructivism iterative design process. The literature review chapter 2.5.1 covers the constructivism iterative design process in more detail as a critical evaluation theoretical concept.

3.4.1 The Participants Action Research Approach

Participants action research (PAR) is a research paradigm whose key emphasis is that it places the key stakeholders at the centre of the whole research process and that they are central to the solutions to the research problems, De Oliveira, (2023). PAR is simply depicted in figure 18.

Figure 18 – Participatory Action Research.



Source: De Oliveira, (2023).

PAR involves the participation of those who are most impacted by the research problem and who collaborate with the researchers to reflect and review on ways to find solutions to that problem and further review those solutions until a satisfactory position is reached by all in the process, (McDonald, 2012). For example, in this research project the participating stakeholders, the trainees, offered the researcher(s) first hand feedback of the training programme that fed directly into the build and implementation of the next stage of the research. For participatory action to be fully effective it must have participants that are a cross-sectional representation of those main stakeholders of the area investigated, (Khanlou, et al. 2005). This is the case in this research project where the participants in the questionnaires and interviews were open to all who enrolled onto the course, even if they did not quite fit the specific criteria of non-finance managers who undertake some finance duties in their roles within small enterprises.

The participants work in collaboration with the researcher to explore solutions rather than being exclusively the subject of the research, (Kidd, et al, 2005). This will be a key strategy adopted and implemented for this research project; that the participants of the research project will drive the solutions to find a way to create an effective financial management training programme for of non-finance managers in small enterprises.

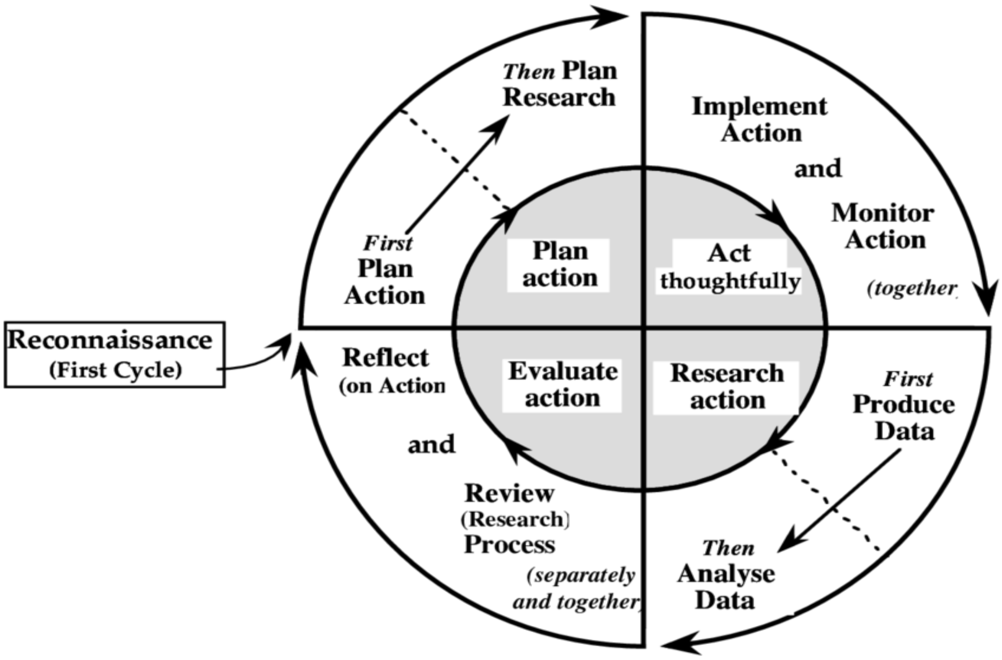
There are issues and concerns about participant action research. Most of the criticisms of PAR involve the inappropriate application of methods that comes about from the researchers not skilled enough to illicit the full benefit of working with participants to reach full understanding of their involvement or at least get the best of what the participants are saying, (De Oliveira, 2008). Not enough time is devoted by the researcher in collecting the data from the participants and bad communication by the researcher of all of which leads to a weak research relationship between and the participants leading ultimately to a weak participation rate, especially over a sustained period or however long is needed to involve the participant in the research. It is imperative that the researcher who uses the participant's action research strategy understand the requirements of this approach so that the full benefit of using the very people that you hope to receive help from the research is delivered, (Löfman, et al. 2004).

Despite these caveats participants action research is the main research strategy for this research project as the deep involvement of the training programme participants in the design of the training programme in meeting the overall objectives of the research as these objectives are that the financial management training programme developed is to these stakeholders' satisfaction, in fact it is the raison d'etre of the entire research project.

3.4.2 The Action Research Cycle.

One of the key features of participatory action research is that involves an action research cycle strategic approach. This will also fit in the constructivism iteration process that is deployed in this research project and therefore it is part of the fundamental strategic aspects of this research project is to undertake an action research cycle approach. Action research cycle is depicted in figure 19.

Figure 19: The Action Research Cycle.



Source: George, (2023).

Action research involves an investigation of a research problem whose solutions will involve every stakeholder reviewing, reflecting and gradually problem solving through a cyclic process that reaches an overall solution based on the data collected and acted on during the cycle that last over a set period, (Löfman, 2004).

In 2000, Meyer maintained that the advantage of action research is that is a drawn-out process that takes participants on a journey with the researcher to help identify problems with a phenomenon and working together by adapting and modifying previous positions to derive a new and better outcome in relation to the research problem. In 1991, Elliot pointed out that action research is a very valued method of developing a training programme as it is integral to the main training evaluation methods that exist such as Kirkpatrick's evaluation model where an action research type approach would be recognised.

In this research project there is a process of using the participants of the training to improve the overall effectiveness of the training needs to be embedded in accepted evaluation processes. This would involve a process of evaluation over a cyclic basis during the time the training course is being developed. The consequences of this were to adapt the training based on the responses of the previous cycle of the training programme delivery and subsequent cycle of responses, with the next cycle of training to take place on the reactions of the previous batch of respondent's reaction to the previous cycle of training. For example, if a material response stated that the underlying contingency was not met by the training and for example the training was budgeting then the training would be adapted based on the responses of why the budgeting training did not meet the budgeting requirement that motivated the participant to attend the training in the first place. These changes would be evaluated on the next cycle of participants with similar profiles of the earlier delegates.

In terms of the theoretical application of participatory action research Löfman, (2004), stated that the core of participatory action research is that individuals bring together their own views on the area investigated, and trade off each other that will help to find a collective optimal solution. This would be how effective the training has been on tangibly changing the management accounting practiced within their work organisations.

Critics of action research such as Jacobs (2016), are based on the premise that action research does not use any established quantitative methodological controls enough, meaning it is not based on a rigorous enough scientific approach. However, Jacobs empathises that action research collaborative approach to research would work well for the training environment as it allows all stakeholders, both the trainer and the trainees, to reflect on each other's thinking and become jointly educated and consequently collaboratively deliver on a more enhanced and effective education process.

Other criticism of action research in the training environment come from such contributors to the debate such as Jacobs (2016), who stated that action research lessens the traditional knowledge hierarchy of training by advocating all stakeholders bring knowledge and experience to the training process and that trainers in general do not have the research skills to evaluate the robustness of the research findings. In response to Jacobs caution that 'action research lessens the traditional knowledge hierarchy of training by advocating all stakeholders bring knowledge and experience to the training process' the participants in this study will be working with owners and employees of small enterprises that are more knowledgeable of their organisation's management accounting needs than the training provider and therefore in a much more stronger position to assess the impact of the management accounting disciplines taught from the training. Therefore, this undermining of the 'traditional knowledge hierarchy' is not applicable in this project as it is paramount to the success of the project experiment.

However, taking on this criticism of action research, this research project was conducted as a scientific research project using qualitative measures using interviews and questionnaires to evaluate the impact of the financial management training on the small enterprise's participants. An action research approach was essential to develop a qualitative assessment of the impact which will be in the form of questionnaires and interviews. Quantitative measures were used for this mixed approach study but only metric responses of the participants in comparison to earlier responses. No quantifiable impact of the training was measured such as an increase in profits, sales in increase, cost reduction, an increase in new product launch for example. How could any tangible and measurable changes in these be exclusively attributed to the financial management training at the exclusion of any other causality factors? It would be more appropriate to use qualitative data from the feedback that assesses from the trainee's perspective on the perceived impact of the training in the effective utilisation of the management accounting techniques. This would explain the quantifiable measures of percentage change in percentage over time using a simple statistical analysis test to compare quantitative against the expected data - to show statistically if there was any improvement. More on this later.

In conclusion it is clear from the nature of the research undertaken and from relevant studies into action research that it is a suitable research strategy design to employ for this research project.

3.4.3 The Iterative Constructivist Grounded Process

The overall aim of this research was to design an effective training programme in financial management training for non-specialists from small enterprises. This will be done by using a constructivist grounded theoretical approach to build a training evaluation model. This would be achieved by undertaking an iterative process approach of training programme build.

Constructivism is a theoretical approach where those who are learning actively build knowledge rather than passively absorb the knowledge, (Johnson, 2017). It is also a process where people experience the learning approach and reflect upon those experiences, from this they build their own interpretations into their pre-existing knowledge and apply it as they see fit, (Willis & Wright, 2000). It is this process of learning from reflection that is being captured through the questionnaires and interviews as well as through active observation in this research project.

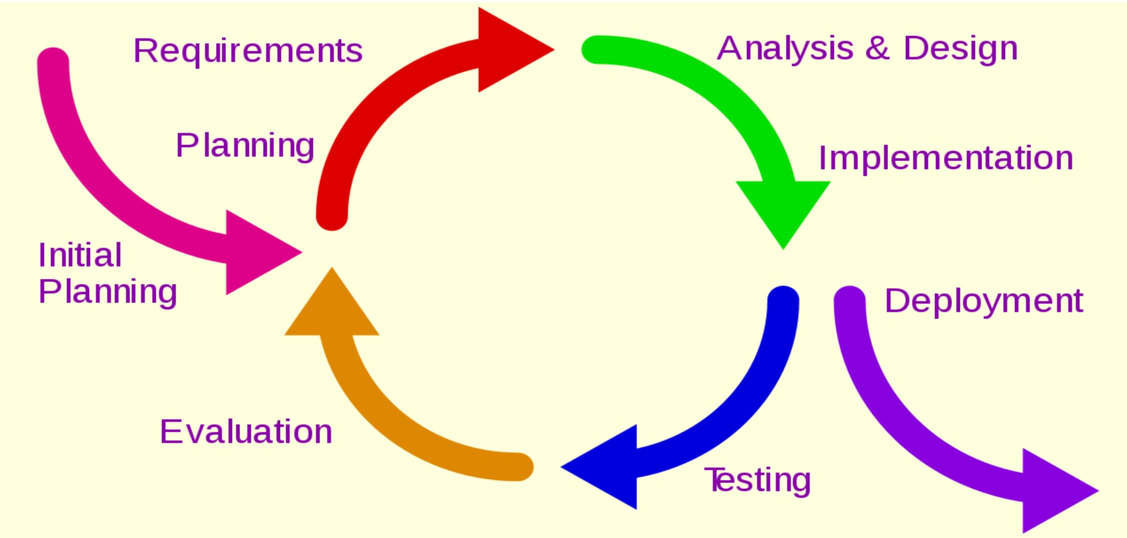
Constructivist grounded theory uses the principles of constructivist theory to find recurrent themes and glean meaning from these, extracted from data that was gathered through a succession of interviews and observations from interested parties, (Charmaz, 2016).

Using this approach of 'identifying recurrent themes,' the training programme was designed through an iterative process which involves continuously improving a concept, design, or product, in this case a training programme. This iterative process allows a prototype, the training programme, to be developed, assessed, adapted, and repeat the cycle process with the goal of getting closer to the solution of best outcome, (Jonassen, 2008). The 'solution of best outcome' would be the successive approximation model that would be the finished product of the iterative cycle process of training course development.

This was applied on a practical level through the process of refining and improving the delivery of the training programme over a period of different iterations to make it more effective based on the reflections of the participants at each stage of the training programme model build. This process of using the interpreted information gleaned from 'grounded' data in the evaluation process as a means of adapting and improving the process. This is the key to the iterative build of improvement, (Gonzalez et al, 2019).

The iterative process involves undertaking four phases: the planning, analysis, and design phase, testing and the implementation phase and further evaluation phase before ending in implementation of best outcome, (Johnson, 2017). The iterative process used in this research is based on the model illustrated in figure 20.

Figure 20 – Iterative Process Model.



From (Johnson, 2017).

These iterative cycles of operations are repeated to achieve a desired result and should converge to a desired end when iterations are completed, (Jaro Education, 2024).

The above model, figure 22, illustrates what takes place over one iterative cycle. It should be noted and explained in more detail later in the methodology chapter, that in this research project the iterative process happened three times over four iterations of the training programme development cycle.

The iterative process of learning in training is like building scaffolding in that the trainer helps to develop skills that exist already in the learner and that they add to it with principally supporting the learners in building a scaffolding of knowledge and learning gained, (Jonassen, 2008).

As the iterative loop is developed, the new learning is added to the existing scaffolding of knowledge to build a higher level of understanding, or it could result in a deconstruction and the re-designing of the scaffolding previous built to redefine the knowledge previously thought of as being the optimal knowledge. The iteration process would be in stages with each stage adding to the scaffolding of knowledge as it is re-designed after analysis and evaluation from earlier iterations, (Kern, 2011).

This iterative approach was right for this research in that it centred on a training programme design where the iterative cycles would be used to refine the training based on the interpretation of the feedback from the participants. This feedback would then be evaluated and any conclusions from analysis of the feedback would be implemented, with the aim of reaching an approximate version of the training programme that would be a more effective learning experience for the learner, (Jonassen, 2008). This iterative cycle process is what takes place in this research project where the feedback data is analysed at each iterative stage, and theories are gleaned from the feedback to transform the training programme to shape it more in line with the expectations of the trainees.

The strengths of adopting an iterative cycle process are that it highlights and helps to resolve any issues arising from the feedback data being incorrectly interpreted so no incorrect assumptions were arrived at. It also allows designers to create and evaluate ideas formulated in an earlier iteration quickly and effectively. Successful ideas make their way into the final product, whilst unsuccessful ones can be quickly dropped, or refined and re-tested, (Komerath, 2001).

These are exactly the techniques adopted in this research project where the data was re-evaluated and reanalysed to glean new meaning, looking at the data with fresh eyes, (Jonassen, 2008). Going through this iterative process helps to ensure the final training programme product is fit for purpose as much as feasibly possible and therefore meets its functionality, usability, and reliability aims. By adopting the full iterative process in this research helped to make sure any round off errors were not given a chance to "accumulate," at the approximation at each iteration. What is left is the successful elements of the training programme, and is basically a solution to a previous iteration problem, (Kerssens-van Drongelen, 2001).

Another advantage of adopting the iterative cycle design process in this research was that the functional prototypes that were developed early in the life cycle of the project were assessed in a live scenario, (Jonassen, 2008). This allowed more time to be spent on the actual design of the project as a work in progress. This meant the 'developing' training programme was evaluated in a real environment and feedback given from the trainees on the progress of the development of the training programme. The trainees, and those who participated in the feedback, in these earlier iterations were made aware that the training programme delivered was not the finished article but an evolving work in progress towards a structure of a training programme that would be considered most effective by the participants. This is explained in more detail in the ethical considerations section in chapter 3.10. Having these evolving training courses tested out on a live audience, which is the essence of the iterative process, allows for authentic feedback in a real environment so that the lessons taught from that iteration of the training programme development are much more detailed and will tend to be much more genuine than asking for feedback on an idea of how the training should be structured, a hypothetical scenario, (Jonassen, 2008).

This iterative testing of live developing training programmes is opposed to assessing a conceptual design of a course and asking for contribution on what would make a good training course. The progress in terms of what works and what does not is more easily measured and acted on in a more effective way with an iterative process and any changes to the project scope are easier to implement in this staged manner, (Komerath, 2001).

The iterative life cycle is also ideal where changes in the scope or aims are to be carefully managed as there will be immediate impact because of these changes. This is the simplest approach to the iterative process as changes are made quickly and the build moves on, (Kerssens-van Drongelen, 2001). It is important that any changes made to any future iterations of the training course based on the feedback of previous iterations are accurate and do represent the views of the prevailing majority as the iterative process is linear and so any errors to the journey of improvement of the training course will be difficult to rectify. The errors made in the adaptive process will be permanently built into the design of the training course and if these changes devalue the quality of the course, then to rectify them will require a significant rebuild process, (Jonassen, 2008).

These and other risks and criticisms of the iterative cycle that emphasise the practical issues such as being too costly and time consuming as there were potentially too many learning cycles. Other criticisms are that it is too flexible resulting in learning programmes becoming too much in a constant state of flux. To make the iterative process more effective and capture the full benefits of the process then these risks should be considered and not ignored, (Nguyen, et al. 2007). An overall risk then is that there is a constant state of cycles with no satisfactory end point.

In their research Jakeman et al 2006, recommended an incremental model of learning where the development of the course goes from start to finish in a linear path of progression. This would be right for where the requirements of the learning are clear but not necessarily the specific topics of research or to an extent the learning outcomes. The cycle process should be limited to a set number of steps in the iterative process of course development based on an evaluation process, (Jakeman, et al. 2006). This was the approach adopted or the development of this training programme.

These limitations of the iterative process were considered in the design and the implementation of the build process for this research project. These risks were mitigated by having the successive approximation model (SAM) as the evaluation process of the training design. The theoretical details of what SAM is was covered in the literature chapter 2.9.1. The main benefit of SAM is that the training programme development is fast but with imperfect solutions with the knowledge it is an improvement on earlier iterations and can improve with future iterations. This allows for testing multiple approaches and can increase creativity and failure is an accepted part of the process where instructional designers are free to try something new, (Wolverton, 2022).

So, with this research project it is not a research objective to derive a perfect training programme but to reach a point where in the later iterations of the training programme design the scores of positive understandings of the training and the level of adoption of certain techniques of the training courses increased markedly from the earlier iterations of the training programme. The iterative process was not endless, as there was a defined pre-planned end to the process, after four iterations of the training programme development. It was not going to continue beyond that fourth iteration so outcomes could be delivered. Therefore, the final training model would have elements and aspects that did not really work or were flawed but overall, the final iteration of the training programme would be more successful in the perceptions of the participants than the earlier versions were. In other words, a final training model that approximated best practice derived at after successive adaptions.

Other criticisms of the iterative cycle process are that it may need resources given to the process for the iterative process to work properly as the process of change and adapting may not be straightforward so people skilled in the process are needed. There is also the issue that each successive phase is rigid with no overlaps so cannot develop a model that is non-linear, (Nguyen, et al. 2007).

But overall, the iterative cycle approach is particularly suitable for training programme development projects where the training needs to change often and fast, in other words needs to be highly agile to the responses of the trainees, (Clinton, et al. 2012). For this research project the participants may not have clear understanding of the specifics of what they want this added management accounting skills for, only to gain a better understanding of their organisation financial functioning. Therefore, an iterative cycle approach would be more proper to evolve the courses organically in conjunction with the learner's requirements.

The iterative process completely fits with the training evaluation models set out in section 2.4. At each iterative the evaluation steps as per the evaluation model used will be undertaken to build up to the final outcome at the end of the iterative process, (Zarraonandia, et al. 2007).

However, infinite incremental steps to the iterative cycle would not be right as this course development, like all course development, needs to end or at least a conclusion that can be updated later. Plus, from a practical adoption perspective who would feasibly want to adopt a training model that required the training to be in constant state of flux, (Jakeman, et al, 2006).

Eventually there needs to be a project conclusion. This process will never reach a level of satisfaction that would make the programme perfect, it is not within human nature to say nothing must improve. That is why a 'best fit' approach is needed and why it was adopted in this research project. Having a constant reflection on earlier cycle feedback will very quickly have diminishing returns, (Kemper, et al, 2002).

Recognition of the management accounting contingencies in the analysis of the feedback at each stage turned out to be key to the design of the training in relation to the data analysed from each iterative cycle. There is a need to recognise the absorptive capacity of those participants as well, both explained through reference to literature in the earlier sections.

This research project undertook a four iterative cycle of delivering the training with each cycle adapted and changed by the feedback. This number of cycles will maximise, on a practical level, the 'discovery of theory from data,' (Allen & Davey, 2018).

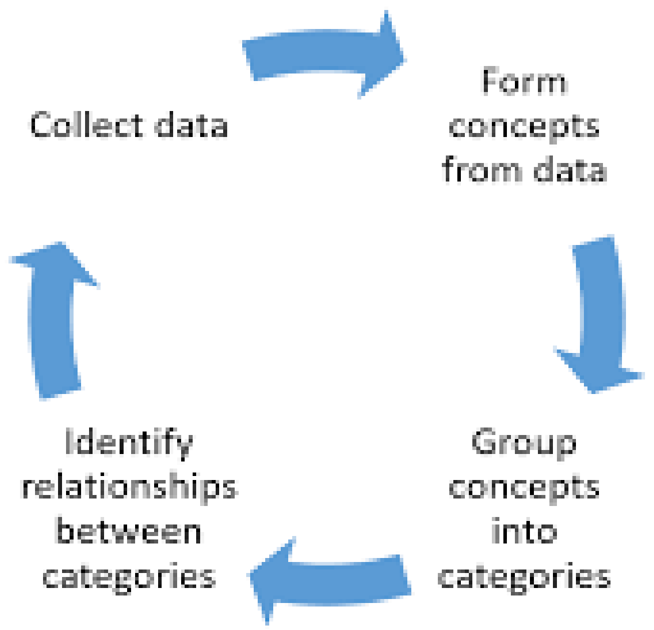
Overall, evidence from the results of this research project, as set out in the findings chapter, showed that by adopting the iterative process of training programme development was a highly effective means of building the training programme to make it fit for purpose. This was shown by the fact that the level of learning from the training and the level of adoption of the techniques adopted had increase significantly from the first iteration to the fourth and final iteration. Therefore, a training programme that was developed using the iterative process that was considered highly effective by the end users. This was the whole purpose of the research project to have positive impact on the wider community.

3.4.4 Constructivist Grounded Theory

The main benefit of undertaking the iterative cycle development approach for training design is being able to find common themes that appear from the feedback data of each stage of the development. This allows theories to develop that will help the understanding of how to resolve the problem of building a financial management training model that will improve financial self-confidence and adoption from the training of non-finance managers who work in small enterprises.

This approach is the Constructivist Grounded theoretical approach to the research style. This is the style that was adopted for this research project. This approach is a method for developing theory that is buried, grounded in the data, and can be systematically gathered and analysed, (Glaser and Strauss, 1999). It tends to be qualitative but can be quantitative as well. The grounded theory approach was developed in California, USA by Glaser and Strauss in 1969. It is illustrated in figure 21.

Figure 21 – Grounded Theory.



From: (Glaser and Strauss, 1999).

It is important to note that the constructivist grounded theoretical approach is cyclic in nature so continues to gauge the mostly qualitative feedback at each stage of the project's development, exactly the method adopted for this research project and hence its suitability. This innovative method of developing theory from data differs from a more established deductive approach that assess to a preconceived theory from the data collected, (Urqhuart, et al 2010).

The constructivist grounded theoretical approach relies on an iterative recruiting process. This involves theoretical sampling where there is a continuous recruiting process and conducting new rounds of interviews with new participants while earlier interviews data is still being analysed. The questions asked also evolves, and changes based on what is taught from earlier iterations. Constructive grounded theory is often used by the Human Resource departments. For instance, they might study why there is a large amount of employee dissatisfaction. Staff are feelings and opinion are gauged to investigate the causes of their dissatisfaction and any common reasons that emerge and presents solutions and then gauged again later to see if the new initiatives have resulted in an increase in satisfaction, (Urquhart, et al 2010).

To clarify, this is the reason a constructivist grounded theory approach method was adopted in this research. As the literature states, it is a very robust way to discover problems that you do not have solutions to yet as you do not know the details of the problem yet. This approach was adopted to maximise the effectiveness of the iterative constructivist approach so that the feedback from the participants would allow open responses and from these responses theoretical conclusions could be arrived at that would contribute to the build of the next stage of the training programme. So, it lends itself perfectly to the cyclic process that is the core of the research method adopted. This approach would also help to avoid pre biasness in the interpretation of the feedback.

However, this approach by its nature can result in the researcher seeing what they want from the data, including theory that fits their preconceived views of what causes an action or phenomena, (Urquhart, et al 2010).

There is also the possibility of biasness originating from the participants as they know their responses are being evaluated. This is known as the Hawthorn effect, (Jones & Alony, 2011). The Hawthorne effect can also affect the behaviours of the participants in the evaluation process as they are naturally inclined to make a positive impression on the researcher, thus polluting the right version of reality. Researchers who have experienced this phenomenon further conclude that changes in practices fed back by the respondents in the evaluation process are not changes in practices because of what is being tested. But rather the participants are so impressed by the fact someone was concerned enough about their needs to conduct an experiment on it that the respondent's feedback in a way to placate and satisfy the researcher, (Kenton, 2022). It is difficult to avoid this phenomenon in the analysis and interpretation of the data when undertaking a grounded theoretical approach. The researcher needs to mitigate the potential negative impact of participant's bias on the research findings by being conscious of it and controlling it, (Corbin & Strauss, 1990).

It can be challenging to be aware when the Hawthorne effect is in play when respondents change their behaviour purely based on being evaluated, but it is necessary to be mindful of this phenomenon and adapt accordingly, (Jones & Alony, 2015).

In this research the use of in-depth interviews of the participants and not use leading questions helped to mitigate the Hawthorne effect and researcher bias by quizzing the participants on their level of understanding from the taught material and their level of adoption and take up of the material taught in the training rather than relying on questionnaires that stated positive responses to these queries. With qualitative research, by delving further into the data collected by more interrogative processes such as interviews then the risk of researcher bias is reduced as it is more likely the views of the participants of the research are heard and understood clearly, (Parker & Roffey, 1997).

Constructivist grounded theory is an effective method for finding out about a phenomenon where little is known. The appeal of this approach is that unlike other approaches, it embraces the idea of subjective reality, meaning that each person has his or her own unique sense of reality, and no two people have quite the same understanding of what is reality. By using the benefits of this approach, you can discover things that are not original, but are things that the researcher may never came close to considering. Ass such this is a powerful tool to find solutions to a complex previously unsolved problem. By considering these unique phenomena then grounded theory can be a powerful tool to extract theory from data that can be unexpected and insightful to research, especially qualitative research, (Urquhart, et al 2010). This is why this approach was chosen to be used in this research project.

3.5 The Methodological Time Horizon Outline

3.5.1 The Longitudinal Timeline.

A longitudinal study was employed for this research study as this was most consistent with the iterative style of training evaluation design that took place, phased feedback over time was necessary to evaluate the step improvements made to the training programme. The period of feedback from the participants was approximately eighteen months.

A longitudinal study involved seeing and collecting information from the same sample group, or similar demographic profile (as with this research project), at repeated intervals over an extended period. The data is collected in 'waves' over the research period. These longitudinal designs enable researchers to investigate the impacts of factors on changes over time, such as the effects of interventions, therapies, or other manipulations of an independent variable, (Street, et al. 2012).

The longitudinal time of the study was consistent with the nature of the research project that involved adapting a training programme to fit the needs of the users of the training programme based in their feedback. The finance management training sessions were conducted face to face and were promoted to small enterprises initially from all sectors. The sessions had on average twenty-five people in each session and lasted all day and were conducted on weekdays so that the participants forego a day's work. The courses were free for the participants in the understanding this was a research project looking to build a process of effective finance training for small enterprises and not the final product. There was the additional request that the trainee participate in the feedback process which involved completing online questionnaires before, immediately after and six weeks after the training. They were also asked to agree to a one-to-one interview to discuss their feedback on the training and to be observed during the training to assess their reaction to the programme in real time.

This hybrid approach to gathering data was to maximise the understanding of the impact of each iteration of the training session and to understand the feedback data thoroughly. These hybrid approaches maximised the understanding and interpretation of the data collected, (Cadez and Guilding, 2008).

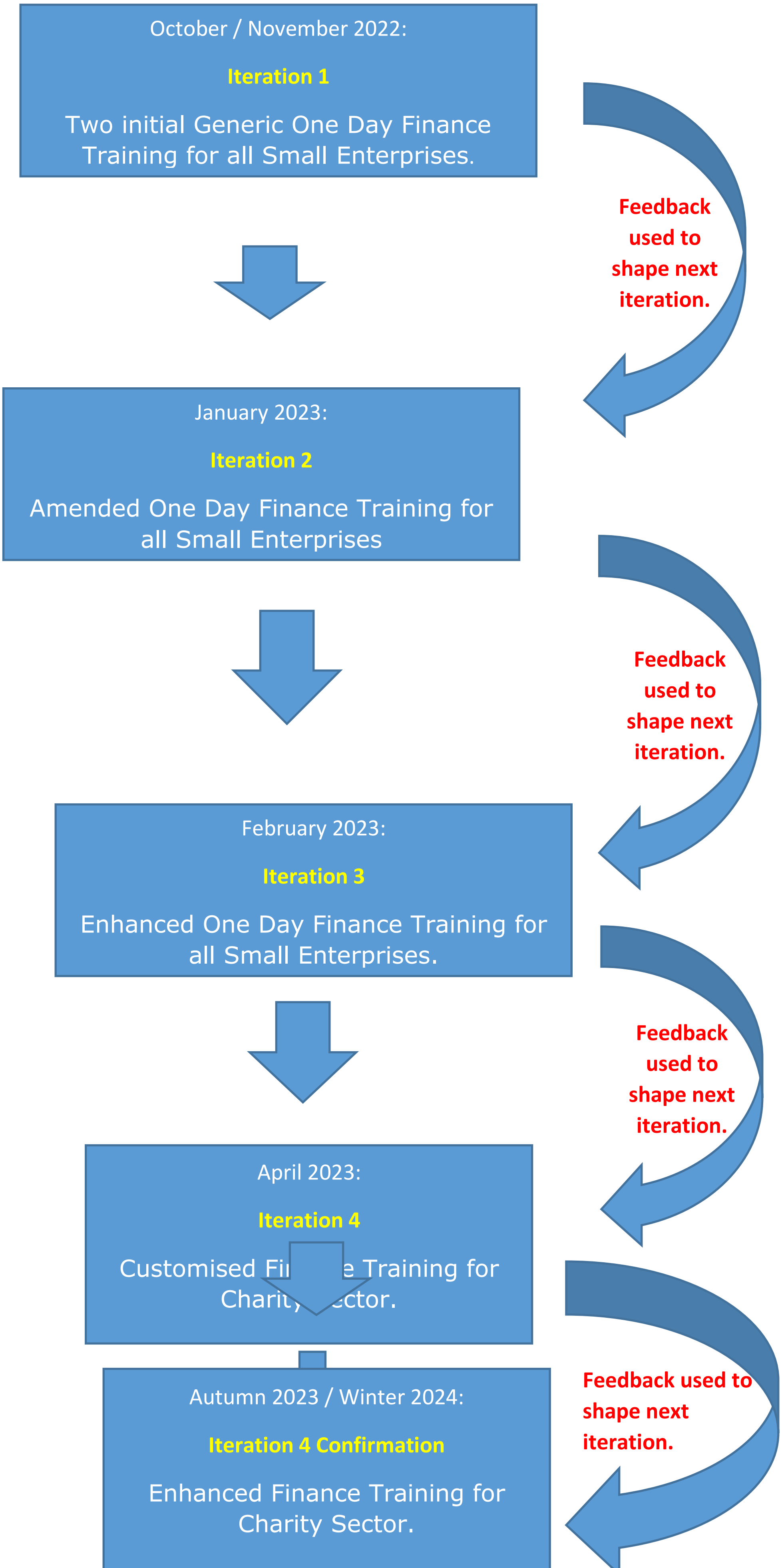
The online questionnaires proved to be an effective and successful method of collecting a significant volume of primary data. However, they lack depth by their nature and so have limitations in gathering significant insights into the response feedback full meaning (Converse and Presser, 1986). The interviews not only overcome this limitation but also provided a deeper understanding of the nature of belief and attitude of the respondents about the training sessions. This hybrid method has long been used in this type of research to confirm the summarised questionnaire responses, (Cadez and Guilding, 2008). This allowed for a more exact process of interpretation translating into what was needed to adapt and change the training course to improve evaluation of the effectiveness of the training programme.

The training sessions proved to be extremely popular even under the proviso they were being delivered as part of a research project. However, not all of those who attended took part in the feedback process. Details of the participants are set out below in the sample strategy.

3.5.2 The Timeline in the Iterative Process.

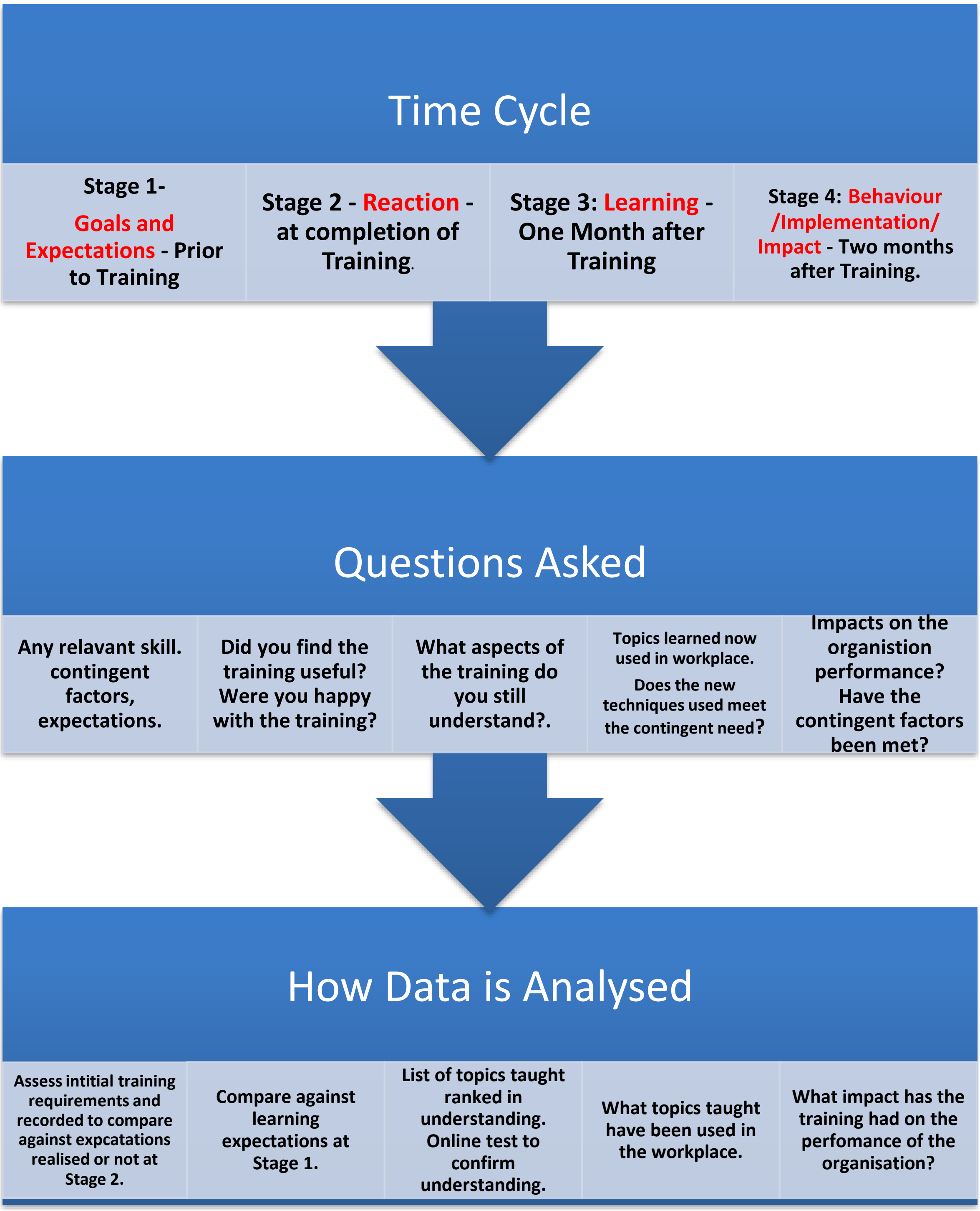
The training sessions had the following stages to be consistent with the reflective practice cycle. This timeline also allowed time to assess the concepts investigated and feedback questionnaire, interviews and observation data was recorded at each stage and shaped the development of the next stage of the training. The feedback was done at once after the training to measure impact and then six weeks post training programme to assess uptake. This process is set out in figure 22.

Figure 22: The overall Timeline of the Training Sessions:



The timeline flowchart of when the data is collected and analysed is illustrated in figure 23.

Figure 23– The Research Time Horizon.



3.6 The Sampling Strategy

The sample used for this research study can be best described as a controlled sample. Controlled sampling is where a prescribed method of choosing cases for research to target certain characteristics and minimise the probability of those not covered by these characteristics being selected is therefore minimised, (Goodman, et al, 2012). Control samples are used to confirm and verify the accuracy of what is being assessed. By analysing the control sample over a period time, a sample with similar characteristics is taken on in the experiment. By keeping the sample controlled will keep the sample dependable and consistent. The advantages of controlled sampling include it has simplicity and a lack of bias. There is also the significant reduction in the number of variables that could affect the outcome of the experiment of a controlled sample. However, there are practical issues using a control sample such as being able to find a big enough group that fits all the restricted controlled criteria and who would all be available at the same tine to take part in the research project. This is especially true with a longitudinal period of research, (Rao, et al, 1992).

3.6.1 The Participants.

As said, the participants of the training sessions were the controlled sample. The controlled common characteristics they had was the fact that were all managers, or supervisors, and working in small enterprises undertaking internal finance work in the small enterprises. This controlled characteristic of the people surveyed and questioned was achieved by advertising the training sessions at non finance managers of small enterprises, that way reducing as much as possible the risk of unsuitable characteristics or any other non-relevant variables being evaluated and affecting the outcome.

All the training sessions, over all the iterations, took place physically in class and lasted all day. The sessions were on a weekday, so the participants were out of their normal working duties on the training days. In total sixty-nine people took part in the training and the feedback process. These individuals work for a cross sector of small enterprises and all their work involved a level of internal finance work, but they had no prior finance training. Not all the attendees of the training took part in the feedback process even though individuals were asked to complete the pre course survey at the beginning of the training session and at the end.

The basic demographic profile of the participants is outlined in figure 24:

Figure 24: The demographic profile of the participants:

Gender	**Male** 25%	**Female** 72%	**Other** 3%	
Educated in Finance	**Yes** 95%	**No** 5%		
Do work in Finance	Yes 95%	No 5%		
Education	**Professional** 16%	**University** 45%	**School** 39%	
Age	**18 - 35** 15%	**36 - 45** 38%	**46 - 65** 41%	**Over 65** 6%

The basic demographic information came from the pre training questionnaires that the participants completed. The demographic makeup of the participants suggests that the participants are female, middle aged and of university / professional educated. As the training courses were aimed at non finance managers of small enterprises this demographic profile is expected in terms of education background. As for the gender make up why it is so female dominated is an area for separate investigation.

The key relevant information from the demographic make-up is that the delegates do finance work in their roles but have no or little pre training or education in finance. This is consistent with the target audience for the training sessions aimed at small enterprises, non-finance managers who have no or little finance training. The conceptual objective is that when a process of financial management training for small enterprises is developed it then the managers / owners who work in these enterprises and indulge in some form of finance work who will be in the most influential position to make a beneficial impact of the financial management techniques taught from the training, the controlled random sample.

The training sessions proved to be extremely popular due to them being free as part of a research project. Not all the attendees agreed to participate in the questionnaires and interviews, did not agree or did not deliver on their promise to participate but on average over all the iterations approximately sixty percent of the people who attended the trainings sessions participated in the feedback process.

Sixteen individuals who attended the first training sessions took part in the feedback process by providing responses. These individuals attended the first version of the one-day course of the financial management training. The sixteen took part in the post training survey as well. The procedures to increase responses from the attendees improved from the second iteration of the training programme, by contacting them individually rather than as part of a group communique.

Overall, twenty-seven individuals fully took part in the second iteration of the training programme. This means they attended the training courses (two separate sessions) and took part fully in the feedback process. Again, not all attendees of these sessions provided full feedback. The participants are from a cross-sector range of small enterprises looking to improve their finance skills and to improve the financial information they use within their current small enterprises. No one was precluded from volunteering for this process for the practical purposes of maximising numbers from which to collect data. However, individuals working in small enterprises with no or little finance training or education but do finance work within their roles were the target audience. As with the first iteration the training session was open to participants form any sector the small enterprises ran in. All the participants worked in small enterprises, but all had finance or accounting work they needed to perform in their roles.

In the latter, fourth, iteration the participants were exclusively from the charity sector as results from the earlier analysis of the feedback of earlier iterations of the training programme suggested that the financial management training needs to be sector focussed to improve perceived effectiveness and crucially uptake.

These sessions were very well attended as the researcher worked with local charity support agencies who were looking for any affordable training provision for local small charities and the training provided was part of the research project was free. Twenty-six individuals, over two sessions, took part in the questionnaires and interviews from this sector. All of them took part in the pre and post training questionnaires, a higher response rate from any other iteration. The fourth iteration had a further round in early 2024 with no further changes and only took place to confirm final findings. Due to this reason this was still classified as being part of the fourth iteration of the training programme.

3.7 The Data Collection Method

3.7.1 The Survey questionnaires.

The feedback was cyclic, and the collection of data done at set periods over a longitudinal period. All responses were anonymous to safeguard all those involved as much as possible.

The questions to be asked in the research are the following:

The Questions in Detail.

- **<u>Before the training - Goals and Expectations measured</u>**

1. The core content of the research undertaken was qualitative as any form of quantitative, specifically in relation to a Return-on-Investment measure for the training would be difficult to measure with accuracy without considering other causality factors. Therefore, before the first training there was a questionnaires one month before the training date to assess pre training knowledge and expectations. The questions at this stage would be:
    - What management accounting skills if any does the participant hold now?
    - Level of maths and English skills (O & A level) or degree educated if relevant.
    - Any IT such as MS office skills database or accounting packages skills.
    - What are their own skills attainment targets in relation to the management accounting training?
    - What are the contingent factors that are prevalent within the organisation that affects the management accounting practiced within the organisation?

- Are they have committed to a level of willingness to learn?
- Questions about relevant soft skills such as diligence, ability to check for errors, analytical / cognitive ability.
- Then a list of key management accounting skills would be listed that they would select in order of preference to learn from the training day. This would form the practical application of selecting the right training programme they wished to learn. This would either be said to them verbally and they answer verbally which key management accounting skills they wish to learn, or a form would be sent to them ranking their order of preference of study which they complete and return.

The last point of questioning determined the mix of the management accounting course that would be most suitable for them. So, for example if the respondent replied that a general oversight of budgeting is needed then a beginner's course on budgeting would be prepared covering general theoretical concepts and the basic budgeting calculations. This would be the basis of the training that the participants are delivered.

- **<u>On the day of the training - Reaction measured</u>**

2. Immediately after the training (on the day) questionnaire to assess reaction to the training. This was in the form of a questionnaire asking on different aspects of the training such as did you enjoy the training, did you find it useful, do you feel that you will use the concepts taught in your work environment? And do they feel that the learning will meet the immediate workplace needs, the contingent factor that is driving your need to seek the training in the first place? Do you feel the training was cost effective?

- **<u>Three months after the training - Behavior and Implementation and Impact measured.</u>**

3. Three months after the training date there was a questionnaire and interview to assess change in behaviour and what aspects of the training have, they are being using in the workplace. So again, there was a list of the main topics studied with questions ask to be completed by the participants asking them if they feel there has been any benefit of the training in terms of their work in accounting, if they have implemented some of the topics within their jobs and whether they feel they are now more confident in using some of these newly taught management accounting topics and disciplines. The evaluation of the answers again included an analysis of those contingent factors that may be impeding and hampering the implementation of the management accounting techniques taught and as such impeding their change of behaviour, even when the trainees is inclined to implement the taught management accounting techniques. The questions asked what affect the new management techniques taught and implemented have had on the organisation, again stressing these were qualitative in nature and will involve the participant's opinion of how they perceive the impact to be. The questions again included an analysis of those contingent factors that may be impeding and hampering the implementation of the management accounting techniques taught even when the trainees is inclined to implement the taught management accounting techniques. As said, the nature of the data collected was qualitative. So, impact examples such as the new techniques taught, implemented, and used have resulted in quicker processing time or more key performance issues found or reduction in operation costs, were not asked to be quantified due to the uncertainty of causality. They will be noted as being perceived by the participant that these techniques taught have had an impact on the performance of the organisation.

3.7.2 The Interviews, and Observations.

During the training sessions the researcher took notes of the participant's reactions to the training including any ad hoc comments which there were substantial during tea breaks and lunch breaks (lunch was provided free by the University). These were summarised in note form by the researcher at once after the training.

The interviews took place between two and three months after the training session, to assess the level of adoption from the training and the reasons why they were adopted and crucially what were the obstacles preventing adoption. This feedback was used to adapt the training course to increase the chances of adoption from future versions of the training course.

For interviews that are undertaken for the purposes of research there are two common methods for capturing what was discussed during interviews; recording the interviews entire dialogue verbatim and analysing and summarising key points from this detailed record or taking notes of the key points discussed during the interview. Each of these methods has their benefits and drawbacks and therefore the selection of the method of capturing the interviewee's feedback is a crucial decision to get right, (Rutakumwa, et al, 2019).

For this project, the methods of capturing the key relevant facts from the training participants throughout the development cycle is set out in section 3.8. To recap briefly, the relevant information from the participants was captured through the comprehensive standard questionnaires sent to participant's pre and post training, observation notes of actions and informal conversations during the training backed up by in depth interviews of the participants post training. These post training interviews were not recorded, but notes were taken during the interview of the key points made by the interviewee, key points in relation in helping to meet the aims of the research. These notes were then summarised post interview and these summaries that concisely set out the key points made by the interviewee were sent to the interviewee for them to review and feedback. In addition to this, the key assumptions and interpretations of the interviewee made by researcher were also sent to the interviewee for them to confirm this was what they meant. They then confirmed and agreed that this was and accurate reflection of what was said and meant during the interview, or they clarified the points they made during interview or indeed at that point they offered new insights that they have subsequently thought of. Or reading over the summarisation of the key points of the interview evoked new ideas from them that only at that point did they impart to the researcher. This correspondence exchange of clarifying what was said in the interview is an important part of the researcher interviewee relationship and should be done even when the interview was fully transcribed. There is an ethical responsibility not to misrepresent the interviewee's views even if the interviewee's identity stays anonymous. It also has the added benefit of setting up the facts of what was meant by the interviewee, and this helps with the overall conclusions and interpretation the researcher will reach from the interview, (McGrath, et al. 2019)

What is essential is that the aim of the interview is to reach meaning and understanding from the interview in relation to the research question. If that can be done by intuitive observation summarised by note taking during the interview then so be it, (Halcombe, 2006). The fact that this research used the interviews as a confirmation of the findings from the mixed structured and semi structured questionnaires and observations set out and explained in in section 3.8 meant that a full recording of the interviews was superfluous. The key aim of these interviews was to explore the overall emerging themes from the questionnaire responses and observations to see if the emerging theories gathered earlier did apply to real settings without leading the interviewee. On top of this, as explained, the summary findings and interpreted conclusions was sent to the interviewees for confirmation for them to confirm that this is what they said and more importantly what they meant. This process was invaluable in meeting the overall aim of the interviews; to confirm what is needed to make the training programme more effective in building perceived understanding and financial self-efficacy and to improve the likelihood of adoption from the training programme.

If the summary conclusions from the interviews had been shaped by any biasness on part of the interviewer, then this would have been self-defeating as the next stage of the adapted and developed training programme would not have met a higher positive response as it was not meeting their needs. This confirmation and clarification in the interviews were an important step in the iterative development cycle. Overall impressions and understanding on part of the researcher was needed and going through the dialogue line by line would not have contribute any significant increment benefit, and that was the key reason the interviews were not recorded verbatim.

The intuitive approach of initial interpretation of interview feedback data, backed up by the interviewee confirming or contradicting these intuitive interpretations was a powerful and effective way of using the feedback data to meet the overall objectives of the research.

3.8 The Data Analysis Techniques.

As the data collected was mixed with both qualitative and quantitative data, a twofold approach to analysis of the data was needed.

To recap the data captured was qualitative through written responses to online questionnaires undertaking prior, at once after and at fixed points after the training programme was delivered at each iteration. Additionally, the participants were interviewed two to three months after the training to assess change in financial self-confidence and more crucially the level of adoption of the financial management techniques taught.

The quantitative data was limited and quite simple as it involved the number of people who voted a certain way in the online surveys that took place prior, at once after and at fixed points after the training programme. The change in these quantifiable responses is analysed to check changes in preferences and reactions of aspects to the training programme as it developed and evolved through the different iterations over time. The quantifiable data does not include changes in the small enterprise's quantifiable performance because of the training, the so-called return on investment of training that is used in established training models covered in the literature review.

3.8.1 Using a Grounded Theoretical Approach to Analysing the Qualitative data through an Open Approach.

The qualitative data for this research was analysed using the grounded theoretical approach. As it is a significant theoretical concept that underpins the building process involved in the research project then this theory is covered in detail in the methodology chapter sub sections: 3.4.3 and 3.4.4, with a comprehensive understanding of its strengths and weaknesses and therefore its general appropriateness to this research study.

What follows is an explanation of how key themes, and later theories were drawn from the feedback data using the main principles of grounded theory and how it lent itself well to an open approach to the research process adopted in this project.

As set out in section 3.4.3, grounded theory is the opposite of traditional hypothesis deduction where an established hypothesis is assessed on a population to confirm or question its application to what is being investigated. With grounded theory, hypothesis is developed from the patterns of meaning from the data collected, (Khan, 2014). Therefore, the grounded approach of analysis was ideal for this research project as it was key to have the participants drive the build of the training programme. This happened through the principles and theoretical conclusions they come to or allude to through all the means possible to capture and observe their reactions to the training. This is consistent with the principles of grounded theory as all means used to collect and evaluate data that will draw out theory from that data, (Corbin, et al, 2015). A key element of this research project is that the participants' opinions are captured through a variety of sources, including observation notes taken by the researcher post training to identify themes and meaning that along with the participant's survey responses and interview statements form the foundations of the framework of training programme improvement. This was the fundamental process to building an improved training programme from one iteration to the next, an effective training programme of financial management for non-finance specialists working in small enterprises. All of the data collected was scrutinised to find any common elements of response and these responses were used to derive hypothesis. Therefore, the essence of the grounded theory approach is that it tries to unravel the meanings of people's interactions, social actions, and experiences, (Khan, 2014). These experiences are at the center of how the participant's reactions are interpreted and summarise for meaning in this research.

This happened on a practical level where the grounded theory approach involved closely analysing what the trainees said in their feedback on each iteration of the training course development. Common responses in the qualitative data were found by working through these responses in the surveys in careful detail and the notes from the interviews and in session observation notes were also suitably analysed. The main themes that were focused on were in relation to what was good about the training sessions in terms of increasing financial management understanding and what was wrong in the same context. Additionally, any suggestions to make the training more effective for the participants especially in relation to increasing the likelihood of adoption of the techniques delivered during the training were carefully analysed for any common themes.

The distinctive difference with grounded theory to other approaches to research is that it doesn't take a particular theory and then test it against a population to determine is validity. But instead it involves taking data in relation to a particular problematic scenario and analysing the relevant data to theorise why such a thing occurs or needs to occur to explain that scenario, (Corbin, et al, 2015). This is exactly the approach that was taken in this research project; all the data collected about impact from the training session was analysed to derive meaning to improve the impact of the training. A significant benefit of this approach, as said, is that it reduces the influence of pre conclusion biasness.

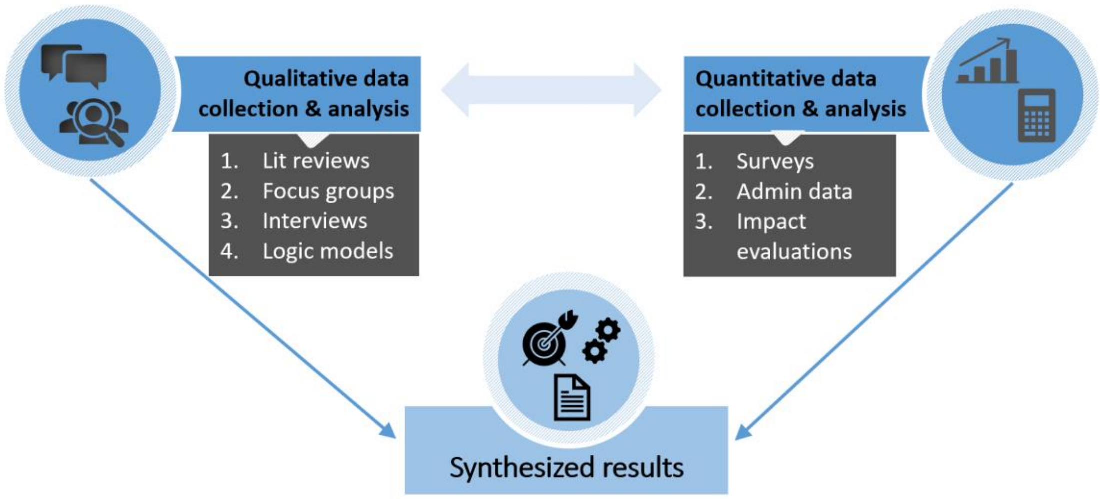
This grounded theory approach applied to the qualitative data that was collected through multiple sources of feedback and reaction: questionnaires, post event interviews and observation notes made after the training sessions. The grounded theory approach helped to have an open-minded approach to what was discovered from the feedback data. Indeed, grounded theory helps to 'visualise' what the qualitative data is saying, (Tie, et al. 2019). The qualitative data must be of high enough quality to allow logical meaning to what is interpreted and concluded from it, (Johnson, 2016). The quality of the data collected in this research project was heightened by having a multiple source, longitudinal approach to collecting the data.

This was the key analytical approach undertaken in this research project. From the qualitative data collected theoretical conclusions were formed based on this analysis grounded in these multiple source feedback sources, spread over the lifetime of the development of the project.

This allowed a full triangulation analysis to take place that added to the strength the credibility of the conclusions reached in the interpretation and analysis process. Triangulation in research means sourcing types of datasets using various methods and using a range of theories to address a research problem. Having a diverse range of sources enhances the credibility of the research as the validation process was undertaken extensively, (Turner, et al. 2009).

Triangulation of research is depicted in figure 25.

Figure 25: Triangulation Analysis.



Source: (Turner, et al. 2009)

The results from the online questionnaire completed before and at different points post training sessions showed an analysis of the participants that prefer a certain outcome to a range of scenarios at each iterative version of the training programme. This triangulation of analysing responses grounded in the data led to overall derived theoretical conclusions in the changes in the responses over the period of first to last iteration of the training programme development. So, for example a theoretical explanation to explain the adoption rate from the first to the fourth iteration was derived this way.

This grounded approach suited the open research style, where there was openness throughout the research cycle, through collaborative working that helped to build a training programme that fitted the user's needs, (Charmaz, 2016). The open-source approach allows for a collaborative approach with invited participants to bring clarity to an issue, or resolve one, or create a project for their own use. Open collaborative research practices in educational scholarship can be democratic and inclusive resulting in courses that the students feel they can take ownership of and therefore, will be beneficial to their desired outcomes, (Christianakis, 2010).

The participants were made aware of what the purposes of their participation was. It was explained to them that their input was being used to improve the training they were subjected to, and their responses and reactions were being used to directly shape the future content and structure of the training courses. The results then went through a confirmatory process when the post survey interviews that took place post training sessions were summarised and sent to the interviewees for them to confirm or change as they felt fit. These summaries that were sent to the participants for confirmation were the overall conclusions of the findings. These were not just of the essence of what was concluded from their interview, though that was the main summary, but the overall conclusions from all the feedback of that iteration, or phase, of the training programme which involved the key strengths and weakness of the training and details of how the training programme would be improved going forward. This was to allow them to agree or dispute these findings or indeed change or add further to the conclusions.

Having this process of participants confirming the overall theoretical conclusions of the feedback from that iteration of the training programme development captured the essence of open collaborative applied research.

The grounded theory approach fits well into the iterative process employed in the training programme design of this research project. The idea with iterative grounded theory is that researchers work through the process data in a linear fashion to draw out common answers that can be encapsulated onto theory and this theoretical development is an inductive process that develops as the data is captured over a longitudinal study, (Orton, 1997). Iterative sampling involves a process whereby researchers move back and forth between selecting cases for data collection and engaging in a preliminary analysis of the cases sampled. The idea is that what appears from data analysis will shape later sampling decisions, (Orton, 1997).

This approach of adherence to the principles of grounded theory during an iterative design process, strengthened the research process as it made the outcomes more robust. This is because it brought different perspectives, experiences and voices into the research process that made the research more useful in that it created strong impact activity, as it helped to meet the broader research aims of the potential end users of the research. These became clearer as the iterations of the training design process evolved. This clearly showed the benefits of using the grounded theory in an iterative process. The more these inductions are assessed the more robust and believable these emerging theories become and can be used to derive robustly evaluated conclusive theories.

Adherence to the grounded approach in the collaborative research process during an iterative process also created a strong impact activity, as it was helping to meet the broader research aims of the benefactors of the training. By doing this, conducting a fully collaborative approach to the findings of the research, then the research is ‘grounded’ in real-world challenges which generates deeper learning that is much more likely to be of real benefit to the real world as opposed to the academic world only, (Orton, 1997). In other words, real impact research.

By prizing out the findings of the research that are grounded out from a fully collaborative process then the research will provide strong evidence to policymakers and funders, in the form of evidence-based insights to help inform decision-making, (Laal, et al, 2012).

This sub chapter explains how grounded theory is suited to this type of open research, where openness throughout the research cycle encourages collaborative working to reach a better outcome to the research.

3.8.2 Using simple change and trend percentage analysis in quantitative data to derive meaning.

As said previously the quantitative data recorded in this research project was the basic changes in responses to set questions over the period of transition, from the first iteration to the fourth iteration of training programme. The reasons behind these key changes in responses, mainly responses on level of understanding and the level of adoption of what was taught on the training courses, was gained through other changes in the response in the survey in quantifiable form and from the qualitative written responses in the surveys as well as the record of responses in the interviews and from the observation notes.

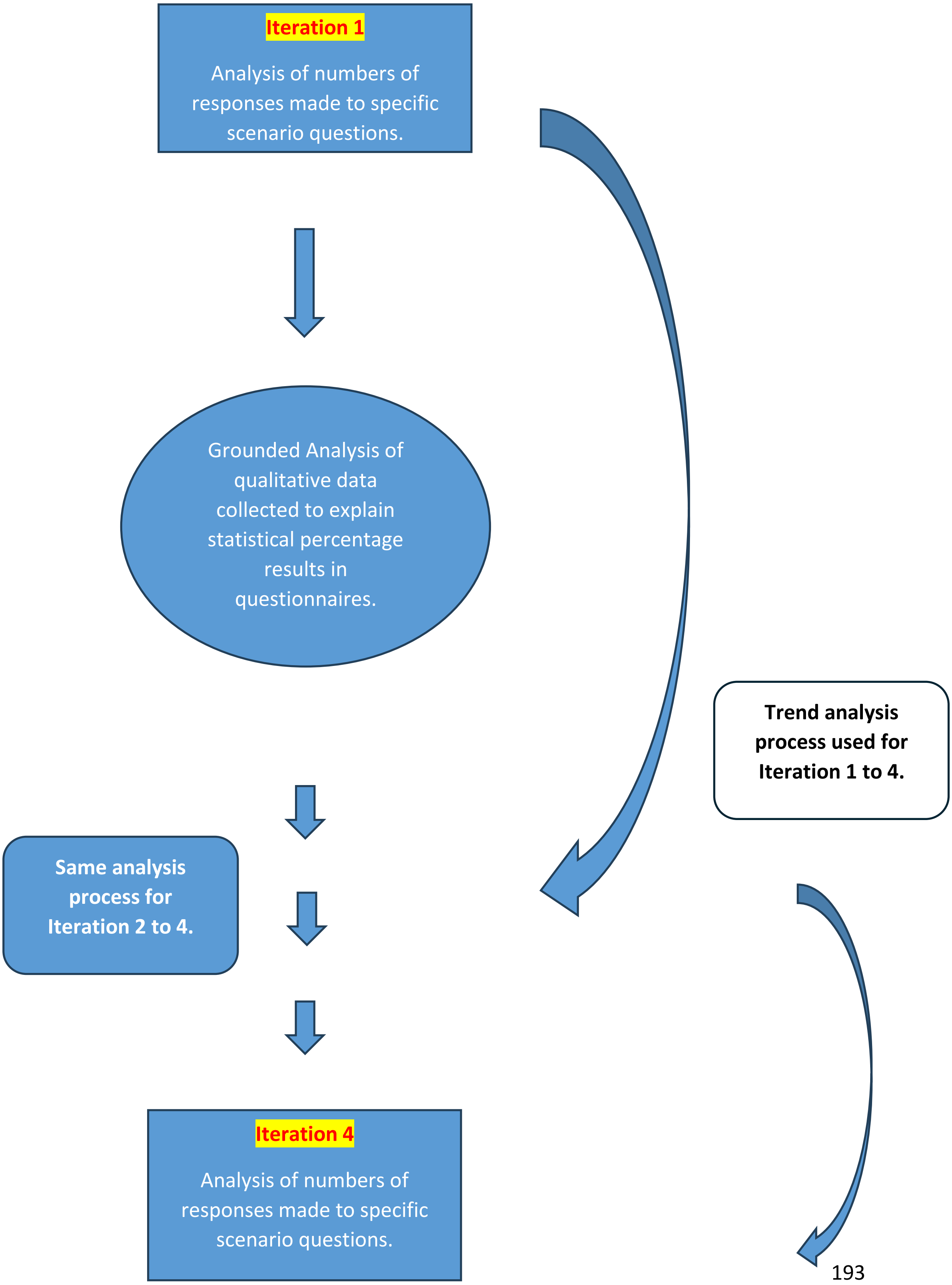
Using percentage trend in the analysis of these sequence of numerical results is a common measure to use and is easy to understand. Percentage change gives context to any changes in data in a relative sense and is easier to comprehend those other more complex statistical methods especially for a limited data set. One of the main disadvantages of the percentage change method is that it can be inaccurate and oversimplified, (Hess, et al, 2001).

Trend percentage analysis, also referred to as index numbers, helps to compare information over time to a base year or period. Trend percentages compare the change from the current year to designated base year. The analyst can easily decide whether the outcomes are going up, down, or stable by looking at the numbers, (Sen, 2011).

Trend analysis has limitations, it does give limited details of the changes as it does factor in many variables and it could include a time range between the current year and the base year that may have included some abbreviations (such as Covid 19 years) that significantly distort the meaning from the results, (Hess, et al, 2001).

3.8.3 Summary of the data analysis techniques used in the research project.

Figure 26: Analysis Techniques Employed.



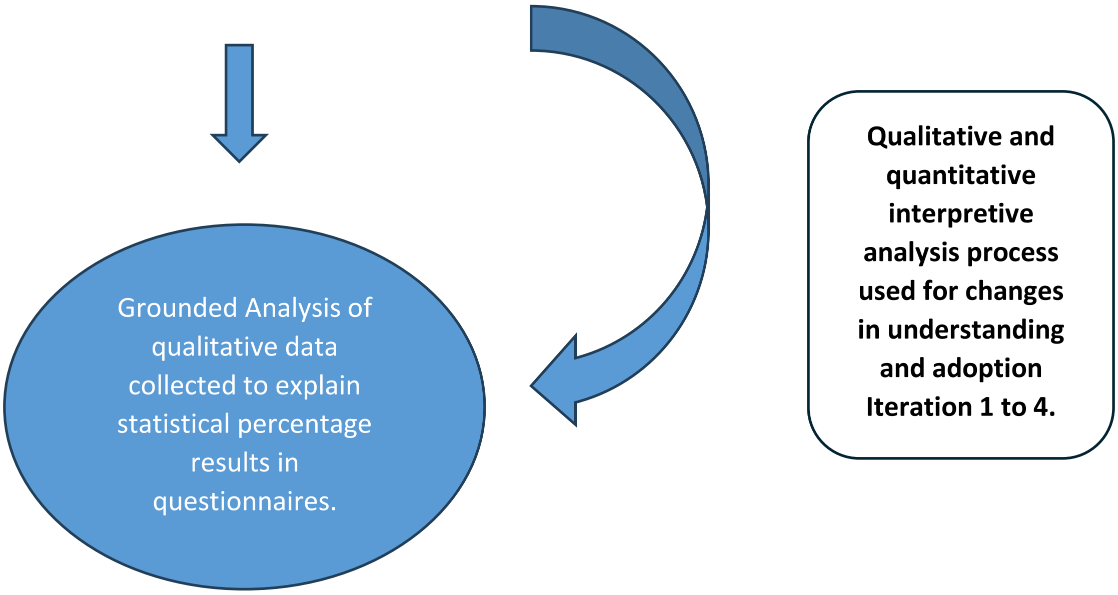


Figure 26 depicts the analysis techniques used in the research project. To summarise the steps:

1. The survey preference responses were analysed with basic percentage analysis from iteration 1 of the training programme.

2. Grounded theoretical approach was used to analyse the written responses to the surveys, the interviews responses and observation notes to explain the results of the preference responses from the questionnaires.

3. The same process from steps 1 and 2 take place for iteration 2 to 3 of the training programme.

4. The same process from steps 1 and 2 take place for iteration 4 of the training programme.

5. The survey preference responses for iteration 4 of the training programme is analysed to find material changes of responses.

6. Grounded theoretical approach was used to analyse the written responses to the surveys, the interviews responses and observation notes in iteration 4 to explain any material changes found in step 5.

7. Lastly, grounded theoretical approach was used to analyse the written responses to the surveys, the interviews responses and observation notes throughout iteration 1 to 4, to explain the underlying theoretical conclusions that will explain any significant changes found in step 5.

3.9 The Methodological Limitations.

The limitations of the methodology are set out in the Conclusions chapter.

3.10 Ethical Approval

3.10.1 The need for ethical approval.

All research involving human participants requires ethical approval by an approved Research Ethics Committee. This ensures research is honest, rigorous, transparent, and respectful and protects participants. Participants are a valuable part of the research process and not merely a means of accessing data. Ethical review provides protection for participants and helps to protect the researcher. By obtaining ethical approval the researcher is proving that they have adhered to the accepted ethical standards of a genuine research study. Participants have the right to know who has access to their data and what is being done with it. If ethical approval has not been obtained, the individual researcher bears personal responsibility for any claims that may be made. Research funders will only fund research that has ethical approval, and publishers will not accept submissions of research results that was not ethically approved, (Murray, et al. 2012).

3.10.2 The background of the ethical processes in place for the research project.

The researcher worked in a collaborative arrangement with participants who were owners, employees, or managed small enterprises in Scotland. These persons enrolled on one or more of the financial management training courses that were being assessed for set parameter measures of effectiveness in an iterative adapted process. The training programme was adapted to enhance the impact of the financial management training based on these feedback metrics.

3.10.2 Voluntary Participation

Notice was given to the participants of their need to consent to take part in the research and that the information they provided would be for research purposes only. The nature of the research was clearly explained to the participants in a participants information form. This form detailed exactly what the research is for, what the purpose of their participation was for and what exactly their input would be. Notification was also provided on the restrictions on the use of the data they provided. The form clearly said that their participation in the feedback process was completely voluntary, and they could withdraw from the process at any time.

Crucially, the participants were clearly told that they did not have to volunteer to take part in the feedback process if they wished to enrol onto any of the training courses evaluated in the research. The training courses were free, so if the person wanted to enrol on the training course but not take part in the feedback process then this was acceptable. These persons would receive the same training as someone who participated in the feedback process. This was all made clear in the participant's information form that was sent to the person when they enrolled onto the courses and they either signed or agreed to take part or refused. Either way both groups received the same training experience. This is to show that no one was subtly coerced into taking part in the feedback process which would violate the basics of research ethics.

3.10.3 Participants Confidentiality

The participants were told their identity would be kept confidential. They would only be identified as participants of the research to formulate more effective financial management training and referred to as individuals who worked in small enterprises in some capacity but undertook financial duties within their role in the small enterprises but who had no or little training in finance previously.
In terms of data security, the data will be kept intact for a period for up to 10 years or any longer period required by an approving body, the research funder or under legislation. It will be password protected, encrypted stored in One Drive.

There will be nothing documented in the research project that will name a person (e.g. audio and videotapes, electronic and paper-based files, e-mail records). Measures to prevent accidental breaches of confidentiality will be taken. Specifically, all data will be in secure password storage and not on any external open storage. Where confidentiality is threatened, relevant records will be destroyed.

Guarantees of confidentiality and anonymity given to research participants will be honoured, unless there are clear and overriding reasons to inform third parties which is unlikely based on the nature of the research. All participants under the Data Protection Act have the right to access personal information, whether it is confidential, that relates to them, and to be provided with a copy of the information on request.

For confidentiality and anonymity, the collection, storage, disclosure, and use of personal data in this research will follow all legislation relating to data protection and arrangements will be put in place to carefully protect the confidentiality of participants. Details that would allow individuals to be found will not be published or made available to anybody not involved in the research unless explicit consent is given by the individuals concerned.

3.10.4 Participants potential for harm.

All practical measures were deployed to protect the physical and the mental welfare of the participants. Nobody was interviewed physically in private; any physical interviews were conducted in public spaces. Anyone who were interviewed online were recorded with their consent. The summary findings of each interview were sent to the participants for confirmation or otherwise so that the correct conclusions on the essence of the feedback were correctly arrived at, and it was in line with the meaning they were trying to convey during the interview. The summaries of the meetings were sent to the participants to reassure them that nothing that could name them or anything negative about their organisations was revealed in these notes.

Personal liability of the researcher's professional status.

It was made noticeably clear in the participant's information form that anything from the training programme implemented in their organisations would be done so at their own risk. It was made clear that there was no guarantee of financial gain by implementing the techniques from the training and could indeed lead to financial loss.

To protect the researcher and the participants from any potential financial loss as an intended or unintended consequence of the training provided, the University of Dundee legal team included my research activity in the university's professional indemnity insurance that covers such a risk.

3.10.5 Results communication.

The results of the participants input at each stage were summarised and sent to the participants for their confirmation. This had a summary of the key learning from their interviews and how it would affect future development of the training course.

Full results of the research will be communicated to the participants through peer reviewed published articles.

Full ethical approval for this research was gained from the relevant Ethics Committee from both Birmingham City University and the University of Dundee and evidence of the relevant approval documents can be provided on request.

3.11 The Methodological Summary.

Chapter 3 set out the methodological approach of this research project. The remaining chapters will cover the analysis, discussion, and overall conclusions.

Chapter 4: Findings, Analysis and Preliminary Discussions.

This chapter is a detailed and comprehensive overview of what happened in the experiment, what was discovered in the results, how these results were analysed, summarised, and used to adapt, change, and build the training programme. It also shows how the key theories that underpin the study started to emerge from the data.

The chapter will begin with a brief recap of the main interpretation techniques used for the data collected. For fuller descriptions and analysis of these techniques please refer to the Methodology chapter 3, where the methods of collecting the data used and the type of data collected is described.

This chapter will mainly set out how the data collected was analysed and interpreted. It will also explain how the analysis and interpretation was used to build and develop the training programme in a way that meets the overall research project objectives; to build a financial management training programme for small enterprises that improves financial self-efficacy and uptake of the training inputs.

The chapter ends with an analysis of how the key data changed from the first iteration to the fourth and what impact that has on the overall study.

The chapter starts with a brief recap of the established approaches used to analyse and interpret the data and then goes on to set out the detailed ways the data shaped the iterative design process of the training programme.

There are extensive results to review. For conciseness there will be summary discussions on the results of each iteration in this chapter. This will reduce the detail needed in the main overall discussions chapter so that the discussions chapter will be an overview of the results.

4.1 The Process of Using the Data to Adapt and Build the Training Programme.

As set out in the methodology, the participant's responses were collected through mix methods at different points in the development of the training programme. An analysis was made of this data and used to make inferences and predictions about a wider population based on the samples of qualitative data collected. This is the basis of overcoming the limitations of the methodology.

It is explained how the responses from the participants impacted the controllable variables to the training programme. For example, if a significant number of the respondents reported positive on a certain variable element, then that element was kept for the next cycle of the training programme and then assessed again for reaction. If the element had a negative response, then that variable element was dropped or amended based on the details of the responses in the interviews. The variable element was the content of the training, though method of delivery, teaching style and lesson structure were also altered based on these responses.

The responses to the online questionnaires, interviews as well as the notes from the active observation were analysed and used to formulate the theoretical approach to maximise effectiveness of financial management training for small enterprises. The iterative approach underpins the building of a 'successive approximation model,' (SAM), for the training programme, (Allen and Sites, 2012). The (SAM) is a derivation of the ADDIE Model which uses feedback to derive and developed working models of the final solution. Developed by Dr. Michael Allen it uses a linear process for course development, (Cheung, 2016). The training approximation model developed in this process was based on the feedback from the participants of each stage of the development cycle.

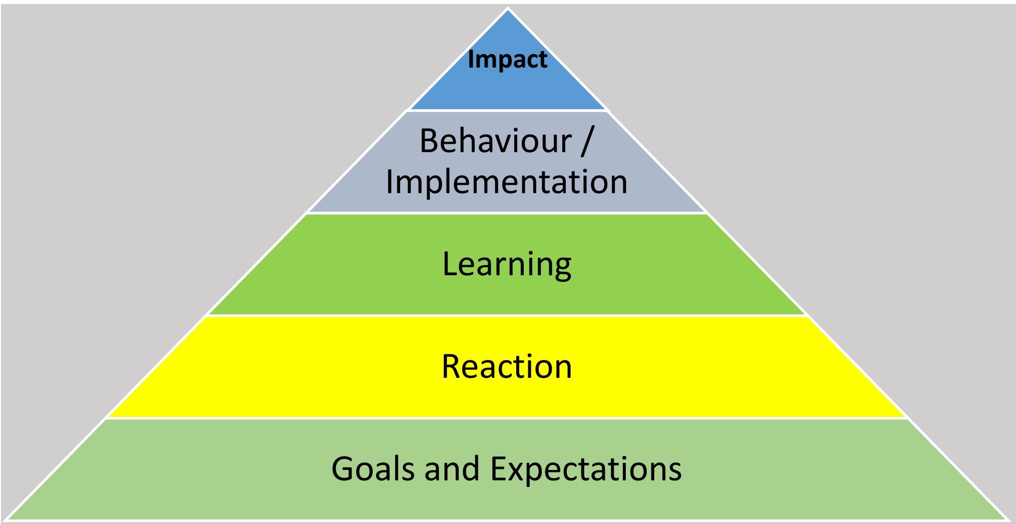
The process of analysing and interpreting the data shaped each stage of the training programme and was key to the iterative design process to build the successive approximation model of financial management training for small enterprises.

4.2 The Interpretation of the Data and using it to Adapt the Training Programme through an iterative process – step by step build.

The results of the questionnaires, observations, and sample interviews of the participants of the training in relation to this analysis are set out.

To illustrate the evolution of the development of the training programme through the iterative process, a summary of the responses from the first and fourth iteration are shown here. The rational of how the data was interpreted into action and how this made the changes to the training programme is also shown. This is the process of developing an effective financial training programme for small enterprises through this adaptive iterative process.
The model used to assess goals and expectations of the training through to the change in behaviour is set out in the training model are set out below in figure 27:

Figure 27 – The Training Evaluation Model.

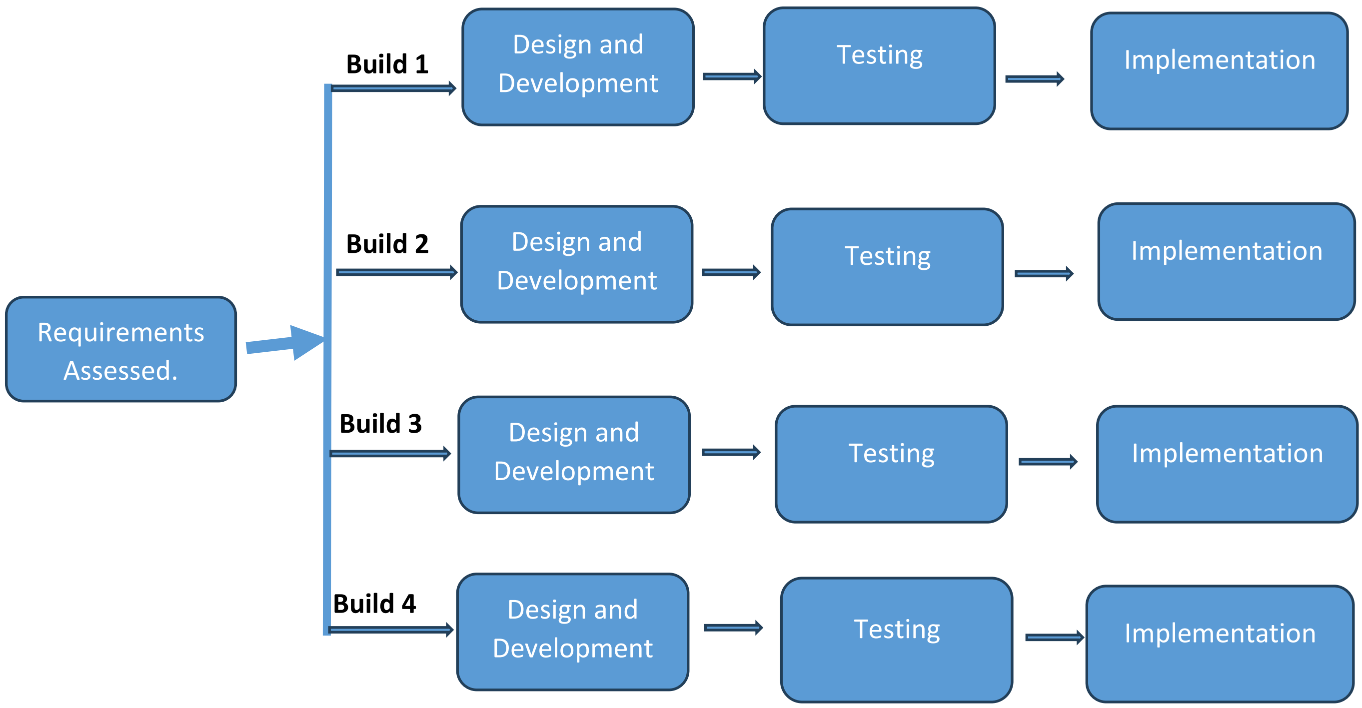


(Researcher's own model)

4.3 Recapping the stages of the iterative development cycle.

The detailed steps and times of the training sessions are set out in detail in the methodology section 3.6 and illustrated through figure 11. This part of the iterative development cycle as recapped in figure 28:

Figure 28 – The Iterative Model.



(From Jonassen, 2008)

To recap, there were four cycle builds of the training programme before the final successive approximation model of the training programme was reached. Each iteration involved one day of face-to-face training with up to a maximum of fifteen participants in each session to preserve quality. There were two or three sessions per iterative cycle to maximise the potential number of participants onto the research. The iterative cycles ran from the first cycle in September 2022 until the last training session of the fourth cycle of the development that took place in March 2024. As explained in detail in the methodology section, the participants were questioned prior to the training on their expectations and motivations for seeking the training. They were also questioned post training and approximately six weeks later. Additionally, the participants of the training were questioned and observed during the sessions to test for reaction.

Again, as detailed in the methodology section there were four stages of course development:

1. From conception of the Training Programme to the first iteration.
2. From the first iteration of to the second iteration of the training programme.
3. From the second iteration to the third iteration of the training programme.
4. And finally, from the third iteration to the fourth iteration of the training programme.

The next sub sections set out how each stage of the iteration was constructed.

4.4 The build of the conception of the training programme to the first iteration of the programme.

The foundations for this research were laid down in a pilot project of evaluation of financial training for non-specialist. This project took place between March 2019 and December 2021 and involved one day finance training courses for non-specialist that were run on a fee-paying basis in conjunction with a professional accountancy body. These courses were popular and well attended by people with no prior financial or accounting training. The attendees worked in a variety of organisations and who all had finance work in their role and who looking for short and easy consumable finance training. The training sessions were delivered physically in person, though the latter sessions were moved to an online live delivery due to the Covid 19 lockdown restrictions, but the format and the structure of this training remained the same despite the change in platform of delivery.

All the lessons were delivered by the researcher as a pilot project, but these sessions were not formally part of this research. The results were used as the starting point for the first training sessions of the doctoral project and shaped the content of the first iteration of the training that started in September 2022, as set out in the methodology section. Indeed, the results and an analysis of the pilot programme formed part of the conception and the basis for further investigation that led to the doctorate project as questions were evoked that needed clarification from the pilot research.

To clarify, the pilot programme was not part of the doctorate research.

One of the key conclusive learnings from the pilot project was to establish what was needed in terms of the content of these sessions and the nature of delivery and who they should be aimed at, the so called generic financial training for small businesses. The researcher worked in cooperation with the Association of Accounting Technicians (AAT) on finding training solutions for non-accounting specialist for workplace needs. The AAT work closely with small businesses organisations and associations, as well as consulting directly with small business owners to implement effective training solutions for small businesses. They look to develop and deliver financial and accounting training that can be ‘readily and quickly used by businesses.’ (AAT, 2021).

The researcher worked with the AAT as an external consultant to develop these ‘Essential Accountancy’ courses. The key contribution of the researcher was to be part of a team of teaching consultants throughout the UK delivering these courses and using AAT standardised feedback procedures to assess the effectiveness of these courses. As part of this team the researcher was privy to this feedback that evaluated what topics taught were viewed as useful and what were not. Structure, length and pace of the courses was also evaluated.

From the result of this feedback the researcher was able to clarify and prove what topics of the generic financial training delivered were liked and preferred by participants and to be able to show what the structure should be of these generic courses.

At the end of the pilot project the AAT developed one day non accredited finance training courses for small businesses owners and employees that they believed met the key skills needed for small businesses owners and managers to run their organisation with more financial acumen. ‘The AAT has developed courses that will allow Small business owners and employees to take away finance skills that can be used immediately,’ (AAT, 2021)

These courses went onto be marketed as ‘AAT Essentials: Short Finance Training Courses.’ The content, the syllabus of these courses formed the initial generic, stage one of this research project with the purposes to provide financial management skills to non-accountants and who work in small enterprises.

Small enterprises were the key target sample group as the researcher had undertaken separate research that investigated the high number of small businesses in the United Kingdome (UK) that fail. This separate research identified that a material reason for this failure was the lack of financial literacy of the small business owners which contributed towards their financial failure.

The researcher further investigated what aspects of the subject content of the training were adopted by the participants, or how much of what was taught did they use in the workplace and to what extent. The participants on the AAT courses volunteered to be surveyed after they received the generic training and questioned on whether they used any of the content taught. Again, this was part of the project that was conducted in conjunction with the AAT, but it should be noted this feedback was restricted to a short online Q&A undertaken by the trainee as part of a feedback process undertaken by the AAT. The feedback process was not extensive and was quite high level.

The feedback on these questions, on the level of adoption of the content on the training where the researcher was not the trainer were not made available to the researcher. However, the researcher was able to view the feedback on the issues of the trainees who the researcher had trained. Here the results were that the first feedback on the course was positive, but the level of adoption from what was taught was incredibly low. Analysis of the short answers given by the trainees in the feedback amounted to that they found the training okay and interesting, but not all was relevant and therefore the opportunity to adopt of what was taught was exceptionally low.

Another key finding of the pilot programme from the AAT pre-registration surveys was a breakdown of who was it enrolled on the training programmes and what were the specific reasons for these people enrolling on the training courses. There were other questions on qualifications and prior experience to add to the profile picture of who it was who enrolled. But the key findings from these surveys were the details of who they were in terms of what role they had in the small enterprises and the key reason for enrolling.

These results showed that the vast majority the people who enrolled onto the courses done so for specific work issues, financial information requirements in their roles in the workplace that needed help with and trained how to provide. Some of the delegates came to training that was run by the researcher with very specific financial work-related queries, indeed some of them with paper copies of the financial information they needed help with or asked if they could email the researcher with these examples even though the training sessions were never advertised as one to one help session but group training sessions covering the essentials of finance needed for internal financial management.

The survey results also showed that all the delegates on the pilot programme training courses had roles within the small enterprises that involved some form of finance work, and further they had the authority and the autonomy to change the financial management information that was used within these organisations.

The results from these surveys first brought to the attention of the researcher to the possibility that in order to build a financial management training course that would be useful and effective measured by positive response and crucially show a change in pattern of financial management work that could be linked to the training delivered then it would be necessary to provide training that met the prevailing financial management needs of the trainees at that time. This was confirmed in relevant literature as set out in the literature review section 2.5. But it would be near impossible to provide individual customised training, as that would not be training but more consultancy, not possible in a more affordable collective group format. The training would therefore need to somehow have content that met the overall prevailing financial management needs of the group of trainees.

This was the first step of incorporating the theoretical concept of the contingency theory of management accounting into training programme to make them more effective, and the best way to identify these financial management contingencies was to incorporate questions relating to the financial management needs into pre training questionnaires as part of an iterative constructive design, as was done from the first iteration onwards, as seen in section 4.5.

The second key relevant finding from the pilot programme was that for the objective of improving uptake of the training programme the persons enrolled onto the attending courses needed to be in best position within their organisations to learn and absorb the content of the training and be able to implement the key kerning points and effect change of behaviour within the organisation as a result of the learning from the training. This was the first emergence of the theoretical concept of absorption capacity. Therefore, from the first iteration onwards question of participants included questions that related to absorption capacity as explained in section 4.5.

As said, the basis of this doctoral investigation; how to improve the uptake of financial management training to non-specialist from small enterprises. As set out before this was aimed to be achieve by using an iterative constructive design of financial training that would incorporate any key theoretical findings that would improve uptake of key elements taught in the training. This aim shaped the first questions that were asked of persons from small enterprises prior to the first iteration of the training session that took place in September to December 2022.

But from a practical basis the content of the first iteration of the training programme came from the results of the pilot project; they were the AAT Essentials: Short Finance Training Courses. These were three generic courses for non-finance specialists in small enterprises: Finance for Non-Finance Managers, Budgeting for small businesses, Cash Management and Profitability for growing business. Unlike the pilot programme these courses were open to participants free of charge as it was made clear their delivery was part of a research project that would look to improve the relevance and the uptake of these courses, and they only request of the enrolled delegates was that they participate in the feedback process as part of the research project.

This section set out how the first iteration, or version of the training programme was developed.

The next section sets out how and why the training course was adapted from the first to the second iteration; from the generic first version that was developed through the pilot project.

4.5 The build from the first iteration of the training programme to the second iteration of the training programme.

As stated, the first iteration of the training courses came from the results of the pilot programme. Therefore, the first iteration of the training courses was the one-day AAT Essentials: Finance Training Courses for Small Enterprises. This financial management training course met the basics that potential delegates from the target audience were looking for.

The AAT Financial Essential courses were developed through the pilot programme, as set out in section 4.4, to meet the basic immediate needs of the average non finance manager working in small organisations who needed financial training to improve the performance of the financial duties in their roles. These courses would be the starting point to develop financial management training courses that would improve understanding and the uptake of what was trained. From a practical perspective it was also an ideal method of recruiting participants onto the research project. This is because there is an ethical duty to inform participants that the courses they were enrolled on were part of a research project and to be fully transparent on the nature and the details of the research. Therefore, the potential participants would know the training programme was at the first stages of this development process and that this process would be experimental. This may have deterred people from enrolling as they would be looking for ready-made solutions to their financial management problems in their work roles. These managers, owners and key employees of small enterprises are usually very time restricted so they may not have been willing to sacrifice a day working to participate in experimental training, so it was important from a practical perspective to advertise initial training that already had quality assurance from a UK professional accountancy body. However, as stated in the research ethics commitment the people who volunteered to participate on the feedback of these initial training programmes were clearly told that the purpose of their feedback was to amend the initial training so that it could be developed into a training programme that would be more relevant for them.

The questionnaires, interviews and observations were geared to testing if the training improved financial competence and the level of adoption of the training provided. But also evaluating the contingency theory of management accounting as well as the theory of absorption capacity, all of which were proven as relevant factors in the first pilot project.

4.5.1 The pre training course questions.

As said in the methodology section, the pre training questionnaires were sent to all the people from small enterprises who had enrolled onto the free first generic financial management training for small enterprises courses. The pre training questionnaires focused on who the participants were in terms of what prior experience and relevant qualifications and training they had and what was their role in the organisation and what was their motivation for enrolling onto the courses.

The results of these pre training questionnaires for the first iteration of the training programme appear below. As set out in the methodology section there were sixteen people who attended the first iteration of the training who had taken part in all the questionnaires:

Table 1 in the questionnaires asked the participants what their role is within their organisations:

Table 1 Analysis: The fact that the participants are in management position is not a surprise as the courses were promoted to management level as the financial management taught is aimed at non finance managers who undertake finance work. This means that the training can take a strategic overview style. So rather than focusing on the numerical calculations it is more appropriate to focus on the interpretation of the financial statements and their impact on the organisation and how they can be used to improve the aspects of the business they illustrate.

Table 2 in the questionnaires asked the participants if they had any earlier financial training.

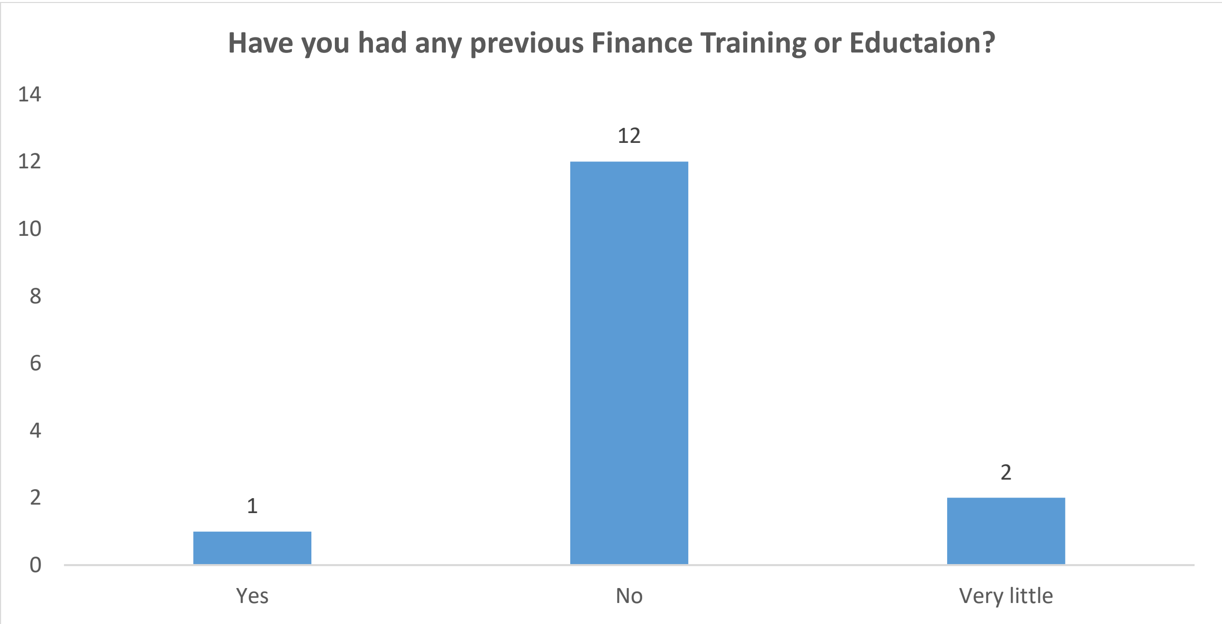


Table 2 Analysis: (there was one non respondent in this question). It is clear from the responses that they have no prior finance training and so the training must be of a level where the basics are covered. This was the level the AAT Essentials courses were pitched at and so the proper level was used. However, these first generic training courses were pitched at people who work in small enterprises who have finance work in their job role. In other words,

someone who has no or little formal training in finance but has worked with financial information in their job roles.

Table 3 shows the responses to the question if the participants undertake finance work in their current roles.

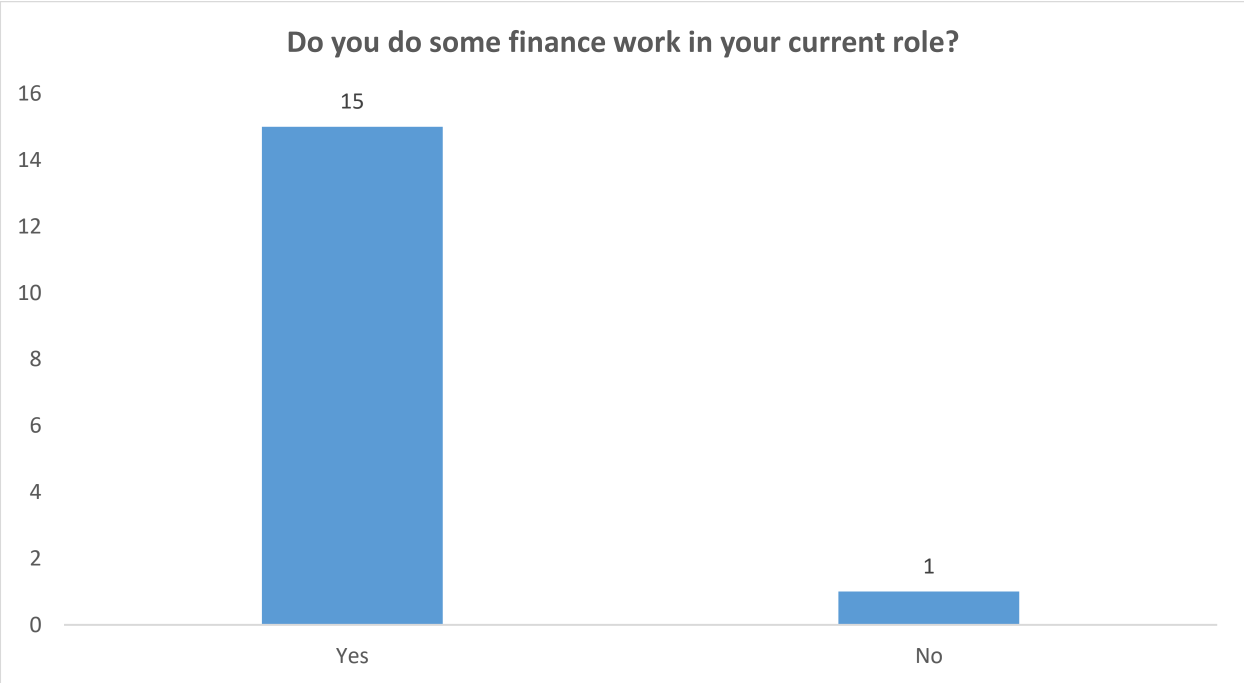


Table 3 Analysis: All the respondents undertake finance work in their work roles within the small enterprises. From the perspective of finding the right level of training provided, it would be important not to be too basic as a working knowledge of finance is assumed. There should be tasks that should stretch the participants early in the training. For the trainees that have some experience in what is being trained, but do not have any previous formal training in this area, it is best approach to adopt a more mentoring role to bring out the unconscious knowledge within and foster a greater sense of self belief in what they already know to some

extent, (Pont, 2023). This could mean that any trainees who have no experience and no earlier learning in finance, then these courses would not be suitable for them. This is because one of the main aims of this research is to provide financial management training to small enterprises that will increase the uptake of the training. To provide short-term training that people can use immediately is not realistic when the trainees have no prior knowledge or experience in this area, (Pont, 2023).

Table 4 in the questionnaires asked the participants if there were any specific work-related issues that made them seek financial management training.

This question was asked to aid the development cycle onwards as analysing the responses from the interviews following the first generic financial management training identified a common theme in much of the responses. This was that many of the participants enrolled onto the course to gain knowledge relating to specific financial information needs within their organisation.

Table 4 shows response to the question about meeting an accounting information need.

Table 4 - Pre-Training Responses from the first iteration of the Training Programme:

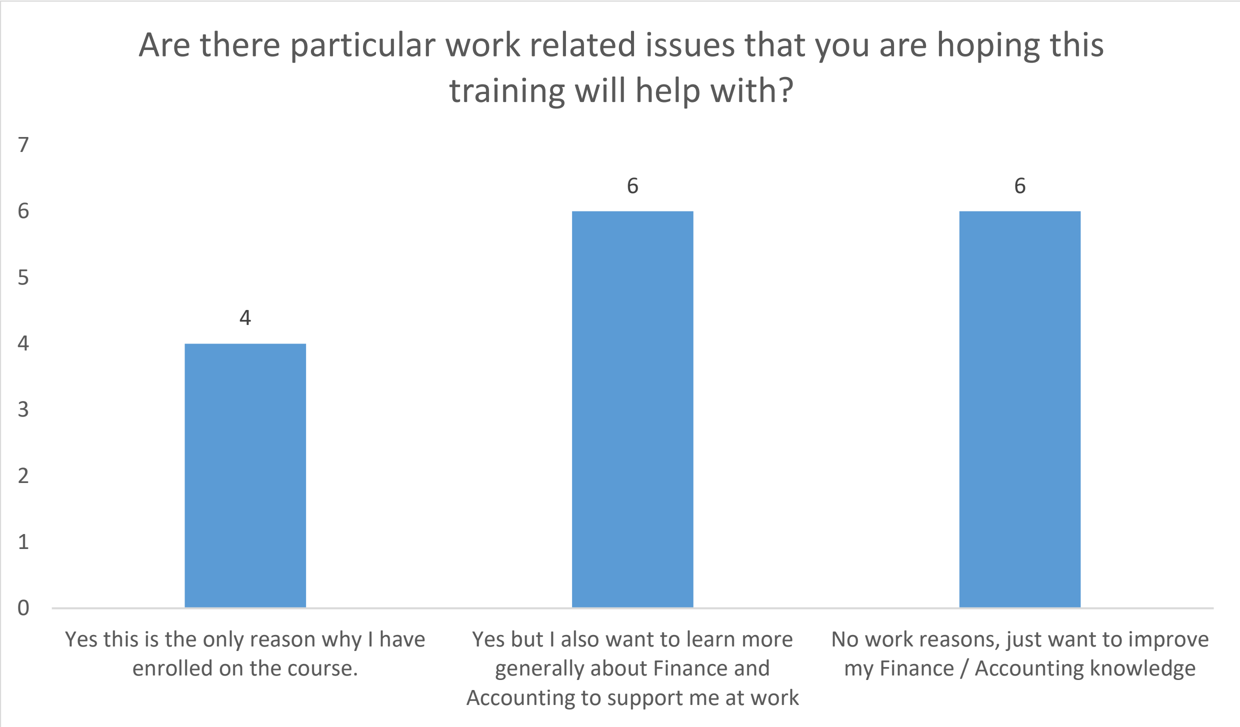


Table 4 Analysis: the responses of the participants from the first iteration of the training sessions. These participants were asked immediately prior to the first training programme if there were specific reasons for enrolling and what areas of financial management they were looking to improve on. The key question that assessed contingency theory of management accounting was: 'Are there particular work-related issues that you are hoping the training will help with?'

There were sixteen participants who responded to this online question in the first iteration of the training programme and came from small enterprises from a cross section of sectors. Twenty five percent of the participants showed that there was a particular work-related reason to be resolved for wanting to enrol on the course and that this was the only reason for enrolling. Another thirty seven percent said that there was a work-related issue that they hoped the training would resolve but they also wanted to have more general finance training.

This means sixty three percent of the participants overall showed that a work-related reason to be resolved was a main factor for wanting to enrol on the finance training course.

From this it is reasonable to conclude that there is a clear indication that the contingency theory of management accounting applies when considering the design of financial management training for small enterprises. This is because the participants wanted finance training that helps with a business need and is a major motivation for non-finance specialist from small enterprises wanting finance training.

Table 5: Does the organisation view the individual as being the right person to make the most impact within the organisation from the financial management training?

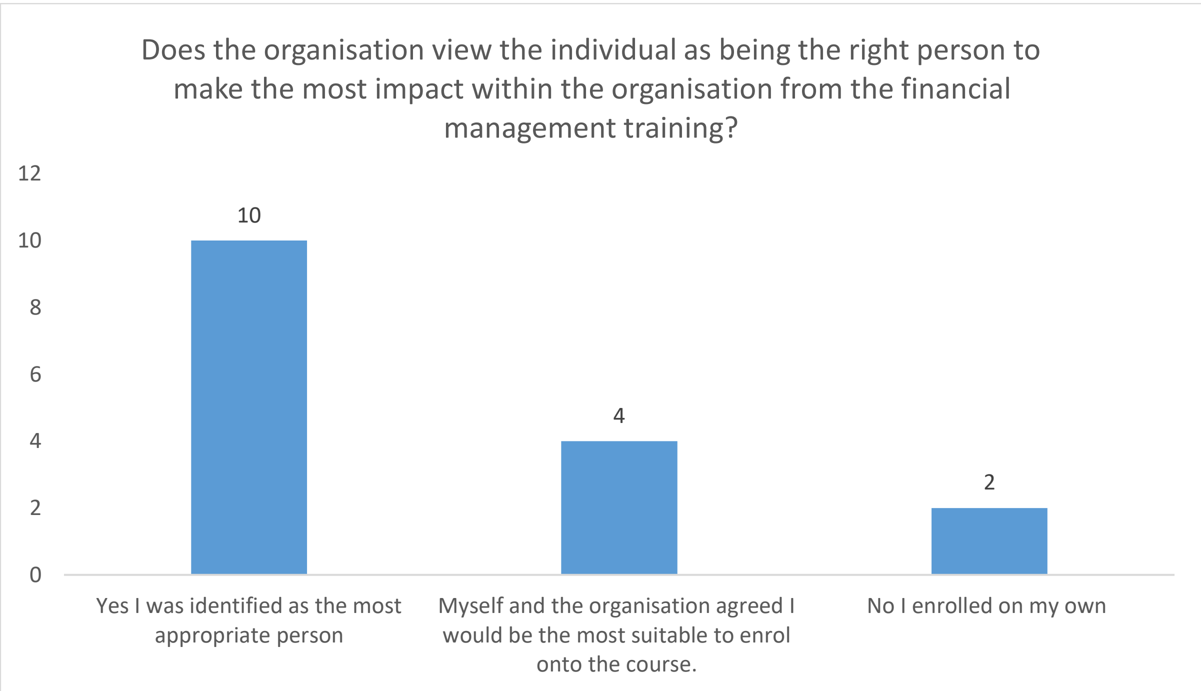


Table 5 Analysis: This would suggest that most participants have been identified as being the right persons to make the most out of the financial training and therefore having potential absorption but also the organisation believe there is opportunity for realised absorptive capacity.

Table 6: Are you hoping you will implement the techniques taught on the course to the benefit of the organisation?

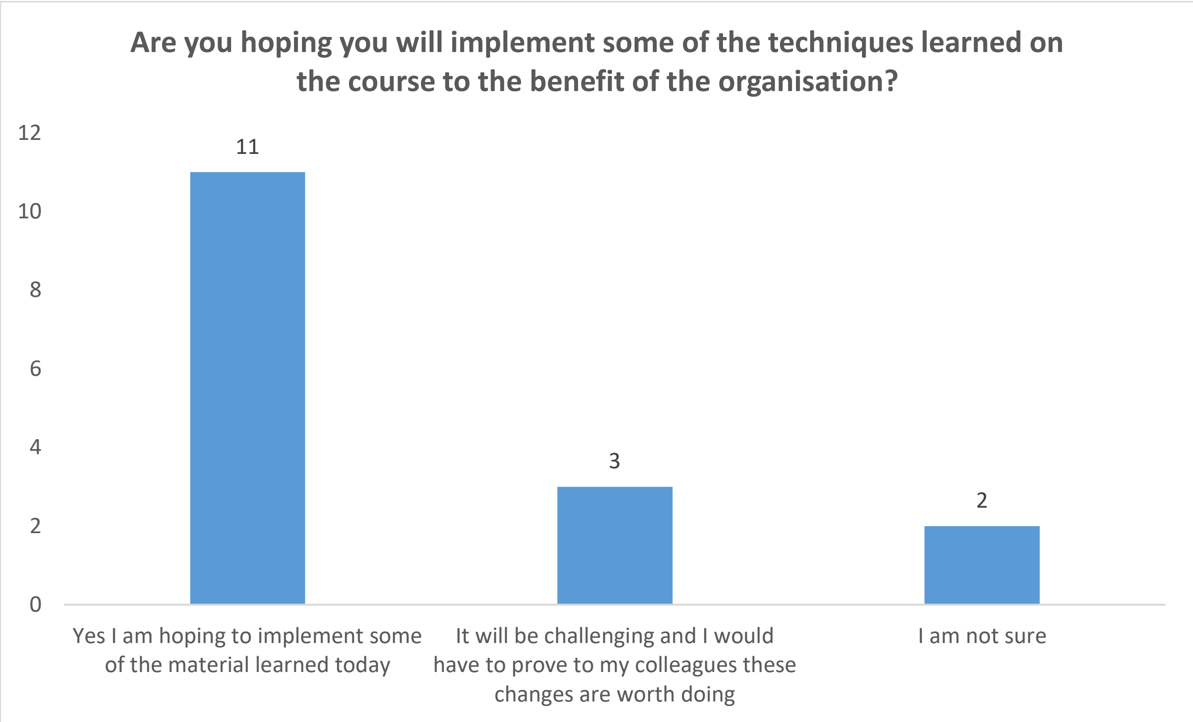


Table 6 Analysis: This would suggest that the participants believe they have potential absorptive capacity and believe there is a potential for realising the absorptive capacity.

Table 7: Does your organisation hope you will implement the techniques taught on the course to the benefit of the organisation?

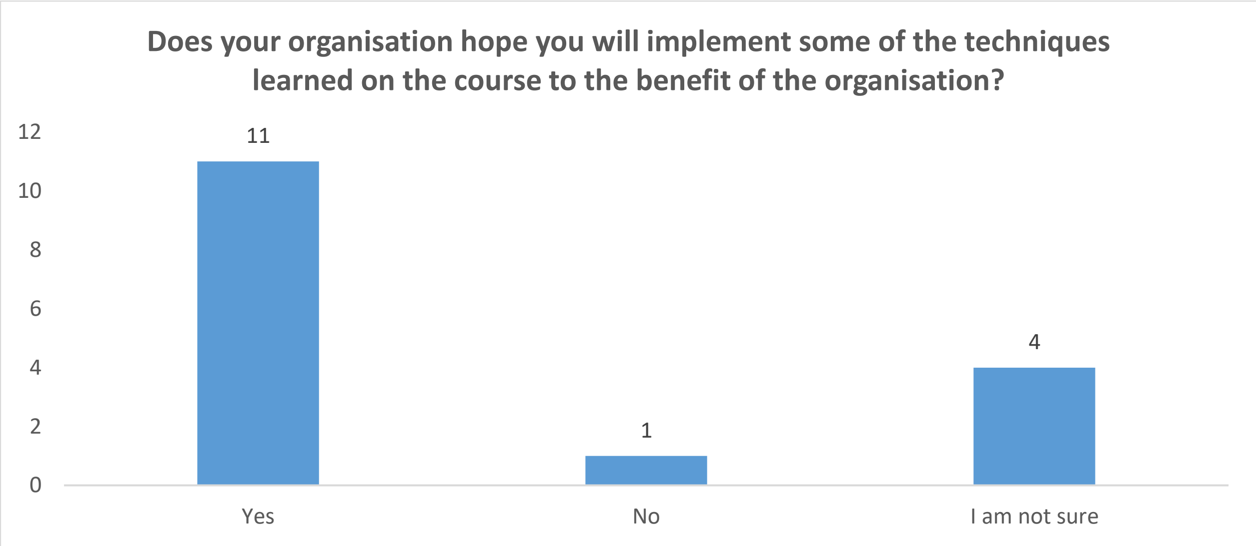


Table 7 Analysis: This would suggest that the organisations feel there is scope for realised absorptive capacity from those enrolled on the course. In other words, the organisations have found those enrolled to absorb the training material and hopefully use it to improve the financial management of the organisation.

Table 8 shows a summary of the responses from the pre training questionnaire that relate to what the training delegates financial information needs are. These interview responses were taken after the first iterations of the financial management training where there was a sign that the principal reason for enrolling onto the financial management course was to meet a contingent financial management information need at work:

Table 8 – A sample summary of the relevant pre training responses from the first iteration of the Training Programme on what they hope to gain from the training:

I want to understand the legal aspects of financial reporting especially in relation to regulation requirements to debt reporting.
I am hoping to gain new insights to the financial statements of the business as well as help with the budgeting process as this is a particular area I need help with.
I want to improve my overall financial skills. I have been doing limited financial work at my employer, and I would like to develop my skills so I can look for a more challenging role.
I am hoping to have some sort of overview of Finance that is relevant for small businesses. I appreciate this is a general course, but I hope to gain relevant knowledge to help me.
I do a little amount of finance work in my job, and I enjoy it, so I am looking to gain insight to Finance to see if I can expand the role where I am or in a future role.
I enrolled onto the course in the hope that it will help me with the finance element of my work that is not extensive but is quite important, especially the budgeting side.

We have finance skill issues at work as there is no trained accounting staff including myself, therefore our understanding of the finances is limited. We need to be up to speed with budgeting and cashflow.
Cash flow management is a key issue at our business, and I need to learn new tools to help us manage this better and I hope this course helps with this.
I enrolled onto the course as I need to understand the financial accounts better so that when I sit with our Accountant, I can properly question her on the issues raised.
Overall, I am just looking for understanding of the Finance work I now need to do at my work. It is basic stuff done through quick books, but I need background to it all.
We have been struggling with looking at how to improve our credit control procedures as we are experiencing problems with cash flow, so the cash control aspect of the course should be helpful.
I work in a small charity, and we now really need to understand how we report on the separation of restricted and unrestricted funding, but any finance training will be helpful.
I need to understand how to review the budget against the actual results, how to find any key issues in relation to budget performance. Based on the spec of today's course I hope this is covered.
I am just looking for general training in Finance as I only just started the new role where I must undertake financial work such as budgeting and cash flow.
The Finance for non-Finance managers course is just what I was looking for. I have been struggling away doing the Finance work for years so to have basic training is just ideal.
Training on how to produce on going expense monitors reports. But I realise this would involve accounting software. But I am hoping to gain the basics today.

Table 8 Analysis: The responses set out summaries of the feedback in the pre training questionnaires of the first iteration of the training. These were answers to the question 'what are you hoping to gain from today's training session?' From the responses it was clear they were coming to the training to resolve a financial information need but there were other more general reasons. There is enough evidence to suggest that the contingency theory of management accounting is a factor to consider in designing financial management courses for small enterprises at this early stage of the development of the training programme. Therefore, it is crucial that any further iterations of the training programme incorporate the main financial management information contingencies of the delegates.

There is also substantial information from the delegates on what they hope to learn to help build towards the second iteration of the training programme, capturing the essence of what the target audience want. These responses of what the trainees are hoping to learn do not go into technical detail of what financial management information they want to learn. Why should they? They have no prior accounting or finance training, so they only say in general what they need in relation to financial management information such as: 'budgeting and cash flow,' 'credit control procedures,' 'legal aspects of financial reporting,' 'debt reporting.' It is for the trainer, researcher, to match these broad concepts that are desired to be taught with the technical specific financial management techniques that would cover these broad concepts.

As the first iteration of the training programme had already been set when these responses were gathered as they had already enrolled onto the training programme advertised; the Essentials Generic training programme, then these responses were used to consider what changes were needed for the second iteration of the training programme. The build for the second iteration of the training programme had begun before the first iteration had been delivered.

4.5.2 Discussions of the first iteration of the pre training course survey.

The first important aspect to reflect on and discuss at the end of the first analysis of results is on the topic of who it is who is enrolling onto the course. This is before we discuss on why they enrol, what are their main motivations for enrolling?

In a sense by investigating and reflecting on who it is that enrols onto the courses will help to allow us to understand why they enrol.

Figure 1 shows that the majority of those who enrol onto the courses are in management positions within their small enterprises. There is a practical explanation for this in that the courses were aimed and advertised at non finance managers working in small enterprises and would provide financial management training that would help to improve the overall financial management of the enterprises they worked for.

This is because the training courses were for the purposes of building up financial management skills that would help to improve the financial management of the enterprise.

As a result of this aim, the content of the training, as explained earlier, was made up of management accounting disciplines. This means that the training can take a strategic overview style. So rather than focusing on the numerical calculations that make up the construction of these statements, it is more appropriate to focus on what these statements mean in terms of the impact on the organisation and how they can be used to improve the aspects of the business they illustrate.

The overall responses from the pre training survey from the participants of the first iteration of the training suggest that a significant motivation for the participants enrolling and attending the financial management training was to deal with financial information needs currently prevalent in their organisations.

However, the participants were not in general clear what these information needs were in the pre training survey, or they had general conception of what was needed and a hope that the training would help to resolve these work needs.

But overall, it can be concluded that the evidence from the pre training questionnaires is that the contingency theory of management accounting is a relevant theory to consider when designing financial management training courses for small enterprises.

The challenge for training providers is to identify the financial management information needs and incorporate them into the training programme. This is achieved through targeted detailed questioning in the iterative process of training design which is the basis of the wider research this analysis is part of.

The other main theme that was identified from the pre training questionnaires was that most of the delegates attending were persons who were considered someone who was the most appropriate to attend and learn from the training, a conclusion both they themselves and their organisation agreed on. The other aspect to this was that both they and their organisation felt these individuals were best placed to implement anything relevant taught from the training.

This would infer that the absorption capacity of the small enterprises who attended the training was high.

The practical consequences of this are that those attending have been identified as having a good basis of absorbing new information. They also work in some capacity in finance in their work roles, even if it is a limited role. In other words, the financial management training courses that will be designed to increase uptake should be aimed at those individuals who have finance work role but not any prior training in finance. This is what the pilot programme revealed and already, even at the first iteration of the training programme, individuals are voting with their enrolment. They attract people who work in some degree in finance but are seeking some clarification training rather than start from scratch type training.

The results of the pre training survey also provided insights to the financial management topics the delegates wanted to cover to meet the financial information contingent need. Working on the continued assumption first identified in the pilot project that uptake will be low from the first generic training inputs as it does not meet what the delegates specifically want from training then these areas to be covered can be used for the first adaption of the training programme.

4.5.3 The post training course feedback, immediately after the first iteration of the training programme.

The following tables summarise the training participant's immediate responses at the end of the training session and helped to shape a response to these that would contribute to the development of the second iteration of the training programme.

Table 9 - Responses immediately after the First, sector wide, iteration of the Training Programme.

Table 9 Analysis:

Nineteen percent of the participants believed that the training session would potentially meet a contingent management accounting need in their organisation. The remaining eighty one percent either did not think outright there would be an opportunity to adopt and implement the techniques taught on the training course or there would likely to be. This would suggest that the training course at this stage did not score highly in terms of relevance to meeting a specific financial information need of the organisation, and that the training course needed to be adapted and refined to be more useful to the participants to meet the financial information needs of those participants from small enterprises.

But it is necessary to refer to the pre training question of this first iteration participants. Table 3, where only twenty five percent of respondents said that meeting a financial information work need was the main reason to enrol onto the training course so the fact that only nineteen percent believed that the training session could help with a particular financial information need is not peculiar. In fact, it could be said that sixty three percent (10/16) of those who were looking for the training to meet a financial information need at their workplace believed after the training that it potentially could to some extent. Though the training course as it stands does suggest that uptake will be high as only a small minority of the participants, only nineteen percent (3/16), can see a specific financial management information need that can be met by the training. This finding is consistent with the pilot programme that concluded that the training helped trainees to have a better understanding of finance relevant to their work but was not applicable enough to allow for them to adopt and use the techniques taught in the training.

Table 10 – What areas of the training did you find most useful.

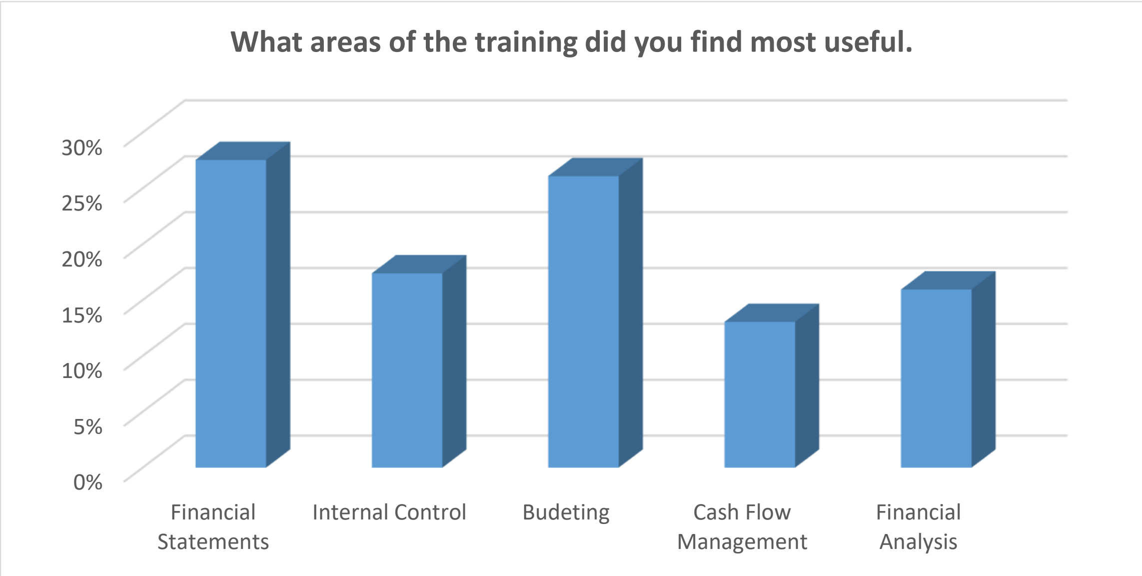


Table 10 Analysis:

The respondents were allowed to make multiple choices. These results are high level and only show the topics that were overall very favourable and others that were not. The results are quite evenly spread suggesting the work done in the pilot project was good in that the generic course designed covered the basics that people wanted covered. More detailed analysis was needed to understand more on this and the later interviews and observations provided this.

Table 11 – What areas of the training did you believe you are most likely to use in your workplace.

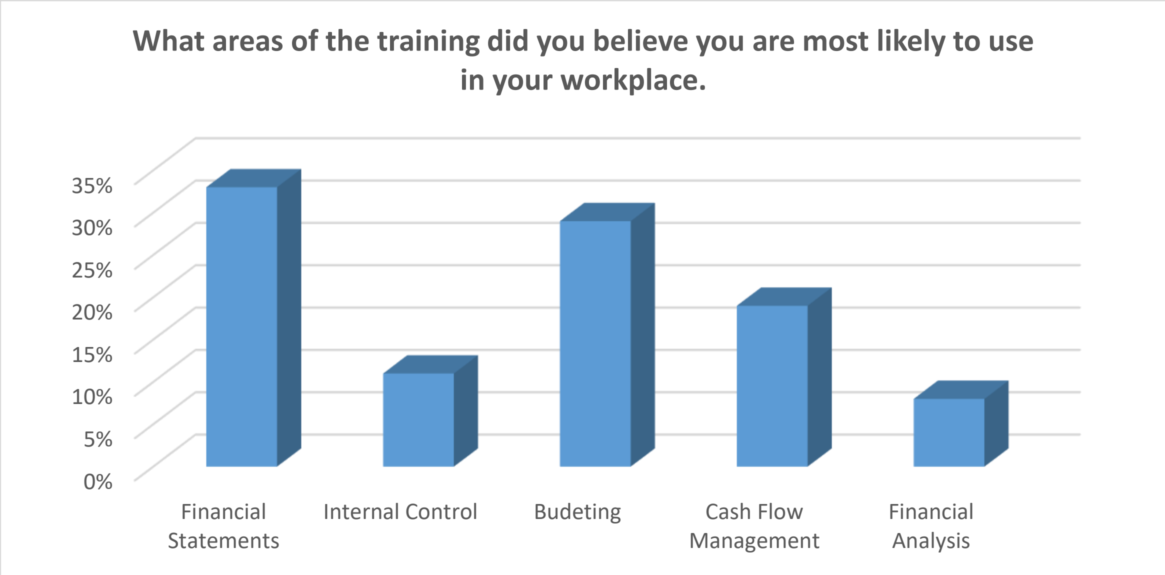


Table 11 Analysis:

On this question the respondents were allowed to make one choice. It is clear from the results of this survey that the two topic areas that the participants feel were most useful were understanding Financial Statements and Budgeting. This may be that these topics were most relatable. Level of technical difficulty is unlikely to be a factor as understanding financial statements was the most technically accounting topic covered. Follow up observations and interviews would give clarity to these questions. But only a small minority of the participants believed that they could use any of what was taught on the course to resolve a specific financial management information need at their workplace. From this it can be concluded that delegates on these courses have a need to understand the financial statements and to be able to have the tools to effectively budget.

The extracts from written responses from the questionnaires of the respondents immediately after the first iteration are set out below in table 12.

Table 12 - A sample of the participant's responses immediately after the First, sector wide, iteration of the Training Programme.

The training was quite informative. But I would need to do the follow up course to feel confident enough to use these techniques at work.
I was hoping that the training would be helpful for my role as a Charity treasurer, but it did provide good general background.
The training was highly informative, and I will attend the future courses.
The training was good in the sense that it gave me a broad understanding of the basics of accounting which is what I need for my job. I am not sure I can implement what was taught as much of the material does not apply to my role.
I want to have a better understanding of the key aspects of financial reporting for charities. Also, how to better manage cash flow and budgets.
I found the training helpful in that it showed me key areas of budgeting and cash management that we need to improve on. But understanding the main financial documents is invaluable for me for my job.
This was an interesting course, on essential financial education. I can see that there are parts of my job that I should be able to do better now, and this has helped me to feel more confident.
The training was useful, and I enjoyed it. I am not sure there is anything specific I can use from it at work now but perhaps after he follow up courses, I will be able to.
The training was good and helped. But as it was aimed both for profit making and non-

profit making, it was too general, and it did not cover my needs in detail which was inventory control.
Good training. I will attend more sessions.
I enrolled to learn more about the Finance aspects of budgeting, and I found it extremely useful, and I will look to see if any of the budgeting techniques can be used. I think they will be.
The training addressed aspects of my financial duties at work. I will investigate to see if these can be used in my role.
I was particularly pleased with the level of detail in the training with the basic financial documents and how to use these to gain more in depth understanding of the business. Extremely useful for me.
The training was interesting, but I do not think there is anything I can take and use in my business as my needs for Tax management are quite specific. But it was interesting and helpful.
I came on the course to understand more about the budgeting process, so this has been great from that perspective. The budgeting cycle starts soon so it has come at the right time.
I think this type of training should be made more widely available to small companies who are drowning in bureaucratic financial information. I will use some of the techniques in my role.

Table 12 Analysis:

At this early stage of the course development cycle the content and structure of the course did not seem to make the participants believe that the training would result in solving a financial information requirement at their workplace and this is reflected in the comments from the participants. But overall, the participants felt the training helped them to enhance their understanding of accounting issues they needed to deal with at the small enterprises they worked for. This training was sector wide which means it is difficult to fit all contingent financial information needs of all sectors in one session and that this stage of the iterative design process not enough data was collected to find what these contingencies should be. Part of this process was surveying the participants on what areas of the training they found most useful.

Table 13 – Summary of research observation notes during the first iteration of the training sessions.

Students find the first session on the breakdown of the Financial Statements challenging but seem very engaged and very keen to gain an understanding of the details of financial statements. To me it seems quite a dry subject to start a general finance for non-finance managers in small businesses course. But as I interact with many of the delegates, I appreciate that understanding and breaking down of financial statements is something the managers in the group, which tends to be most of them, want as this is a key requirement of their roles and they feel that this is where they knowledge is lacking. We spent quite a bit of time on this, more than initially planned so will affect how time is spent on other topics to be covered. But this is okay as the whole idea is to be flexible and change and adapt the course to see what works and what does not for the delegates. **Initial Conclusion:** The section on Financial Statements is an important area for research

for the delegates and more time in the day session should be dedicated to this than is in the first sessions.
Discussions with delegates during the first sessions are very engaging. The students really want to know and understand about financial statements, but the questions are very much about how it applies to their own organisations. This is where it is challenging. The details requested are that they have help to understand their own set of accounts. The delegates even bring their own accounts with them printed out and want me to go through them with me either during the session or at break time. The problem is that is just not feasible to dedicate that time to individual queries that would be quite time consuming and because delegates come from a wide variety of sectors then this time would be of limited relevance to the other delegates in the room. **Initial Conclusion:** The section on Financial Statements is an important area for research for the delegates, however they very much want the training to apply to their own organisations and what is going on in their own organisations in terms of what the financial statements show. There are also people with statutory requirements to understand the financial statements. The problem is spending too much time on individual queries can alienate others in the class, a problem as one of the three sessions had 25 people. Other issues involved the fact that not all the content of the financial statements applied to everyone's organisations. The two main problem areas were accounting for Inventory (stock) and debtors. The delegates worked for small enterprises that did not have one or either of these. But the problem was that the delegates from these areas were especially important as they worked in small enterprises that had stock levels and high amount of credit customers. What is needed is to find a way of delivering the training in this area that would be relevant

to everyone, every aspect to it. The natural conclusion is that this would only be possible if the training session were delivered to a sector specific group so that the training on the financial statements could apply to everyone in the room. For the moment there needs to be a way of delivering the training so that no one feels excluded for too long, or when their areas that are been covered that are not relevant to them.
The next section, looking at internal control. I was surprised that delegates did not seem to be as engaged in this section as I thought they would be. There did not seem to be as many queries and questions over the three sessions that made up the first iteration. After speaking to the delegates, they were too bogged down with the calculations in this section even though these calculations were very straightforward percentage calculations used for benchmarking. **Initial Conclusion:** This section was not as engaging for the delegates as it had been in the pilot project. My first feelings about this are that people have come to the training for a specific reason, specific problems to be solved. This section is about using analytical tools to improve the operation and the performance of the organisation. What is needed for future session is to have less time on the calculations and more time on showing how these tools can find problems but also help to provide solutions to improve performance. Based on the discussions with the delegates this is very much the case.
The next section was on Budgeting, and this was immensely popular and very engaging. People contributed to this section and group discussion were lively and provoking. There was a degree of peer learning, both formally and unstructured. All the aspects of this section were applicable and relatable to everyone. This was a good section and speaking to delegates they said they wanted to go into it deeper. It was mentioned there was a separate training day on Budgeting and the delegates seem interested in attending and did. **Initial Conclusion:** This section was very well received, and the delegates found the

session useful. Indeed, many would go on to enrol on the Budget only course. There was much peer learning taking place and in future sessions there should be more opportunity for group work and through this some peer learning can take place more and there even in their informal unstructured discussions taking place I observed people saying to each other; 'I experienced the same budget pressures; this is how we resolved this…………..' Therefore, Budgeting should feature prominently in this session and there should be opportunities for group work and discussions.
The last section on Cash management again was well received though delegates were fatigued after lunch. Emphasis was placed on the importance of cash management and the short-term consequences if this is not managed properly, and this was understood and appreciated. The section on credit control had an interesting reaction as delegates were very engaged with the concepts and the exercises though some of them said that they did not have any credit customers. Discussions with the delegates during this section showed they did find it interesting and said that they did offer credit to their customers. So, it was one of those sections where the delegates in general were happy with the background knowledge even if was not applicable learning to their job roles. **Initial Conclusion:** This section was well received, and the delegates found the session interesting if not necessarily useful to their job roles. The delegates found the credit control section interesting and were very engaged with the exercises. But I would have preferred they had more focus on the overall cash flow management aspects and the importance of cash flow management. This is something that needs to be emphasised in future sessions.
The financial analysis section resulted in the delegates being disengaged. This may be that it was the last topic of the day and general fatigue factored. There was engagement in discussions and interviews, and it was found these were senior staff who really wanted the strategic level work. They wished the whole day had been at this level. This was mitigated

by speaking to individuals about this that it is important to know the foundations to be able to confidently deal with the strategic financial information. **Initial Conclusion:** In future sessions it must be explained that financial analysis is important and people who do finance should learn the techniques and basics to grasp the strategic element of financial management. This will be stressed in future sessions.
In terms of how the session went I was pleased with the level of engagement. The most engagement happened when the areas taught were given practical application in terms of examples and more so by bringing in the delegates to speak about how the concepts applied to their own areas. I was concerned about how people said in conversations and then later confirmed in immediate post training survey questionnaires that the concepts taught had no relevance to their roles and as such they found it a bit of a waste of time. This needs to be addressed in future sessions. There is no question that group discussion resulted in peer learning, and this must be incorporated in future sessions as the amount of relevant applicable material that can be delivered to a diverse group in one session is limited. Therefore, if there are opportunities to have relatable learning like doing more group work then this needs to be explored in future sessions. **Initial Conclusion:** Group work and real case examples to go through in groups will maximises the potential for peer learning. These people in the whole are very experienced, they just lack the formal training. But they can learn from each other so need to explore ways of making this happen in these sessions.
Some participants dominated class discussions. **Initial Conclusion:** Though these people’s contribution is valuable for learning it must be limited and so the structure of the course must fit in with group work that stops individuals from hijacking the whole session.

Discussions on the Immediate Post Training results – First Iteration.

Key findings from the questionnaires and observations and discussions with the delegates immediately after the training revealed that delegates were really absorbed with the financial statements and budgeting sections and found them useful for their own job roles. Some of the aspects of the financial statements were not relevant to the delegates such as inventory and debtors. This was due to the delegates coming from a diverse sector background. For future sessions there needs to be a way of not excluding these important areas. Initial thoughts are that these sections will have to be sector specific to get around this issue. This would apply to the internal control sections; delegates would find this more interesting and applicable if it were more sector specific. However, for practical reasons, at this point, I do not want to conclude that sector specific training is needed. So, it is worth trying to find ways to make these all-inclusive to a wide arrange of people so that the trainings sessions offered can be open to all sectors so that the provision of the training is financially feasible.

As for budgeting and cash management these seem areas that apply to all, and they lend themselves very well to group work. The questionnaires and discussions confirmed that these areas are where the delegates are wanting help with to meet a financial management information need in their workplace.

As for the way the sessions are delivered and conducted, as said: group work and real case examples to go through in groups will maximises the potential for peer learning. These people in the whole are very experienced, they just lack the formal training. But they can learn from each other so need to explore ways of making the most out of the sessions.

4.5.4 The post training course feedback, six weeks plus after the first iteration of the training programme.

After six weeks plus post training of each iteration a final questionnaire was completed, and interviews conducted to assess actual uptake of the techniques. This was principally to measure the level of adoption or the likelihood of adoption of the concepts taught in the training.

The six-week minimum post training period was considered enough time for delegates to review the relevant learning from the training and begin to apply it to their work situation. The overall aim of the project was to improve uptake of the key learnings from the training and to show this improvement through from the first to the fourth iteration of the programme.

Responses six weeks plus after the First, sector wide, iteration of the Training Programme.

Table 14

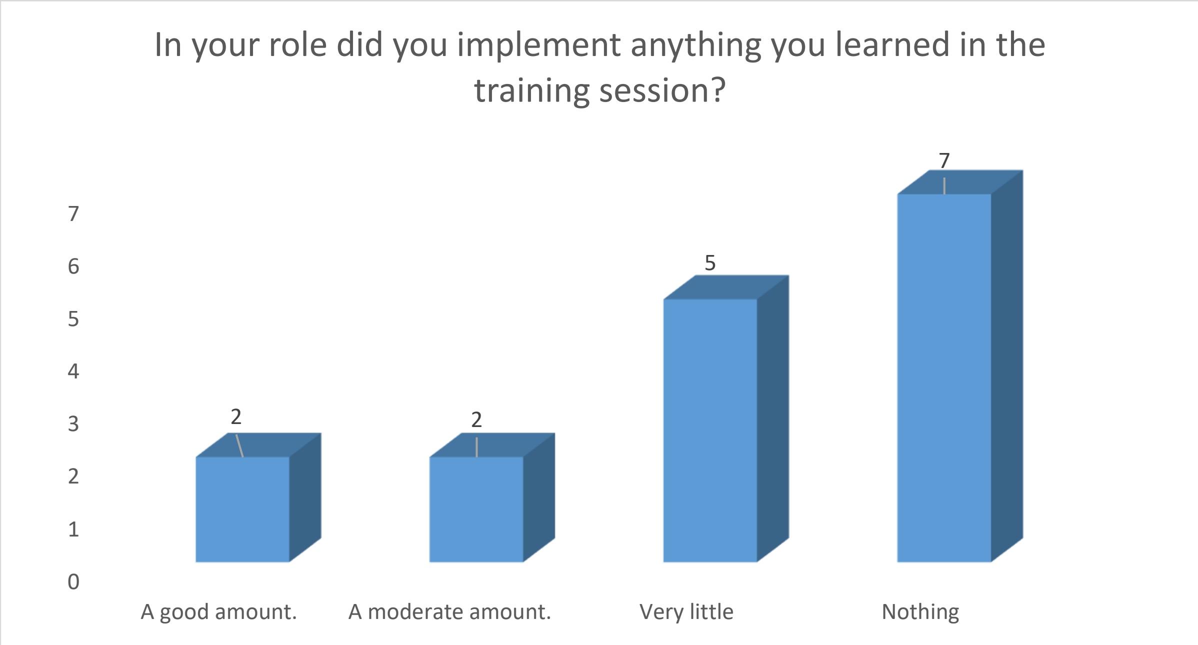


Table 14 Analysis:

The results clearly show most who attended the course did not use what was taught. Written responses shown in table 17 explain the reasons why that happened. But practical time and work pressures were certainly a common reason given, but lack of clearly applicable work situations were also given.

Table 15

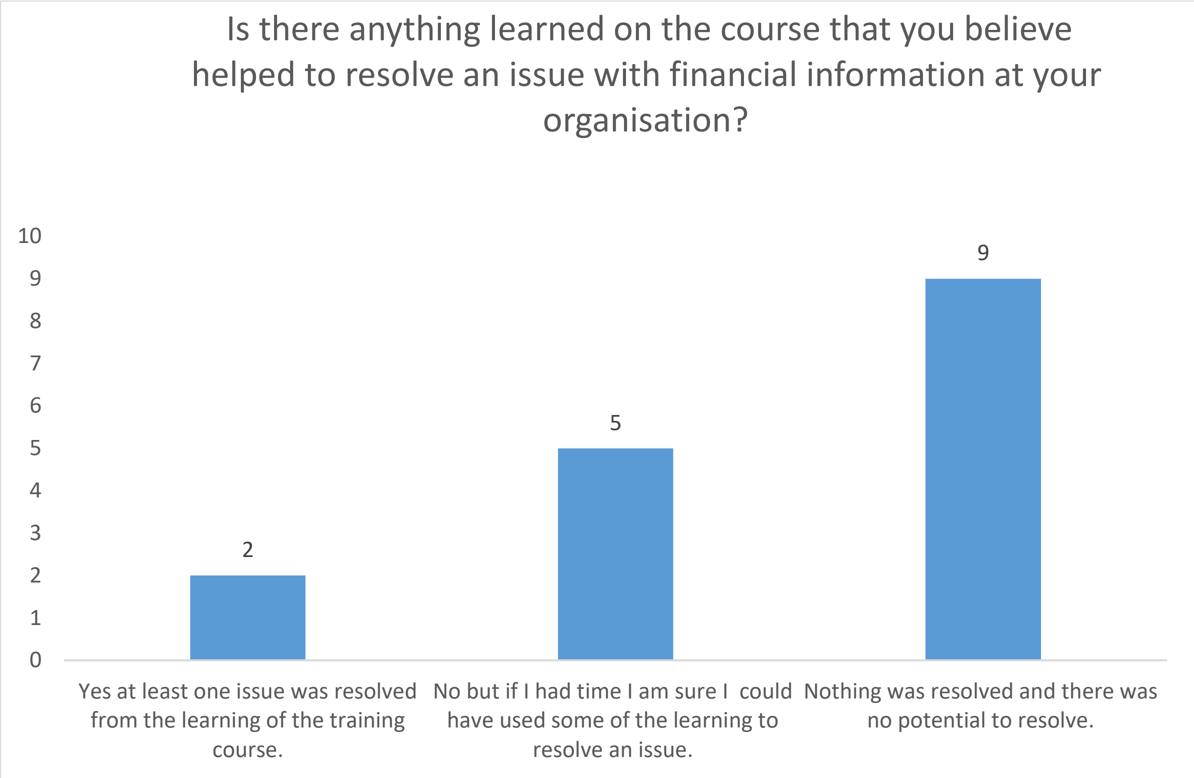


Table 15 Analysis:

Results from this questionnaire suggest that little of what was taught on the cross sector financial training course was used to resolve a workplace issue, with only eight percent (2/16) showing that they used the techniques to improve a work financial information issue. Another thirty one percent of the respondents said that they used a little of what was taught with fifty six percent showing that they used nothing of what was delivered on the training course. This would suggest that the course needs to be adapted and developed based on the responses of the participants to become more relevant to the current needs of the participants financial management information needs within the organisations they work for.

As it was on average six weeks after the training session the word ‘potentially’ was included in the question as there may be practical reasons for not adopting any of the techniques taught in the training session in that relatively short time but the intention to adopt and use some of those techniques is still there.

These results reveal that uptake of what was taught was expected as the responses immediately after the training (Table 7 and 8) showed that the feedback of most of the participants was that the training content was unlikely to be adopted at work or indeed meet any financial information currently needed in the small enterprise. This evidence suggested that the course needed to be developed and adapted based on the feedback to make it more relevant for the financial information needs within the organisation that the participants worked in.

Table 16 - A sample of the participant's responses six weeks plus after the first iteration of the Training Programme.

The training feels a long time ago. I still have my notes, and I referred to them before responding and I suppose I could implement things if I had more time to investigate.
The training allowed me to understand what I was doing wrong in my role. So, from that perspective I have used the training to resolve an issue at work, my own shortfalls in doing the finance work.
The training was good and informative, but I did not come to training to look to see if there was anything I could use. But if I investigate, I am sure there are some techniques I could use.
The training was good in that it helped me to realise what I was doing was correct with modifications.
Yes, I was able to incorporate the variance analysis into a monthly review of our performance. I was aware of this before, but the training helped me to bring into the

information we use.
We are remarkably busy and so I suppose to implement anything taught from the course would involve someone being there to help us to do this. I understand that provision was not part of the training though.
The training was okay, and I do feel more confident about working with numbers after the training, but I could not see anyway of using anything taught at our legal company.
I enjoyed the training programme, and I learned about finance for business in a general way. But I thought it was too general for me to use in our sports club accounts.
The training was good. I will attend follow up courses, but I have not had the chance to investigate if I can implement any of the features taught that day. But I still look at my notes.
I was hoping to see financial software as this is all the rage now. But there was nothing about this. I may have misread the details of the course.
The training was excellent, and I have used the internal control techniques to improve our analysis of current results against prior results which has revealed crucial issues.
I have used the budgeting techniques that was covered to improve our general approach to budgeting, especially the zero-based approach. This has helped us to find savings in real terms.
I gained a general understanding of finance and to clarify if there were any improvements I could make. I did not use anything specific, but it did confirm to me what I was doing was fine.
I really liked the cash flow management aspect of the course, and I have been learning more on my own to install a more robust cash management process.
I found the course extremely useful and now have a much better understanding of our financial statements. When it comes to our budget period, I am sure I will be able to use the

budget material as well.
Sorry I did not implement anything, but I do plan to when I have time. But I will have to go on the course again when it runs next time to refresh my learning.

Table 16 Analysis:

The more detailed responses from the questionnaires that were completed six weeks after the first iteration of the training programme, confirmed that most of the respondents did not adopt much or any of what was taught on the training programme. But they did feel positive about the experience in that it helped them to clarify what they were doing was right or it helped them to realise where they needed to develop their financial skills. Some of the delegates felt the training was too general and did not address their specific financial management work needs and therefore did not overall meet the financial information needs of the organisation that may have stimulated them to enrol onto the training in the first place.

As with Table 15 analysis, this would suggest that the training programme needed to be developed and adapted, based on the feedback of the participants, to be more relevant to improve uptake.

Table 17 – Summary of interviews of participants of the first iteration of the training programme, six weeks plus after the training.

As explained in the methodology section 3.2 only three people were interviewed from the sixteen who took part in the first iteration of the training and responded to the questionnaires. Two were interviewed in their workplace and one online.

Below is a summary of the main conclusions of the interviews that, as explained in the methodology section, was sent to the participants for confirmation and clarification. What appears here are the final verifiable versions.

Interview 1:

Interview date: 15th December 2022. 1530 – 1700. At Interviewees offices. **Role:** Development officer – responsible for fundraising, managing grants. Pulling together the figures for Finance, what the funding is for. Role is to manage funding Grants. Including large capital, renewal repairs capital and operating grants for ongoing expenses and for renewals. Works part of a Team. Officer for the Team. Collaborating with a Manager and Director. Up to 33% of job is doing critical grant funding work, more finance responsibility due to managerial changes. She has the authority and autonomy to implement anything taught in the training.
Background of Training No formal training. Has on the job training, shadowing current and earlier managers to pick up the basics of the role.

Has been invested in by her organisation to up skill. Also, there are clearly contingencies that has resulted in her looking for more training. Her finance management information contingencies being more diversifying funding needed, more enterprise work to funding. So, needs to know how to budget for these properly.
Training Feedback Fundraising is something that would be exceedingly popular. – show an easy-to-use Toolkit for funding application. For the training she feels that it is necessary to have exposure to the things that are being taught in the training, to have background. Would not be suitable for someone with no accounting or finance experience at all, needs to have experience of working in finance. The training clarified what she knew already and provided the platform for asking the right challenging questions specific to her own environment. She is content with the two generic courses that she attended and feels she has enough foundation training but will attend the cash management course as this is relevant to her future work needs. She says the courses should be packaged and clearly structured sessions, time is too restricted to undertake own training. Also, must be accredited training course, recognised, brand name. Overall, has found the training useful. “It provided the platform for asking the right challenging questions specific my own work environment.” Empathises that though she has not implemented any of the specific things taught on the course she feels that it has allowed her to feel more confident in what she is does. Though nothing specific adopted there is a clear increase in self-evaluation of financial management competence from the two courses she attended at the first iteration stage.

Interview 2:

Interview date: 5th December 2022. 1430 – 1600. At Interviewees offices.

Role: Account Manager – responsible for managing a portfolio of property to sell in legal office.

Works part of a Team of four with Legal Director and Portfolio Director as well as Finance manager who has main Finance duties.

Up to 25% of job involves finance responsibility due to the financial impact of estates owned by clients.

She has the authority and autonomy to implement anything taught in the training, but it would have to go by the Finance Manager first.

Background of Training

No formal training but studied accounts as part of school business studies. Feels very unequipped to do the Finance work of her new role.

Has been invested in by her organisation to up skill. Is expected to be versed in the narrow finance aspects required by her job as soon as possible.

Her finance management information contingencies are extremely specific, as in she has specific finance work, and she needs to understand relevant finance work.

Training Feedback

Especially useful to go through the financial statements in detail as this is what she needs to do with the financial accounts of her clients. Found the internal control element also particularly useful and easy to understand and follow. She has used these parts of the training, the digging deep into the financial statements of her clients to gain a stronger understanding. She admits confidentially that her finance manager expected her to be able to do this anyway, but the training has helped her confidence with this. With the internal control techniques, she has worked with her finance manager to use these on the client’s accounts, and they have already had material benefits to these.

She found the budget and cash management in the afternoon interesting but not overly useful as no relevance to her job and if being honest would have been happy to have left the training in the morning after the financial statements and financial control sections. But can see how they would have been useful. She is happy with the training and that she has used what was taught. However, she believes the training needs to be tailored and shorter and not try to cover so much in one day training session.

Interview 3:

Interview date: 23rd November 2022. 1030 – 1130. Online meeting. **Role:** General Manager of Social Enterprise: School Finance Education Support – responsible for running the organisation and all aspects to it. She truly has little support. Works part of a Team of two, her and her husband who run all aspects of the organisation. Up to 50% of job involves finance responsibility. Mainly doing basic cash transaction records and making the returns to the council for funding. She has the authority and autonomy to implement anything taught in the training.
Background of Training No formal training, simply taught from the earlier owners before taking over control three years ago. Has been invested in by her organisation to up skill and very much hopes that she can implement material taught from the training session. Her finance management information contingencies are specific, as in she has specific finance work, and she needs to understand it.

Training Feedback

She found the training interesting but also quite overwhelming as it brought home how much she does not know.

The training made her feel that she was out of her depth in terms of doing finance and is very reluctant to take on more finance role. When the organisation grows and requires more extensive finance work, she feels resources will need to be found that will allow a finance expert to be taken on to assist with the finance work (she later approached me to help by taking on the role of treasurer which I declined).

Nothing from the training was adopted and in conclusion the training was not right for someone like her who does truly little and limited finance work in her role.

4.6 Main learning points from the first iteration of the financial management training courses.

As covered in chapter 4.4, the first iteration of the financial management training courses was developed in the pilot programme preceding this research and built-in cooperation with the Association of Accounting Technicians and marketed as 'Financial Management Training for Non-Finance Managers in Small Enterprises'.

The main learning points from the feedback of the first iteration are the following:

- Most delegates who attended the training were employed in managerial or ownership positions within their small enterprise.
- Most delegates were motivated to attend the training to gain an understanding of a specific financial management information need at their organisations. Though they also said that they wanted an overview of key financial management training as well to improve their overall financial management skills needed for their jobs.
- But delegates said that aspects of the financial statements were not relevant such as inventory and debtors.
- Most found the sections on financial statements and budgeting most useful. Cash management the delegates found interesting but not useful to their jobs. The delegates did not appreciate the importance of cash management for small enterprise short term and medium-term survival. As set out in the literature section the lack of cash management is a significant contributor to the number of UK small business failures and therefore it is key that any finance training for small businesses emphasise the importance of good cash management.
- Delegates did not value the internal control element. It was bogged down with the internal control calculations even though these were quite simple and as such the

usefulness of these controls to find problems and provide solutions to these problems was not realised.

- Delegates enjoyed the group work and valued the peer learning opportunities of these.
- The level of uptake of what was taught six weeks plus post training was low.
- The lack of time to implement was a problem, but they also said that lack of clear application was also a reason for not implementing anything taught from the training.
- The delegates struggled with some aspects of the training as their experience in working with finance was too limited and they struggled with the technical nature of the training. This would suggest that the training must be pitched to the right level, junior managerial level with finance in their roles.
- Where the training was adopted, it was either partly adopted or it overall made the delegates feel that what they were doing was broadly correct and it allowed them to see how they could use the financial skills they already had and were using but could use more effectively.

4.7 Reflections and Discussions on the first iteration of the financial management training courses.

The main point to reflect on and discuss from the first iteration of the training programme is the type of person who attended the training. This may help to develop the effectiveness of the training by reflecting on the reasons why this type of person attended. As discussed in the learning points from the first iteration in chapter 4.6, the vast majority of those who attended the training are in management positions of the small enterprises.

It is not a real surprise that most of the delegates who attended were managers. Academic literature explains why it is important for managers of small businesses to regularly receive effective business training. Most organisations see management training as being crucial for growth and success. Management training allows managers to up skill, and this helps to drive productivity, motivate employees, and ensure a harmonious workplace especially in small businesses where the one-to-one manager employee relationship is more intense, (Li. 2024). This Management up skilling is also vital in improving employee retention and development, which is essential for long-term organisational stability. Overall, researched literature supports the view that management training to smaller enterprises, if conceived well, is highly effective, and that customised training leads to improvements in management performance, and organisation and business performance in the participant firms, (Marshal, et al. 1995.)

As the benefits of ongoing training are widely recognised by managers and reflected in literature then it is widely accepted that managers must regularly undertake up-skilling training, (Marshal, et al, 1995). Since the half-life for taught knowledge is rapidly shrinking and additionally digital innovation promises to transform many operational processes, managers recognise that they must keep learning and stay familiar with these advancements so they can remain an important element in the improvement of small business performance, (Green, et al, 2005). By emphasising the continuous nature of skill development, management up skill training can foster leaders who are adaptable, forward-thinking, and capable of navigating complex business environments. These are essential skills for managers of small business in a highly competitive world, (Li, 2019). Therefore, the fact that the persons from small enterprises attending the training are managers is not surprising and is explained and covered extensively through literature.

Another factor that is reflected in literature that helps to explain why managers undertake financial training is the recognition that finance based training is not only critical for small enterprise performance, but also it can help managers gain a competitive advantage in their careers both within their current employed organisations and any potential future employer, (Green, et al. 2005). As the business environment becomes more complex and dynamic, employers seek individuals with specialised skills and ability. Finance training courses can provide individual managers with the necessary skills and knowledge to stand out in the job market, improve their career prospects, and increase their earning potential, (Miller, et al. 2013).

Another fundamental aspect of financial management training that attracts small business managers is the fact it helps managers of small businesses to learn how to develop and implement effective financial strategies, which are in tune with the businesses long term financial strategic aims, (Mack, et al. 2017). Financial training can be a platform to empower managers that helps to boost their confidence to create robust budgets, forecast future financial performance more accurately, and distribute resources more strategically. This will allow managers who receive this training to gain the ability to set out a financial roadmap to help them navigate economic uncertainties with confidence and staying ahead of their competitors, (Li, et al, 2019).

These are the key literature reflections on why small business managers look to receive finance type training and can explain the high number of participants who attend the training courses at every iteration of the training programme that are in a management position.

As seen in the literature chapter, managers of small businesses feel it is critical to undertake finance training to improve their performance in their roles and consequently to improve the running of their business, (Johnson, 2007). A key finding in literature is that most small business owners and managers see finance training as potentially beneficial. An extensive survey done in 1999 in the UK found UK small enterprises attitude to financial training in general were positive. The respondents' attitudes were very much in favour of this type of training at around 93% of small enterprises responding positively to the concept of finance training with less than 2% from both manufacturing and service small enterprises responding very negatively in their attitudes, (Matlay, 1999). This would suggest if the right finance training were in place, accessible and affordable, it would be popular amongst small enterprise managers. This is consistent with the feedback from participants of the training course delivered in this research that were positive at every iteration but especially in the later iterations.

It is not just managers from small enterprises that may be struggling financially who seek financial training. Research has shown that there is a strong positive correlation between firms that were experiencing profit growth and those that had external financial advice and training. However, this research found ‘push factors’ that result in small enterprises seeking external financial advice and training. These push factors tended to be previously successful small and medium enterprises experiencing an onset of financial problems or a slowdown in growth so that external advice and training was sought by these small and medium enterprises to help address and correct these issues, (Johnson, 2007).

There is significant evidence that small business managers tend to rely on prior knowledge to make the major financial management and planning decisions within their enterprise. However, they will be inclined to undertake training if they can see that training and education is targeted to improve performance measures. With those conditions in place then managers would consider the training to be worthwhile, (Simpson, 2004).

Overall reflection of the first iteration:

The delegates that attended the training in all the iterations were mostly management level. Therefore, the training needs to be more strategic focussed and less focused on the financial operational issues. This was reflected in the development of the training courses from the first iteration to the last where the content, tasks and overall learning content became more financially strategically focussed. It was seen in the results set out before in this chapter that the course became more relevant and customised to the managers financial needs and hence drove the improvement in the usefulness and adoption scores from the first to the last iteration. More overall reflection on this in the Discussions chapter 5.

4.8 The Second iteration of the training programme.

The second iteration of the training took place in January to March 2023. The training was adapted from the first iteration based on the conclusions from the feedback from the first iteration. These are summarised here:

- The training should be aimed at management level of people who work in small enterprises who do financial management duties but have had no real financial management training. Those with lower level, operational roles who only undertake the most perfunctory of finance roles the training may be a struggle especially the strategic element of the training. The strategic nature of the training really interested the management level delegates and generated discussions within the session using their own organisations as examples. This proved to be very much appreciated by these people, but people not in those roles struggled to contribute and see the relevance. As a result of this it should be made clear in future versions of the training that the training is for management level individuals and not operational level even if they have finance work in their roles. For these people it would be better for them to do a more technical short finance training course, something like a computer accounts courses like Sage, Xerox, or QuickBooks.

- For the Financial Statements element of the training there is the problem that important aspects of these statements are simply not relevant to the organisations they work for. For example, inventory and debtors may not be relevant as they have no stock or sell on credit. But for others the understanding of how they are calculated and what impact they have on the organisation is crucial. For future sessions when there is an overview of these elements it will be important to emphasise that though this will not be completely relevant to their current work for a broader understanding of finance it is important that they are aware of these elements and know how they are included in the financial statements. However, as they are not completely relevant to everyone their coverage will be cut back in the instructions section and instead will feature more in a case research scenario that delegates will go through to merge their understanding of financial statements. Then the delegates can split into two groups, one that go through case research with financial statements that include inventory and debtors and one that does not. However, each group will feedback to the other for reference.

- The internal control element was not well received. Part of the issue is that delegates spent too much time doing the basic calculations and did not have enough time looking at the interpretation of these calculations in the case research and from that learn how this could apply to their own organisations. In future sessions the calculations will be given to them with notes on how they were calculated. Then the emphasis will be on the internal control and improvement ability these internal control mechanisms have.

- For the cash flow element, it was a concern that delegates did not capture the critical importance of cash management and how essential it is for small enterprises survival that this is improved. Part of the reasons is too much time was spent on credit control. Delegates enjoy these tasks though no one worked in credit control and the principles behind it are quite simple. This was the problem, it was not challenging. For the future sessions will move the credit control element to internal control section and allow much more emphasis of an understanding of the principal benefits of cash management techniques. It will be interesting to see how this will affect uptake of these cash management methods post future sessions.

- For delivery there are opportunities for peer learning. Therefore, there should be more opportunities for group work so that delegates can learn from one another and use each other's experiences to boost the ability to see how these techniques can be adopted in their own roles. It will also reduce the risk of individuals dominating class discussions. Of course, there is a risk of these people will dominate the group. But studies have shown that small groups are easier to police themselves and hence stop one form dictating the whole dynamics. However, this should be checked in future session.

This overview learning and development points gained from the first iteration was used directly to structure the second iteration of the financial management for small enterprises training sessions.

The second iteration of the training programme took place over three separate day training sessions in January and February 2023. These again were face to face one day sessions that covered the same overall broad financial management concepts and techniques that were covered in the first iteration of the training, but crucially these were amended and modified based on the feedback from the first iteration set out in section 4.4. This is the essence of the research as set out in the methodology section, to adapt and modify the training programme to improve level of understanding of what is taught in relation to the relevance to the participants financial management work in their job roles and leading to an increase in adoption of what was taught.

These training sessions were again all offered free to attend with the understanding that those enrolled were participating in a research project and their feedback on the training would be sought, exactly as it was and in the same format and timescale as it was in the first iteration with questionnaires, observations and interviews. Again, these training sessions were targeted towards people who worked in managerial type positions in small enterprises from all sectors and who undertook finance work in that role but have had no formal prior training in the Accounting or Finance. A minority who attended the first iteration of the training re-enrolled onto the of the second iteration sessions. The changes of content were clearly advertised so that these repeat participants were aware of the differences in the course structure and content and where the material covered was the same. When these repeat participants were questioned later on why they enrolled onto the course again just a few months after they first attended the courses especially as they knew some of the material taught would be the same, they stated that they felt they needed more confirmation of what was taught in the first sessions, that there would be further new networking opportunities as they really valued this opportunity in the first session and the fact that there would be new elements and some taught in a different way attracted them to return. These summaries of their views are detailed more in section 4.5.3. However, the participants on the second iteration of the training programme were new and did not attend the first iterations of the training. For the research purposes this is not an issue, as explained in the methodology section, as the profiles of these new participants are the same as those who attended the first iteration of the training programme and therefore their backgrounds and needs are similar. The research experiment applies to them, and their responses are as equally valid as those from the first iteration.

In terms of how much of the second iteration of the training sessions was changed from the first iteration, there was about a third of the training programme (not scientifically calculated) was changed from the first iteration, based on the interpretation of the responses and observations from the first iteration.

Examples of the changes made to the course were topics removed all together from the programme. Examples of the topics removed were the more technical elements such as the different methods of valuing closing stock and depreciation of non-current assets. These did not score well in the understanding element for the non-technical management staff or did they score highly in the general interest. This is because people stated that they could not see the relevance to their work or financial management information needs and, in many cases, people worked for organisations where inventory and large capital assets didn't exist as they worked in small enterprises operating in some sectors of the service industry.

Other elements were expanded on based on the feedback from the first iteration. These included more on the different approaches to budgeting, including the philosophy of budgeting and the impact the approach on budgeting has on staff. The feedback from the first iteration empathised that manager of the small enterprises wanted to undertake organisational budgeting that was staff inclusive as running in small enterprises it was crucial to have staff buy in. For internal control laborious simple calculation of multiple ratios was dropped as participants felt that too much time was spent on this and that they were more interested in how to interpret these simple calculations and how they can be used for more effective internal financial and operational control, so pre calculated ratios based on a case study were given for trainees to work through and analyse the performance of the organisations based on these pre given calculations.

These were just examples of the changes and modifications made to the training programme based on the feedback from the first iteration. Other changes involved the timings of each section and an increase in group work, and time given to whole group discussions, all with the goal of improving understanding, relevance to the financial management issues at work and to improve uptake.

As said, the sequence and the timing of the questionnaire and the interviews and observations and the methods used to interpret these were the exact same as the first iteration. The purpose again was to use this data and information to build a financial management information training programme for small enterprises that would lead to a feeling of more effective learning and to increase uptake of what was taught.

4.8.1 The pre training course questions (Second Iteration).

The pre training questionnaires for the second iteration followed the same pattern as the first iteration: they were sent to all the people from small enterprises who had enrolled onto the training, days before the event. The questions were the exact same to those of the pre course questionnaire from the first iteration.

The results of these pre training questionnaire for the second iteration of the training programme appear below. As set out in the methodology section there were twenty-seven people who attended the second iteration of the training who took part in all the questionnaires. Again, as with the first iteration not everyone who attended the training took part in the review process but overall, twenty-seven attended the sessions in the second iteration and took part in the feedback process.

Table 18 in the questionnaires asked the participants what their role is within their organisations:

Table 18 Analysis: as with the first iteration it is not a surprise that the participants are in management position as the courses were very much promoted to non-finance managers who undertake finance work. This confirms the feedback from the first iteration of the training that the structure of the training needs to focus on the strategic dimensions of financial management information and how it affects strategies for operational improvement and growth rather than the day-to-day accounting and finance transactions.

Table 19 in the questionnaires asked the participants if they had any earlier financial training.

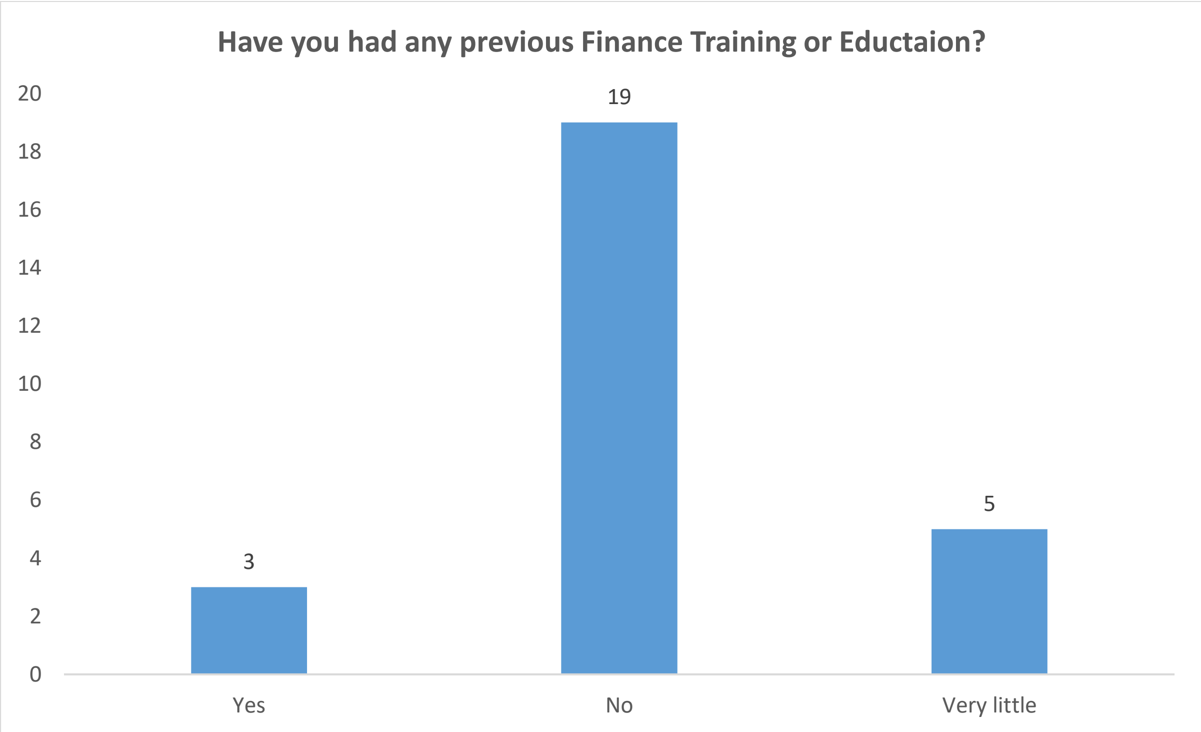


Table 19 Analysis: As with the first iteration all the respondents have no prior finance training. Though as later questionnaires reveal all the participants have finance work experience. One practical implication of these facts is that though the training does not need to be pitched at a very simple level, in fact it would be inappropriate to do so as these are

mostly managerial level and have some finance work experience, some basic accounting and finance terminology and definitions does need to be explained properly.

Table 20 shows the responses to the question if the participants undertake finance work in their current roles.

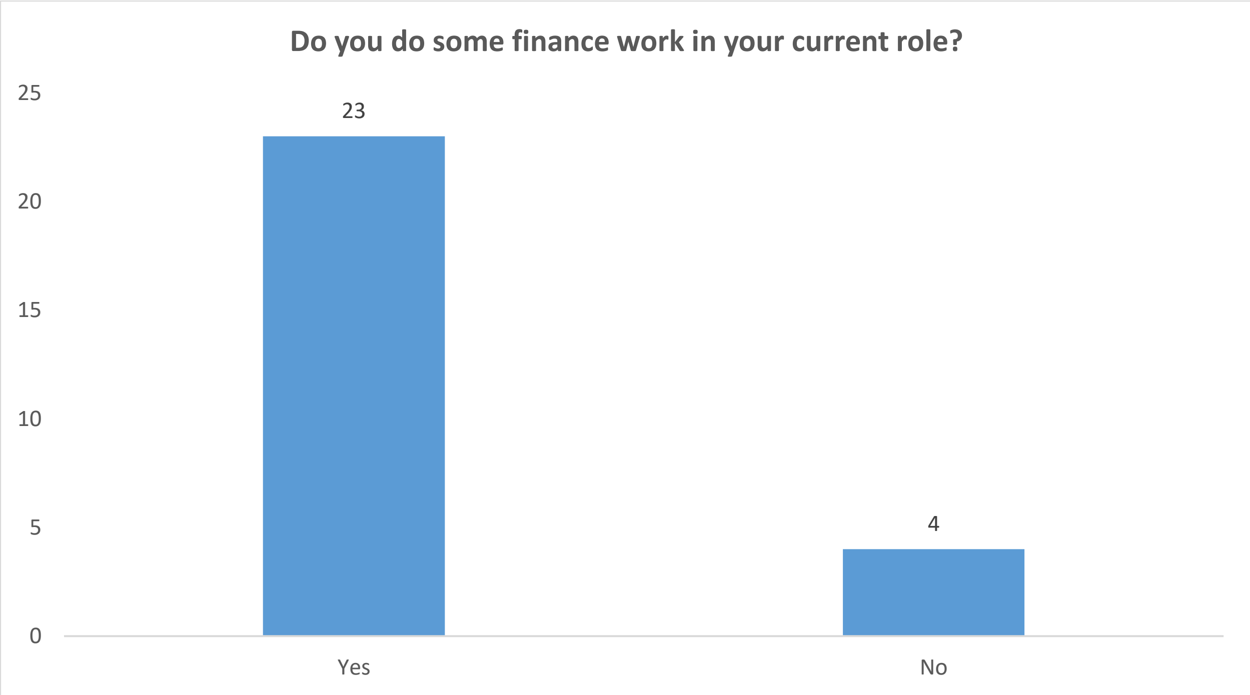


Table 20 Analysis: As with iteration one, most of the respondents undertake finance work in their work roles within their small enterprises. Again, this confirms the level that the training should initially be aimed at should go beyond the very basic level, with the important factor here being that most of the trainees have some form of experience in finance work so their self confidence in dealing with this type of subject matter should be strong even on a sub conscious level. Studies have shown that people with more prior knowledge are able to absorb related increments in associated knowledge by undertaking critical analysis and instrumental help-seeking, leading to good quality learning engagement, much more so than those engaging in the learning activity with no prior knowledge, (Dong, et al, 2020).

Table 21 is the responses to the questionnaires that asked the participants if there were any specific work-related issues that made them seek financial management training.

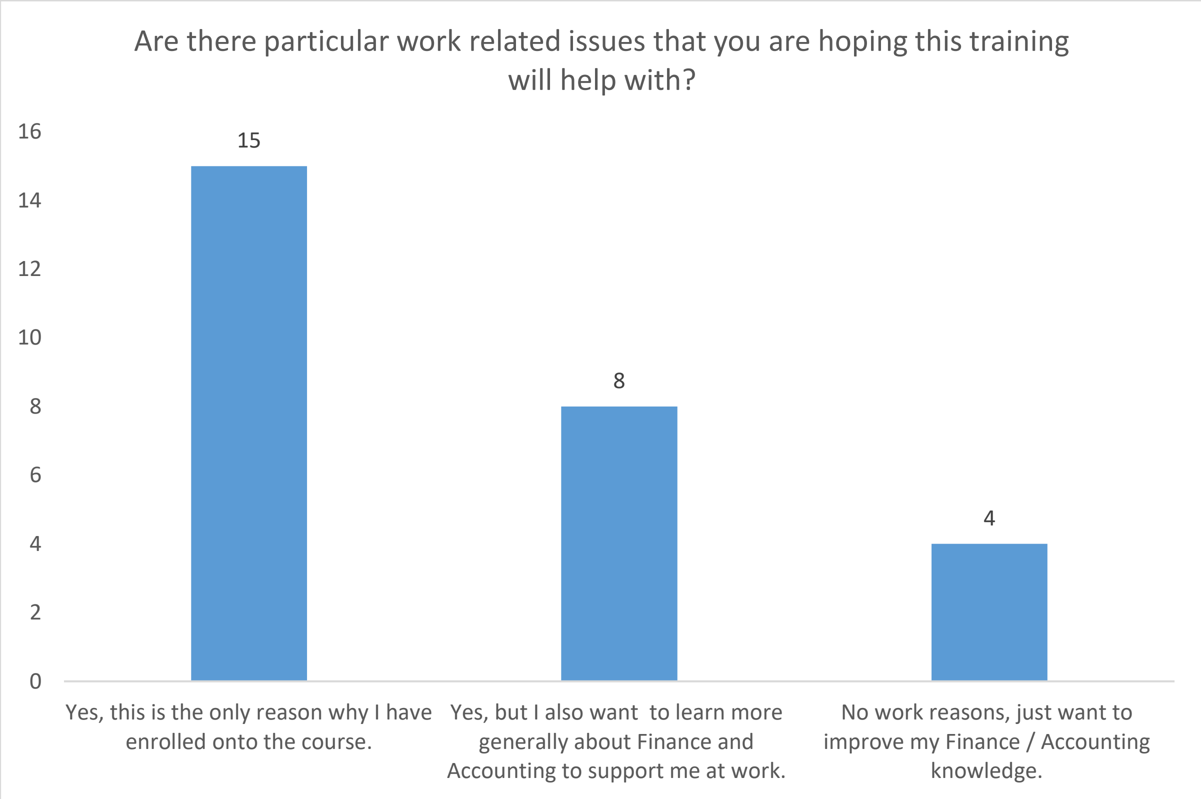


Table 21 Analysis: the responses of the participants from the second iteration of the training sessions of this query. These participants were asked immediately after the second training programme if there are specific work-related issues reasons for enrolling onto the training programme.

Fifty six percent of the participants showed that there was a particular work-related reason to be resolved for wanting to enrol on the course and that this was the only reason for enrolling onto the course. Another thirty eight percent said that there was a work-related issue that they hoped the training would resolve but they also wanted to have more general finance training.

This means eighty five percent of the participants overall showed a work-related reason to be resolved was a main factor for wanting to enrol on the finance training course.

As with the conclusions from this query in the first iteration there is a clear indication that the contingency theory of management accounting applies when considering the design of financial management training for small enterprises. This is because they are wanting finance training that helps with a business need within an organisation, and therefore this is a motivation for non-finance specialist from small enterprises wanting finance training.

However, the key development here from the first iteration results is there is a material increase in the number of people who have stated that the main reason to enrol on the course is the hope that the training will provide support to resolve a work situation prevailing. This means that the contingency theory of management accounting is even clearer in this situation. This could be attributed to the fact the course was adapted from the first iteration because of the feedback from the participants of the first iteration. One of the key measurements of effectiveness of the first iteration was the level of adoption. There is more chance of adoption if what is trained or taught is relevant to the trainees needs, (Herrholtz, 2020).

Therefore, the training programme was adapted to increase the chance of adoption so it is possible that more people enrolled on the programme as they identified more content, from the marketing of the second iteration training that could be used to support a work issue that needs relevant financial information to resolve. This was further investigated in the post training interviews.

Table 22: Does the organisation view the individual as being the right person to make the most impact within the organisation from the financial management training?

Table 22 Analysis: This would suggest that most participants have been identified as being the right persons to make the financial training and therefore having potential absorption but also the organisation believe there is opportunity for realised absorptive capacity.

Table 23: Are you hoping you will implement the techniques taught on the course to the benefit of the organisation?

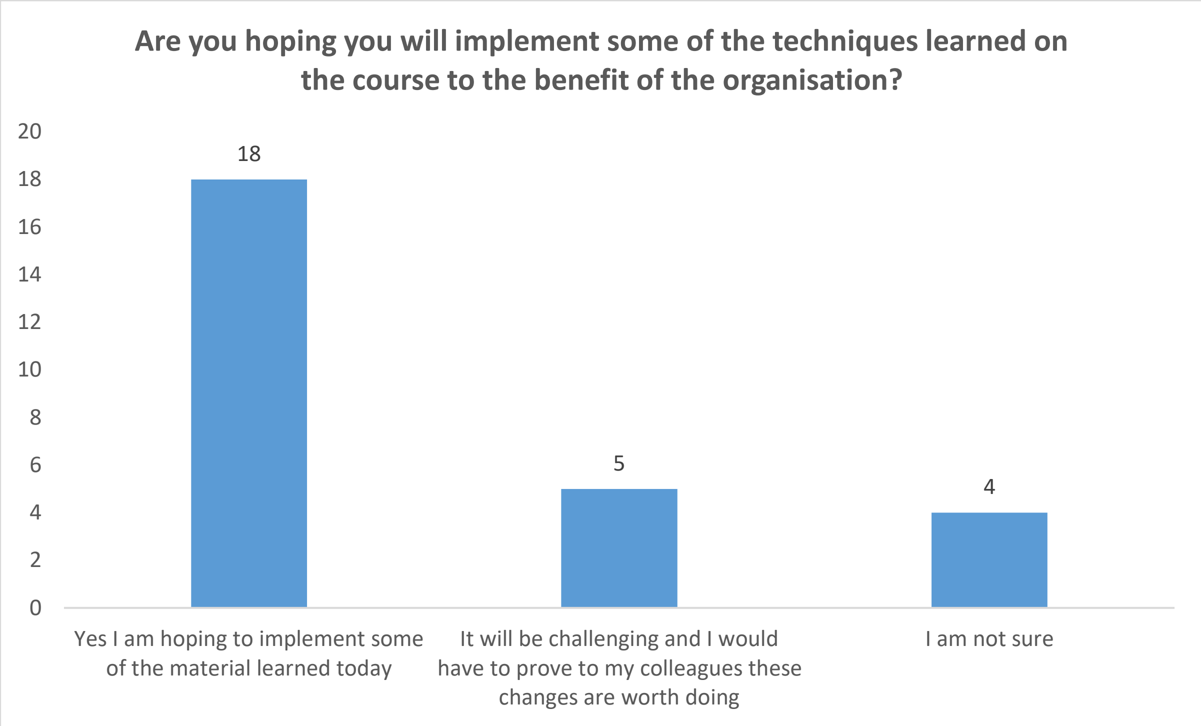


Table 23 Analysis: As with this question in the first iteration this would suggest that the participants believe they have potential absorptive capacity and believe there is a potential for realising the absorptive capacity.

Table 24: Does your organisation hope you will implement the techniques taught on the course to the benefit of the organisation?

Table 24 Analysis: This would suggest that the organisations feel there is scope for realised absorptive capacity from those enrolled on the course. The number who are linked with this has increased from the first iteration. This could be based on the outline of the courses advertised. This would demonstrate that the material is more relevant to the work done by small enterprises and so there is a belief that relevant persons attending the courses can absorb material that can be used within the organisation.

Table 25 shows a summary of the responses from the pre training questionnaire that relate to what the training delegates financial information needs are. These interview responses were taken after the second iterations of the financial management training.

Table 25 – A sample summary of the relevant pre training responses from the second iteration of the Training Programme on what they hope to gain from the training:

I want to learn more about budgeting, so that I can make the budgeting process better at my organisation as this is an issue that needs improving.
It will be likely that I will assume responsibility for finances - managing a budget, projections, reporting. I have done aspects of this in other roles, but I would like to combine this.
I recently started working for a small charity in Dundee and have been asked to help with their financial governance after they experienced issues with their accounts.
As a trustee on a local charity, it is imperative to the success of the charity that the staff and trustees understand the financial position of the charity to make informed decisions.
I have financial knowledge, but I have never had the opportunity to put it into practice. I wish the refresh the knowledge I have and help the organisation I currently work for, or others, in the future.
I am hoping this training will help me with internal control. I have been given responsibility for two cost centres for their budgets, and it is important that I have the techniques to check and keep on top of their expenditure.
Because it can be a tricky task to have good finances and understand the right techniques for workable finances in the third sector. I want the charity I work for to thrive, and doing this course will help me to do so.

The fact that this is a one-day course is great. This will allow me to gain further insight and knowledge of Sustainable Financial Control and Effective Budgeting.
I have no prior finance experience and no finance superiors to train me, so I need to understand the basics. I will be attending future courses further training.
To help me better understand our annual accounts and to get training on putting together cash flow forecasts/budgets.
Good to get formal training face to face, opportunity to ask questions and learn from others.
Am retired from paid employment and becoming Treasurer for a voluntary organisation (that is intending to apply for charitable status). Need to understand the financial and reporting requirements of the charity.
I work in Administration and support the Finance Manager with Accounts related admin. She suggested I go on this course, as I have an interest in this area of work.
I am about to move into a more senior role which will require me to understand budgets, funding stream. I currently have no skills or knowledge in this area.
As a project coordinator, I deal with office accounts and consult with treasurer and accountants. I would like to get a better understanding of the account statements and anything else that would help.
I need a good background in Finance for managers as my job has become more finance orientated but not specifically accounts, so I just need training that is more general.
Understanding of finance terms and documents. Processes that I can use in my work to help manage the cash flow, budgets, and a general understanding of our financial position.
Better understanding and knowledge in general are what I need. But cash management techniques will be good as monthly cashflow is tight even though we are profitable.
As a project coordinator, I deal with office accounts and consult with treasurer and

accountants. I would like to get a better understanding of the account statements.
My role is about supporting organisations an often with the smaller groups their financial recording is not great. I have tools that I can use but hoping to pick up some more.

Table 25 Analysis: These answers were to the pre course questioning of the participants of the second iteration of the training programme to try to find what specific contingent management accounting information needs were needed. As this second iteration was still sector wide the responses were still quite broad but areas such as departmental budgeting, performance tracking and cash flow management were common general responses to the type of management accounting training that was required because of financial management information needs in their work environment.

Overall, it is seen that the responses from the participants from the second iteration of the training do still clearly state that a significant motivation of enrolling on the financial training programme was to meet a specific management accounting need of their organisations at that time, though others are indicating that it is also a desire for more general financial training that they are enrolling onto the training courses. But overall, it can still conclude that the contingency theory of management accounting still holds.

4.8.2 Discussions of the second iteration of the pre training course survey.

The overall responses from pre training survey from the participants of the second iteration of the training suggest that a significant motivation for the participants enrolling and attending the financial management training was to deal with financial information needs currently prevalent in their organisations. These were similar responses after the first iteration and like the first iteration the participants are not overly specific which can make it difficult to plan the courses purely from the pre course questionnaires. However, the evidence from the pre training questionnaires is that the contingency theory of management accounting is relevant theory to consider when designing financial management training courses for small enterprises as it is still evident at this stage of the course development that the majority of people who enrol in these courses do so as they have a situation in their workplace that requires some financial information support with and they hope this training will help to resolve this situation.

The hope would be that as the training course development cycle progresses the outline of the course is so relevant that the attendees can identify beforehand specific content in the training that will meet a financial information need in their organisation and that will be a key reason for them to enrol on the course.

Again, as with the first iteration the other main theme that was identified from the pre training questionnaires was that most of the delegates attending were persons who worked in their small enterprises who were considered someone who was the most appropriate to attend and learn from the training, a conclusion both they themselves and their organisation agreed on. This would again infer that the absorption capacity of the small enterprises who attended the training was high.

4.8.3 The post training course feedback, immediately after the second iteration of the training programme.

The following tables summarise the training participant's immediate responses at the end of the training sessions of the second iteration and helped to shape a response to these that would contribute to the development of the third iteration of the training programme.

Table 26 - Responses immediately after the Second, sector wide, iteration of the Training Programme.

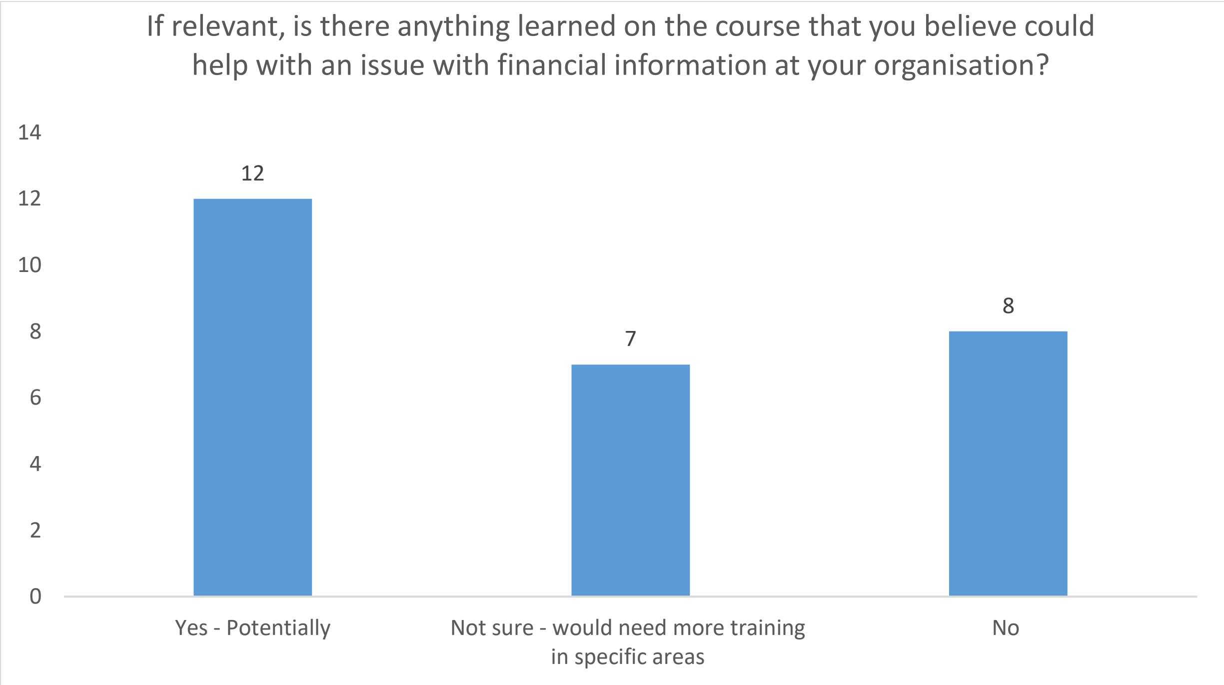


Table 26 Analysis:

Forty four percent of the participants (12/27) believed that the training session would potentially meet a contingent management accounting need in their organisation, this is up from nineteen percent who said the same immediately after the first iteration. Therefore, these forty four percent believed immediately after the training sessions that there would be an opportunity to adopt and implement the techniques taught on the training course or there would likely to be. The training course has been adapted and refined to a level in the second iteration that it is already perceived to be more useful to the participants of the training programme to meet the financial information needs of those participants from small enterprises than it was from the first iteration. Therefore, the adaption process at this stage of the development of the iteration process is successful.

But it is necessary to refer to table 23 where seventy seven percent (18/27) of those who were looking for the training in the second iteration to meet a financial information need at their workplace believed after the training that it potentially could help. This is up materially from the first iteration where it was only nineteen percent who enrolled onto the course hoping that they could use some of the techniques taught in the training, so it is logical to explain the higher number of people who immediately post training believed that the training could meet a financial information need at their workplace would increase in the second iteration of the training programme. This was explored in the immediate post training interviews to try and understand why these respondents believed the training was more likely to meet a financial information need at their workplace. It can also be explained by the fact the training programme had already gone through material changes as set out earlier to try and make it more relevant to the participants from small enterprises.

Table 27 – What areas of the training did you find most useful.

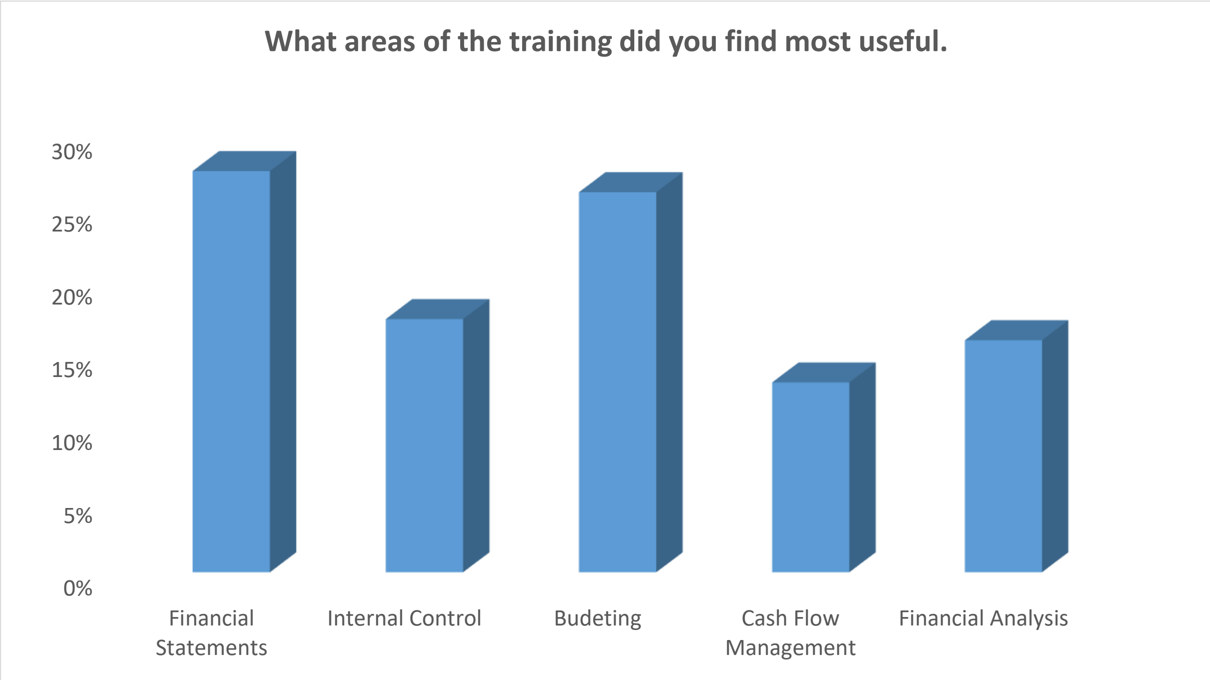


Table 27 Analysis:

These responses help to build an understanding of the main areas of the training programme the participants find most useful. The two fundamental topics of financial control and budgeting are still the main area that the participants in the training find most useful. In the conversations during the sessions and interviews after the participants said they needed the training for budgeting as that was a key area of their work and any support on what they did was valued and for Financial Statements as they said there was an acceptance that understanding the statutory accounts reports was fundamental, but they lacked the basic understanding of these. Therefore, to include both topics would increase the likelihood of adoption from the training.

Table 28 – What areas of the training did you believe you are most likely to use in your workplace.

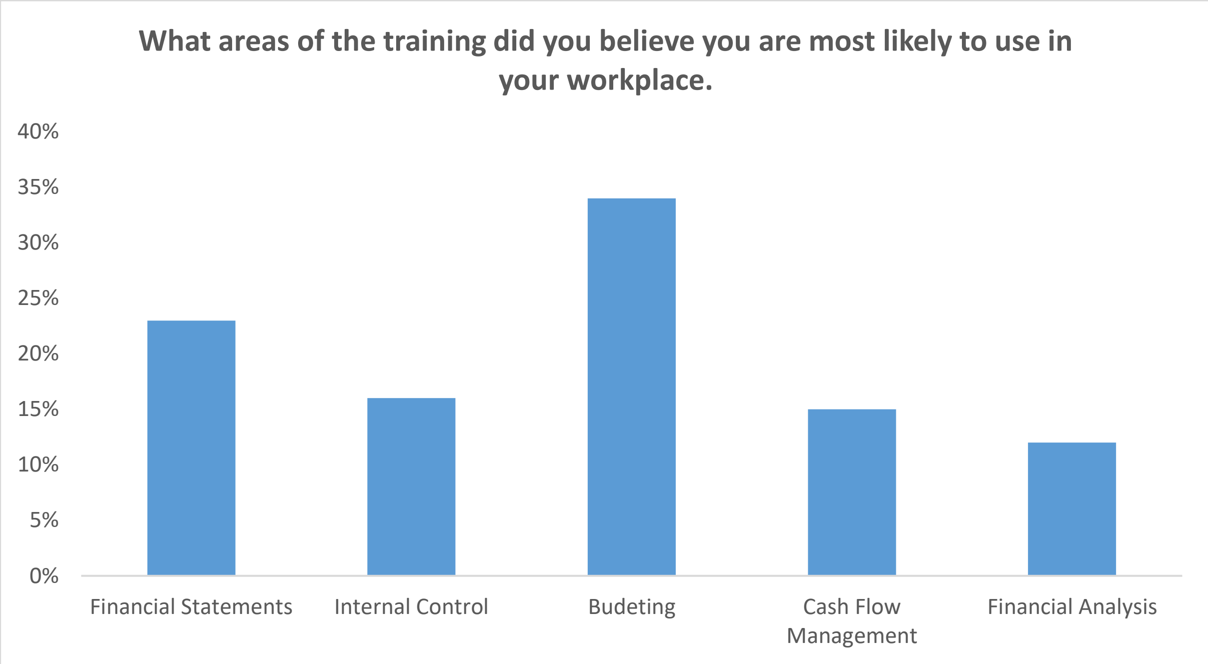


Table 28 Analysis:

As in the first iteration on this question the respondents were allowed to make one choice on which topic covered, they were most likely to use in their work roles. And with the case in the first iteration, it is clear from the results of this survey that the two topic areas that the participants feel were most useful were understanding Financial Statements and Budgeting. The discussions during the sessions and post interviews simply confirmed that the delegates found these topics useful. It can be concluded that the increase in the number of people who thought that they could use these topics increased and this is because it was now more in line with how the participants used this information in the workplace. So, there was a positive impact on adoption with Budgeting and Financial Statements. Therefore, analysing these results and the later interviews and discussions it would suggest that in the confinements of a single day session when only so much can be covered in detail it seems the most needed areas to focus on are Budgeting and Financial Statements.

Table 29 - A sample of the participant's responses immediately after the Second, sector wide, iteration of the Training Programme.

The training was informative. But I feel I could do with going into more depth with the topics before I could use the key learning in my work environment.
The training was incredibly good and interesting and certainly helped me with general understanding of the key issues of Finance for small businesses. But I cannot see much of what was taught that I can use but I do take time to learn things.
The training was informative, and it will help me with my role. But for now, I do not think we can use any of the aspects shown today, after some more training maybe.
The training was useful, and the networking was great in that it was immensely helpful to hear others of the issues they have been trying to get through all the mountain of financial information.
The training was good in that it helped to clarify reporting issues I have been having at work. But I do not think we can apply any of this, but I will look to see if I can.
The training session was good, and it was certainly worth me attending. I learned quite a bit. I will try and see if we can use the material.
The training was good, and I would like to go on similar sessions as they do help to make sense the finance work, I am doing in my role. But I am not sure I have time to implement this.
I enjoyed the training, and the finance was explained very well. I think we can use the processes easy enough, but it be challenging without help.
The training was interesting, and the complexity was made very clear by the instructor and by the material taught. I think I would need it to be more specific to my business before I use it.
The training allowed me to have a better understanding of the key aspects of finance for

small businesses. I will look to see if I can use the budget techniques taught but I am not sure.
The training covers relevant areas in relation to my work. However, I am not sure I can use any of what was taught without training my colleagues.
The training was good; I enjoyed hearing from the other delegates about the challenges they are experienced with the finance work. I am not sure I can use any though as it was a bit complex for me.
The information on budgeting will come in very handy. I think we can start using aspects at once as really, we have no budget process in place at all.
In my work I need to pull together my own budget and check other budgets, so this is what I was looking for from the training and I am pleased this expectation has been met.
The training was good in that it helped me know what I do not know. But I feel I would need more training before feeling confident enough to try these things at work.
The course was particularly good, and I realise that I should have enrolled on similar training long ago. The information on cash flow management and detailed budgeting was invaluable in relation to our needs.
I found the information on budgeting invaluable as I have been struggling along with budgeting for years. Thank you.
I thought there would be more on the basics such as dealing with financial documents like invoicing and buying. I also thought that financial software would be covered.
The training was incredibly good, and I can certainly use the budgetary aspects that were covered. Other aspects covered over I cannot see being used in our operations.
I do not think I can use anything that I was taught in the course, but it was still especially useful and informative.
The training was good. But I need to have more training before I am a position to use any

of this on how I do the accounts at my work.
Aspects of the training day did not really apply to my work situation as we do not deal in stock being a service company that helps social projects in the local community. The budgetary work was particularly useful as was the cash management as our cash income can be erratic.
I really found the budgetary section the most useful and the most likely to be used in my work as it dealt with issues that are causing pressures developing the budget. I really liked the financial control part as well. I did not realise that simple techniques could be used to give us greater transparency of our financial position.
The training was good, and I am extremely glad I took time out of work to attend. I feel so much more assured of the finance work I do. I was surprised about how easy I was able to take the information on. Certainly, aspects of budgeting and the financial statements I will be able to use, and I think the financial control techniques as well.
The financial control and the financial analysis sections are spot on from what I was looking for from the training especially in my role as manager director. This was excellent and great to see how to use basic financial interpretation techniques to help build a clearer picture of the strategic direction of the company.
All the training was good. I think I would be looking to use the financial control techniques, but I was disappointed not to have an opportunity to do some of the calculations. I think this would have made it more relatable but I appreciate the trainer gave us the information on how to do this and we can do these calculations in our own time, but I would have preferred to have done it in class.
The training was extremely useful, and I believe that much of what I leaned I can use.

Table 29 Analysis:

In the second stage of the course development cycle the content and structure of the course seems to be starting to meet the needs of the delegates, at least to some extent. Yet on a specific level some have stated that certain aspects of the training would be useful for helping to meet a financial information need at work. But overall based on this initial feedback the training is beginning to be perceived to be useful by many of the participants, more so than the first version, the generic training, which would suggest the modification of the training programme is beginning to be seen as more useful and hence a greater chance of resulting in the adoption of what is taught. But the response from the delegates is that there is a reluctance in seeing how they can adopt the techniques and concepts taught. So will need to see how to make this more relevant and make it clearer how they can adopt more, build more confidence in what they have been taught.

Table 30 – Summary of researcher's contemporaneous notes observations during the second iteration of the training sessions.

After the first iteration of the training, the generic AAT training, I have tried to make the Financial Statements section more interesting, less dry. Therefore, I try to encourage the delegates to give examples of assets, liabilities, expenses, of their own organisations with the hope this helps to breathe more life and more relevance into this quite dry but important topic area. But I keep it controlled, specific questions, less open, to the delegates so that it keeps their specific contribution relevant but short. This seems to work better than the first iteration where it was just me explaining the statements and taking queries from the delegates as I went along, where these interjections were people asking about that part of the financial statements and how it applied to their organisation. The problem with taking these types of ad hoc questions was that this could take time and then their specific questions on the statements might not be relevant to the other delegates. For example, if someone were spending time asking about inventory valuation or methods of depreciation then this could exclude delegates who have no stock or long-term depreciative assets in their organisations. **Initial Conclusion:** As said in the first iteration notes the section on Financial Statements is an important area for research for the delegates, so I have dedicated a bit more time of this section than in the first sessions. Overall, I thought this session went okay and the delegates were very engaged in this section. It is very noticeable that delegates find this section, financial statements particularly useful and relevant as with the first iteration so it is important to make it engaging and present it in a way that the delegates can apply to their own work situations. I feel this has been achieved more so than the first session but there is still some degree of lack of understanding shown at the end of the session and based on my impressions I still think many of the delegates can see how much of this material applies to

their work situation. So, reflection required on how to make it more relevant.
The next section, looking at internal control. I changed this section from the earlier iteration by giving the calculated answers in advance so that the delegates did not have to spend time doing the calculations as they did in the first iteration. This did not really work as well as I thought as I could tell the delegates wanted to understand how the percentage ratios were calculated. I felt because of this the key benefits of these internal control techniques were lost. There was engagement but not the level of enthusiasm I thought there would be. **Initial Conclusion:** I was hoping that this section, which I believe to be a vital element of financial management, would be more engaging but the delegates just did not seem to see the importance and the power of these instruments in helping them with improving the financial position of their organisations. Not allowing them to do the calculations was a mistake as it made the topic more remote for them. I will reintroduce the calculations in the third version of the training, but fewer than the first iteration.
The next section was on Budgeting, and with the first iteration this proved to be an extremely popular section where participation was good and engagement high and as a result understanding was high. The delegates said during class discussions that they had budgeting issues at work as in they had to do the budget for their organisations sometimes with no help so there was a big appetite for this section. However, unlike the first iteration there were delegates who dominated the discussions especially in one of the second iteration sessions, but this happened throughout. The problem with this is that the other delegates felt left out and though what was discussed may have been of general interest in terms of budgeting it did tend to be specific to the individual's organisation. However, the delegates said that they taught aspects of budgeting that they could use in their own roles at

work. **Initial Conclusion:** As with the first session this budgeting section worked well in terms of content and delegates overall informally fed back during the session that they found the session helpful in terms helping of them with their budgeting work. But I feel I will need to break the session up to allow group participation to avoid whole class discussions being dominated by individuals, this has overall learning benefits, but they diminish after a time.
Cash management section was extremely popular in the sense people really were engaged. It really helped people's engagement when I explained the importance of good cash management, the consequences of not keeping good cash management and then importantly how to use the financial management techniques to obtain and support cash management. This is key to get people engaged. Delegates fed back during the session that they found the session helpful, even said that by learning these techniques that they now understand the importance of good cash management and really appreciate the methods shown to support good cash management. **Initial Conclusion:** There was good engagement during this session and informal discussions from the delegates is they valued it. Unlike the first session people really enjoyed and valued the credit control element. On enquiries of what types of organisations they worked for, it was found there were more organisations that had credit customers so this could explain the overall increase in interest in this topic. But conclusions are that this section is done okay and keep the balance between general cash management and credit control. The aim of the research is not to have a course that everything taught is adopted, but that the delegates can take what parts they find useful, as there should be at least one element useful to them of cash management.
The Financial analysis section, it was taught from the first iteration to stress that strategic level financial information is important and that should affect the quality of the financial

information at lower tactical levels. This section was better engaged than the first iteration of the training, as the training session had emphasised that these trainings session were for non-financial management level, more so that the first iteration so they had more of that level on the course. **Initial Conclusion:** Engagement was good during the sessions, better than the generic training programmes previously. It would seem the delegates are more of the management level and so value this type of information. My feelings are this section still sits naturally at the end of the session after the more tactical level previously, but I will look to see how I can integrate the topics more in future sessions.
In terms of how the whole training sessions programme went there seems to be more engagement than the first iteration and more of an impression from the delegates that they can use at least some of what is taught in the training days. This is encouraging and feels that progress is being made in making these courses more relevant to the needs of the delegates.

Discussions on the immediate post training feedback– Second Iteration.

Key findings from the questionnaires and observations and discussions with the delegates immediately after the second iteration of the training suggest that there is more of an engagement and understanding overall in comparison to the first iteration. This can be attributed to the modifications done to the training programme because of the feedback from the second iteration. This is because the composition of the delegates is the same as the first iteration, indeed two delegates who attended the second iteration also attended the first iteration session so it is logical to deduct that the slightly higher level of engagement and understanding can be singularly attributed to the changes made in the course. The process of adapting and amending is already working.

With the delegates still coming from a wide range of sectors there is still specific aspects of the training that people find is not relevant to them especially aspects of the financial statements and of cash management. The budget element is well received by all delegates as it is more generic in nature that applies to all sectors. As with the financial analysis section, there are broad areas that apply to all sectors but as stated in notes this section still divides people as it did in the first section with people really finding this worthwhile while others do not seem too engaged in it. Research suggests that the Financial Analysis section is an important section to help people gain a comprehensive understanding of financial management, so it is important that all try to gain an understanding and appreciation of this area and the tools and techniques that are used to develop strategic information for decision making. It may be that running some form of case study that incorporates other elements that have been covered in previous sections are incorporated into the case study scenario that allows delegates to work in groups so that they can each contribute to this area but also see how the other delegates deal with strategic financial management information, maybe people who operate at a higher level from them. But equally the people who work in higher level can receive help from people who work in lower levels so that they can appreciate the impact it has on them. This would be an ideal opportunity for a formal structured peer learning session as the group work, as mentioned, would be a strategic case study that incorporated all the other elements covered in the training day programme so delegates could help each other to clarify some aspects of the training that may not have been clear to them earlier.

A situation that stays a concern is with the delegates not finding the material covered completely relevant to them because they work in industries that does not use that financial information. For instance, they have no inventory or large depreciable assets or some in cases they have no credit customers. Attempts were made in this second iteration to scale down the amount of these industry specific elements, but they must still be covered as they are important to those sectors to which it is relevant. The problem is these areas are completely irrelevant to some of the delegates and unless they have a general interest in these areas then they could end up being completely disengaged as appeared to happen again with some of the delegates in the second iteration. This needs to be addressed and tries to find solutions to this will be done in the forthcoming third iteration of the training.

Hopefully, this will address the other main issue being the fact the delegates are still not sure of how they can adopt the techniques taught. But what is also needed is to try to focus on areas that people can easily see how to adopt by training them in areas that they need to meet a financial information need in their workplace.

4.8.4 The post training course feedback, six weeks plus after the Second iteration of the training programme.

As with the first iteration, another questionnaire was sent to the delegates six weeks plus post training, as well as interviews conducted to assess actual uptake of the techniques. This was principally to measure the level of adoption or the likelihood of adoption of the concepts taught in the training.

Responses six weeks plus after the <u>Second</u>, sector wide, iteration of the Training Programme.

Table 31

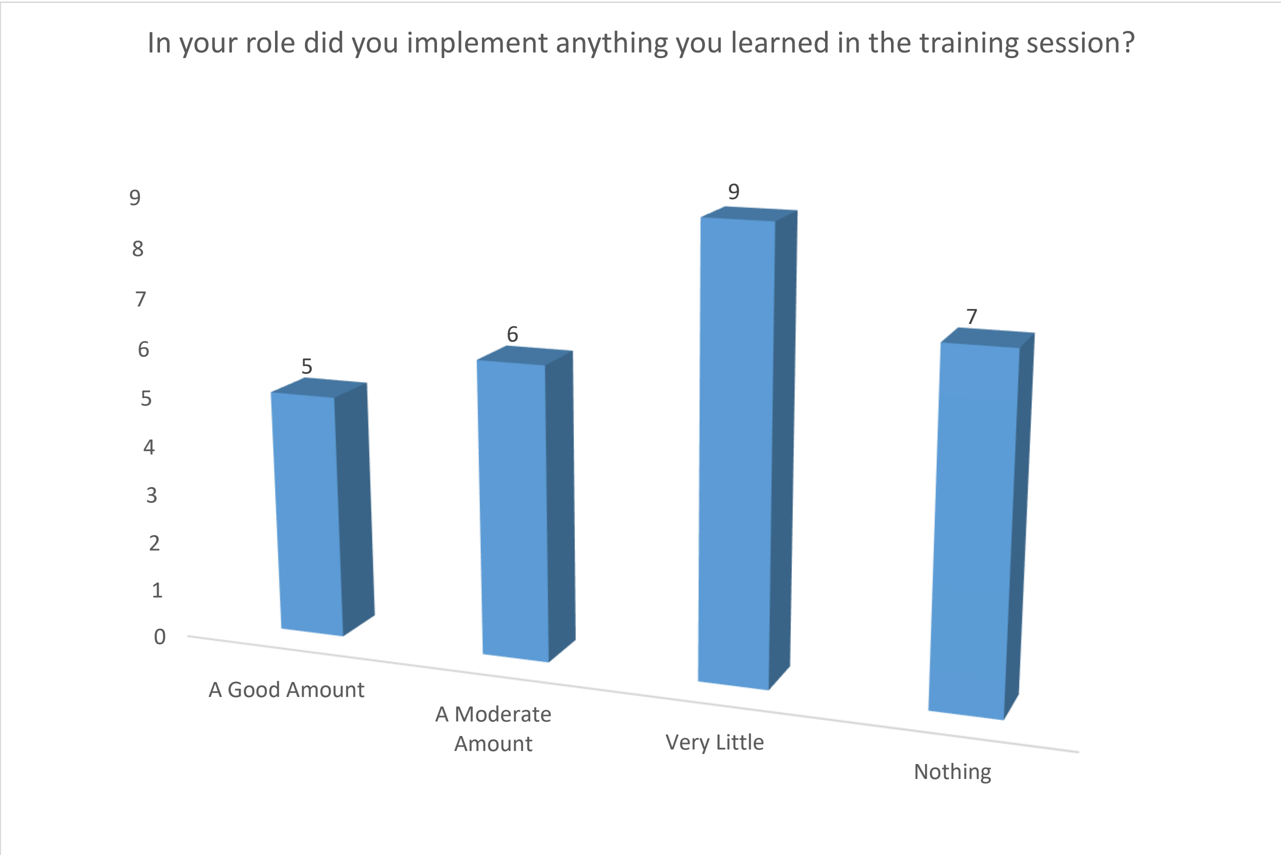


Table 31 Analysis:

The results still show that many of the delegates who responded to the six-week survey did not overall adopt much what they had been taught in the training session. With only forty one percent (11/27) of the delegates saying that they adopted a material amount taught. This still suggests that the delegates adopted truly little or nothing from the training session. Though this is up from twenty five percent from the first iteration it is still quite low considering that adoption could be classified as using techniques taught that simply confirms what the delegates were already doing at work.

Table 32

Is there anything taught on the course that you believe helped to resolve an issue with financial information at your organisation?

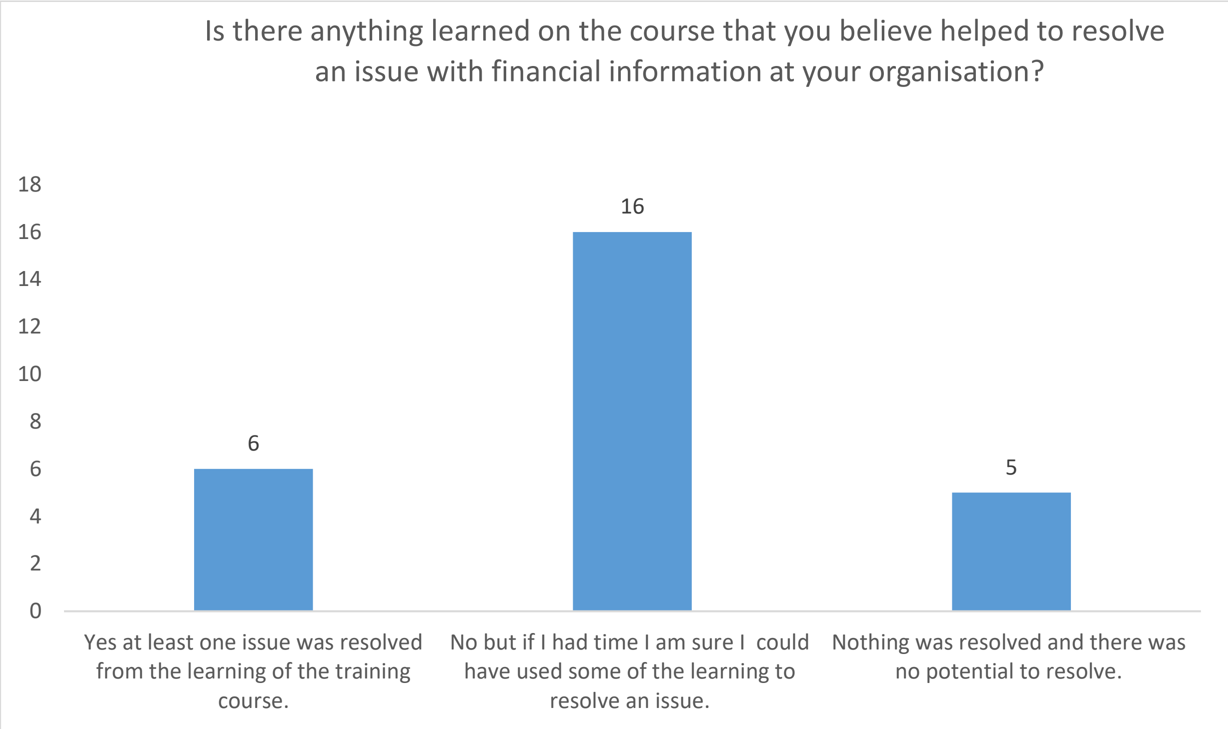


Table 32 Analysis:

Results from this questionnaire showed that only twenty two percent of the respondents believed that the training helped to resolve a financial information issue, or a work issue. But this was up from eight percent from the first iteration. Though in the second iteration there is an extremely high fifty nine percent (16/27) who feel they could potentially adopt the training if they had further developed training in the area. Though the level of adoption is higher than the first iteration it still suggests that the overall adoption is low with most people showing that they did not adopt anything from the training. This was not a major surprise as the questionnaire at immediately after the training suggested that only twenty six percent of delegates thought the training could resolve a work information issue, (table 26).

Table 33 - A sample of the participant's responses six weeks plus after the <u>second</u> iteration of the Training Programme.

The training helped to clarify matters especially in my understanding of the Balance Sheet and P&L. So, I have used the training to improve the financial control of the organisation.
There were aspects of the training I thought I could implement, but I have not had time.
The training was good. But to be honest I did not implement anything taught. This is mostly down to time but also though the training was good background to my job.
I enjoyed the training, and the cash and credit control techniques is something we already had, but I have improved it based on the details that were explained in the training.
I only do the most basic work in the cash office, so the training was beyond me to be honest.
The training gave good understanding of financial management that I had no idea about. I have broader understanding of the P&L and the accruals process.
I enjoyed the training, and I intend to do more financial training, but I do not think I am not quite at the stage of being able to use any of what was taught yet. I will need more training for that.
The training was good; in respect I now need more training on how to use what was taught.
We are looking to apply for more funding, and I am using the budget techniques to incorporate into the applications.
I have not used any of what was taught and there was nothing that I could directly apply to my financial work needs, but the training was beneficial, and I would like to do more.
The budgeting aspects of the training was incredibly good, and I still intend to use the techniques shown in our next budgeting round in weeks.
I have been using the variance analysis principle in our last quarterly review. It is simple

but amazingly effective.
No changes that can be specifically measured, it is more I have changed my approach how do my finance work and look at it more strategically as taught on the course.
I have been looking at our credit control and working with the Finance Assistant to see if we can build an Aged Debtors Report, as was proved effective in the course.
Though I did not implement anything from the course I still found it useful, and I am glad I went on it.
I have used the ratio analysis to undertake a review of our last few month's accounts and as I suspected it has revealed interesting aspects of how we have performed.
I have used the hybrid approach to forecasting; this is so much easier and quicker yet still excellent in building a robust forecast.
The training was excellent, but I need some more training to feel confident enough to implement the areas taught in the training.
I have given what was taught to my colleagues. It would be good to have the training together so we could learn together and help one another to see how we could improve the accounts.
I will look at the notes from the training again and see if there were parts of it, I can use in my role. But as I said before the training helped me feel more confident about my Finance work.
Yes, I did implement the management accounting principles such as ratio analysis but nothing else now as the main priority was getting deeper into our accounts.
I found the training particularly useful and have incorporated both the financial analysis and the budgeting into my role. But I will need more training.
I am much more assured now when I am sitting down with our Treasurer and going through the accounts.

The training was incredibly good as said at the end of the training. But unfortunately, I have not been able to use any of what was taught in my job yet. Just so busy firefighting so does not have time to work through new ways of doing things.
I have used the zero-based forecasting techniques shown as this coincided with a full evaluation of operations. It was particularly useful in this task.
No, nothing has been used but the training was good and maybe in the future when I get into more detail of these things it will be possible.
I have simply been able to understand my accounts better and make better financial decisions already which is great.

Table 33 Analysis:

The more detailed responses from the questionnaire six weeks after the second iteration of the training programme confirmed that the respondents did not adopt much or any of what was taught on the training programme, though clearly have appreciated the information taught on the training programme. This showed that a lack of time to implement the techniques was an issue, as in lack of time in their working day. But this is one of the challenges of the research; to develop a programme that has the potential to easily adopt as it logically fits the financial information that is needed, and therefore should not take a substantial lead time to implement into the persons workflow. It is clear the development of the training programme is not at that point, though the delegates do seem to understand of what is taught, the fundamental aspects of the training. However, they just do not seem to be a point to be easily adopt what was taught. Therefore, it needs to be concluded that the training programme still needs to be developed and adapted, based on the feedback of the participants, to be more relevant to improve uptake.

Analysis of the respondents so far in the research suggest that if the contingency theory of management accountancy is met in the training programme or simply put if the training programme can deliver training that meets the financial information needs of the participants, then the level of adoption will increase. The challenge is to develop a programme that will increase this prospect.

Table 34 – Summary of interviews of participants of the second iteration of the training programme, six weeks plus after the training.

As explained in the methodology section 3.2, only five people were interviewed from the twenty-seven who took part in the second iteration of the training and responded to the questionnaires.

Below is a summary of the main conclusions of the interviews that, as explained in the methodology section, was sent to the participants for confirmation and clarification. The evidence here are the final verifiable versions.

Interview 1:

Interview date: 28th February 2023. 1230 – 1330. On MS Teams **Role:** Small Business Owner and Manager of a small online travel firm specialising in corporate bookings. Has a finance support person who is also attending the training, but he deals with the overall budgeting process and the financial control. The statutory reporting is done by a hired Accountant, but he needs to understand the basics of these reports so to challenge the accountant on issues such as tax liability. Takes full responsibility for any funding applications including the financial projections. Assistant only, who helps with the basic calculations, spreadsheet work. As owner / manager, he has the authority to implement anything taught in the training.

Background of Training

Undertook short online financial training, and years ago a college business course that has basic management accounting.

Is invested in the organisation to up skill, so absorption capacity does exist.

There are contingencies that has resulted in him looking for more training. These management information contingencies are needing have an understand how to pull together a budget for capital investment, specifically an upgrade to software and hardware used. Also, need more knowledge on the ongoing budgetary process.

Training Feedback

He said there was quite a lot to take on board but certainly some of the key areas such as budgeting and the analysis of the Balance sheet were very useful to him and terms of the balance sheet; he started to analyse the balance sheet differently with a new light and forwarded queries for the accountant to answer.

The more advanced budgeting aspects have also been used or will be planning to be used, so certainly the training has met financial management needs.

He feels the other parts of the training he could use but needs some more clarification in terms of their application. But on reflection the cash management aspect should have been something his assistant should have picked up on (Interview 2).

Though he is owner / director he had trouble seeing how the financial analysis section could be something he could use, though he found it interesting and it made him feel he should be looking to use these aspects. So will need to think how to make this section more understandable.

He feels more confident in the areas of analysing financial statements and controls as well as budgeting and has used these parts that were in the training. Therefore, their self-evaluation of financial competence has increased.

Interview 2:

Interview date: 28th February 2023. 1330 – 1415. On MS Teams **Role:** Administration Assistant – small online travel firm specialising in corporate bookings – helps owner / director of interview 1. Up to 50% of job involves finance responsibility recording basic financial transactions, invoicing, and basis cash management. Hoped to be able to implement some aspects picked up at training and has relative freedom to change some of the ways the finance is done in the company. But he feels he would need to check with the owner for any major changes. So absorption capacity does exits, also potential absorption capacity.
Background of Training Did one year of AAT level 1 accounting training but stopped the course when the pandemic came and has not had any other finance training. Feels that he has limited formal training for the specific finance work he does. Has been invested in by her organisation to up skill and can implement anything that is taught in the training. This has been through his manager who attended the training with him (interview 1). His management information contingencies are quite general, does not feel there is anything new he has to learn, just a better broader understanding of finance.
Training Feedback The first two sections were extremely useful to him, this being the financial statements and financial control as these were the most relevant to his job. This helped him to understand the statements that the accountant produces which will be of help to the business but what he taught from the financial control element of the course will be of help to provide useful financial information to the owner to help him identify efficiency and cost improvements. For the second half of the training, the Cash management was very useful especially the debtors schedule and is working with the owner to pulling one together for the company as they have multitude of credit customers which is the nature of their business and there have been some later payers especially lately. But budgeting and financial analysis was beyond his level as he feels

it is not part of what he does. Though he realises that he needs to have a better understanding of pulling together a budget for the company as the owner is looking to him to help with this in the future. Feels the training could be half day sessions and module based so that people can select what parts of the training they want. He feels that this training is helpful to be made available.

Interview 3:

Interview date: 15th March 2023. Met in café over lunch. **Role:** Treasure to local music group, Bagpipe Band – Charity status. Does all the finance for the organisation, has no support for this work. The band is growing extremely fast with up to 50 members. Significant movements and challenges in the finances. Almost 100% of job involves finance responsibility. Mainly handing all income and expenses. But significant capital funding about to occur due to large order of bagpipes and other instruments. Complete autonomy to implement anything taught in the training.
Background of Training No formal training picked up as went along, though was a Treasurer for a primary school years previously and had mandatory training then which was basic finance. His finance management information contingencies are specific, being understanding how to pull together a capital budget for the musical instrument replacement – capital budgets are covered in the training at this stage.
Training Feedback He was very direct in saying the training was of no interest to him in relation to his treasure responsibilities. But thankfully he found the capital budget element to be exactly what he needed and will be using a form of this for the instrument's purchases. He also found the credit control techniques extremely useful as the bands event customers are terrible at paying on time. He intends to set these credit control techniques up especially as the band's bookings have multiplied

recently. Overall, he could see the benefit of the training programme, but that only certain parts will interest people, as people in similar positions to him only want certain specific training that they need for work – a confirmation of contingency theory of management accountancy.

Interview 4:

Interview date: 21st March 2023. Online Meeting, 1600 - 1700. **Role:** Partner in Small Law firm. Must manage a portfolio of property estates that includes an analysis of financial value of the estate. About 40% of job involves finance responsibility. This is managing the financials of the property investments. Would need to consult partners and refer regulatory restrictions before changing the finance procedures by implementing anything taught in the training but would have the potential to change the methods of producing financial information of shown to add value to customer service.
Background of Training No formal training at all in Finance or Accounting. Has been really struggling with this side of the job role. Has been relying for help from the Financial Accountant with the finance but the expectation now is she can manage clients finances unsupervised and is worried about lack of technical knowledge needed to understand the client's estate finances.
Training Feedback Found the section on Financial Statements exactly for why she enrolled onto the training programme. She needed to understand the balance sheets as well as the income statements and now feels much more confident about assessing these statements – so met a management accounting contingency. The sections on budgeting and financial control not relevant but cash management was of general interest to her role.

Feels the training could be shorter and more focussed but overall, she can see the training being very worthwhile for non-accountants who work with financial matters in their roles.

4.9 Main learning points from the second iteration of the financial management training courses.

Changes and modifications took place after the first generic iteration of the training programme. The hope was this would increase the level of engagement, relevance and adoption of the training that was delivered. As said, the sample population was of the exact composition as the first iteration. The overall conclusions of the second iteration of the training after the assessment of the feedback at different stages are outlined below.

The main learning points from the feedback of the first iteration are the following:

- As with the first iteration the delegates were all working in small enterprises across a range of profit and non-profit sectors undertaking finance work but had no or little training in finance.
- Like the first iteration most delegates were motivated to attend the training to gain an understanding of a specific financial management information need at their organisations and to have training that would improve the overall quality of the financial management information used in their organisations.
- Financial statements and budgeting were still immensely popular, but the cash management sections increased in engagement from the first iteration. Can assume this was due to the modifications made to this section of the training to make it more practical based by using case study examples of a company with cash management issues to work through. It was well engaged, and learning was high.
- Still an issue with financial statements is that delegates work in sectors that do not have key elements that need to be covered in the financial statements section, such as inventory valuation and debtor's provision. You tend to lose these people while

covering these, but it is very necessary for other delegates, so it needs to be covered while the training is open to all sectors.

- The financial control section was devalued by providing the delegates with pre calculated ratios, the intention was to move quickly to focus on the analysis aspect of this section. This needs to be changed for the next iteration.
- Delegates enjoyed the group work and valued the peer learning opportunities of these though these interactions were improved and more effective when the groups had delegates working in similar sectors.
- The level of uptake of what was taught six weeks plus post training had increased from the first iteration, suggesting better alignment of topics taught and the level of time spent on the more practical elements that delegates want to address issues at work.
- As with the first iteration the main areas that were adopted were in relation to what the delegates were seeking training in, so really does confirm the contingency theory of management accountancy even at this early stage of the development of the training course. But this does mean that even when there is adoption it is only a small part of the training course, that which is relevant to their needs.
- However, the criteria for an effective training programme course are to have what is taught adopted by those who enrol and attend the course. There is ample evidence set out in literature, (covered in the literature section), that uptake from professional development training is low for a variety of reasons so any level of uptake can be considered good. The challenge is to increase that level of uptake, the uptake to meet a contingency management accounting information need, as this is the best opportunity of uptake from financial management training.

- The level of uptake from people who have adopted techniques taught in the training they needed at work has increased slightly. The key to this is to identify and deliver training that is needed without the clients knowing they do beforehand and to aim the training to those from a high potential absorption capacity so that the delegates attending have the agility to adopt what they recognised is financial information that will improve the quality of the financial information used within their organisation.

The third iteration of the training took place in April to June 2023. The training was adapted from the second iteration based on the conclusions from the feedback from the first iteration. These were:

- The training should be continued to be aimed at management level, from junior management level, or owner employees who are looking for financial management training that will look to improve the calibre of the financial information available so that they can utilise that information to improve the immediate and long-term efficiency of the organisation.
- The areas of financial statements and budgeting continue to be an issue as there are areas covered in the financial statements section that are just not relevant to the delegates. Need to assess and analyse carefully the pre training questionnaires to find what sectors people come from to see if any way to emphasise certain areas more. But based on the first two iterations the comparison of the training delegates will be fully cross sector, so will need to cover all elements of the financial statements. However, will attempt to have two case studies to be attempted in groups which the delegates will go through the financial statements of two types of organisations, one with inventory and debtors and one more service oriented that does not have a high level of

credit transactions. The groups will be configured based on the sector type the delegate works in.

- For the internal control section will go back to having the delegates calculate the ratio percentages again rather than providing pre calculated ratios. But there should only be a limited number available so that there is not a high amount of time on basic calculations allowing more time on the finding the issues and developing the corrections which is the key beneficial aspect of this section.
- The amount of time spent on unstructured discussions in class needs to be controlled, so to be reduced as it is too high. This should be helped by providing more group work so that delegates can provide peer learning in a controlled environment.
- The budgeting section is so popular that need to see if a separate session that is completely dedicated to budgeting. For the third iteration will keep the level of budgeting in the main course but will add a separate dedicated budgeting day for those who need more in-depth budgeting training.
- The Financial Analysis section is still proving to be divisive with delegates very engaged and find useful, and others very much less so and this really depends on the level of seniority of the managers. After the third iteration will look at the possibility of having a separate training day for this area. But for third iteration will try and expand the case study approach at the end of the day that incorporates all that has taken place in the training and emphasise more how on these days to financial management techniques that shape the strategic planning.
- Overall need to be more aware of timings of each section so that the day's plan is adhered to as there were a couple of comments of the day going off the pre published plan. Also, this is necessary as need a good amount of time on each key section to ensure understanding and relevance.

- At the end of the session, finish half an hour to forty-five minutes earlier to allow delegates with individual queries about the training to be addressed. Advertise this time will be available but must make sure this one-to-one time is refection on the training just provided and not on other issue within their organisation or else this will enter the realms of consultancy and not training.

4.10 Reflections and Discussions on the second iteration of the financial management training courses.

Another key theme that appeared from the results was that the delegates attending were considered the right persons to attend the training, a conclusion both themselves and their organisation agreed on. This result is a feature from all four iterations but became clear from the second iteration onwards. The results suggest that their organisation felt these individuals were best placed to get most out of the financial management training and to implement anything relevant taught.

This was one of the main themes found from the pre training questionnaires. Reflecting if the literature explored could explain this phenomenon it would suggest that the absorptive capacity theory was a relevant factor and that those who attended the training had a high absorptive capacity. In addition, the small enterprises that delegates came from had high organisational absorptive capacity.

The theoretical details of absorptive capacity theory were covered in the literature review chapter. Absorptive capacity theory, was first conceived by Cohen and Levinthal in 1990 and is defined as "an ability to recognise the value of new information, assimilate it, and apply it to commercial ends." The theory assumes that there are structures in place within the organisation that allows it to recognise the value of new information, information that will have a positive impact on the progression of the organisation. Therefore, if an organisation invests in related research and development, it can increase its absorptive capacity. Firms can invest in absorptive capacity by investing in research and development or by investing directly in key staff who are part of the absorptive capacity foundations of the firm, (Qian, et al. 2013).

Therefore, one way of utilising and developing the absorptive capacity of the enterprise would be to identify the key staff to be sent on relevant training, as in this case financial management training. So, that they are the best people to 'recognise the value of new information, assimilate it, and apply it to commercial ends', (Cohen and Levinthal, 1990).

It was seen in the feedback that the organisation viewed the individual as being the right person to make the most impact within the organisation. Therefore, the enterprises who have enrolled on the training are sending staff who they believe have the highest potential absorptive capacity, or the highest ability, to find the key elements from the training that will further the boundaries of knowledge of the firm.

So, in refection what are the consequences of this in terms of the financial management training programme in how it should be developed and adopted? The main impact is the structure, content and indeed level of the courses should be planned on the assumption that those attending have been identified as having a good basis of absorbing and using what is taught in the training. The assumption should be then that those who enrol on the courses are not absolute beginners to finance and financial management as they work in some capacity in finance in their work roles, even if it is a limited role, so that they have has some exposure to finance and the finance concepts covered in the training. Therefore, the financial management training courses should be designed and aimed at those individuals who have finance work role but not trained in finance. This is seen in the individuals who are enrolling on these courses; they attract people who work in a limited level in finance but are seeking clarification training and augmented useful and relevant knowledge, rather than start from nothing type finance training. As the persons who enrolled are identified as having high absorptive capacity they can be assumed to be of high ability and therefore be able to learn quickly.

Therefore, the training programme should be beyond beginner's level and should be stretching and challenging so that those attending discover new techniques that they can recognise to be useful in their roles and go on to use them. In other words, the training course should be designed in a way to cater for the high potential absorptive capacity of the trainees and for the training programme to be designed in a way that those techniques taught can be easily implemented. This could be achieved by having practical, case study, role play type sessions that simulate the work environment. This would allow the high absorptive capacity attendees a greater opportunity to recognise the value of the new information that they are receiving in the training and to envisage a way of implementing these new techniques into their organisation to the betterment of the financial management techniques that are currently practiced.

Of course, by adhering to the concept that absorptive capacity of those who attend the training is high, then there is a risk that this may exclude people who do not have that high level of absorptive capacity. This could very well result in these people being lost during the training as the content, structure and pace of the training is pitched too high for them.

But as said before, this is collective group training where training programme is set at the level of the majority. It is not individual customised consultancy type training. The results of the feedback surveys show that a significant majority of the participants of the training have been identified as having a high potential absorptive capacity. Literature states that potential absorptive capacity can allow a company to be in a stronger position in the market by exploiting new innovations if the platforms for internal information transfer are improved. This will help to reduce the distance between potential and realised capacity, (Fosfuri, et al. 2008). Therefore, to make the training programme effective, which is a key goal of the research project, the training programme should be designed in a way to be accessible to 'reduce the distance between potential and realised capacity.'

This is a critical aspect to reflect on from the results of the feedback, in that the training should be new but show a clear method on how to implement and adopt these techniques in the workplace so that the benefits of these techniques can deliver improvements in the financial management of the small enterprise quickly. This is because results from the feedback data show that the participants are of natural high ability, hungry for new knowledge and be able to imagine and create ways of allowing these new techniques to be set in place within their organisations. When the organisation has high absorptive capacity then it can find, assimilate, transform, and use external knowledge, research, and practice to exploit new opportunities for organisational improvement, (Cohen and Levinthal, 1990).

It is logical to deduce that the organisational absorptive capacity of the small enterprises who attended the training is high. This is because the level of adoption of what is taught in the training is high in the latter iterations of the training programme. This would suggest that the individual participants of the training programme who were part of the high absorptive capacity had mechanisms in place to use the techniques taught in the training as there is a 'high absorptive capacity foundation' in the organisation.

If the financial management training is structured and planned in a way to cater for these high absorptive capacity organisations, then the training is likely to be highly effective.

4.11 The third iteration of the training programme.

The third iteration of the training programme took place over two separate day training sessions in April and June 2023.

- As was noted in the main learning points for the third iteration it was decided to run a separate course for Budgeting that would go into the philosophy of budgeting, the approaches, and techniques of budgeting in more detail than the general financial management course. This was purely based on the feedback from the first two iterations where the conclusion on the budgeting element was positive and that the only issue was that a significant proportion of delegates in both iterations wanted to spend more time on budgeting and into more depth before moving onto the next sections.
- The Financial Statements section will have an added case study sub section that will involve two case studies, one with inventory and a large amount of credit transactions and one without these. This will mean those delegates without inventory and credit transactions do not have too much of this section of the training that is irrelevant to them.
- The financial control section will have the delegates do calculations again to increase engagement but only a limited number, less than the first section. This will allow the delegates to progress to the analysis aspect of this section which is far more important than basic calculations when it comes to financial management.
- The cash management section is fine and will keep this largely as it was in the second iteration. Again, as in the second iteration try and focus more on the overall cash management techniques and consequences of not managing a healthy cash cycle

rather than just credit control that the delegates seem to enjoy and is important, but not the only element of cash management.

- The financial analysis section will be entirely case study based rather than tutoring and general discussion as it had been in the first two iterations. It is hoped this will increase engagement as this area is a key element to effective financial management. There will be one case study for all delegates but still working in groups to encourage peer learning. The case study will incorporate all the aspects of the training delivered as this is the last section of the training.
- Group work will be increased to allow for more peer learning in a more controlled way so to reduce the risk of individuals dominating the class. The feedback from the earlier iterations is that the delegates really appreciate the peer learning and networking opportunities from the training days.
- Though the participation rate in the questionnaires is good, the number of people who agree to an interview is incredibly low. Everything is done to accommodate the participants so that the interview is at their convenience in terms of when it is done and where it is done and if they would prefer to meet online. However, though the trainees agreed to an interview when it comes down to arranging an appointment many do not respond at that point. For the third iteration will need to arrange the interviews more in advance of the six-week post training period to increase the number of potential interviews with the realisation that the potential interviews will not materialise.

4.11.1 The pre training course questions <u>(Third Iteration).</u>

The pre training questionnaires for the third iteration followed the same pattern as the first and second iteration: they were sent to all the people from small enterprises who had enrolled onto the training, days before the event. The questions were the exact same to those of the pre course questionnaire from the first iteration.

As set out in the methodology section, there were only fifteen people who attended the third iteration of the training who took part in all the questionnaires, the lowest number of all the iterations. Again, as with the earlier iterations not everyone who attended the training took part in the review process even though an initiative-taking approach was taken to encourage the delegates to the training to take part in the training.

Table 34 - in the questionnaires asked the participants what there is role within their organisations:

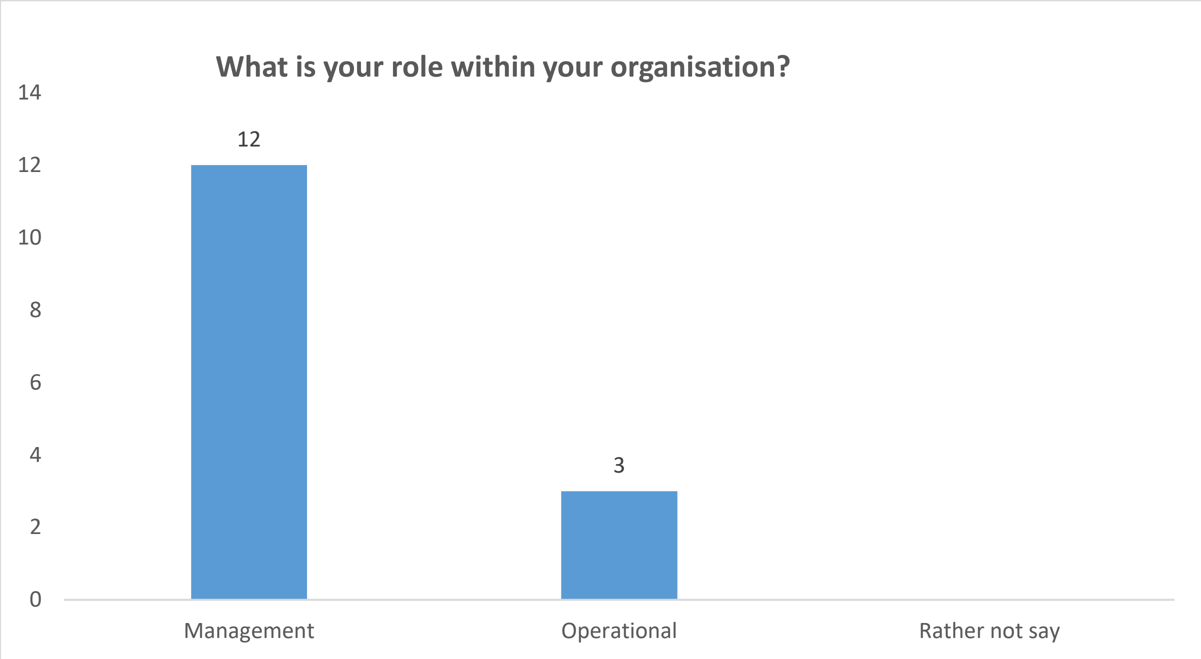


Table 34 Analysis: The delegates are management level. Therefore, it is correct that the training needs to focus on the strategic dimensions of financial management information and how it affects strategies for operational improvement and growth rather than the day-to-day accounting and finance transactions.

Table 35 in the questionnaires asked the participants if they had any earlier financial training.

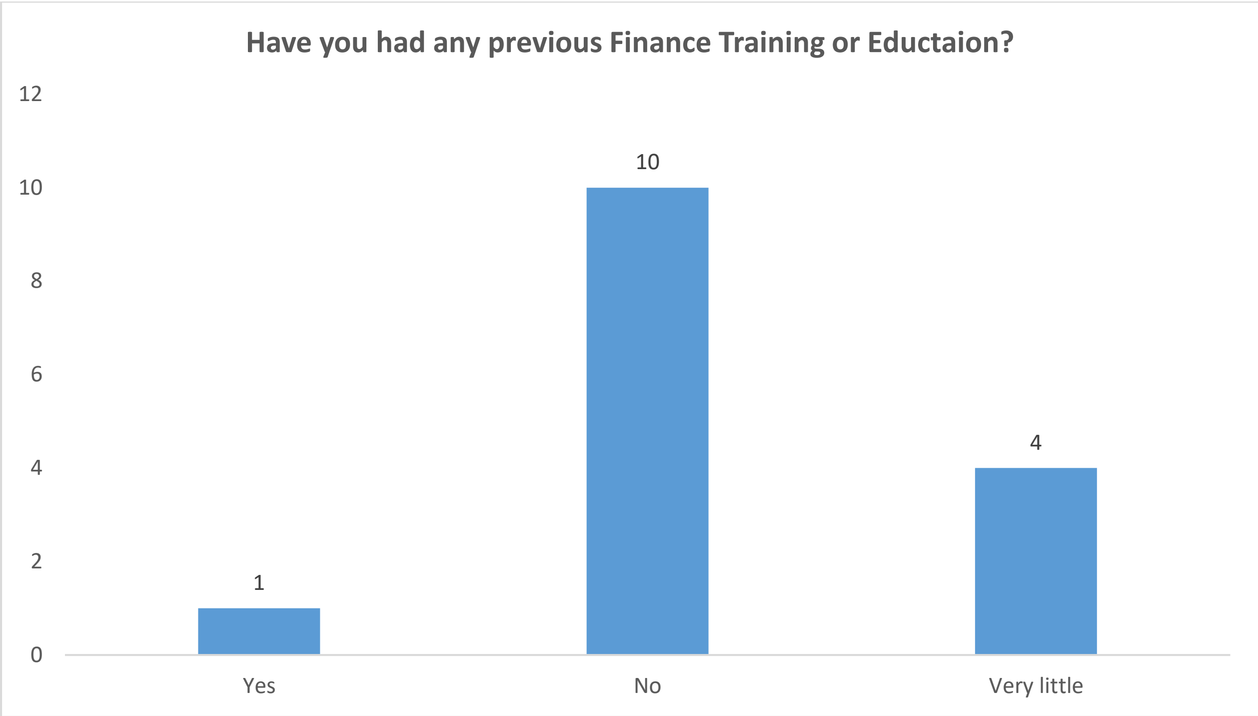


Table 35 Analysis: These results prove that the pre course information is clear, that these courses are for non-finance managers.

Table 36 shows the responses to the question if the participants undertake finance work in their current roles.

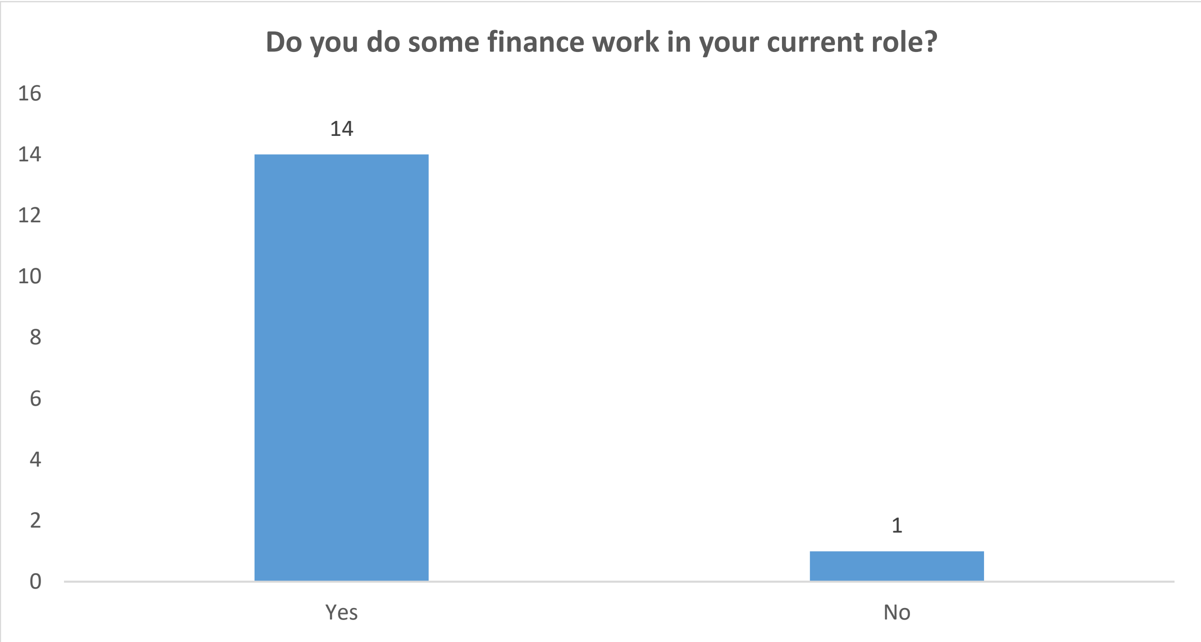


Table 36 Analysis: It is still the case that all the respondents undertake finance work in their work roles within their small enterprises. As with the first two iterations this allows the training to go beyond the basic level.

The pattern is beginning to merge that the people who seek this type of training are people who work in small enterprises are of management level and who must undertake work with financial information.

Table 37 is the responses to the questionnaires that asked the participants if there were any specific work-related issues that made them seek financial management training.

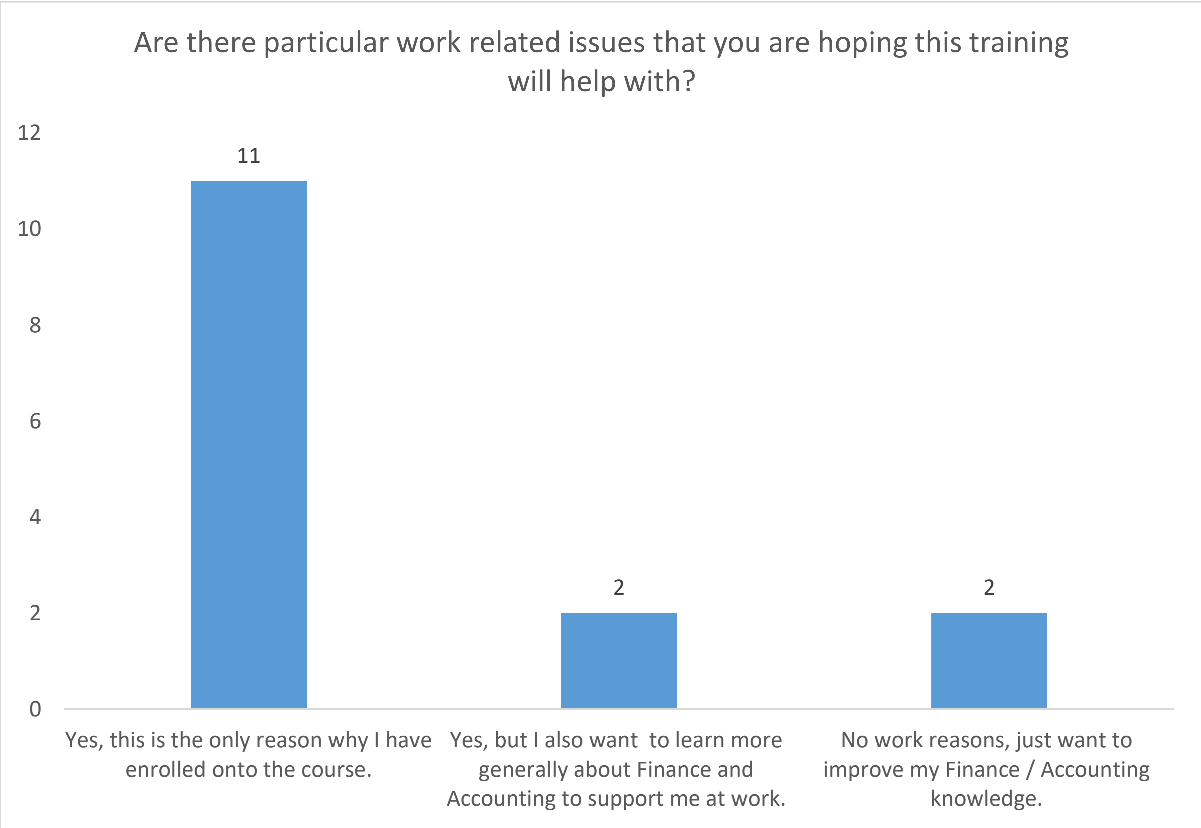


Table 37 Analysis: the responses of the participants from the third iteration of the training sessions of this query. These participants were asked at once prior to the second training programme if there are specific work-related issues reasons for enrolling onto the training programme.

Seventy one percent of the participants indicated that there was a particular work-related reason to be resolved for wanting to enrol on the course, and that this was the only reason for enrolling onto the course. This is up from the fifty six percent who stated the same in the second iteration. This would suggest that the course outline published and marketed before the course is relating to the overriding financial information needs of the persons who enrol onto these courses. There is now a separate stand-alone budgeting course but only five people enrolled onto this course (it was not as popular as believed it would be), and logically this would suggest that this is because they have a budgeting financial information need that they hope this training will address.

Overall, this would suggest that the course on its third iteration is being presented as something that can help with the financial information needs of most people who enrol onto these courses, and as such the course is attracting people who fit this profile. What needs to be tested now is will this convert into an increase in adoption?

Table 38: Does the organisation view the individual as being the right person to make the most impact within the organisation from the financial management training?

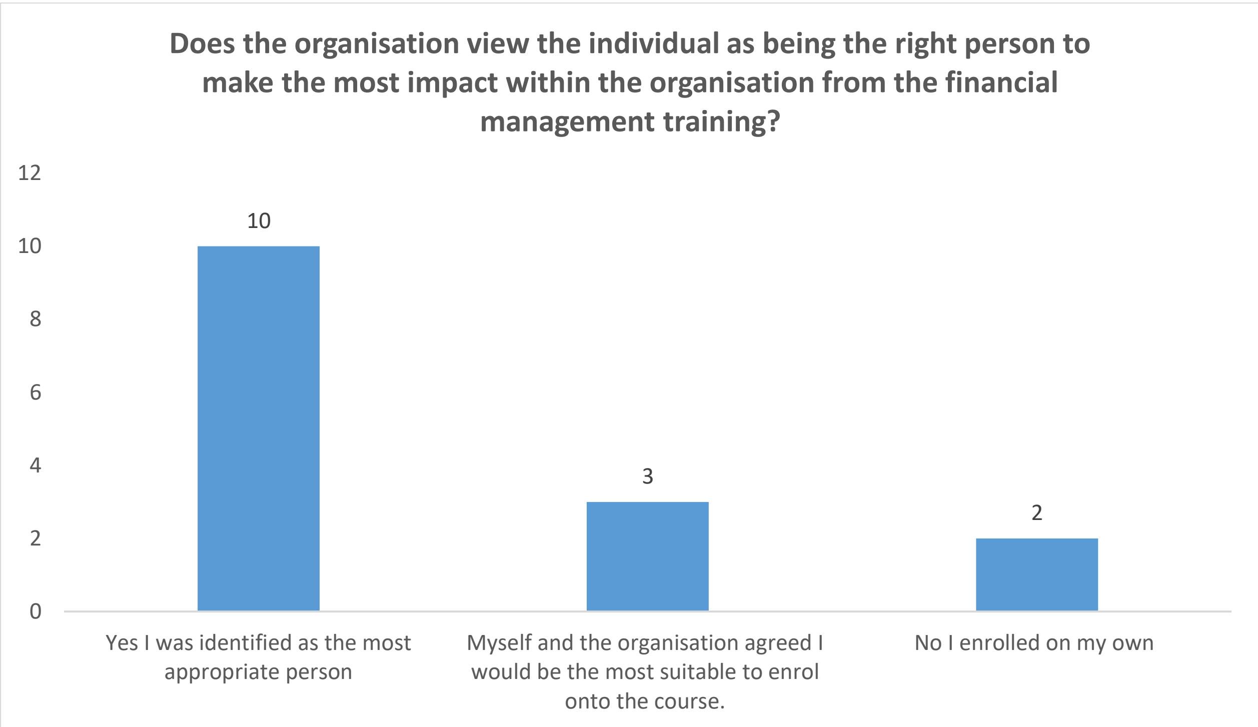


Table 38 Analysis: As with the earlier iterations most participants have been identified as being the right persons and therefore having potential absorption but also the organisation believes there is opportunity for realised absorptive capacity.

Table 39: Are you hoping you will implement the techniques taught on the course to the benefit of the organisation?

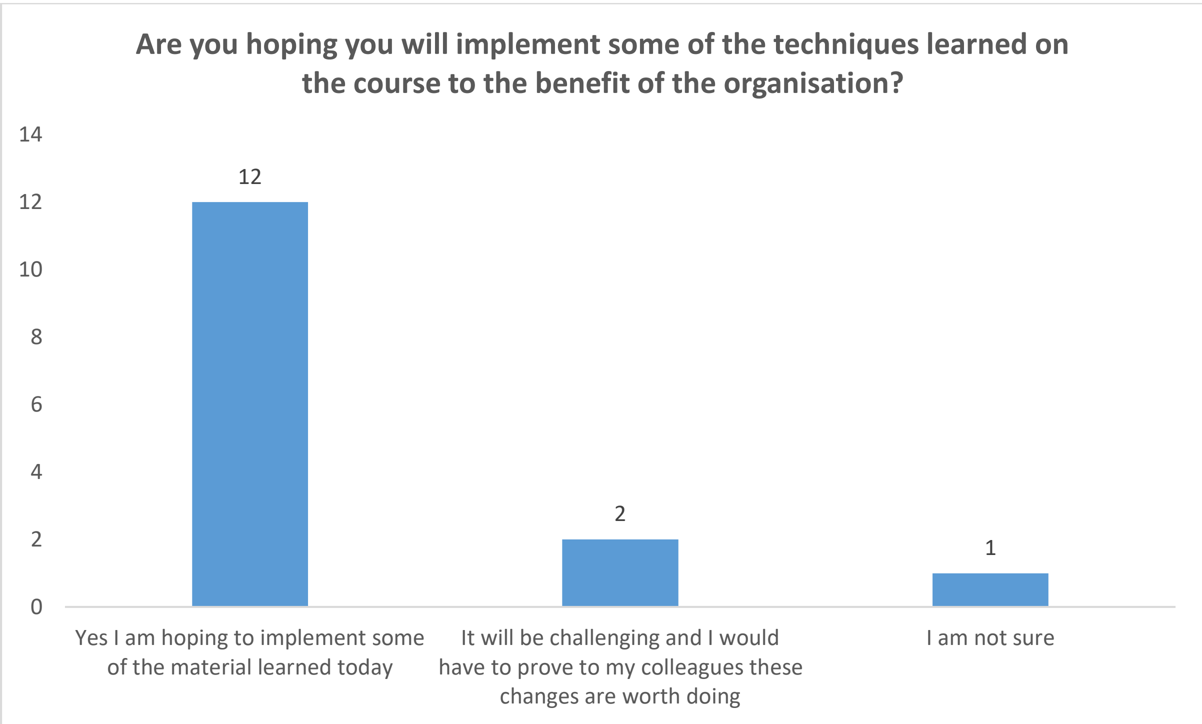


Table 39 Analysis: The participants believe they have potential absorptive capacity and believe there is a potential for realising the absorptive capacity, this was like the earlier iterations of the training programme.

Table 40: Does your organisation hope you will implement the techniques taught on the course to the benefit of the organisation?

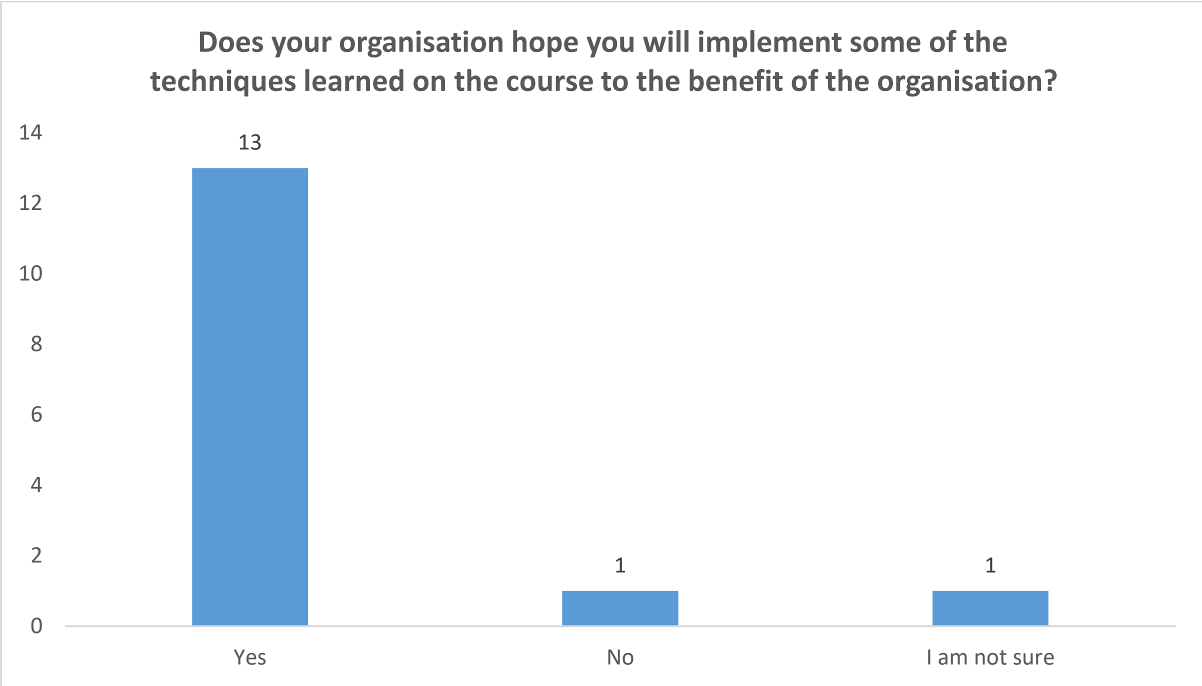


Table 40 Analysis: This would suggest that the organisations feel there is scope for realised absorptive capacity so that there is a belief that relevant persons attending the courses can absorb material that can be used within the organisation.

Table 41 shows a summary of the responses from the pre training questionnaire for the third iteration of the training.

I heard about the training from a colleague who went on an earlier session and recommend it. Like my colleague I need to get a better understanding of the budget process as it is a bit haphazard the approach we currently take. Also, I am also keen on the financial control areas as we have critical cost overruns in parts of the business. So, any techniques that will allow for a better control of the business will be good.
I have been directed towards this training by our charity partners. The fact that it is free is great as I really need financial training to help with the charity I work for. Specifically need information on the financial considerations of good governance.
We are really drowning at our charity to keep on top of our finances so just having a basic level of understanding of the finances will be good as we can start to see how we can extend our provision of services.
I am interested in the financial analysis aspect as I am not really interested in the day-to-day financials as that is not my remit. But I do appreciate that these basics are needed and so it will be good to cover these as well.
The budget course is exactly what I have been looking for, but all other courses have been too expensive so a free one to come along is great. We run a social space for people with non-physical disabilities, and we are always looking for ways to improve our finances as none of us have any finance training.
I am the external fund project manager for a local museum, and we need to pull extensive budgets together for the external funding applications so the support with pulling together these budgets will be appreciated as it is difficult to find these bespoke courses locally.
After working in the Cash office for over ten years it was time to get proper training on what I have being doing. The main area I will be interested in is the cash management. But

I will try and gain a wider range knowledge as well from all that is covered in the course.
I work as a manager for a local charity and as such I undertake financial duties. So, any training that will help me get better grip of the Finances of the charity will be of great use and help.
I am keen to get a better understanding of the balance sheet, profit, and loss so I can have better deep dive into what is driving our costs.
We are an expanding the company, so finding sources of finance will be key. Though I know sources of finance is not on the agenda for the training providing robust budgets for applications of funding is key, so the budgetary section is something I am looking for help with. Also, a better understanding of the financial documents is imperative to find and obtaining finance so any way of having a better handle on those documents will be a plus.
We run two drop-in centres for women in Edinburgh Niddrie area. We receive funding from Edinburgh Council, but we need to give expenditure and donation returns. These are becoming more complex as we need to show accruals and prepayments and show restricted and unrestricted income which is quite complex, so help with this will be especially useful.
Budgeting is becoming an ever-increasing requirement of my role, so it was obvious I need extra training with this, and this training seemed ideal to my needs.
I have taken over maternity cover role of general manager at a local public gallery, and I am quite overwhelmed with the amount of finance work required in the role. So this finance for non-finance managers seems ideal and hopefully will increase my confidence in those aspects of the role.
I run my own business, and I leave all the finance work to my part time Accountant. But I would like to get up to speed so I can take some of the work off him and be able to scrutinise and challenge some of his results and his budget assumptions.

I am looking to improve my financial management skills as the funding we receive as a charity has been drastically cut the last few years, so we are constantly looking to find new ways to obtain funding. I am hoping the training will help to improve our budgeting and help to control expenditure better so that we are in stronger position to win funding.

4.11.2 Discussions on the <u>third iteration</u> of the pre training course survey.

Unlike earlier iterations of the training programme the participants have a clearer understanding of why they want to go on the training. The feedback still show there are general unspecified reasons for wanting to go on the training, but as said there are overall more specific financial information needs evident in the feedback.

Overall it can be concluded that the evidence from the pre training questionnaires is that the contingency theory of management accounting is a relevant theory to consider when designing financial management training courses for small enterprises.

Again, as with the previous iterations of the training it was identified from the pre training questionnaires was that most of the delegates attending were persons who worked in their small enterprises who were considered someone who was the most appropriate to attend and learn from the training, a conclusion both they themselves and their organisation agreed on. Therefore, there is still clear evidence that potential absorptive capacity theory is a factor in determining who attends these courses and the benefit these people can gain from the training if the training programme is delivered in an effective way, something that the iterative design process, which is the key to this research, is hoping to achieve. But it is imperative that absorptive capacity theory is considered in the course design in the sense that the makeup of the person who will the benefit the most from the training will be considered in the design.

4.11.3 The post training course feedback, immediately after the third iteration of the training programme.

The following tables summarise the training participant's immediate responses at the end of the training session and helped to shape a response that would contribute to the development of the fourth and final iteration of the training programme.

Table 42 - Responses immediately after the Third iteration of the Training Programme.

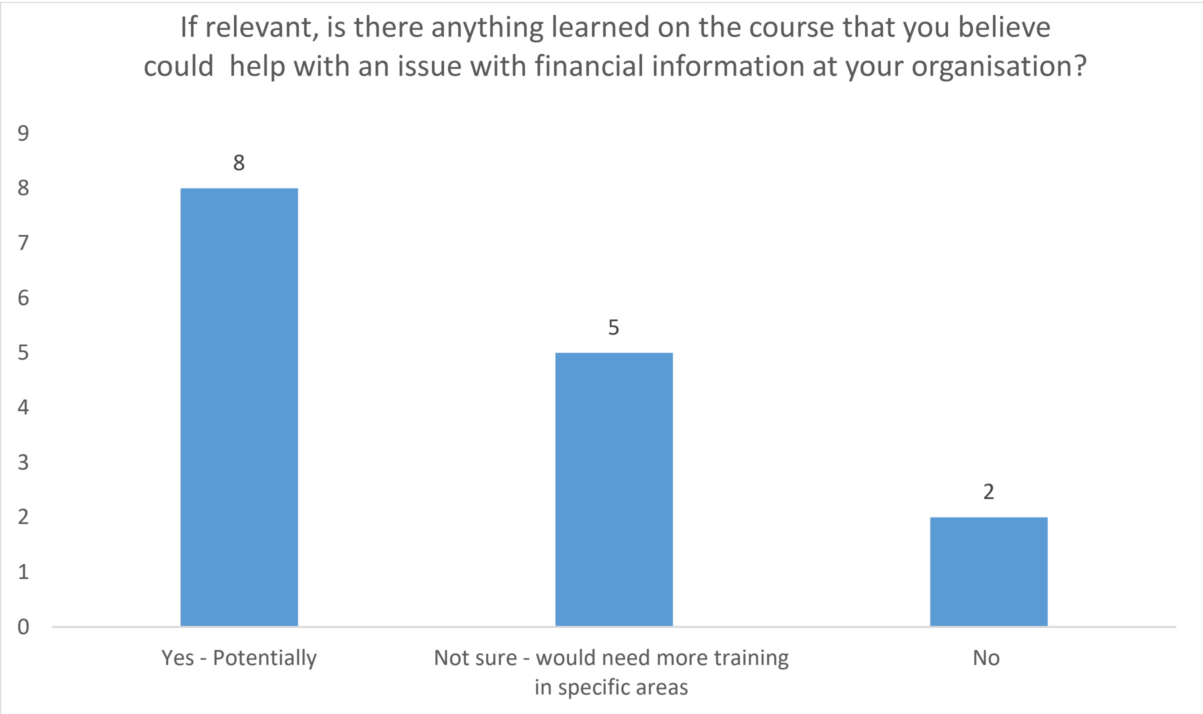


Table 42 Analysis:

Fifty three percent of the participants believed that the training session would potentially meet a contingent management accounting need in their organisation. This is higher than previous iterations and suggests that the adaptive process undertaken to render the training programme more relevant and effective is beginning to deliver as more people believe the training is more in line with training that will meet a financial information need at their organisation, which is what made them enrol on the training in the first place. So, the training is more effective by process of changes that took place because of the feedback from earlier versions of the training.

Table 43 – What areas of the training did you find most useful.

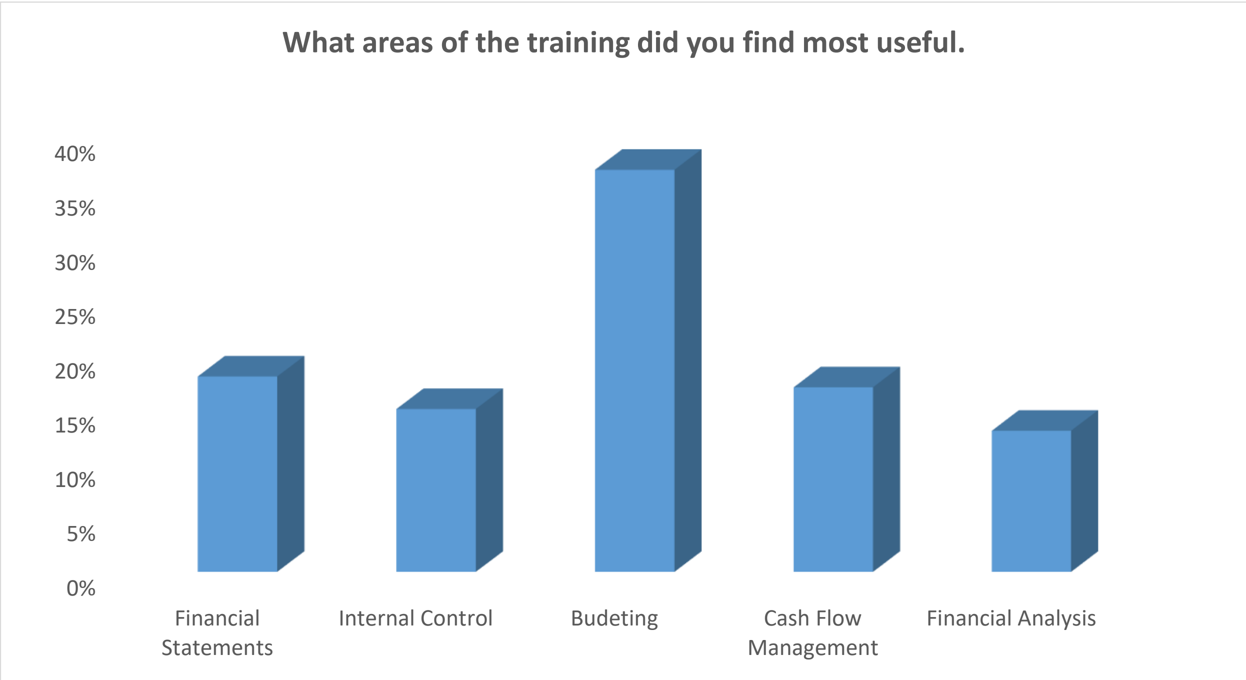


Table 43 Analysis:

These results are a little skewed as one of the training days was a Budgeting only course, each delegate could make more than one choice. But overall, it does still show, as in the earlier iterations, that the key areas of budgeting and financial statements are the fundamental areas that the delegates do find most useful. Follow up interviews outlined later, and identified in previous iterations, do suggest that this due to the duel reason of that these are key areas people need to gain an understanding of for their role, a management accounting contingency need, and the realisation that when they are trained in this area they realise that this concepts and techniques covered are fundamental to having a basic understanding of financial management. So there is a basic reaction that they have gained something very important, even if they didn't realise that importance before the training. The other areas are still not seen as important as these two fundamental areas and that does suggest that more needs to be done to highlight the importance of these areas to financial management and to show their applicability to small enterprise financial issues.

Table 44 – What areas of the training did you believe you are most likely to use in your workplace.

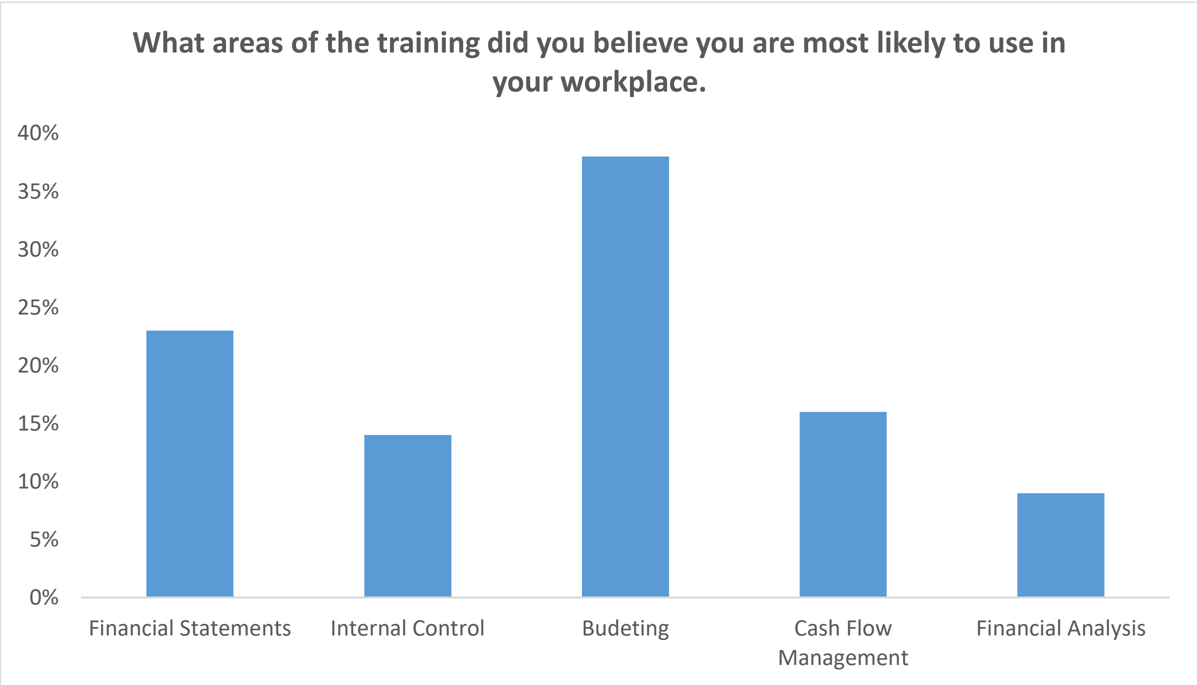


Table 44 Analysis:

On this question the respondents were allowed to make one choice. Again, the results may have been skewed by the fact one of the training days was dedicated to budgeting exclusively. Follow up observations and interviews would give clarity to these questions. But overall, the results show that it is the area of that most people believe they can adopt. Again, financial statements fugues highly as well. There can be two assumptions made about this at the third iteration: one is that this is the area people have a work need that must be met and that budgeting is now delivered in a way that is very relatable and easily seen to be applicable. This is a direct result of the iterative process that has made it this way. Cash management is now scoring higher than earlier iterations, and this is also because of the modifications made based on the feedback from pervious iterations that made it more widely applicable and relatable. For the last iteration of the training an attempt will be made to make these areas more applicable so that they delegates can more easily see how they can use these techniques in their job role.

The extracts from written responses from the questionnaires of the respondents immediately after the third iteration are set out below in table 45.

Table 45 - A sample of the participant's responses at once after the third iteration of the Training Programme.

I really liked both sessions (went to both the general and the budget session) and I feel I can make more of a contribution to the budgetary process as I understand the mechanics better, but I can also make more contribution to improve the budget process.
The section dissecting and analysing the financial accounts was interesting and highly informative. I am in a much better position to understand the company accounts now. I am not sure cash management is entirely relevant, but it was extremely useful to have this information and knowledge.
All the training was good; budgeting information was excellent and there are ways of doing budgeting I will certainly employ. I found the first section on the Financial Statements a bit daunting. I am no Accountant, so I could not really get into this. The cash management

section was more approachable though.
Overall, the training was particularly good, and I really enjoyed the group work where it helped to combine what was taught and it was a good networking opportunity.
The budgetary course went into just enough detail for what I needed. It confirmed what I knew through background research and gave enough new things to try out as well. I wish I had gone to the general course as well, I will if it is running again.
The section on strategic analysis was very well done and combined all of what was taught before. I have to say I did not think that cash management is really management level training we should all know the importance of good liquidity, and this was more focused on the techniques.
I enjoyed the training, and it has certainly made me feel more confident about Finance though it is only a small part of my job role.
Overall, as the manager owner I need support with financial management as I cannot afford anymore fees for Accountants as I pay my Accountant to do my tax returns. So, this training is excellent for giving useful tips on how to name ways of improving the financial status of the business.
I enjoyed the course, and it was great to speak to other small business managers who are in a similar position to me. There did seem other people from not for profit, so that helped for me to relate to them.
The budgeting course was of great help, and I wish I had been able to go on something like this months ago.
The first part of the training was remarkably interesting but as I work for a charity our accounts are slightly different from standard accounts, so I really needed it to be more focused on that, but I appreciate the course is open to all. The other sections like budgeting, ratios, cash forecasting were of good general interest.

The budgeting section was exceptionally good and extremely helpful. I am sorry I missed the budget course due to the work pressures, but I will enrol onto the next one.
The overall budgeting and specifically the cash budgeting will be of help for our business. I will need help to see how I can specifically use these new things, but we have people in our business who can help me, but I do feel more empowered about finance after this training.
It was a bit of a long day, but it was particularly good free training and should be readily available to small businesses, especially such as a new small business.
Incredibly good training and very focussed on what we need.

Table 45 Analysis:

At third and penultimate stage of the course development cycle the content and structure of the course are beginning to really meet participant's expectations and training needs, at least in the immediate aftermath of the training as in their first impression. To repeat these questionnaires took place at the very end of the training day, the last task before the training was closed. There have been significant modifications to the course since the first iteration to make it more relevant to the general body, so it is encouraging to see this is paying dividends. The feedback is still showing that the areas of budgeting and financial statements are the areas that delegates see that can be used in their work roles but other areas such as cash management are also beginning to increase in relevance.

It will be interesting to see how these transfer into actual adoption when assessed in the six weeks plus surveys and the interviews about overall so far, the course looks to be relevant to the delegates work needs including the new stand-alone budget course. But overall, the design of the course does seem to be nearing best level in terms of perceived effectiveness.

Table 46 – Summary of researcher's contemporaneous notes observations during the third iteration of the training sessions.

The delegates were split into groups for the Financial Statements session after the first briefing. People were grouped based on the type of organisation they worked for with those that were stocks and credit based grouped to go through accounts that were relevant to them, and those from more service orientated organisations going through financial statements that were more relevant to them. This first part of this session had all the delegates together with a Q&A after the descriptive part of the session. There was good engagement and participation in this section with a high number of questions asked. **Initial Conclusion:** The section on Financial Statements review is still a part of the course that the delegates find particularly important and as such they are very engaged. The putting the delegates into groups so that they work through financial statements that were relevant to their organisation worked very well and there seemed to be substantial discussions taking place. In groups one or two people dominated discussions and this could be worse in a large session. But the positive from this happening is that it does tend to be people who have more experience who dominate the less experienced. But by segregating people like this it reduced the negative feedback about this section in earlier iterations that was due to the content in this section not being relevant. Overall, the session went well and the structure and duration as it is now at the best level for a training session with delegates from cross sector organisations.
The section on Budgeting was a bit different as it had its own dedicated training day in this iteration as well as and this was exceedingly popular and very engaging. People contributed to this section and group discussion were lively and provoking. There was a degree of peer learning, both formally and unstructured. All the aspects of this section were applicable and relatable to everyone. This was a good section and speaking to delegates

they said they wanted to go into it deeper. It was mentioned there was a separate training day on Budgeting, and delegates seemed interested in attending. **Initial Conclusion:** This section was very well received, and the delegates found the session useful. Indeed, there are those who would go on to enrol on the Budget only course. There was peer learning taking place and in future sessions. As with the earlier iterations this makes this section remarkably effective as the delegates share their experience to each other. This also helps delegates to instil confidence with each other which does seem to be highly effective. The budgeting section, whether it be part of the main course or the single dedicated course, seems to be very well received and does meet a contingency financial management need as budgeting in all its forms is the type of work that the targeted persons for the training, non-finance managers in small enterprises, do at some point in their working year. There is truly little to evolve and develop with this part of the course
The next section on Financial Control was undertaken as a whole group. The third attempt at this section was the best done so far as there seemed to be the right balance between calculations of the ratios that are used for financial control and the analysis aspect that is essential at the managerial level. The duration spent on this section seemed correct. I sent the delegates a spreadsheet with the ratio calculations afterwards so to help them with how to calculate the ratios. **Initial Conclusion:** This section was well received, and the delegates found the session interesting and seemed to realise that these simple techniques could be extremely useful to their job roles. The use of the spreadsheets with the ratio calculations helped to make this section less ponderous and more interactive.
The section on the cash management was very well engaged and people enjoyed it as was the case in the earlier two iterations. Interestingly very few people say that they do credit

control, but they do enjoy it. But as the purpose of the training is to provide useful financial management skills that can be deployed at the workplace then there may be a need to scale this section down or remove it all together as said the average delegate does not tend to use this kind of work. The higher-level cash management sections are much better engaged with in that more people can see the importance of this work and therefore it is better utilised.

Initial Conclusion: This section was well received and encouragingly the higher-level cash management section went well. For the next iteration need to scale back on the credit control element that though delegates enjoy does not have relevance to their work. The cash management section was better done as the relevance was emphasised and that this may be the answer to gain better engagement and as such better adoption.

The last section on financial analysis was at the end and as noted in previous iterations there definitely seems to be a split between more experienced managers / owners who this is exactly what they have enrolled onto the training for and they want to talk more on the strategic aspect of their organisations and how and less experienced staff who can't quite relate to this element and want to focus on the more perfunctory operational element that the financial management information can help them with.

Initial Conclusion: Still can't seem to get away from this split between people who are very engaged with this section and basically say this part of the course is key to them and those who cannot seem to relate to it as they don't work at that level even though they classify themselves as Managers. One solution is to try a dedicated Financial Strategic management course only. But for the final iteration of the programme will keep it in the main course and try case study scenarios that will ease the importance of this work for using financial management information to enhance the financial wellbeing of the

organisation long term.

Discussions on the immediate post training conclusions – Third Iteration.

There has been a marked improvement in the immediate post training reaction to third iteration of the training programme than earlier iterations and that it has been much better received. There was the added dedicated budget training day that also was very well received. But the impression was that all the training was overall well received.

Emphasising how the techniques and the concepts relate to small enterprises sustainability is key and this seems to have a very positive reaction on the delegates so that there is natural improvement in engagement and critically a real attempt from them to find a way to adopt these techniques. In a way it is a form of revelatory adoption recognition of the training.

The increase in group work really seems to be paying off in term of a learning technique and to allow discussions amongst the delegates. This also is increasing the likelihood of adoption as the delegates discuss amongst themselves how they use or would use the work taught. This is an interesting development that was found in earlier iterations. By allowing more group work and importantly using case study examples that incorporates the techniques and concepts just explained helps to show how to adopt what has been trained. This is something that will be kept and progresses into the last iteration.

It is still somewhat of a concern that the financial strategic analysis section is quite polarising, but it is hoped by bringing it all into a single case study will improve this and this will be tried properly in the final iteration.

4.11.4 The post training course feedback, six weeks plus after the <u>third iteration</u> of the training programme.

After six weeks plus post training of each iteration a final questionnaire was completed, and interviews conducted to assess actual uptake of the techniques. This was principally to measure the level of adoption or the likelihood of adoption of the concepts taught in the training.

The key six weeks plus after the third iteration of the training was to assess how much of the positivity that existed at once after the training transferred itself into adoption of these techniques.

Responses six weeks plus after the Third iteration of the Training Programme.

Table 46

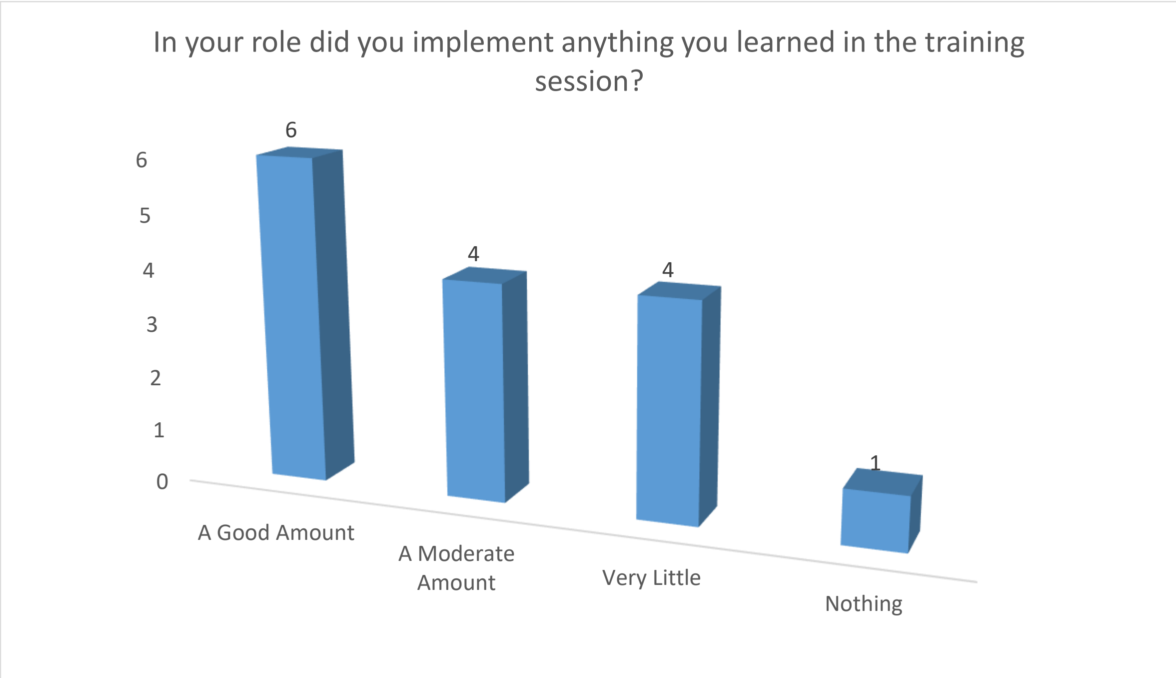


Table 46 Analysis:

There is a marked improvement in the number of people who responded that that had adopted what was taught, or at least one item from what was taught when they were surveyed six weeks plus from the training.

What parts of the course they adopted and to what extent was flushed out in the latter questions and with those that agreed to be interviewed. But all the people who attended the course managed to gain something from the training that they could use in their workplace.

Table 47

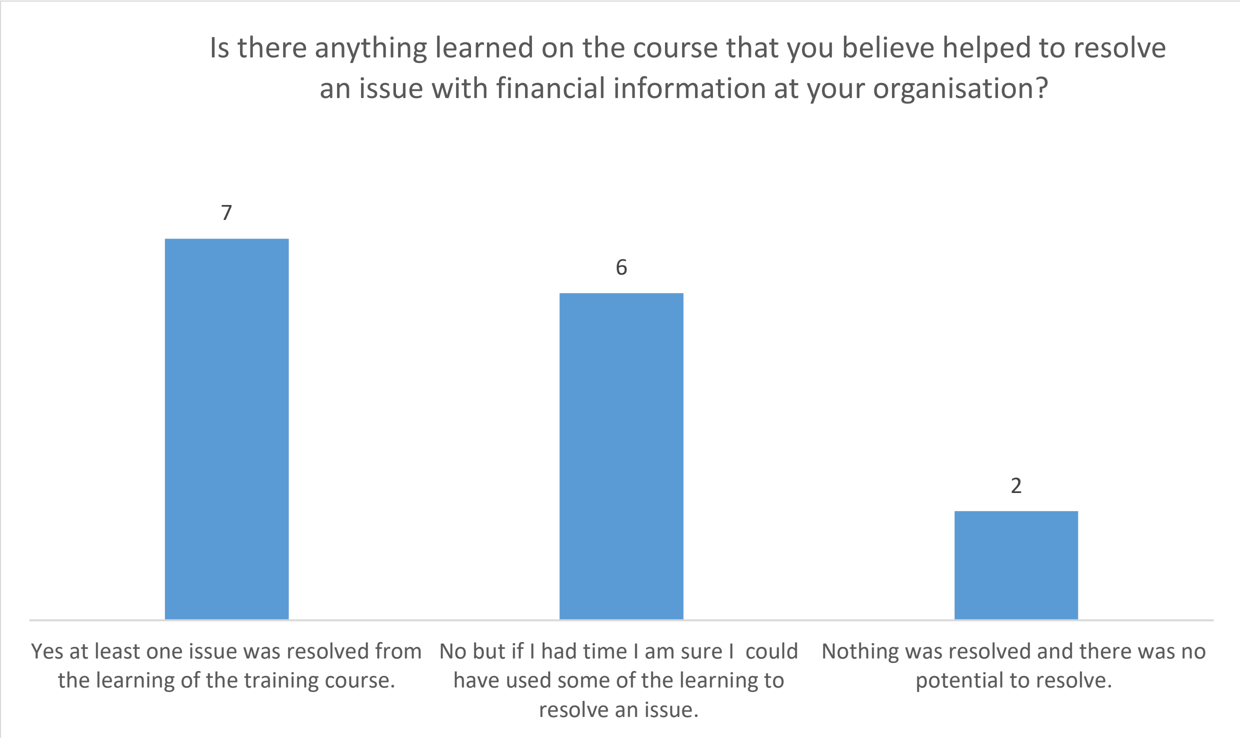


Table 47 Analysis.

Again, it is encouraging that around half of the delegates who attended the training believed that they resolved a work issue using at least one financial management information technique taught during the training.

Discussions in relation to the responses six weeks after the <u>third iteration</u> of the sector wide training programme.

Results from this questionnaire suggest that the level of adoption is materially higher than the earlier iterations and that the contingency theory of management accounting is a significant key consideration when designing the financial management training courses. This is because if financial management training courses can be designed for small enterprises that meet the needs of the organisation for financial management information that will help to meet a work information need then quite simply it will have a higher chance of succeeding in being adopted.

Many of the respondents still indicated that they would use the information if they had more time and resources, but this seems to be a different issue in relation to providing financial management information that they could use to resolve a work issue if they had the time to do so.

Overall, it would suggest that the contingency theory of management accounting applies as said to create an effective financial management information course but there must also be potential absorption capacity to allow implementation of the techniques and concepts trained and taught.

But initial assessment of the post six week plus of the training would suggest that the adoption is improving and that the training is meeting the needs of the trainees.

Table 48 - A sample of the participant's responses six weeks plus after the <u>third</u> <u>i</u>teration of the Training Programme.

I said at the time the training matched what we needed and that it gave us a grounding to develop the information we could use to improve our business
The training was good, and I have changed the way I reviewed our accounts as a result. The budgeting section confirmed what I was doing anyway so I have not changed much to our monthly review.
I really felt the opportunity to network with others at the training who have similar roles was invaluable and I have stayed connected with a couple of people to share ideas and knowledge.
We have been reviewing our budgetary process, so the budgeting course came at the right time. As we are a small business, we had the opportunity to try out something completely new so we adopted the zero-based budgeting approach that was covered in the course, and it has led to us identifying some cost savings and even a small amount of savings will make a big difference to our bottom line.
I enjoyed the course, but I will need to attend the budgeting course to gain more information to able to use the budget. I have reviewed our cash management process to see if improvements can be made there.
The ability to understand our financial position better by going through the accounts in more careful detail is immensely helpful with our grant bid process. We are going through a bid now and we can comment on our financial position better.
The internal control calculations were easy to follow and the spreadsheet you sent out afterwards really helped. It has revealed surprising results in terms of comparing our performance with prior years and areas where we need to improve.

I am sorry I did not get a chance to use anything from the training, but I did find it useful in making me feel more confident in the work I am already doing with finance.
I found the whole training incredibly useful and wished we have more access to this type of training; affordable and focussed. It gave me a complete review of how we did our finances at our small business. I rely too much on my hired Accountant to present to me the accounts and I do not feel I am any information that allows me to assess ways of improving the business. After the training I am setting in motion methods to find savings and opportunities.
I did not really get a chance to use anything specific, but I do understand the company's accounts better now.
The budgeting and financial control parts were helpful, and it helped me have a better understanding of these parts of my job that is becoming more important.
I was very keen on understanding the charity's accounts and though the training did go through charity's financial statements it did not go through it in detail which is understandable as it was training for people from all sectors. So unfortunately, I have not been able to use what was covered on the day.
I really liked the budgeting course, and I have my notes ready to refer to for the upcoming budgeting period.
I am a Marketer, and I was surprised when I was hired by the charity that I would have to do finance work, mainly financial management work when I clearly have no experience in this area. So, this course was a God send. I have used all aspects of what was trained. Even if it is just a little of everything the added knowledge is certainly appreciated.
It was great working with others in the same boat as me. I am not sure if it were coincidence but the other people there at the training worked for charities as me so we could share ideas on how to produce tighter budgets based on what we covered in the

sessions.
I valued the Budgeting course very much, especially as it was free. But I think I should have attended the general course first as I am a bit lost on where the actual values are derived so I did not feel comfortable with changing our budgeting process because of the training. I will enrol on the next Finance for Non-Finance Managers course.

Table 48 Analysis:

The short-written responses from the questionnaire six weeks plus after the third iteration of the training programme show a sustained good consistent reaction to the training that was first shown in the immediate post reaction questionnaires. The feedback confirms that the training is now being delivered in a way that allows people to adopt and use at least what they have taught in the training.

There are still comments on the training being not completely relevant, especially in relation to the financial statements section. This is especially the case in this iteration as the many of the delegates came from the charity sector as a government agency has started to refer charity delegates to this training even though it was not promoted as being charity specific.

But overall, it is encouraging that people are now using what is taught even if it is a small amount or even if it has result in them being reassured that what they are doing in terms of financial management is correct.

Table 49 – Summary of interviews of participants of the third iteration of the training programme, six weeks plus after the training.

As explained in the methodology section 3.2 only two people were interviewed from the sixteen who took part in the third iteration of the training and responded to the questionnaires. Both were interviewed online. It was disappointing that only two people agreed to the interviews even though it was offered online.

Below is a summary of the main conclusions of the interviews that, as explained in the methodology section, was sent to the participants for confirmation and clarification. The following are the final verifiable versions.

Interview 1:

Interview date: 14th July 2023. 1530 – 1630. Online **Role:** Fundraise Manager for Small Charity – responsible for fundraising, managing grants and managing two sales teams. Overseeing the fund applications for the two main areas that provide service to. Collaborating with a General Manager. Up to 80% of job is doing critical grant funding work, more finance responsibility due to managerial changes. She well placed and has the authority and autonomy to implement anything taught in the training.
Background of Training No formal training apart from a business module that has finance elements taken during her social science degree taken years before. Has been invested in by her organisation to up skill so evidence of potential absorption capacity.

Also, there are clearly contingencies that has resulted in her looking for more training as needs a better understanding of the charity's finances to pull together for grant funding, as the competition for funding is so fierce now.
Training Feedback Felt the training was particularly good and noticeably clear. The budgeting course that she attended gave invaluable insights on how she can improve the budgeting she undertakes for major fund applications. The financial control element she said was an unexpected bonus in that she learned from this. She is using these simple techniques to check the performance the two activities of the two sections she manages. There is a question of whether these areas are performing at best level and whether they put too much slack in their budgets so she will use these techniques to evaluate their performance. Though she attended both the general course and the budgeting course she felt the level of budgeting in the general course will be enough budgeting for people in similar positions to her, the target audience as the level of budgeting in the general course was quite extensive as it was for people with her background needs. Does feel the networking is a real bonus to the training but also feels that it would be more effective if the other delegates were working in the same sector, for her the charity sector. But she thought the going into separate groups based on what industry you worked in was a good idea, but it did lead to a clique / silo feel to the day, with people sticking to the people that were within their sector groups. Overall, she thought the training was good and remarkably effective in providing work-based financial management training that could be easily adopted and be used to help to improve how financial information is used within the organisation.

Interview 2:

Interview date: 20th July 2023. 1100 – 1200. Online **Role:** Administration Manager for Small Charitable Enterprise. Working under Section Supervisor. Up to 50% of job is doing finance work. He has the authority and autonomy to implement anything taught in the training to an extent, and he would have shown the benefit of using this new financial information and whether it was worth it. But overall, there is discernible potential absorption capacity.
Background of Training Did Level 2 and 3 Business course that had finance topics covered and assessed, but that was more than ten years ago, so does not feel has satisfactory and right training for current role. Encouraged by his organisation to up skill so evidence of potential absorption capacity. Again, there are clear contingencies for management accounting information that he hoped the training will help top resolve.
Training Feedback He really enjoyed the training and felt the one-day course was more productive than the part time business course he did years ago. He felt the structure of the course was right and it was obvious that the right emphasis was made on areas that people would feel would offer the most value. But also, there was enough of the key essential areas finance management studies was covered to meet the basics. He says that the financial control and the cash management sections are areas he has being using since the training and he has incorporated these into his work. He also found the strategic financial management section highly informative, and it was something he felt he would like to know more about in the future as a better understanding of this area could help him to make more of an impact on the performance of the organisation he worked for. Would very much want to go on further courses of similar nature.

4.12 Main learning points from the third iteration of the financial management training courses.

Quite extensive changes and modifications have taken place to the training course, the main course, since the first iteration first delivered over six months previously. There is a significant emphasis on explaining and empathising the applicability of what is taught and a focus on what it is the target audience, non-finance managers who work in small enterprises but who work with finance duties, need for their work roles. This has been achieved by undertaking the course design iterative process set out in the methodology which at this stage is quite far advance with.

The main learning points from the feedback of the <u>third</u> iteration are the following:

- Most delegates, if not all, are motivated to attend the training to gain an understanding of a specific financial management information need(s) at their organisations. There is no question the contingency theory of management accounting applies when designing financial management training for small enterprises. People from the targeted subgroup do not tend to seek finance training unless driven by a work related need to gain that training.
- The separate dedicated budget course was not as well attended as expected and there could be a variety of unrelated reasons for this. But there was also feedback that the added elements that were covered in the dedicated budget course were not completely necessary as the level that of budgetary training that occurred in the general course was sufficient and relevant.
- The group work undertaken during the training was very well received and the idea to separate the groups based on what sector they worked in was good. There was

feedback that this helped people to understand how they could apply the knowledge to the work situation and hence increase the likelihood of adoption of what was taught.

- The level of uptake of what was taught six weeks plus post training is high, though in further investigation people only used extremely limited aspects of what was trained. But for the purposes of the research this is acceptable as the whole objective of the research is to develop financial management training that is effective in at least providing something that the delegates can take back and use in their work roles to the betterment of their organisations. And this is happening to a greater level than the earlier iterations, so the process is working.
- The strategic financial management section still does not seem to be widely appreciated though the delegates, the minority, stated that this is the most valued aspect of the course. This tends to be the more senior in terms of job roles who say this. The temptation is to offer this area as a separate course, but this was not successfully done with Budgeting in terms of attendances, and it is questionable if this would add value to the process.
- The cash management section is still valued but it is time to scale back on the credit control section as it takes too much time and very few of the delegates work in this field. It also distracts from the overall importance of cash management taught.
- Plus, in terms of the trainers' observations practically all delegates gained from the group work attached to this work in that they learned from the experienced senior staff insight to strategic thinking, and in that though not entirely relevant to the current careers is beneficial in giving them insight to their future financial information decisions. On that basis it is worth keeping this section and continue to emphasise the overall importance of this type of financial management information.

4.13 Reflections and Discussions from the third iteration of the financial management training courses.

The next major element of the findings to be reflected on and discussed in relation to the emerging relevant theories in literature is the fact when asked what the main motivations are for enrolling a majority responded that it was to resolve financial management issue(s) at the small enterprise. This is reflected in the results of the questionnaires for all the iterations including the third iteration.

Cross referencing with the literature to find any theories in relation to financial management used in the work place the closest theory that can explain this revelation is the contingency theory of management accounting.

The principals and the concepts attached to the contingency theory of management accounting are covered in the literature chapter, sub chapter 2.7.1.

Contingency theory of management accounting has been used to explain how accounting systems designs must adapt to environmental contingent variables to that helps to achieve good financial performance within the organisation, (Gordon and Miller, 1976). These contingencies decide for what purpose the accounting information is used. Therefore, specific management accounting techniques adopted are dependent on the circumstances they are been used and needed for, (Otley, 2016).

Reflecting on the feedback results where most of the participants of the training programme state that their main reason for enrolling onto the financial management training programme is essentially to help with new or increasing or more complex financial information needs of their organisation, then the contingency theory of management accounting must be a consideration in the design of work-based financial management courses.

What is the basis of arriving at this deduction based on the literature evidence? Firstly, as explained previously the content of the training programme used the principles of management accounting as the main basis of the courses. Management accounting practices are essential to improve performance as they act as a mechanism for control and motivation by focussing the enterprise on the need to define objectives, provide controls, establish strategies to address deviation from objectives by resetting targets and providing feed forward information highlighting inefficient behaviour and providing quick resolutions to these deviations, (Otley, 2016).

There is a vast array of management accounting techniques that all organisations, including small enterprises, can adopt to meet their needs. Management accounting is not mandatory for organisations and unlike financial accounting there is no hard-set standard to adhere to with management accounting. In any case, there are management accounting techniques that will not be relevant to all small enterprises such as those in relation to inventory control. But even though management accounting is not always relevant, it is a highly effective tool when there is a high degree of environmental uncertainty that needs a form of quantifiable clarity, (Botes, 2017). In addition, the management accounting information used by organisations needs to be adapted to what is needed to support them with more insightful decision making in relation to new commercial pressures that have affected them. If it is adaptable then it is appreciated and highly valued by managers, (Kelly, 2016). Management accounting in general cannot be explained on a purely functional level as it overlooks the importance it has on the way strategic decisions are made by shaping organisational motivations and influencing the co-ordination of intentional action within the organisation. These are based on organisational motivations and emerging influences. In fact, management accounting and organisational aims are interdependent, (Ahern, 2007).

So, literature would suggest that management accounting is used selectively in organisations and that the key to understand what management accounting techniques the organisation uses, or needs, is to try and show the ‘organisational motivations and emerging influences,’ of the small enterprise. It would seem logical to adopt the approach of including questions in the pre training surveys to ask the participants of the training, not specifically what the management accounting techniques do they need, their understanding and knowledge of management accounting is limited so they not be able to do this. But to include questions of what are their ‘emerging influences’ in relation to their organisation and ‘environmental needs.’ From these answers the trainer should be able to show the management accounting techniques to be included in the training programme that could address these emerging needs.

Literature states that if the small enterprise managers were shown the proven benefit of new management accounting information, they would be inclined to adopt it to improve the internal financial management of their organisation, (Zeitz, et al, 1999). Therefore, the training provider really needs to tell the small enterprises what management accounting techniques they need by including these essential core elements into the course and then train them in those management accounting techniques. By providing these management accounting techniques that the small enterprises need to respond to their emerging environmental influences then the management accounting training delivered will be more likely to be adopted. This means that the contingency theory of management accounting is an applicable theoretical consideration when designing financial management training for small enterprises.

A further aspect to this that needs to be reflected on and discussed is the process involved in showing these key management accounting concepts that are needed to be included in the training programme to enhance effectiveness. It was seen that in the latter iterations of the training programme the level of adoption was increased significantly. This was because the management accounting techniques that were taught were more applicable to what the trainees needed to meet their environmental financial information needs, the essence of the principals of the contingency theory of management accounting.

But to find those environmental needs an iterative grounded process was undertaken to adapt the training programme and customise it to include these key applicable management accounting techniques. The post feedback data showed that this process was successful.

4.14 The fourth iteration of the financial management training courses.

The fourth iteration of the training took place in October 2023 to February 2024. The training was adapted from the first three iterations. They were specifically adapted from the third iteration based on the conclusions from the feedback from this iteration. These are summarised here:

- The training should be continued to be aimed at management level of people who work in small enterprises and who do financial management duties, but have had no real financial management training. Still finding that people who work at more junior levels are not as engaged as more senior people.
- There is also a noticeable reduction in the potential absorption capacity of junior participants. This would reinforce the conclusion that it would be better to gear the training to more experienced management staff from small enterprises as there would be greater opportunities for the adoption from the training. Lower-level staff can still receive help from the training, but as part of their professional development as they probably will not have opportunities to implement what they have been taught.
- For the Financial Statements section, the placing in groups based on the sector they work for should continue. This seems to work well and reduces the risk of areas of financial statements being covered that are irrelevant to the delegates. However, it can lead to the delegates feeling remote from those who are not in their group so will reduce the amount of time they work on their group work and pull the groups together as one group sooner to encourage whole group discussions which can be especially useful.

- The internal control element was better received, and this was down to a pre prepared spreadsheet being provided to the delegates that allowed the delegates to calculate the ratios much easily and so spend less time on the calculations and more time on the important analysis section. This will be continued for the fourth iteration as considered successful for the third iteration.
- Will continue with a separate dedicated Budget secession as those who attended during the third iteration highly valued it. The main issue with it was it was not well attended. For this occasion, there will be more information sent out through the partners to promote the separate session. Another thing that will be changed will be to have the general course first and state to anyone who wants more in-depth budgeting work to enrol on the budgeting course. This was a practical oversight from the earlier iteration.
- The Budget element of the main course now is fine and does not to be amended in anyway as the feedback from the delegates is overwhelmingly positive.
- The cash management section was better done, but as noted in the review notes need to reduce the amount of time spent on credit control and more time on the importance of cash management and the tools used to preserve and improve cash position.
- For the final section the Financial Analysis section this still tends to divide as mentioned in the review notes. For the last iteration again have a case study that brings all elements previously taught in the day but make it more high level but at the same time more easily understood so that delegates of all levels can understand and appreciate the concepts and the overall benefits of this type of financial information.
- For delivery there are opportunities for peer learning, the group work is remarkably effective and will continue to the fourth iteration of the course. However, the right

balance has now been reached between whole group discussions and whole group work.

These were the examples of the changes and modifications made to the training programme based on the feedback from the third iteration. Other changes involved changes to timings of each section and based on the relevance to the financial management issues at work and to improve uptake of what was taught.

These overview learning and development points gained form the third iteration were used directly to structure the fourth and final iteration of the financial management for small enterprises training sessions.

However, the overall number of changes that occurred were much less than between the previous iterations, which is a positive thing as it proves that the development and build of the programme based on the previous feedback is working as the positive reaction post course is increasing and the key measure of the level of adoption is also increasing.

Important Note about the Fourth Iteration of the Training Programme.

It was decided that the fourth iteration of the training programme to be sector focussed, as in only have delegates from small charities. This was for two reasons; one was based on a theoretical approach and the other on a practical opportunity.

The theoretical reason for delivering the training to delegates only was that this would eliminate any of the material delivered during the training day that was not relevant, as it has already been shown from the feedback that much of the financial statements section of the training, that overall that combines the financial control section as well as the analysis of financial control uses the financial statements, in total entails around fifty percent of the learning objectives of the training programme. The financial statements for Charities are specific as there are specific elements to Financial Statements that are unique to charities, so it would be much more effective to be sector focused.

The practical considerations are because that most of the delegates of the fourth iteration were from the charity sector. This was because two Scottish government agencies who support Scottish Charities wanted to use the training as a way of supporting the charities they stand for. They also said that there were people who would be enrolling on the course and would accept taking part in the research process.

For these reasons, the training days that took place October 2023 to February 2024 drew people from the Charity sector only. This allowed and assessment of the effectiveness of the financial management training programme for small enterprises when it was sector focused as opposed to when it was not in earlier iterations.

As mentioned in the methodology section there were three different sessions, one being a budgeting only session, over four months with a total of twenty-seven of the people who attended fully participating in the feedback process, but only three people agreeing and participating in an interview.

The summary of findings of the <u>fourth</u> iteration of the training appears below.

4.14.1 The pre training course questions (Fourth Iteration).

The pre training questionnaires for the fourth iteration followed the same pattern as the first three iterations: they were sent to all the people from small enterprises who had enrolled onto the training days before the event. The questions were the exact same to those of the pre course questionnaire from the first to the third iteration. The only difference on this iteration as mentioned is that all the participants came from small charities. There were twenty-seven people who attended and took part in the feedback process.

Table 50 in the questionnaires asked the participants what there is role within their organisations:

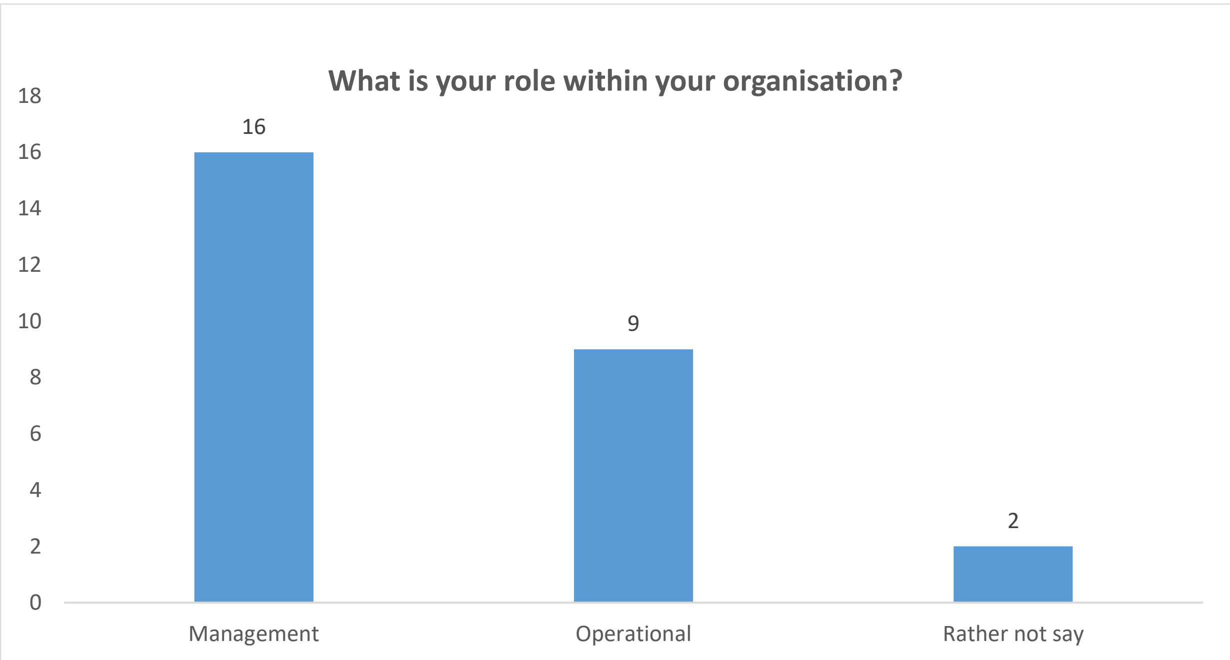


Table 50 Analysis: as with the earlier iterations the participants are in management position, so the course is geared to non-finance managers who undertake finance work and that the training needs to be more strategic based. There are some more people who find themselves within operational level category. The course was advertised as being aimed towards managers who work in small charities and who undertake finance work. On further investigation the people who identified as operational do undertake managerial work in relation to the financial management work, they do.

Table 51 in the questionnaires asked the participants if they had any earlier financial training.

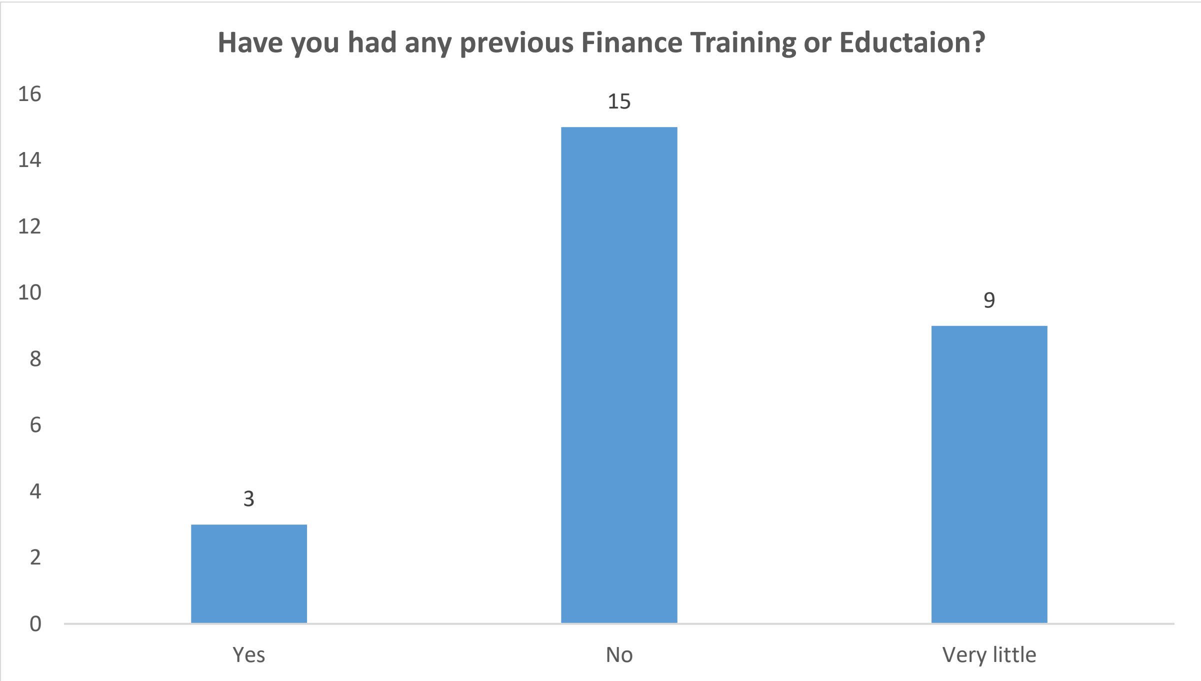


Table 51 Analysis: As with the first three iterations, the respondents have in general no prior finance training. Though more than earlier iterations have prior finance training, with 44% saying that they have had finance training. Whether this is because the training is only open to a particular sector, the Charity sector is something to be investigated.

Table 52 shows the responses to the question if the participants undertake finance work in their current roles.

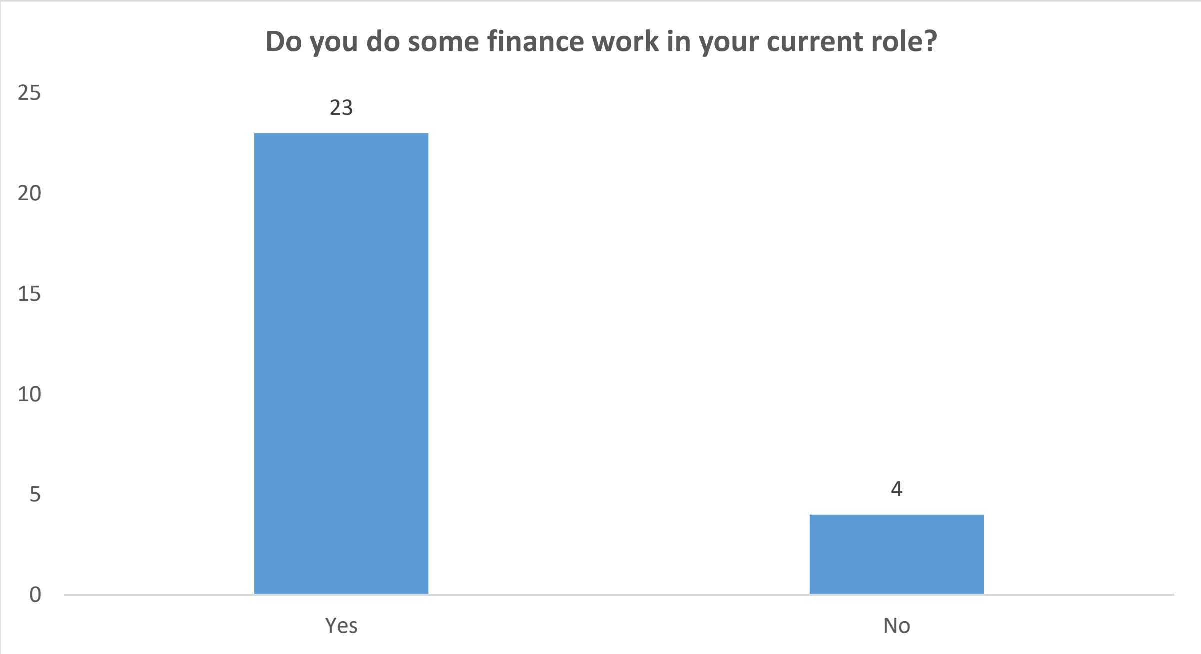


Table 52 Analysis: The course has been promoted as being for Non-Finance Managers who work with Finance in their roles. This allows the course to be aimed at people who are not coming in with no idea how Financial Management works. This course is not really for people who want a starter course, but the course is structured in such a way so that anyone with no experience working on Finance or Accounting should not be too lost.

Table 53 is the responses to the questionnaires that asked the participants if there were any specific work-related issues that made them seek financial management training.

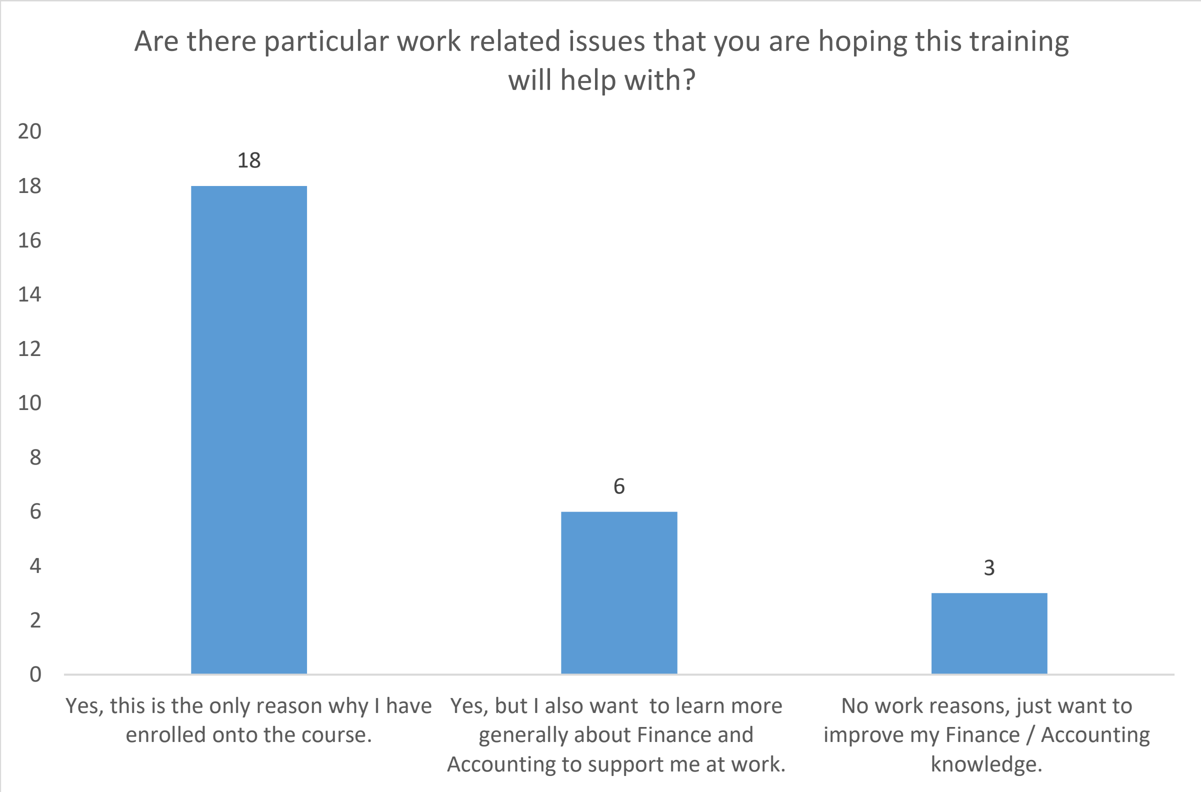


Table 53 Analysis: the responses of the participants from the charity specific fourth iteration of the training sessions of this query. These participants were asked immediately prior to the fourth training programme if there are specific work-related issues reasons for enrolling onto the training programme.

Sixty seven percent of the participants showed that there was a particular work-related reason to be resolved for wanting to enrol on the course and that this was the only reason for enrolling onto the course. Another twenty two percent said that there was a work-related issue that they hoped the training would resolve but they also wanted to have more general finance training.

As with earlier iterations it is obvious that contingency theory of management accounting does apply when structuring financial management courses for small enterprises as the delegates attending are there to meet finance information work need.

Table 54: Does the organisation view the individual as being the right person to make the most impact within the organisation from the financial management training?

Table 54 Analysis: This would suggest that most participants have been identified as being the right persons to attend the financial training and therefore having potential absorption but also the organisation believe there is opportunity for realised absorptive capacity.

Table 55: Are you hoping you will implement the techniques taught on the course to the benefit of the organisation?

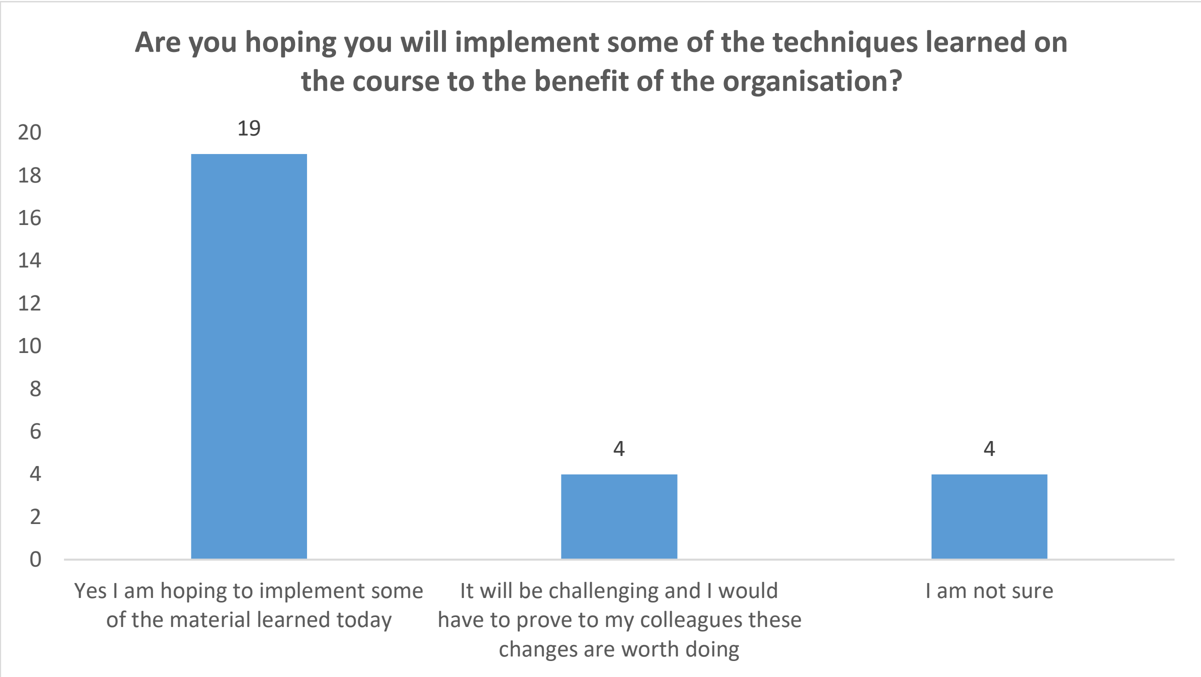


Table 55 Analysis: As with this question in the earlier iterations, this would suggest that the participants believe they have potential absorptive capacity and believe there is a potential for realising the absorptive capacity.

Table 56: Does your organisation hope you will implement the techniques taught on the course to the benefit of the organisation?

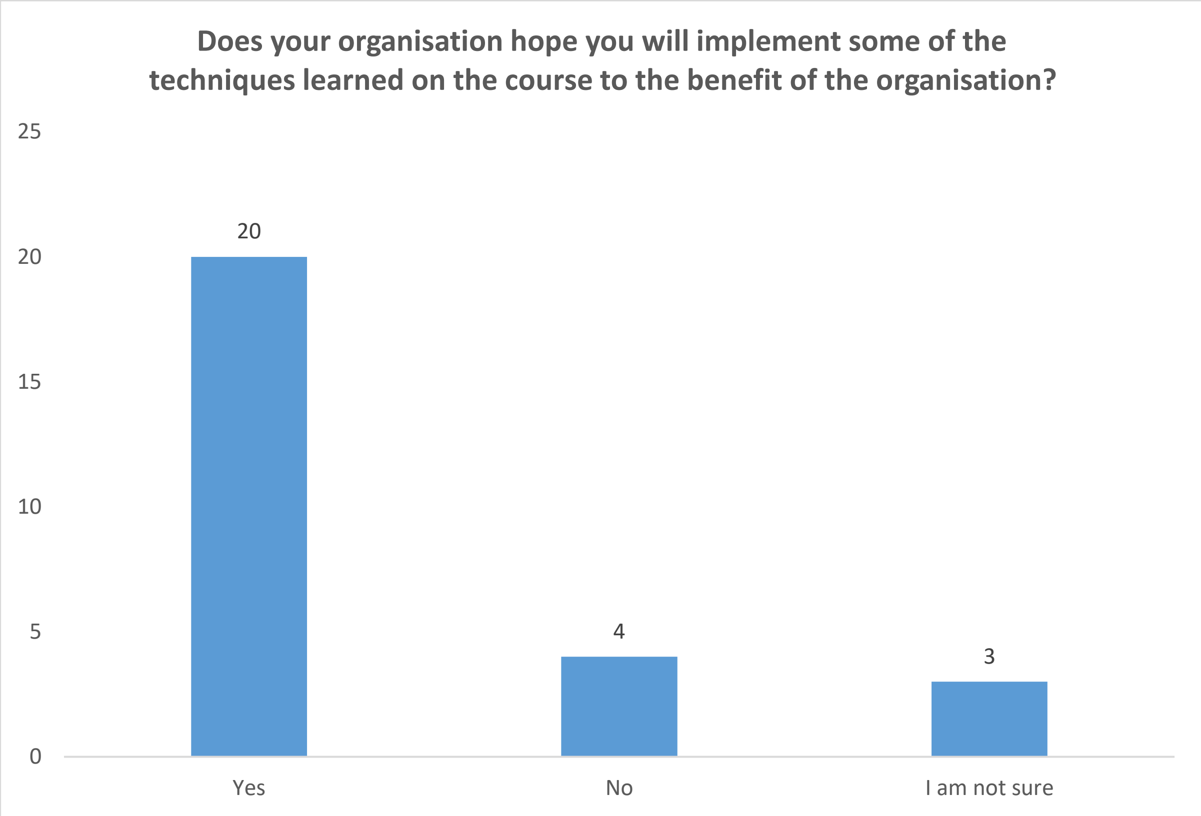


Table 56 Analysis: The number who want to attend the course that have been supported to come on the course is high. This could be based on the outline of the courses advertised proving that the material is more relevant to the work done by small enterprises and so there is a belief that relevant persons attending the courses can absorb material that can be used within the organisation.

Table 57 shows a summary of the responses from the pre training questionnaire that relate to what the training delegates financial information needs are. These interview responses were taken after the second iterations of the financial management training.

Table 57 – Responses from the Pre-Course Questionnaires – Fourth Iteration.

I have enrolled on the course as I recently took over the role as Treasurer for a local charity and there is no consideration of the new reporting requirements in the statements as they are.
I have come to this session today to build up my finance knowledge. But I also need more understanding of the new reporting requirements for charities in relation to restricted funds.
We are about to submit applications for funding for our essential projects. The charity needs to show that we are compliant with the new reporting regulations about restricted income.
I have come here to improve my finance skills as the new job I have taken in a charity involves extensive finance work. I have had finance experience in the past, but I needed a refresh.
I am looking for this course to provide me with added training in cash flow management as we are continually having to gain more funds to function because of cash deficits.
I have been asked to help put together a budget so I need to know how to do this, and I hope this training will help me.
I want to understand some more of budgeting, especially departmental budgeting now that I have taken over the management of a fund raising, we need to keep our costs under control and monitoring.
Cash management is a big problem in our business, and I am looking to this training to support me with finding a solution to our cash control.
I am hoping this will be a great course to combine the knowledge I already have. Though I have considerable experience with Finance I have never had any formal training so this will be especially useful.

I want to know about the basics of accounting as I have no training whatsoever and my role is increasingly becoming more finance based.
Finance is a big part of the role at the charity, and it is crucial that the budget is done correctly as funding is squeezed every year. So, this course will be invaluable to help improve the budgeting.
I recently started working for a small charity in Dundee and have been asked to help with their financial governance after they experienced issues with their accounts.
I support small charities with their finance, and I am hoping to find a tool that I can share that will be easy enough for them to understand. I also need to know more about UK Financial Reporting Standard; FRS 102.
As a trustee on a local charity, it is imperative to the success of the charity that the staff and trustees understand the financial position of the charity to make informed decisions. It is essential that I understand the new reporting standards for charities, and I hope this training will towards this.
I enrolled because it can be a tricky task to have good finances and understand the right techniques for workable finances in the third sector. It is important that I understand about budget monitoring.
The fact that this is a one-day course is great. This being to gain further insight and knowledge of sustainable financial control and effective budgeting.
As a charity that also runs as a business, I am hoping the course will be useful. I have no prior finance experience and no finance superiors to train me. I will be attending future courses of further training as I need to.
I am hoping to be more confident with the accounts of the charity. As a manager for a charity, I do all the finance work so this training will really help me with having a better

understanding.
We need to know how to improve our funding process so we can access more funds.
As we do the finance at the charity, we have come here today to gain a better understanding of every aspect of the course, budgeting, cash management and understanding the financial documents.
I need to understand how to find our excess costs in a way that keeps us going.
I am learning and training in computerise accounts, but I appreciate this course helps me understand the accounting in the computerised accounts.
To help me better understand our annual accounts and to get training on putting together cash flow forecasts/budgets.
I have no training in finance, but I have been doing the finance work for years in my family business. I need this day course to give understanding of what I am not doing right so I can improve.

Table 57 Analysis:

All the respondents worked for small charities with finance work forming a material part of their workload. As this fourth iteration was sector specific, being the charity sector, the financial management needs were overall, but not exclusively, specific to the charity sector. For example, one of the key training requirements for the charity sector in the fourth iteration of the training was for the UK Financial Reporting Standard; FRS 102 requiring Charities to have a “breakdown of the assets and liabilities of the charity between unrestricted and restricted income funds and endowment funds.” Therefore, the final enhanced finance training for charities covered the requirements of UK Financial Reporting Standard; FRS 102 and the implications of financial reporting for charities.

These responses clearly show that a majority of the respondents had a particular financial management need at their organisations that they hoped the training would address and as such the contingency theory of management accounting is a key theory to refer when developing a training programme for financial management for small enterprises, especially when the training is sector specific.

4.14.2 Discussions of the Fourth iteration of the pre training course survey.

The overall responses from pre training survey from the participants of the fourth iteration of the training suggest that there is more of a clearer indication than previous iterations that main reason for the participants enrolling and attending the financial management training was to deal with some financial information needs currently prevalent in their organisations. This will make the training more effective in the view of the participants if there is content within the training programme delivered that will meet the needs of the participants.

By analysing the pre training programme responses the course was adapted to meet the prevailing financial information needs of the participants, specifically including UK Financial Reporting Standard; FRS 102 and budgeting for grant rewards, both areas that can be classified as a contingent financial information need of the organisations the people who have enrolled onto the courses were needing.

4.14.3 The post training course feedback, immediately after the fourth iteration of the training programme.

The following tables summarise the training participant's immediate responses at the end of the training sessions of the fourth iteration and helped to shape a response to the conclusion of the iterative build of the training programme, as the fourth iteration is the final iteration of the build.

Table 58 - Responses at once after the Fourth, Charity sector specific, iteration of the Training Programme.

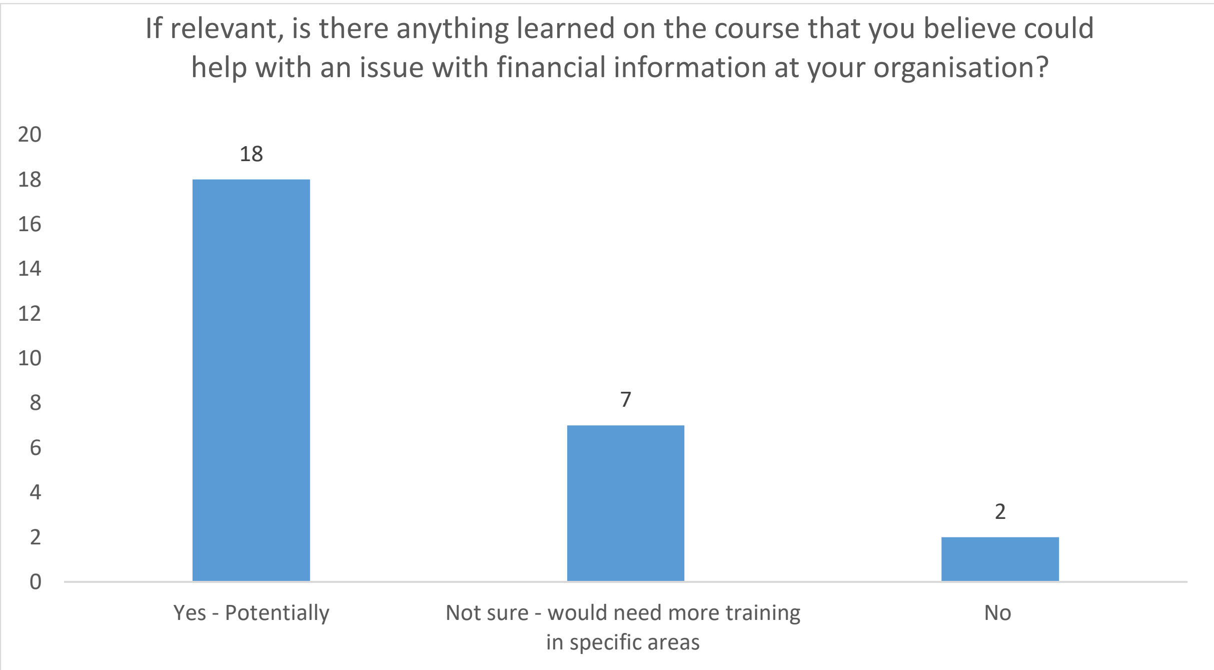


Table 58 Analysis:

Sixty seven percent of the participants believed that the training session would potentially meet a contingent management accounting need in their organisation, this is up from fifty three percent who said the same at once after the third iteration and up significantly from the first iteration of nineteen percent. Therefore, those who attended the fourth iteration believed immediately after the training sessions that there would be an opportunity to adopt and implement the techniques taught on the training course or there would likely to be. The training course has been adapted and refined in the fourth iteration to make it very customised to the training needs of the exclusive group who attended. Therefore, the adaption process at this stage of the development of the iteration process is successful.

Table 59 - A sample of the participant's responses at once after the fourth iteration of the Training Programme.

I needed to be able to read a set of accounts and understand what was needed to compile them. I have gained a greater understanding of the basics which will enable me to help the group I work.
I was hoping to gain enough knowledge on budgeting to help me with my job role of budgeting and analysing. I believe that I have gained enough from the training to help me with this.
I have responsibility for administering budgets for a Fundraising team and wanted to back up my on-the-job learning with good accounting principles and learn the language of our Finance team. So, this has been great for this.
This course was specific to what I needed.
Due to the cost and location this training is great. Working for a charity, this is a change of role for me, so the course was helpful.
For one to be effective in his or her job, adequate knowledge is needed. I trust I will gain useful information and the necessary guide from this course of training.
To have a better understanding of the key aspects of financial reporting for charities. How

to better manage cash flow and budgets. The course covered all of this.
Social enterprise in heading got my attention, as have few ideas on one project and I decided to enrol myself for the course to get more specific info. This course has been invaluable and has whetted my appetite for more similar type of training,
I was hoping to feel more equipped in managing the finances as the organisation grows and this becomes more complex.
This course taught me curiosity and potential for professional growth.
I do the finance work at my organisation and so I needed help with the key budgeting and financial analysis work I do. I would like to be able to implement what I taught today.
I help in finance matters at work and hope to take on more finance responsibilities in the future.
Needed to be able to interpret accounts to have meaningful discussion with accountant and be able to report correct position of business to directors. So, the first part of the course was exactly what I needed, and I was able to take on the other aspects of the training.
I can use what I taught today to help in forthcoming voluntary role as Treasurer.
I support small charities with their finance, and I was hoping to find a tool that I can share that will be easy enough for them to understand. But this course will help me and them.
I recently started working for a small Charity. My role involves understanding the accounts setting up a robust financial process so they can meet their legal & financial obligations. So, this course helps me with my new role.
I have a change of role and for support and learning. But not sure this training will help specifically but in general it will support my development.
I was hoping to have a better understanding of the key aspects of financial reporting for charities. How to better manage cash flow and budgets. This training has allowed that.

This course was recommended by work to allow me to have a better understanding of financial procedures for charities, enabling me to aid further with this at work. I feel it has managed that.
I recently started working for a small Charity. Part of my role involves understanding the accounts setting up a robust financial process so they can meet their legal & financial obligations.
To have a better understanding of the key aspects of financial reporting for charities. How to better manage cash flow and budgets. This course helped me with this.
Need to be able to interpret accounts to ask right questions of accountant and report accurately to other directors so I am hoping this training will help this, I think it will.
I was hoping to understand how to read and record financial records and to network and this was achieved.
I want to be able to have new learning and confidence in budgeting for my organisation. I am in that position.
I needed the training to help me interpret accounts to ask right questions and report accurately to other directors. I feel the training will help me do this.

Table 59 Analysis:

This fourth stage of the course development cycle, and the content and structure of the course was specifically aimed at a particular sector, the charity sector. The reasons why the course at this stage of the training development cycle was sector specific was based on the feedback from the earlier iterations that more sector targeted training would lead to higher level of satisfaction, understanding and potential adoption of the taught material to meet a financial management information need. This process of refining the training programme to make it more relevant was part of a wider project.

The immediate post training responses from the twenty six participants of the final iteration of the training programme, which was sector focused, the charity sector, suggest that this final version of the programme was most effective in building understanding and learning of what was taught. It was also the most relevant to this study, scored the highest in the perception that the concepts taught that could be implemented in their place of work to resolve a financial management information need, This is because fifty nine percent of the respondents stated that the training could potentially meet a financial information need of their work.

The course was designed through an adaptive iteration process to maximising the learning potential of the participants by adapting the training programme. This involved being sector focused but also the content and the structure of the course being adapted based on earlier iterations responses and the interpreted evaluations from those responses.

Table 60 – Summary of researcher's contemporaneous notes observations during the fourth iteration of the training sessions.

Students find the first session on the breakdown of the Financial Statements challenging but seem very engaged as it was all exclusively aimed towards charities. Covering the new reporting requirements for restricted and unrestricted was well received. The delegates were still put into small groups to work through which was necessary as the class size was noticeably big for the sessions. **Initial Conclusion:** The section on Financial Statements is an important area for research for the delegates especially with the new statutory reporting requirements for charities.
The next section was on Budgeting, and this was exceedingly popular and very engaging. As with the third iteration there was a dedicated budgeting day session but on this occasion it was focussed on budgeting issues relating to charities. There was also a prominent budgeting section in the main course that was focussed on charity budgeting issues and that was well received. The people who contributed to this section and group discussion were lively and provoking. There was a degree of peer learning, both formally and unstructured. All the aspects of this section were applicable and relatable to everyone. **Initial Conclusion:** This section was very well received and the delegates found the session useful. Therefore, Budgeting should feature prominently in this session and there should be opportunities for group work and discussions.
The next section on Cash management again was well received with emphasis placed on the importance of cash management and the short-term consequences if this is not managed properly, and this was understood and appreciated. The section on credit control had an interesting reaction as delegates were very engaged with the concepts and the exercises, though they said that they did not have any credit customers. Discussions with some of the delegates during this section showed they did find it interesting and said that they would

like to offer credit to their customers. So, it was one of those sections where the delegates in general were happy with the background knowledge even if was not applicable learning to their job roles. **Initial Conclusion:** This section was well received, and the delegates found the session interesting if not necessarily useful to their job roles. The delegates found the credit control section interesting and were very engaged with the exercises. But I would have preferred they had more focus on the overall cash flow management aspects and the importance of cash flow management. This is something that needs to be emphasised in future sessions.
The last section on financial strategic analysis was the best it was done for any of the earlier iterations of the training session in terms of how well it was received. The delegates were very engaged in this section as the long-term viability and growth of these charities is paramount to the people who attended and the financial management information that relates to the strategic decision making the delegates found remarkably interesting and wanted to learn more about it. **Initial Conclusion:** This section was well received, and the delegates found the session interesting and useful to their job roles. It was a much more engaged section than it had been in earlier iterations, and it suggests that the persons attending from small charities have more strategic control over their organisations than other managers who attend from other sectors. As a result, this section may have to be expanded and developed for any Charity only training programme in the future.

Discussions on the immediate post training conclusions – Fourth Iteration.

Key findings from the questionnaires and observations and discussions with the delegates immediately after the training revealed that delegates were really absorbed with the financial statements and budgeting sections, with the budgeting only day session again proving popular and much better attended than before. The delegates also very much related to the financial strategic analysis sections. This is due to the managers from the small charities having a much larger influence over the strategic direction of the small charity than similar persons working for small enterprises in other sectors.

With the financial statements this was a well-received section due to the financial statements being charity focussed and a significant emphasis on the new FRS102 where people really wanted to know the consequence of how they report their results. This was real financial contingency met.

As for budgeting and cash management these seem areas that apply to all, and they lend themselves very well to group work. The questionnaires and discussions confirmed that these areas are where the delegates are wanting help with to meet a financial management information need in their workplace.

As for the way the sessions are delivered and conducted, as said, group work and real case examples to go through in groups will maximises the potential for peer learning. These people in the whole are very experienced, they just lack the formal training. But they can from each other so need to explore ways of making the in these sessions.

4.14.4 The post training course feedback, six weeks plus after the <u>fourth iteration</u> of the training programme.

After six weeks plus post training of each iteration a final questionnaire was completed, and interviews conducted to assess actual uptake of the techniques. This was principally to measure the level of adoption or the likelihood of adoption of the concepts taught in the training.

Responses six weeks plus after the Fourth, charity specific, iteration of the Training Programme.

Table 61

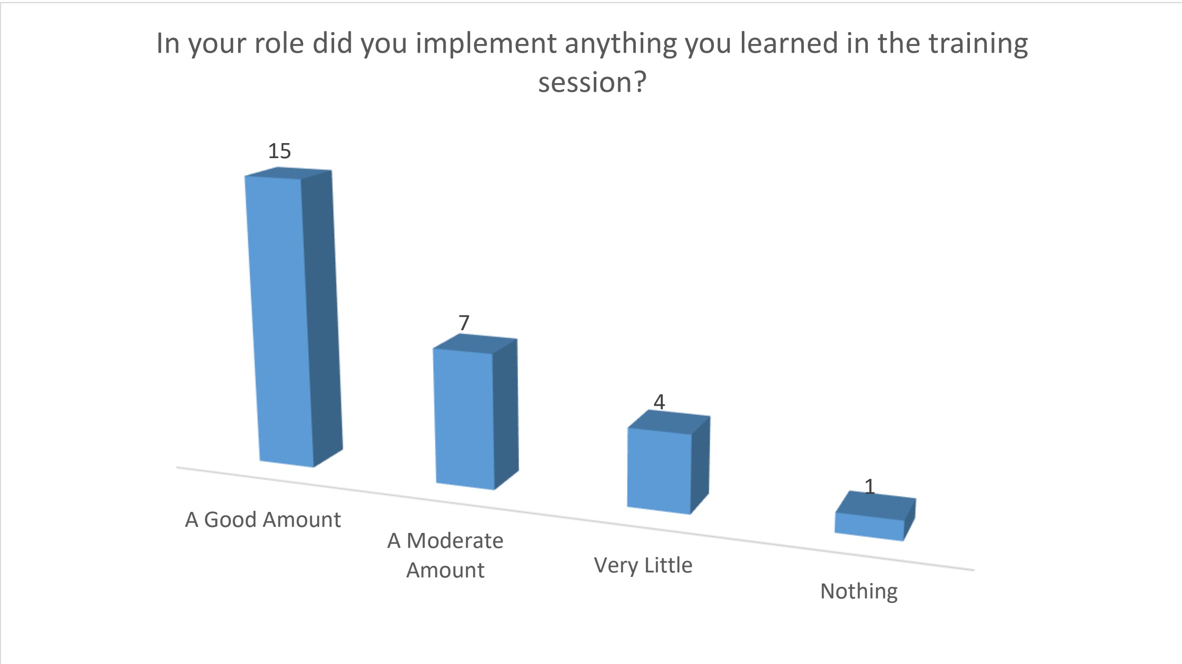


Table 61 Analysis:

The results clearly show that many of those who attended the course adopted what was taught on the course. The training was much more geared to the specific financial management needs of the delegates, all from the charity sector. By doing so there was enough material provided that met the training needs of the delegates.

Table 62

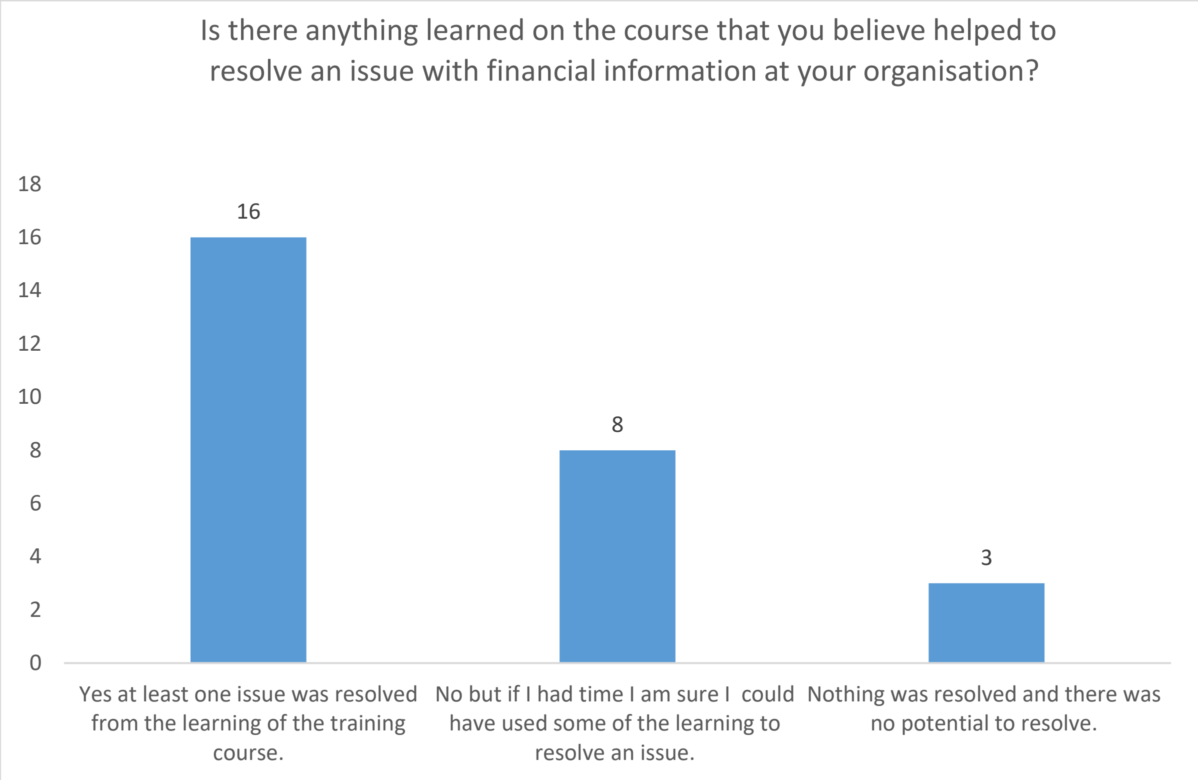


Table 62 Analysis: relates to the responses six weeks after the fourth iteration of the training programme.

Results from this questionnaire suggest that the training programme was highly effective in that it met at least one financial management issue at work. This has been the net result of the iteration process and the pre training questionnaires.

Table 63 - A sample of the participant's responses six weeks plus after the <u>fourth iteration</u> of the Training Programme.

The training has been great in that I now know more about the accounts and crucially the treatment of charitable restricted and unrestricted income. This is vitally important.
I have been looking at ways of partially restructuring our budgeting process based on the key methods taught on the course.
I have used the liquidity ratios and the cashflow principles. Particularly useful for keeping control over the cashflow as we need the money to come in regularly to fund our ongoing projects.
I have discussed with our Treasurer on ways we can implement the budgeting techniques into our monthly budgeting for the school year.
I can deconstruct our Charity's SOFA better. And I now have better insight to the Balance sheet, which is great. And an understanding of how depreciation is calculated helps with the funding application.
Though I have not implemented anything from the training I recognise the significance of it and so it has helped me to want to learn more about Finance and finance for Charities.
The financial control calculations and ratios I have used, and the results have been shocking. But better to know than not know.
The cash flow planning was a simple exercise to implement, and I am pleased to say we are going to keep doing it.
I am planning to use the financial control tips, but I am too busy now ironically.
I simply was able to interrogate our business partners about delayed payments by doing the straightforward debtor analysis. It has been helpful.
I haven't been able to implement anything. The way we do the accounts and build accounting information in our charity is quite structured and fixed, which is frustrating as

improvements could be made.
I looked at the notes on our accounts and I can understand them now. That is a big gain from the training.
Sorry but I did not learn anything that I could have used on the course.
The budgeting and cash management aspects were especially useful and is influencing me on how I manage these important matters of the organisation.
I have used the budgeting aspects of the training to do our three months forecast. Other topics I will have to look at to see if I can use them.
I found the training in general particularly useful but have not been able to incorporate in our reporting systems.
I was able to use the financial control and budgeting elements but only at an exceedingly high level. I would need more training of the details to have major changes.
The cash management part of the course was extremely useful, and we have started to break down or cost movements and see how we can plan this better. It is worrying how we did not do this before.
We did not do any cash management before, yet the principles taught are very straightforward. I do not think small charities do any cash management.
The budgeting techniques and internal control procedures go naturally hand in hand, and we will use this in the future.
I enjoyed the course and though I have not used anything, yet I will try and do so in the future, after a refresher course.
I really understand charity accounts now and I have been digging deeper into our accounts since the training and started to ask questions on whether we are showing our restricted income correctly.
I have not used anything that was taught at the training session, but it has certainly given

me something to consider.
The training was particularly good. I did more studying myself online into cash flow management after the training and I am now revamping the cash management systems we have in place.
General aspects of the training I managed to use especially with forecasting and budgeting.
I have enjoyed using the internal control procedures. Extremely easy to do and to interpret. I will also look at the budgeting material again when it comes to our budgeting period.

Table 63 Analysis:

The majority explained that the methods taught during the training were adopted and helped to meet prevailing financial information needs of the organisation. Some stated that though they were not able to implement anything specifically new taught from the training they believed it increased their confidence in the financial work they were currently undertaking, and as such this was a financial information need met in its own right; the need to be told what they are doing was right with some clarifications and minor modifications.

Other responses showed that though there was a willingness to use the techniques taught at the training sessions, time and resource limitations had prevented them from adopting the techniques. However, there was a willingness and a plan to adopt these techniques in the future. Whether they did and if not why, would be a subject of future investigations. But overall, these responses reveal how the fourth iteration of the training programme, that was sector specific, had a material higher adoption rate than the earlier iterations.

Table 64 – Summary of interviews of participants of the fourth iteration of the training programme, six weeks plus after the training.

As explained in the methodology section 3.2 only three people were interviewed from the twenty-seven who took part in the fourth iteration of the training and responded to the questionnaires. Two were interviewed in their workplace and one online.

Below is a summary of the main conclusions of the interviews that, as explained in the methodology section, was sent to the participants for confirmation and clarification. The following are the final verifiable versions.

Interview 1:

Interview date: 15th January 2024. 1330 – 1415. At Interviewees offices. **Role:** Revenue Manager for Charity. Responsible for twelve staff. Only about 20% of job is doing critical grant funding work, more finance responsibility due to managerial changes. She well placed and has the authority and autonomy to implement anything leaned in the training.
Background of Training No formal training, on the job training. Picked it up as went along. Has been invested in by her organisation to up skill.

Also, there are clearly contingencies that has resulted in her looking for more training. The finance management information contingencies being more diversifying funding needed, more enterprise work to funding. So, needs to know how to budget for these properly.
Training Feedback The training clarified what knew already and provided the platform for asking the right challenging questions specific to her own environment. Overall, has found the training useful, was able to use the financial control element to check the performance of the two sections she managed and implement easy cost savings.

Interview 2:

Interview date: 15th February 2024. 1300 – 1400. At Interviewees offices. **Role:** Account Manager – responsible for running fundraising department at charity. Responsible for five staff. Up to 25% of job involves finance responsibility due to the financial budgeting for fundraising. She is well placed and has the authority and autonomy to implement anything taught in the training.
Background of Training No formal training but had training from earlier manager who she worked for, and she took over after she left. Has been invested in by her organisation to up skill. Is expected to be versed in the narrow finance aspects as soon as possible.

Her finance management information contingencies are specific, as in she has specific finance work, needs to understand.
Training Feedback She found the budget and cash management in the afternoon and exactly what she needed for her role. She is very happy with the training and that she has used what was taught.

Interview 3:

Interview date: 23rd March 2024. 1230 – 1330. Online meeting. **Role:** Manager of local support charity – responsible for running the organisation and all aspects to it. Extraordinarily little support. Works part of a Team of seven, she is the assistant manager. Up to 35% of job involves finance responsibility. She is well placed and has the authority and autonomy to implement anything taught in the training.
Background of Training Had finance training five years ago. Has been invested in by her organisation to up skill and very much hopes that she can implement material leaned from the training session. Her finance management information contingencies are extremely specific, as in she has specific finance work, needs to understand.

Training Feedback

She found the training interesting and found it especially useful. Attended the general course and the budget only course.

Has material from both she uses in work place activity. She has a much greater understanding of the restricted element of reporting due to the new legislation and feels this information should have been provided for before by her employer, and so found it invaluable.

For budgeting the control techniques have been used to check budgetary performance and the budgetary approaches such as zero-based budgeting has been used for their quarterly forecasts. So met significant contingency needs.

4.15 Main learning points from the fourth iteration of the financial management training courses.

As said at the beginning of this section the fourth iteration of the financial management training courses was the final iteration in the research, and it was delivered to one sector only to evaluate the effectiveness of delivering the financial management training to a specific sector.

The main learning points from the feedback of the <u>fourth iteration</u> are the following:

- Most delegates were motivated to attend the training to gain an understanding of a specific financial management information need at their organisations. Though they also said that they wanted an overview of key financial management training as well to improve their overall financial management skills needed for their jobs.
- Most found the sections on financial statements and budgeting most useful as it covered the new FRS 102 requiring Charities to have a "breakdown of the assets and liabilities of the charity between unrestricted and restricted income funds and endowment funds." Cash management, the delegates found interesting from a strategic perspective as it focussed on the long-term strategic implications.
- Delegates valued the internal control element, more so than pervious iterations as they provided solutions to cost control problems.
- Delegates enjoyed the group work and valued the peer learning opportunities of these.
- The level of uptake of what was taught six weeks plus post training was higher than any earlier iterations, suggesting the iterative process works and was aided by the final iteration being sector specific.

- The training is most suited for Managerial level with finance in their roles in small enterprises.
- Where the training was adopted, it was either partly adopted wherein one or two specific areas met exactly what the delegates were looking for the training to provide help with or it overall made the delegates feel that what they were doing was broadly correct and it allowed them to see how they could use the financial skills they already had and were using but could use more effectively.
- Overall, the training programme was as effective as it could be and is now a completed process.

4.16 Reflections and Discussions on the fourth iteration of the financial management training courses.

As seen in the results of the post training feedback data, the level of understanding and the level of adoption of the training programme increased materially by the fourth and final iteration of the training programme.

In reflection, why did this happen? The method of the research was the key to arriving at a training model that was considered effective by the participants. This was reflected in such metrics as higher adoption rates in the final version of the training. As covered in the methodology chapter, this study was a participatory action research project that helped to derive an agreed position through collaborative working. By using the mechanisms of an iterative constructivist approach to training programme design the financial management training programme became highly attuned to the training needs of the participants as their input was tightly integrated into the later design of the training programme.

The principles of the iterative constructivist grounded process are covered in the methodology chapter 3.4.4. To briefly recap, the iterative process of learning in training is like building scaffolding where the trainer helps to develop skills set that exist already and then the iterative process adds to the existing skills by supporting the learners in building a higher scaffolding of knowledge and understanding. As the iterative loop is developed a higher level of knowledge is added, or it could result in a deconstruction and the re-designing of the scaffolding earlier built to redefine the knowledge previously thought of as being correct. The iteration process would be in stages with each stage adding to the scaffolding of knowledge as it is re-designed after analysis and evaluation from earlier iterations, (Kern, 2011). Iterative development in instructional design consists of short, repeatable cycles aimed at refining educational content. Each cycle, or sprint, includes phases such as planning, development, testing, and reviewing. The process begins with a minimum workable product, which serves as a draft version of the course material. Feedback is then collected from learners and stakeholders to find areas for improvement. This cyclical process not only allows for regular updates but also ensures that the final product aligns closely with the learners' needs, (Zarraonandia, et, al. 2007).

It is this last aspect that has been fundamental to the success of the fourth and final iteration of the training model, the fact that 'the final product aligns closely with the learners' needs', as they have been involved in every stage at different levels of participation, in the 'planning, development, testing, and reviewing' stage. This was done in practice at every iteration by first engaging with the participants for their reasons for enrolling onto the training, and their anticipation and expectations of the training being asked prior to the training event. Then during the training, the participant's reactions are assessed through observation and ad hoc discussion, and these are noted and summarised by the trainer at the end of the training process. Post training the participants are immediately questioned on their reaction and then questioned and interviewed at the six weeks plus stage to again assess their overall views of the training and to gauge the level of adoption of the various management accounting techniques taught and any reasons why there was not high adoption.

By undertaking this process, the essence of the iterative constructivist grounded approach is supported and the full benefits of it are realised. By using this approach interpreted information gleaned from 'grounded' data in the evaluation process is the main driver of adapting and improvement, which is the key to the iterative process, (Gonzalez, et al. 2019).

This was appropriate and highly effective for a training programme design where the iterative cycles were used to refine the training based on the interpretation of the feedback from the participants and evaluating and implementing the changes with the aim of reaching an approximate version of the training programme. This would result in a more effective learning experience for the learner. By doing this the training programme is shaped more in line with the expectations of the trainees. The iterative method of training programme build ensures there is an approximation at each iteration which is a solution to an earlier iteration problem. So, each iterative stage reaches a higher level of participant's satisfaction levels as each new stage incorporates corrections that the participants drove, (Kerssens-van Drongelen, 2001).

The iterative cycle approach is particularly suitable for training programme development projects where the training needs to change often and fast, in other words needs to be highly agile to the responses of the trainees, (Clinton, et al. 2012). This research project, though longitudinal, was still of a short duration, around eighteen months, and so the programme design needed to be a dynamic almost continuous process of improvement so to be undertaken quickly.

Another consideration is that the iterative approach was the correct approach to have a clear understanding of the specifics of what the participants wanted the additional management accounting skills for. They all consistently showed in the pre training questionnaires that they wanted to gain a better understanding of their organisation's financial functioning. They wanted added financial training to deal with new and more financial information requirements, but as managers who had no prior training in finance, they do not know the financial technical details of the training they needed. Therefore, by undertaking an iterative cycle approach helped to evolve the courses organically in conjunction with the learner's requirements, which was to have more tools to have a better handle on the financial management of their organisation. By doing this in the iterative process the trainer is able to identify the management accounting principles that would be most suited to the financial management needs of the participants by testing certain elements in each iteration, keeping those that respond positively, amending those that seem to have a good reaction but with some issues still remaining and deleting those management accounting elements that had a negative response. In reflection this key advantage of the iterative process was used well in the research project and confirmed the robustness of the iterative process deployed in the research project.

The participatory action research (PAR) approach was the engine to the iterative process being successful and this was clear by the fourth and final iteration as the positivity response rate from the participants in all metrics was high. These principles of participatory action research are covered in the methodology chapter 3.4.1. The key relevant factor was the active participation of those who were most affected by the research problem, to have effective financial management training. The participants closely collaborated with the researcher to reflect and review on ways to find solutions to the problem of receiving effective financial management training and further review those solutions until a satisfactory position was reached by all in the process. This active collaboration is the bedrock of participatory active research as it involves the close coordination of participants in education research and their action is used to drive the change on social or environmental issues. People who take part in the research feel enthusiastic about the issues investigate and want to take an active and prominent role in its direction and outcome, (McDonald, 2012). For participatory action to be fully effective it must have participants that are a cross-sectional representation of those main stakeholders of the area that is being investigated, (Khanlou, et al. 2005). This closely reflects the process that took place in this research project as set out in the methodology chapter. By having the main stakeholders being truly representational of those who will be mostly affected by the solutions derived at from the research then those participants will have the most personal stake in the research working to a successful conclusion. This was reflected in the enthusiasm of the participants and the level of engagement from them in the active feedback process. They all understood this research was for their benefit and any improvements in how financial management training was delivered to small enterprises would directly help them and their peers. On reflection, looking back on the interviews and the comments made in the questionnaires it was clear that the participants were very keen to get their views across with their opinions as they knew that the aims of this research were for their direct benefit. Indeed, there were occasions when the feedback from the participants was that they wished this type of training were more readily available in the future. This would energise them to first participate in the feedback process, as this was purely voluntary for those who attended the training, and to engage it wholeheartedly as they understood their full and honest collaboration in the research would ultimately benefit them, in that financial management training would be available in the future that would be more suited to their needs. From this perspective drawing on participatory action research is not only essential to the iterative process, but it makes it more effective as the feedback process which is fundamental to the iterative process is done better. The active participatory nature of the research was fundamental to the success of the research programme.

From the perspective of the grounded theoretical approach to find the key themes appearing from the data, this is a technique adopted that was also key to producing an effective training programme. The key aspects of using a grounded theory to bring meaning to the data collected is set out in the methodology chapter 3.4.4.

Grounded theory hypothesis is developed from the idea that patterns of meaning can be found from the data collected in research, (Khan, 2014). The grounded approach of analysis was ideal for this research project as it is key to have the participants drive the build of the training programme through the principles and theoretical conclusions they come to or allude to. The data analysis of this feedback uses all means at their disposal to collect and analyse data that will draw out theory, (Corbin, et al, 2014).

Of course, the participants did not feedback by showing what theory they believed most appropriately reflected their reactions. The feedback was in simple terms which was suitable in its purpose. The application of this in the research project involved closely analysing the trainee's feedback in each iteration of the training course development. Common responses in the qualitative data were found by working through these written responses in the surveys in careful detail and the notes from the interviews and in session observation notes were also suitably analysed. Essentially, the main themes that were focused on were in relation to what was good about the training sessions in terms of increasing financial management understanding and what was wrong in the same context, and any suggestions to make the training more effective for the participants especially in relation to increasing the likelihood of adoption of the techniques delivered during the training was carefully analysed. In addition, the main motivations for responding positively or negatively to certain elements of the training were analysed. Together these responses were scrutinised and analysed for any common themes that appeared, the essence of grounded theory.

By undertaking this approach to deriving meaning that can be summarised into theoretical conclusions the researcher was taking advantage of the best elements of the grounded approach by providing explanations that are buried deep in the participants' own interpretations or explanations, (Corbin, et al, 2015). This is key to making the most of the grounded approach, where the quantity, depth and variety of the information that constituted the feedback data was such a high level that to drill down to summary meanings may have been difficult and wide ranging as to effectively make the conclusions lacking in any real value and possibly meaningless as they were just too general in nature. By filing through the feedback data to try and link it to relevant theories elevated the intellectual value of the interpretations and conclusions. As such the full benefits of the grounded approach was realised in this study by helping to expand existing relevant theories by inductive means and through theoretical construct, resulting in new insights and an extension on how to develop effective work-based financial training.

In overall reflection, the fourth and final iteration of the training programme proved that the iterative design process that deployed a grounded theoretical approach to analysing data driven by a participatory active research method resulted in an improvement in the effectiveness of the training programme. This was borne out by improvements in the key response metrics.

4.17 Trend Analysis of quantifiable results of survey from First to Fourth Iteration.

Before summarising the findings from the survey, observations and interview results in the overall findings and conclusions, simple statically analysis is needed to confirm the interpretation of the results.

The analysis will use the basic trend analysis which uses the formula. The logic of using the trend analysis tool is explained in the Methodology section 3.14.

Trend Percentage = ((Current Period Value - Base Period Value) / Base Period Value) * 100. Current Period Value.

The base period is the results from the first period and the current period is the relevant corresponding results in period 4.

The key measure of the effectiveness of the research project is the level of adoption from the financial management training and to what extent was content taught and adopted from the training programme used to resolve a financial management information issue at work. The results of these six weeks plus survey questions were covered in the main analysis. This simple statistical analysis is here to support the general interpretation.

4.17.1 Measuring the level of overall adoption.

Table 14 in section 4.5.4 showed the number of people who adopted anything taught on the first iteration of the course when they were surveyed six weeks post training. Out of the sixteen people surveyed two said they had used a good amount form the training while two others that had used what was taught. Therefore, the base result from iteration 1 is 25%, with four out of sixteen who said they used what was taught during the first iteration of the training course.

Table 61 in section 4.11.4 asked the same question six weeks plus after the fourth iteration of the financial management training programme. Out of the twenty-seven who responded fifteen said they adopted a good amount and seven said they adopted the training course. Therefore, the base result from iteration 4 is 81% with twenty two out of twenty-seven who said they used what was taught during the fourth iteration of the training course.

Therefore, the overall trend on the issue of adoption of at least what was adopted from the training programme is a 226% increase for adoption from iteration 1 to iteration 4, (81% - 25%) / 25%).

4.17.2 Measuring the level used to resolve a financial information issue at work.

Measuring the increase in the number of people who said they were able to use what they taught and adopted to resolve a prevailing financial management information issue from iteration one to four. In the six weeks plus survey after iteration one only 19% of the respondents, (2 out of 16), said that they used something of what was taught on training course to resolve a financial management issue at work. In the same question posed in the six weeks plus after the fourth iteration of the training programme 59% of the respondents (16 out of 27), stated they had adopted at least something of what was taught on the training programme to resolve a financial information issue at work. This stood for a 216% increase in the number of people who said they received help from the training in this way.

4.17.3 Analysis of statistical results.

These results show clearly that the number of people who attended the training courses and adopted some of what they taught and the number who used what they taught to resolve a financial management issue increased by over two hundred percent in both measures from, iteration 1 to iteration 4.

This confirms findings that the iterative constructivist process of training design that this research project undertook was very effective when completed in providing a financial management information training programme for non-finance managers in small enterprises that increased the adoption of what was taught significantly and increased the amount that was adopted that improved a financial management information need prevailing in the workplace.

As such these statistical analyses showed that the training programme design using iterative constructivist process of training design results in a training programme that is highly relevant for the needs of the programme key stakeholders.

Chapter 5: Discussions – An Overview.

This chapter lays out the overall interpretation of the results and links the findings back to literature. It begins with a reflection and discussion section where the component findings are discussed and reflected on, linking the findings back to the literature covered to confirm and to contribute further, where possible, to what has already been established on the theoretical points raised.

There then be a discussion and assumptions drawn from the people who and why they attended the course and whether that has any bearing on the conclusions of the research.

The final section of the discussion chapter will be on the appropriateness of the iterative grounded methodology of the research study and linking these reflections on the relevant literature.

5.1 What do the results say about who the people are who attend the financial management training programme?

The financial management training courses that were ran for this research project were very well attended and at time due to capacity issues applicants were turned away and placed on a waiting list. Though the courses were free and that may have been a factor for their popularity it was made clear that the courses were part of a research project looking to develop an effective financial management training programme which meant the training they were signing up for was in no way the finished article.

So, who were the people who signed up for these training programme? The profile breakdown of the delegates was provided in figure 24 in section 3.6.1. But the table is reproduced here in figure 29.

Figure 29: Profile Summary of the Participants.

Gender	**Male** 25%	**Female** 72%	**Other** 3%	
Educated in Finance	**Yes** 95%	**No** 5%		
Do work in Finance	Yes 95%	No 5%		
Education	**Professional** 16%	**University** 45%	**School** 39%	
Age	**18 - 35** 15%	**36 - 45** 38%	**46 - 65** 41%	**Over 65** 6%

The key pertinent information from the table showed those that attended who have no earlier financial training of note but do finance work in their role and hold a managerial role within the small enterprise they work for or run. This is consistent with what was uncovered in literature, that the lack of financial literacy of managers / owners within UK small enterprises is significant and as a result contributes significantly to the high rate of demise of UK small enterprises. This was covered in detail in the literature review and is supported in 2014 by Dahmen, et al, who summarised their significant study of the link between the level of financial literacy of small business owners in Florida, US, and their success. The report stated that there was a clear correlation between a lack of financial literacy in owners and managers of small business and those that fail.

Another conclusion from the research is that the type of people who attend the training were people who had been identified either by themselves or by their organisations that they worked for as being the ones that are most suitable to get the most out of the training. This would suggest that absorptive capacity theory does hold when considering the make-up of the people who would most benefit from the financial management training. This was covered extensively in the literature review but to recap it is a theory suggests that organisations have a limited ability to absorb new knowledge, which is referred to as absorptive capacity. This absorptive capacity is made up of two main components being firstly, the ability to recognise the value of new information, and secondly the ability to use that information to create value through knowledge assimilation and exploitation. The relevant aspect to this training programme is that absorptive capacity can be enhanced through investments in human capital as well as other means, (Griffith, et al, 2003). This is clearly identified in the feedback data that suggested the participants were on the whole selected for the training programme by their employers with their agreement as they believed between them, they were best position to gain the most out of the training and use what is taught to extend the boundaries of financial management knowledge within the small enterprise that will as a result have a positive impact on the financial performance of small enterprise. The consequence of this will be summarised in the conclusions but suffice to say now that the financial management training courses should be pitched at persons from small enterprises who have been identified with the capacity to learn and have some background in financial management probably from experience rather than prior training. This is a clear example where the evidence in the feedback is consistent with the evidence in literature.

5.2. What do the results say about what the reasons are for people attending the financial management training programme?

The written responses from the pre training surveys, set out in the analysis chapter at each iterative stage, also suggest that virtually all the attendees that sign up for the training programmes do so as they are having to undertake some finance work responsibilities, yet they feel very under qualified to do that type of work even though they know how vital this work is for the financial sustainability of their organisation. This is consistent with studies done and published in literature that suggest that there is a significant demand for relevant training that will help to increase the financial skills of persons within small enterprises in UK as there is a recognition that this type of training has potential benefits to the viability of the organisations they work for. This was covered extensively in the literature section, where key players in UK small enterprises are desperate for effective financial training as they believe this training will be integral to making responsible financial decisions and will influence the small business owner on how to control their money effectively in a way that gives confidence to manage the businesses money wisely, be less trapped by debt, and help them grow for both long- and short-term goals to allow the small enterprise reach its potential.

The feedback data also clearly suggests that the other key motivation for people from small enterprises seeking out this type of training is to meet a financial management information need, or a management accounting information need, which is prevailing within their organisations at that time. As said, contingency theory of management accounting suggests that changes in the external environment will cause changes in the organisation’s management accounting practices needed, (Otley, 2016). So, the data suggests that people who have worked on financial matters in the past within the small enterprise, perhaps for years without previously having any relevant training of note, are now seeking management accounting training as there has been a change in the external or / and internal environment they work in that that now requires them to have a greater competence in financial matters. In the feedback from the participants these changes were things like statutory requirements for more small enterprises to produce audited financial statements and statutory requirements to have more detailed transparency of those statements. The feedback data also suggests there is the change in the wider macro environment that is driving small enterprise persons to seek financial management training as the wider environmental factors such as the cost-of-living crisis is creating very tough operating conditions for them so that they believe they need to improve their financial management skills such as budgeting skills to be able to better navigate these new tougher wider environmental conditions.

5.3. What do the results say about what undertaking an iterative constructivist process of training programme build?

The results from the data are noticeably clear. By undertaking an iterative constructivist process of training programme build, going through four iterations of the training build, the level of adoption from the training programme increased significantly. An iterative process evaluating the feedback of the training will allow a customised training programme that accommodates the needs of the training participants needs. Therefore, the training programme is effective as it will meet the prevalent, contingency, financial management information needs of the trainees.

The iterative process has moulded the training programme to meet the needs of the target participants, and this is key a component to achieving the research objectives. By targeting the training programme to the needs of the participants then this will naturally render the training more relevant and factoring in the targeting of the training to the appropriate identified persons within the small enterprises will ensure, as much as possible, its effectiveness.

This was a summary of the discussions of key findings of the research results. The overall conclusion of this summary appears in the next chapter.

5.4 A consolidation and an overall discussion of the reflections in the Findings Chapter.

In the Findings Chapter 4, there were preliminary reflections and discussions on the findings of each iteration of the training. There were also references of these reflections to the relevant aspects of the literature covered.

The following is a recap summary of these findings and a final extended reflected analysis of these findings beyond what was covered in these sub chapters.

In chapter 4.7 of the findings, there were preliminary reflections and discussions on the make-up of the participants of the financial management training for small enterprises. By reflecting on the common profile of who it was that attended the training and cross checking against literature on who, why and what type of business finance training people took, had a significant influence on how the financial management training programme developed to make it fit for purpose for this target group.

It was found in the findings from the first iteration onwards that the vast majority of those who attended the training were managers of small enterprises that undertook a degree of financial management work at their small enterprise but who were not qualified or previously trained in finance. Studying literature on why this may be the case it is recognised that in general managers seek new professional development training as it is essential that managers of small businesses take regular up skilling training to help them be 'adaptable, forward-thinking, and capable of navigating complex business environments,' (Li. 2024). It can also help managers gain a competitive advantage in their careers both within their current employed organisations and any potential future employer, (Green, et al. 2005). To gain a competitive advantage in career progression within their current small business may not be as relevant to the attendees of the training as the career advancement opportunities in the small enterprises may be extremely limited. A small enterprise is one that is classified as having less than fifty employees, (Gov, UK, 2022). Therefore, it is more likely for managers in small enterprises to gain advancement in their careers they would look to another, bigger organisation. But to gain that elevated role with the associated improved pay and status a manager must be strong in their strategic planning skills and, crucially, be shown to deliver on strategic improvement in their organisations, (Watad, et al. 1999). This is a 'silent' reason for managers in small enterprises to look for and undertake more professional development training. Organisations are looking for people who can think and deliver strategically to help improve the position of the organisation overall. Therefore, managers want to augment their experience of working strategically, that they have more opportunity to do in smaller organisations, with formal professional accredited development training that certifies those skills and hence makes them more employable to a proscpoective employer, (Tharenou, 1997).

So, this revelation, that it is mostly managers who attended the training became clear from the first iteration onwards, affected the design of the future iterations of the training programme. A reflection on the literature that said that one of the principal reasons managers seek out professional development training is to strengthen their strategic management skills both for their existing job and for potential career advancement elsewhere affected the structure of future iterations. The result of this was to design and adapt the future sessions as being more strategic in nature. This was confirmed by analysis of the feedback from the first iterations onwards where those areas of the course that were more strategic in nature scored higher in positivity than those that were more technically orientated.

Linking this revelation in relation to finance training that was on offer in this project there is clear evidence in literature that the type of finance training managers seek out is more of the strategic nature. As stated in chapter 4.7, a fundamental aspect of financial management training that attracts small business managers is the fact it helps managers of small businesses to learn how to develop and implement effective financial strategies, with a focus on clearer 'realistic financial goals aligned with the organisation's vision and mission', (Mack, et al. 2017). This again would confirm that the financial training should be more strategic based. This was replicated and confirmed in the feedback data.

Another revealing aspect of those who attended the training was not only were they mostly managers, but that they overall had truly little if any earlier financial background training. In most cases these same financially untrained individuals were actively involved in financial management work at their small enterprise. Another discernible result from the post training interviews and discussions was that their confidence in the quality of the financial work they were doing was low. This was something that needed to be considered and addressed within the training programme design; how to improve the confidence of the participants who had technical financial skills.

The relevant literature states that training non finance managers the fundamentals of business finance is secondary to engendering greater confidence and interest in the commercial aspects of finance. Trainers often find themselves pushing against a deep-seated aversion to the numerical components of finance, even amongst numerically inclined managers who use these numerical skills in an important part of their role. There is a feeling that anything new that is heavily numerical is treated with caution by managers, (Karadag, 2015). This was noted on occasions in the feedback data that the participants said that the training had a ‘reassuring’ effect on their confidence in the finance work they were doing in their organisation.

On reflection this lack of confidence in the financial abilities of the participants, even though many of them have been working with finance to some level and in some cases for many years, would suggest that many of the participants need some form of confirmatory training to raise their financial self-efficacy. Financial self-efficacy is defined as the level of confidence an individual has in relation to financial decisions, (Amatucci & Crawley, 2011). If the financial management training offered could be tailored to enhance financial self-efficacy, then it could lead to self-aware improved financial literacy, (Kirsten, 2018). In other words, the completion of the training could provide them with the confidence to have invaluable insight to their organisation, which in turn improves financial control,’ (Cohen and Levinthal, 1990). This enhanced self-perception of financial understanding will improve the small enterprise financial stability, allowing managers to plan and stay competitive, (Tavares, 2023).

Therefore, the training programme incorporated mini case studies and scenarios that allowed the participants to work in groups during the training on relevant material using the management accounting techniques and concepts taught in the training. By doing this and collectively deriving a correct solution then the sense of satisfaction and surprise was palatable. They were impressed by their own abilities to use complex management accounting techniques to engage in in-depth financial management planning. This was borne out in the feedback where participants stated that they felt that the financial management and planning activities demonstrated to themselves that in many ways they were indulging in similar methods in their work and helped to confirm that 'what they have being doing was correct', as more than one participant fed back.

The process of enhancing financial self-efficacy as an underlying aim of the training programme design process will lead to a greater likelihood of taking part in positive financial behaviours that can only have a beneficial impact on the employees' firm, (Farrell, et al. 2016).

The next preliminary finding that was discussed was in chapter 4.10.

The delegates attending were persons who worked in their small enterprises and were considered someone who was the most appropriate to attend the training by their organisation. They are best placed to get the most out of the financial management training and to implement anything relevant taught from the training. This suggested that absorptive capacity theory was a relevant factor and that those who attended the training had been identified as having high absorptive capacity. In addition, the small enterprises that the delegates came from had high organisational absorptive capacity for being initiative-taking in finding and sending the staff to enrol and take part on the dedicated financial management training.

The theoretical background to absorptive capacity theory was outlined in the literature review chapter 2.7.2. Here, it was explained that absorptive capacity theory is 'an ability to recognise the value of new information, assimilate it, and organisation invests in related research and development, it can increase its absorptive capacity. Firms can invest in absorptive capacity by investing in research and development or relevantly by up skilling their staff.

As said, a full critical analysis of absorptive capacity is covered in the literature chapter 2.7.2.

So how did this revelation impact the development and structure of the training programme?

It was clear from the early iterations of the training programme that the average trainee attending the training was initiative-taking and very keen to learn the relevant key financial management skills that they could recognise as being beneficial to the improved financial management of their organisation. Even though the trainings sessions were free to those enrolled they still needed to forego their time from work to attend the all-day sessions. So, there was an opportunity cost of attending. Therefore, the training had to be of a high standard and be challenging but be easy to contextualise and apply.

Higher level absorptive capacity can lead to entrepreneurial behaviour. This is where the absorptive capacity is of such a high level that there is not just an understanding of new knowledge, but there is a subsequent recognition of its value, and an ability to visualise and realise its commercial and competitive advantage, (Qian and Acs, 2013).

These participants of the training were not just managers but were of high-level management who had years' experiences in their field, and they had years'experiences in the organisation they worked for. This was based on the observation notes and feedback interview data. Therefore, there should be an opportunity through the case study tasks that take place throughout the training to allow the trainees an opportunity to seek out solutions to business problems by critical analysis and self-solution. By undertaking this kind of classroom activity such as students working through independent projects or through collaborative group work then it encourages students the basis of independent learning that fosters the entrepreneurial qualities of students, (Jiang, et al. 2017).

On reflection shaping the course in a way that adopts these teaching strategies will encourage this independent learning and as such foster the entrepreneurial qualities of those taking part in the training programme. By doing this the participants who have high entrepreneurial absorptive capacity will identify key relevant aspects of the training programme and use this new financial management information taught on the course to create new work practices that are entrepreneurial and that could in turn lead to a 'competitive advantage' being gained by the organisation as a direct result of the financial management training delivered.

Having financial management training courses that can be a platform for entrepreneurial financial management behaviour will only serve to help make the training courses seen to be highly effective. Therefore, by recognising the profile and the high ability of the average participant of the training programme in the feedback results and associating that with high absorptive capacity and high entrepreneurial absorptive capacity the latter iterations of the training programme was shaped in a way that took full advantage of this. This was a clear example of how the results analysed links the findings back to key elements in the relevant literature, not only to give the results academic context and integrity but also to make the results more practical and beneficial to the targeted segment of society.

The next preliminary finding that was discussed was in chapter 4.13 of the findings.

Here, the findings revealed a recurrent common theme appearing from the responses of the participants that was confirmed by the third iteration of the training programme. It was clearly found in the data that a key reason for enrolling onto the financial training programme was to obtain training that would address a financial information need in the organisation. These financial information needs may have been because of new financial information required because of changes in the influencing environment of the organisation. This could be new commercial challenges such as a new competitor, new technology or new challenging economic conditions that required an update to the financial management and planning information to help the organisations navigate through these new challenging conditions.

Another reason that was seen in the feedback data to be driving the need to enrol onto the financial management courses was new financial information regulatory requirements on how organisations reported their financial position. This meant they needed to update and adapt the way they produced their financial information as it no longer met the prescribed need. For example, there were participants who work in small charities. The financial reporting of charities in the UK, including small charities changed dramatically with the introduction of UK Financial Reporting Standard; FRS 102 in 2019 requiring Charities to have a "breakdown of the assets and liabilities of the charity between unrestricted and restricted income funds and endowment funds." This has serious implications of financial reporting for small charities who did not report in this detail previously. The key element is that 'charities had to recognise revenue as the performance obligations being satisfied.' In other words, they had to clearly show that donations that were for specific projects were shown to be used for expenses in the direct support of that project and not use for other overheads. This new challenge represented serious transparency issues for smaller charities in the UK who had nothing to hide but did not have the skills to 'unravel' the restricted and unrestricted income and expenses, (Green, et al. 2021). The participants from small charities wanted help in how they could amend their financial information to meet this new statutory requirement.

Therefore, essentially it would seem that the participants would be seeking financial management training when their financial information, or management accounting information, needs to change to respond to a new contingency that affected the type of management accounting they used. An analysis of the relevant literature would suggest that the contingency theory of management accounting is an applicable theory that relates to this emergent pattern in the feedback.

A critical evaluation from literature of the contingency theory of management accounting is covered in the literature chapter 2.7.1. A quick recap summary of the theory; it was first conceived in 1976 by Gordon and Miller. They said that financial systems change in line with certain key movements in organisational environmental factors such as management structure, technology, and other organisational human factors. They concluded that the overall findings of their research are that financial systems are designed to have an adaptive framework by default due to the environmental uncertainty that all organisations run in. As the environment changes the management accounting information required to address these changes will adapt to respond. So, in effect a change in management accounting information used within an organisation is needed because of any environmental changes that directly affects the organisation, (Gordon and Miller. 1976).

This would suggest that when it came to the management accounting information used by organisations it would be shaped by the environment they ran in and any changes in that environment would affect the management accounting information the organisation needed. Therefore, logically for any management accounting type training that is offered as work-based training, including any training aimed at small enterprises, would be considered effective by the recipients if this training reflected the type of management accounting information the organisations needed to help them in the environment they operated in.

From a practical perspective this phenomenon was found in the feedback data in the post training questionnaires where the participants were asked to rank the usefulness of each main topic taught. This was cross checked against the comments in the questionnaires and crucially the interviews to assess what topics were adopted or not. By analysing these responses on preference and adoption it was a straightforward process of removing, expanding, and adapting the management accounting topics for latter iterations of the training course so that they became more attuned to the management accounting needs of the participants. So, there is a clear sign that the contingency theory of management accounting applies in the work-based financial management training course development process. As said in literature, management accounting techniques practiced within organisations come about because of a cultural change within the organisation and that the management accounting techniques adopted are to help the realisation of the organisation's new strategic goals, (Otley, 2016).

As a result of this conclusion the financial management training programme needs to include the established but also the emerging financial management information needs of the targeted population. But as these needs change and adapt then the financial management information training needs to adapt as well to still be relevant.

It was referenced in the literature chapter that for work-based training to still be relevant and topical it needs to be updated regularly. Once the training programme is implemented in a live environment, there will be elements noticed that could have been done better, such as, the amount and style of information provided, or the overall organisation of the program.

Updating the program gives the trainer the opportunity to make the training more streamlined, making the training process better for both trainers and trainees in the future, (Dettlaff, et al. 2004). There is also a need to adjust the training programme for new organisational policy updates, these will happen periodically. As the new policies roll out training programmes should be updated, but in practice, few training programs are updated this regularly. But for the training programme to still be relevant it must update eventually and not too infrequently, (Knowles, et al. 2014).

It is shown in the literature chapter that work-based training needs to be updated to keep its relevance to employees. For finance work-based training to remain relevant it must be adapted to improve the financial literacy of the trainees when the accounting training is targeted to meet their training needs, especially training that will have a positive impact on financial performance, (Chepkemoi, et al, 2017).

Therefore, literature confirms for training programmes to still be relevant they should be regularly updated, and this concept fits in with the contingency theory of management accounting. The basis of this is that for the financial management training to still be relevant it should provide management accounting training that centres on the management accounting information that is needed by the organisations enrolled onto the training. This financial information need will be shaped by the environmental contingent needs of the small enterprise. As these financial information needs change, as they inevitably do in line with influencing commercial, economic, and technological changes, then the financial training programmes for small enterprises will need to change as well in line, so the training will have to be periodically updated. As the findings revealed the best method of doing this is through an iterative adaptive process.

This is the last major finding that was summarised in the mini discussions chapter 4.16. This is where the evidence in the findings suggest that the most effective method of building a work-based training programme that is fit for purpose, is for the training programme to undergo an adaptive iterative constructivist process of training programme design.

A review of iterative constructivism is covered in the methodology chapter 3.4.3. Here, it was noticed that using this approach of 'identify recurrent themes,' the training programme was designed through an iterative process which involves continuously improving a concept, design, or product, in this case a training programme. These iterative processes allow a prototype, the training programme, to be developed, assessed, adapted, and repeat the cycle process with the goal of getting closer to the solution of best outcome, (Jonassen, 2008). The 'solution of best outcome' would be the successive approximation model that would be the finished product of the iterative adaptive cycle process of training course development. It was discussed in the mini discussion that it was clear from the feedback data the iterative adaptive cycle process was effective in making the training programme more attuned to the participants training needs as the training programme went through the sequential iterations. The process was fundamental to the success of the development of the training model so that 'the final product aligned closely with the learners' needs. This is because the participants participated in every stage at different levels of participation, in the 'planning, development, testing, and reviewing' of the training programme at each iteration.

By going through this recurrent and progressive participant review process the final training programme aligns to the participants needs and therefore meets its functionality, usability, and reliability aims. The approximation at each iteration is a solution to a previous iteration problem, to iron out as many of the problems and issues of the training programme by the time the iterative process is complete, so that the final version should be as satisfactory as possible to the targeted training programme group, (Kerssens-van Drongelen, 2001). This was borne out by the findings that showed a clear and material phased improvement in post training levels of satisfaction and adoption by the final iteration of the programme. The adaptive iteration process worked and worked well, significantly contributing to the overall goal of building an effective financial management training programme for non-finance managers in small enterprises.

These were the main summary reflections and discussions of the findings in chapter four.

5.5 A discussion and refection on how the study relates to earlier studies considered in the literature review.

This section recaps the key relevant literature in the literature chapter and summarises how it relates to this study and how it develops the current literature. The overall aim of the study was to develop effective work-based financial management training for non-finance managers in small enterprises. So, the first question would be why, as in why is it important to undertake this study?

In the introduction chapter two, it was proved that there is a need for this type of study because so many small businesses in the UK cease to trade between one to five years. It was further seen through literature that a lack of financial management skills contributes towards this problematical fact. This lack of financial management acumen within small enterprises is linked to lack of skills in internal management issues, especially poor financial management. The specific skills that are lacking are: not understanding how to manage the finances of the business or how to plan and invest in the best areas that would maximise the potential for growth. There is also a noticeable lack of sophisticated budgeting and planning activity within the small business sector, (Yip, 2022). Recent studies have said that one of the main deficiencies that are hampering UK small enterprises in these tougher economic times is poor cash flow strategies, and with small enterprises having virtually no or little cash management strategy leading to solvency issues quickly. Small enterprise manager's struggle with creating robust cash forecast budgets that will allow them to proactively deal with the shifting external environment and as a result small enterprises are not prepared for the adverse conditions. They are unprepared to deal with higher prices such as energy tariffs and higher wage costs, (Waltower, 2024).

So, the study contributes towards solutions to this problem, to help with the fact that so many UK small business ceased to trade every year. This is a critical area of research as literature states that small enterprises form a large proportion of the UK employment. In 2024 there were 16.7 million employed in all types of UK small enterprises, profit and non-profit, (Lennox, 2024). Small enterprises are now a major driver in the UK economy, fuelling growth, innovation, and productivity. Simply put, small enterprises are too vital for the UK economy to be left to fend for themselves, (Prime, 2016).

Therefore, there are elements that this study that contribute to a solution to the problem of such high UK small business failures. This solution is to prove an adaptive design of financial training will improve understanding of financial management in small enterprises.

There are relevant academic studies that show the importance and the effectiveness of work base training, which is the basis of this research. Indeed, literature supports the idea that work-based training can have a significant immediate and long-term positive impact on employee behaviour. With well-planned and well executed work-based training there will be immediate uplifts in staff productivity and usefulness as well as discernible improvement in staff morale. The morale will improve as the staff feel that they are being invested in, this will be seen as recognition of their potential to contribute more to the organisation in the future, (Bramley, 2019). Work-based training can produce increased internal efficiencies; higher labour participation rates, lower turnover, and shorter on job learning curve. This leads to better employee morale and later improved productivity, (Hansson, 2009).

For finance work-based training, there are studies published with evidence that exhort the benefits of this type of training. Research has proven that there is a correlation between external financial training and advice and small and medium enterprises improved commercial achievements, (Robson, et al. 2001). Other research has investigated the impact of financial training on small businesses and shown there is evidence that though small businesses rely on prior taught knowledge to support the financial management of their enterprises, where finance training and education was targeted to improve performance measures it was considered successful and worthwhile, (Simpson, 2004). Overall, earlier studies have shown that financial training allows small enterprises to simulate financial planning safely, especially planning that involves high risk decisions. This allows the trainees to draw on the lessons taught during training and therefore help to make the best decisions for the future financial wellbeing of the organisation. Therefore, finance work-based training can improve the strategic planning skills base of small businesses, (Tavares, 2023).

The evidence from the findings chapter supports the conclusions from literature that work-based training, and specifically finance work-based training, can have a significant positive impact on the small enterprise. This was seen in the findings through improved positive reactions to the financial management training once the training programme had gone through iterative improvements. There was also significant improvement in the level of adoption from the training in the latter iterations as seen in the findings. Analysis of the responses suggested adoption was high as the participants could find that key elements of the financial management training could be used to add transparency and provide solutions to challenging financial situation existing in their small enterprises. This confirmed the literature that small enterprises will recognise the value of work-based finance training if it is shown to support better internal finance management. The financial management course confirmed this by going through an iterative process that adapted the course structure and content with active feedback participation from the trainees. This meant any changes to the course was based on their input so that it was customised in a way they would find most useful. So, it is logical that the latter versions of the financial management course were recognised as being valuable as literature said that work-based finance courses that are seen to add valuable commercial insight will be highly valued by small enterprises, (Matlay, 1999).

Other related literature studies into financial literacy or financial self-efficacy have similar bearings to the findings of this study. As said in the literature chapter, financial self-efficacy, or the confidence of an individual in making effective financial decisions, has significant impact in managing the finances of a small enterprise, (Kirsten, 2018). Financial self-efficacy leads to financial literacy and therefore is a potent tool for small business owners in that it provides them with the confidence to have invaluable insight to their business which in turn improves financial control and provides a better understanding of the small enterprise financial position. It also helps them improve planning for a more secure financial future. This enhanced self-perception of financial understanding will improve the small enterprise financial stability, allowing business owners to plan and stay competitive, (Tavares, 2023).

There were participants who found the training was a confirmation that the financial management and planning techniques they have been using at their work was correct. They realised they were more financially astute than they had previously thought. This raised their confidence and later financial self-efficacy so encouraging them to try other elements of the financial management training that they were not familiar with but now had the confidence to try, with the aim of improving the financial management of their small enterprise. This was gleaned from the interview feedback and helped to shape the structure of the later training programmes. By adding more simulations of financial management scenarios and case studies for the trainees to work through, they can simulate complex financial management scenarios and work through these new techniques with their peers in a safe environment. This noticeably improved their self confidence in these finance matters. This confirms similar studies in literature that stated that financial training must be structured in ways to look to enhance financial self-efficacy so that the training will enhance the desire to persist in the proper management of the finances of a small enterprise in the first place, (Kirsten, 2018). This way the training outcomes will improve financial self-efficacy, and this will serve to be a crucial link between financial knowledge and implementing confident financial decisions that will enhance the financial management of the small enterprise, (Amatucci, et al. 2011).

In relation to the build of work-based training courses there are a considerable number of articles published on established training evaluation models that this study leant heavily on. These are related studies as they set the groundwork and foundations of this study. This is because the final adaptive design of the financial training programme has the student evaluation of the impact of the training as the driving force of the adaptation of the training programme. By regularly evaluating the feedback of the project and using the analysis of the feedback to drive the improvements of the training in latter versions then the evaluation process is the heart of the methods used in the study at each iteration of the programme.

There have been studies on the different types of training evaluation models, a review of the merits and issues of each of the main type of evaluation models. These main models are covered in the literature chapter and are Kirkpatrick's model, the Addie model, Birkenhoff Six Stage Model, Stufflebeam's Context, Input, Process, Product (CIPP) model and Phillips Evaluation model.

All these studies explain and analyse the benefits of each of the evaluation models and the overall benefits of using feedback to evaluate the effectiveness of training. Studies set out the importance of evaluating training effectiveness by assessing the impact on employees' skills and performance. Additionally, studies have shown that by evaluating the trainee's impact then this evaluation process provides a clear idea of what the employees have achieved in their careers as it could confirm, as this study did, that they are more technically knowledgeable than previously thought, (Wang, 2006).

Another element of the benefits of training evaluation models that is covered in literature and identified and drawn out in this study is that the trainee evaluation process helps the trainees to map their own career path. This will help them to find a way to get to the next level of their desired work-based skills competence, (Wang, 2006).

The training evaluation process developed in this research and set out in the findings chapter goes into depth of the details of how the evaluation is conducted. The derived training evaluation model for this research is shown in figure 30. Organisations compare actual outcomes of the training to performance indicators laid down in the training programme's implementation plan. After analysing the evaluation, the results of these programmes, then an alteration or replacement of ineffective training processes can happen. Literature states that this will lead to increasing general productivity of the training programme. By designing performance measures of the training against which the feedback is measured then the trainer can define the successes of the training and build up these processes at the expense of those parts of the training that are not considered beneficial, (Vo, 2018).

There are studies in literature that analyse different training evaluation models and explain how they are used to improve the work-based training offers. This is exactly why the evaluation process was the key to this research project as substantial academic literature documented the merits of this process in training programme development.

The final key element of literature referred to, was the method of using the iterative adaptive process to build an effective training programme for uptake.

There are articles in literature that describe the benefits of iterative design in training. Iterative development in agile instructional design consists of short, repeatable cycles aimed at refining educational content. Each cycle, or sprint, includes phases such as planning, development, testing, and reviewing. The process begins with a minimum workable product which serves as a draft version of the course material. Feedback is then collected from learners and stakeholders to find areas for improvement. This cyclical process not only allows for regular updates but also ensures that the final product aligns closely with the learners' needs, (Jonassen, 2008). This method was the key overriding approach to build the financial management training programme. The principles deployed were based on the extensive literature on the iterative adaptive process to build training that describe the strength of this approach.

Key relevant literature detailing the iterative process to build educational and training programmes were a starting reference for this study. There was a key article referred that used an iterative process of intervention to develop a multi-phase process for a comprehensive training package for secondary age students with social, emotional, and behavioural problems. As the targeted population had wide ranging and challenging educational and training needs the iterative process involved evaluating the impact of the educational courses through observation of learning. The different iterations of this process eventually led to a suite of educational courses and materials suited for this challenging segment, (Kern, et al, 2011). In other words, the iterative process proved to be effective for this complex training package build. So, there are clear precedents in using the iterative process. The analysis of the process was done in depth and offered key insights on how to approach this method in this research.

Another key piece of literature that outlined a similar approach was the reflections on the use of 'iterative, agile and collaborative approaches for blended flipped learning development,' (Owen, et al. 2015). This study used the iterative approach to develop suitable new training practices for students in an e-learning environment. The iterative approach ensured that students were actively involved in their learning as co-constructors of knowledge, as opposed to passive recipients of knowledge. The conclusions of the study were that higher order thinking skills could be practised through participation in activities, application, collaboration, and reflection, all key in an active participatory adaptive iterative process, as was employed in this research. The results of this study showed that students were engaged, and aware of the metacognitive strategies they were employing, and were enjoying the flexibility the blended, flipped design enables. The highly collaborative and iterative approach enabled course writers to challenge their own perspectives of intelligence on e-learning which resulted in a course being developed that was stretching but manageable for the students as they provided their own seal of approval to the final version, (Owen, et al. 2015). The iterative approach was a highly effective way of developing an educational course in a new area of teaching for this institution; e – learning.

Another key published work that was referenced in relation to the development of this research was by Chine, et al, 2022. This article detailed how the iterative design process was used where short duration work-based training courses needed to be improved. The researchers wanted to use feedback in an adaptive staged improvement process at a large scale and believed using the iterative process was the best method of using high numbers of collaborators to produce these improved short courses.

Their conclusions were that evidence supports the hypothesis that the participative iterative design process had a positive impact on how the mentor learning element of the course were developed and improved student self-efficacy, (Chine, et al. 2022).

This and other related studies had impact on this research, as it proved that by using an adaptive iterative design process increases the possibility of the training programme meeting the overall strategic aims, and more importantly meeting the immediate aims and expectations of training programme users. This collaborative build process, improving the training programme in the eyes of the trainees at each stage, was fundamental to rendering the training successful in terms of the key criteria of being understandable and of adoption.

The above are the key similar academic studies that helped to shape the conceptualisation and planning of this research.

The unique contributions of the research are discussed and concluded in the Conclusion chapter 6. Here it is explained how this study can contribute and add to the field of collaborative, adaptive iterative design of training, especially financial work-based training.

Chapter 6: Conclusions, Impact and Future Related Studies.

This chapter will conclude the study by summarising the main overall findings and how they relate back to the aims of the research and presenting the final overall model of training programme development that appeared from the research. There will be an explanation of the positive aspects of the research and how it informs further understanding in the field of work-based training development. The limitations of the study and their consequences on the research outcomes are also discussed. Finally, the plans for future related research that progresses and advances the scope of this study will be set out.

The conclusions will clearly set out the purpose of the research, the findings, and the impact it will have on the specific area of purposeful financial management training for non-finance managers working in small enterprises and its potential contribution of improving the financial viability of the small enterprise.

6.1 Recap of the goals and aims of the research.

The research goal was to develop an adaptive framework model for effective finance training for non-finance managers who have finance duties in small enterprises.

To reach this goal the overall aim of the research was to investigate ways in which an iterative process of training programme design impacted learning and organisational adoption.

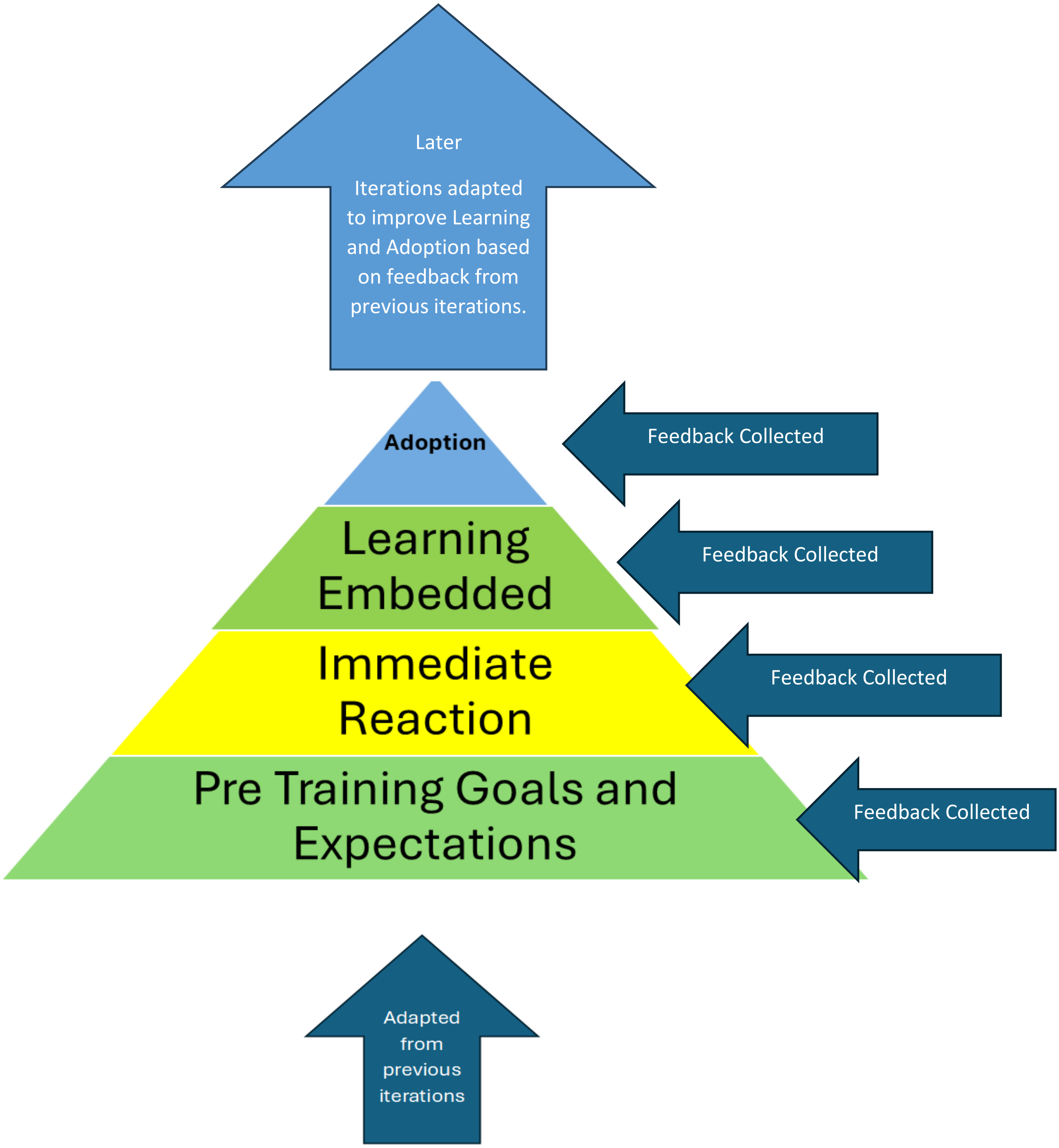
The concept was that this process would render the training programme effective in the perception of the key stakeholders and consequently would result in a framework model that would produce an effective financial management training programme for non-finance managers who have finance duties in small enterprises. According to literature, this effective financial management training programme should result in improved financial management within the small enterprises of the participants of the training and so decrease the risk of financial failure or slow growth of the small enterprise. But this last outcome was beyond the remit of the measured outcomes of the study due to the time limitations and therefore only the belief of financial management self-efficacy and the level of adoption of the training in the short term was measured.

6.2 The Model of Research Hypothesis.

In terms of the final model of methodology for building an effective work-based financial management training programme for non-finance managers in small enterprises, this is set out in figure 30 and explained below.

Figure 30: Details the model of training programme design that the research has found.

Figure 30: Conclusive Training Model – The Four Level Iterative Training Evaluation Model.



The final training model developed for this study is a result of the literature on established training evaluation models and summarised above. The basis of the model was set out in detail in the methodology chapter.

This is the 'Four Level Iterative Training Evaluation Model.'

This model of evaluation of training is referenced to the established theoretical models that are been evaluated so that all levels above the bottom levels of practice have been assessed extensively.

The "Goals and Expectations" will be established pre training. The reaction will be assessed immediately after the training. The learning will be re-visited six weeks plus after the training, as well as any change of behaviour or / and implementation of key learning will be assessed with the level of adoption being the key metric to evaluate the training effectiveness.

This periodic feedback will come from the participants of the learning to be consistent with the participatory research approach using the principals of the iterative cycle.

This model of evaluation is the cornerstone of the detailed research design.

6.3 The Key Elements of Financial Management Training Programme.

In the Discussions chapter there is a summary on what areas of financial management, or management accounting disciplines, the participants find the most useful and the easiest to adopt into their workflow. From this evidence we can conclude on what aspects of financial management should be included in the financial management training programme for non-finance managers in small enterprises to enhance financial management self-efficacy and crucially, increase adoption from the training.

This section also explains how the iteration process of training programme design not only helped to identify the key management accounting techniques covered in the training that were most useful to the delegates but also how the iteration process refined and improved how these management accounting techniques. This is to increase their relevance to the training participants so that it increased the probability of these techniques being adopted and in doing so increased the effectiveness of the training programme overall.

The conclusions on what topics were most relevant depended very much on what financial management information needs of the delegates were at that time and therefore the contingency theory of management accounting was applicable in identifying the key financial management techniques taught. So, the contingency theory of management accounting is relevant to identifying the key financial management techniques to cover in the training programme.

These specific conclusions on content of the training programme and how they are refined through the adaptive iterative process add to the theoretical conclusions relating to the iterative design process and is a key element of the theoretical conclusions of the study.

Another element of the conclusions discussed here in this section is what key accounting concepts the research data suggested need to be in the financial management training and again it is explained how the adaptive iteration process made these concepts more understandable and applicable to the trainee participants to allow them to relate to their own financial management information requirements.

But it also provides a practical guide to training providers of such training on what to include in an effective financial planning training programme for small enterprises and how to refine and tune these management accounting topics to meet the needs of the training delegates.

6.3.1. Financial Statement Analysis.

In the feedback reviewed, analysed, and discussed one of the key areas of the financial management training that was identified as being most useful to the delegates is understanding and analysing the key financial statements. The feedback found the understanding of these documents as a practical area of importance for the delegates mainly as it has now become a UK legal requirement for all companies for tax and transparency purposes to produce statutory accounts. However, only medium sized companies and above need to have their financial statements audited by an independent audit (see figure 2 for a definition of medium sized organisations). But all companies of all sizes need to produce financial statements annually. In addition, all non-profit making organisations must produce statuary accounts for transparency purposes, so in effect all small enterprises, both profit and non-profit making must produce financial statements. The financial statements that should be produced annually and audited, or for smaller enterprise independently verified, are a Statement of Financial Position (balance sheet), an income statement (profit and loss) and a cash flow statement, (GOV.UK, 2024).

The feedback from the delegates highlighted that they need to have a greater understanding of these statements. The formulation of these annual financial accounts is in many cases done by paid external accountants, but the trainee delegates wanted to be confident of what was in these statements, what they meant and what information they were conveying about the organisation and be able to query and challenge the financial advisors on certain areas of concern. Therefore, the review and the breakdown of the financial statements should be a key part of the training course.

One of the main accounting concepts that is fundamental to understanding financial statements, specifically the balance sheet was the accounting equation. This basic concept states that everything owned by an organisation must be paid for by borrowings or own generated monies and was clearly lost on many of the trainees in the earlier iterations based on the observations during the training and therefore had to be explained properly to the trainees in order they understand not just how the financial statements are put together also but the basic concept of organisation valuation.

In the latter iterations understanding financial statements including the accounting equation was the first part of the training course, and from feedback from earlier iterations it was logical that this should be the case as it is essential the delegates have a basic understanding of these. This is because the delegates were showing that they were struggling to understand aspects of the training, especially the financial analysis and budgeting elements as key terminology was lost on them as these financial documents were referenced. They had been covered before these sections were taught but not in as much detail as was the case in latter iterations of the training programme. By analysing the financial statements in more detail in latter iterations of the training programme then the sections on financial analysis and budgeting as well as the financial strategy were much more productive to the delegates as they had a better and stronger understanding of the basic mechanics of the financial statements that form the foundations of these other financial management disciplines.

Another key accounting concept that the feedback and the training observations suggested that not only be included but be emphasised and explained properly for a robust understanding of financial statements was the matching principle. This simply says that all income raised in a period must be matched against the expenses incurred in that period to raise that income. Though a basic principle, if not the easiest accounting principle and concept, it was clear in the observations and feedback that the actual application of this concept was lost on the trainee delegates. In the latter iterations of the training programme the matching concepts was explained simply with examples as there was a clear lack of understanding in the earlier iterations. This lack of understanding of this basic concept was a surprise but this was a learning step for the researcher as the target audience are non-finance managers with no finance background. By seeing and finding the lack of understanding of this concept the latter iterations covered this concept simply which eased a better understanding of the more advanced finance concepts covered in the training programme. This was only proven by the iteration process.

A key advantage of undertaking an iterative process of training programme development in relation to making the coverage of financial statements more relevant and productive was to understand what aspects of these documents needed to be emphasised and focused on. For example, there was a clear lack of understanding of how the accruals process effects the financial statements, this came out in the observations and the feedback. This is the third key accounting concept that should be covered in the training programme. Without going into the technicalities of accruals, it is sufficient to say it is fundamental that the trainees understood the difference between accrual and cash accounting in their roles or they could be misled to thinking that the cash position in their organisations is better than it is. This is a common error made by small enterprise owners and managers that leads to financial problems within small enterprises. This has been referenced in the literature review as a significant underlying cause of small business failures as there is a lack of understanding that profit reports are based on sales income and that the income shown in a period's profit and loss statement does not equate with the cash received in that same period. This is due to the timing difference of sales recorded and the cash received for a period as the enterprise may have sold on credit terms from anything from one to six months from that period of recorded sale. This means, that an organisation must understand that it needs other healthy inward cashflow to cover the time lag of extended credit sales cash inflows. According to ample studies evidence suggests small enterprises do not have a good enough grasp of this fact leading to critically adverse outcomes.

In a significant European wide study undertaken in 2023 by Albuquerque, et al, surveyed European small companies that a minority of small businesses understand this concept in general and that this false sense of security of profit showing on the financial statements resulted in unforeseen future cash flow problems. It is worth noting that there is a legal requirement for most UK organisation, including most small enterprises (not micro) to use the accrual method that requires organisations to 'report all economic transactions, whether liabilities or income when all the events have occurred which fix the right to receive such income', (GOV.UK, 2024). Therefore, it is fundamental that the financial management training programme includes this accounting concept. Earlier iterations of the training programme revealed that the delegates struggled with the accruals process, so later iterations simplified the explanation of this concept significantly as the conclusions was that some understanding is better than none.

The last conclusion in relation to including financial statements analysis in the training programme and to feature it prominently in the training is that the financial statements should be sector specific if adoption of what was taught is to be high. In two of the fourth iteration session all the trainees' delegates and participants were working in small enterprises from the charity sector.

The overall iterative process made it clear that it is imperative that financial statements are included and are prominent in the training programme with the associated accounting concepts set out included to ease the understanding and the analysis of financial statements. As Welker said in 2023; 'if analysing the financial statements is not part of the small business strategy development, then the likelihood of that small business becoming one of the many of businesses that make it to the 10-year mark is slim.'

6.3.2. Budgeting.

The iterative process refined and improved the delivery of budgeting in the financial management training programme into the latter iterations to the point a dedicated budgeting day course was offered as part of a suite of financial management day courses. The necessity to include budgeting in the programme and feature it prominently came from the pilot programme that as mentioned was undertaken in collaboration with a professional accounting body who had already established through their work in partnership with small business associations that small business owners and managers have a high need for budgeting training so that they can avoid cash issues in the future and survive the volatile first year and the precarious first three years.

As covered in the literature section researchers have found the need and the demand from small enterprise owners and managers to have more robust budgeting skills and the need and the demand to provide training to small enterprises in this specific field. A comprehensive study undertaken by Lange, et al. in 2000 looked at the key skills that were missing within SMEs in Scotland and as a result was contributing to the demise of a high number of them.

The study found that there were issues with the lack of budgeting skills and the inability of many SMEs in Scotland to budget strategically that would allow them to be more proactively prepared for the challenges ahead. Also, there was an inability to budget to enough detail in the short term that would identify imminent cash flow issues. Sudden cash famine is a significant cause of Scottish SME financial issues that lead them to downsizing or indeed ceasing to trade. Training that targeted this budgeting skills shortfall would go a long way to alleviating this situation in Scotland, (Lange, et al. 2000).

Though budgeting was featured heavily in the training programme from the offset in the first iteration of the training programme because of the need for budgeting training identified in the pilot, how it was delivered and what aspects of budgeting to focus on came about through the iteration process.

It became clear from observations and delegate feedback that the general knowledge of the mechanics of budgeting was extremely limited. As a result, the fundamentals of budgeting were covered in terms of why organisations budget for both the short and long term, budgeting philosophies, the impact of budgeting on staff and the approaches to budgeting with the advantages and disadvantages of each in terms of zero-based budgeting, incremental budgeting and a hybrid approach. The feedback revealed the more general approach to budgeting training had higher positive reception from delegates. But it was observed that the contribution from delegates was lower in the second and third iteration of the training when covering these general budget topics, so it was necessary to have practical exercises in this section by using scenario-based case studies so that the delegates could put into practice the budgeting concepts that was just covered in the training. This was successful in the fourth and final iteration and feedback showed that having this combination of theoretical and practical of budgeting enhanced understanding and increased the probability of adoption.

The next accounting concept that was found from the observations and feedback to be included and emphasised in the training programme in relation to budgeting was the prudency concept. In accounting, prudence refers to the concept of adopting a conservative approach when estimating income and expenses with the emphasis on leaning towards underestimating income and over estimating costs on the scale of outcomes on income and cost estimation, (AAT, 2023). When explaining the approach of budgeting from a financial management approach that the delegates from small enterprises budget adopting the prudency concept as a key approach. Observations from feedback and comments made during the training suggested that the delegates believed in budgeting with 'slack' and to allow manoeuvring. There was a distinct absence of the understanding that budgets are used as a control mechanism and therefore should cut slack. This is consistent with literature where the prudent concept in budgeting is advocated by many writers, with the AAT (2023) stating that 'there is clearly an expectation among many users that accountants and their accounts are, or should be, a restraint on the anticipated over-exuberance of management in reporting a company's results and in their forecast budgets'.

This training to 'budget for the least optimistic option' was well received especially as it was caveated by the recommendation that actual scenarios that resulted in an improved position from budget should be used as a 'motivating factor' for employees and managers to aspire to.

So, in terms of budgeting the iteration process concluded that more general background to the concepts of budgeting needed to be covered in the training, though with a practical based scenario case study included to consolidate the practical knowledge and enhance applicability and the possibility of adoption. The iterative process also identified that the accounting principle of prudence should be stressed in the budgeting training, as the delegates had a somewhat Gung Ho attitude to budgeting at their organisations.

6.3.3. Cash Flow Management.

The last element of financial management that was found through the iterative process as an important aspect to include was cash flow management.

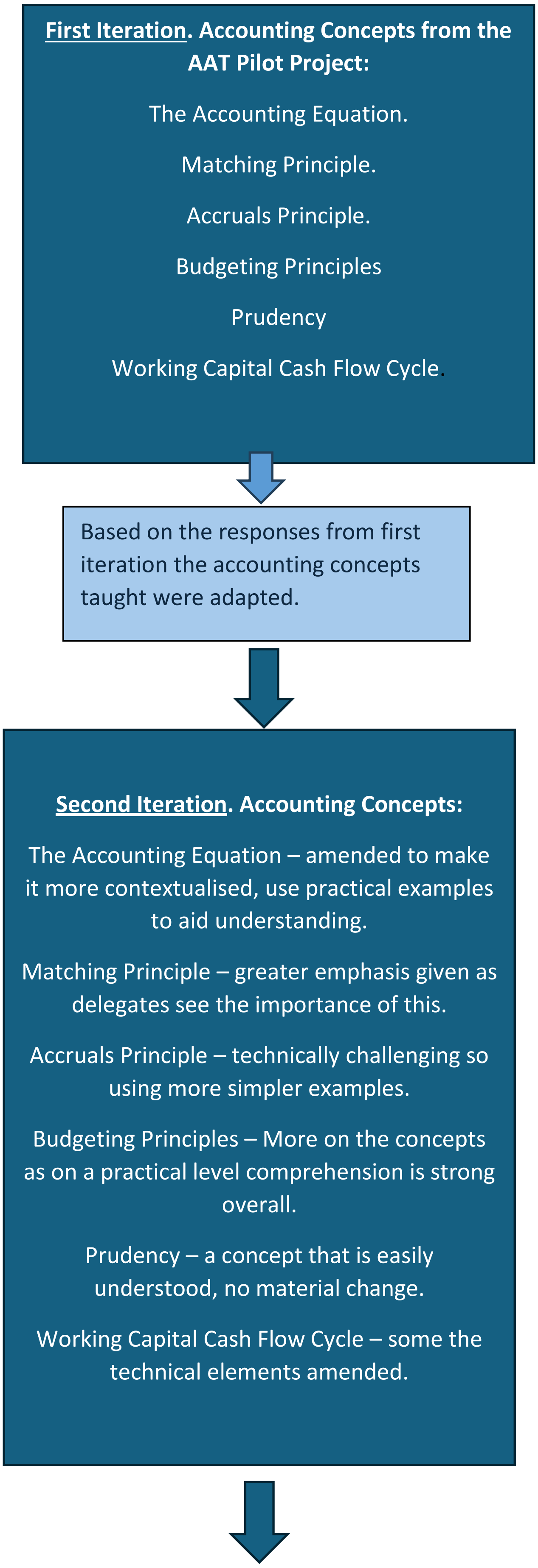
As covered in the literature chapter, there is substantial literature on the need for firm cash flow management within small enterprises and how bad working capital management leads to cash running out and failure. There is also substantial literature on the need for cash flow training aimed at better small business internal management. In 2013, Epstein, et al. stated that cash flow training improved small firms finance outcomes by improving their provisions for better cash flow and by doing so allowing for more attractive credit facilities to be offered to attract business, a clear indication of the synchronisation of cash flow training and better business outcomes for small enterprises.

In the earlier iterations of the training cash management techniques were covered such as debtor management schedule and credit control practices. These were well received and enjoyed but in terms of the level of adoption it was low purely from the perspective that most of the delegates were not involved in such work. Therefore, in future iterations more general aspects of cash flow management were covered and concepts like the cash cycle were stressed and this had a positive reception from the delegates in latter iterations feedback and based on observations.

This was the last accounting concept that was found and emphasised in the iterative process, the Cash Flow Cycle. The cash flow cycle describes ‘how the cash flows in and out of business. Receivables are promises of payment you have received from others. Debt is a promise you make to pay someone later. To bring in more cash it is better to speed up collections and reduce the extension of credits,’ (AAT, 2023). It was important to explain this important fundamental financial management concept as it was clear that there was not a high understanding of this concept in earlier iterations and yet, as literature identified this cash flow cycle as a fundamental concept to grasp to improve their chances of survival short and medium term.

6.3.4. Summary of accounting practices and concepts to be included in the training shown and refined by the iterative process. The accounting concepts included in the training programme and how they evolved and were adapted through the four iteration stages is set out in figure 31.

Figure 31: The Accounting Concepts integration and journey of development through the iteration process.



Based on the responses from second iteration the accounting concepts taught were adapted.

<u>Third Iteration</u>. Accounting Concepts:

The Accounting Equation – main amendment that examples are more sector specific to aid comprehension.

Matching Principle – Same emphasis but some simple examples given to aid understanding.

Accruals Principle – Need to spend more time on this as feedback is there is a need to do accruals yet understanding is low.

Budgeting Principles –comprehension is still strong overall. Delegates want to spend more time on this, so perhaps dedicated session needed.

Prudency – a concept that is easily understood, no material change.

Working Capital Cash Flow Cycle – some technical level elements with examples too much for the targeted profile. So spent most of this section reflecting on the cash cycle concept.

Based on the responses from third iteration the accounting concepts taught were adapted.

Fourth and Final Iteration. Accounting Concepts:

The Accounting Equation – Now exclusively sector specific. This makes it much more applicable and increases adoption potential.

Matching Principle – As previous iterations show easy understanding some stretching questions on this to really embed knowledge.

Accruals Principle – Really went into detail with this but with simple examples. Understanding much better than previous iterations.

Budgeting Principles – There was specific session in this iteration and so more depth. Feedback from delegates was still very satisfactory. There is a high demand for this training and so much feature prominently in any financial management training programme for small enterprises.

Prudency – a concept that is easily understood, no material change.

Working Capital Cash Flow Cycle – with the conclusions come to in 3rd iteration that technical aspects of cash management were too demanding, but they are important so combined it will high level strategic cash management and this was much more engaging by the trainees.

To summarise, the iterative process of training programme design led to the conclusion that analysis of financial statements, budgeting and cash flow management should be the key areas of financial management that are covered. In addition, the accounting concepts of the accounting equation, the matching principle, prudency and the cash flow cycle should integrate into the relevant sections of the course. The basis of how this was found and how it should be done was covered above in section 6.3.

6.4 Contributions of the Research.

The survival and growth problems for UK small enterprises has been widely documented in academic literature as well as contributions to find solutions to this societal problem. The approach to this research was directly motivated by evidence from literature that suggested that an increase in financial management competence will help small enterprises to survive and grow in a financially sustainable way, (Dahmen, et al. 2014).

Research has also shown that effective targeted financial training will improve the financial literacy of small enterprises when the accounting training is targeted to meet their training needs and will have a consequential positive impact on their financial performance, (Chepkemoi, et al. 2017)

Therefore, the outcome of this research contributes to the theoretical question on how to develop financial management training for small enterprises where the criteria is an increase in understanding and confidence of the key financial management core competencies taught. Another core aim is an improvement in uptake in the adoption of these competencies. The achievement of these aims will have material positive societal impact.

In plain language, the positive contribution of the research is based on the following premises taken from academic and professional literature. First, successful small enterprises contribute significantly to the UK economy. Small enterprises can fail early in their life cycle to the detriment of their impact on the economy. One of the key underlying reasons of these failures is the conspicuous lack of financial acumen within small enterprises. If the financial management skills of these enterprises increased, then research has shown that the impact on their financial performance would improve. There is evidence in literature to prove that one practical and effective way of improving the financial acumen and competence within UK small enterprises is to offer effective and customised work-based financial training.

So, this research sets out a framework that is based on a sound theoretical basis to develop an adaptive design of financial training for uptake in small enterprises.

The following are the main theoretical conclusions of the research that are significant contributions to the knowledge in the field and constitute clear addition to the information available in improving work-based finance training.

The first overall conclusion drawn is that to achieve the aim of an effective financial management training programme for non-finance managers of small enterprises, then a successive approximation model of the training should be developed. This would be achieved through a constructivist iterative process of evaluation of participant's feedback from earlier iterations. The iterative process should be in four stages, and the feedback from each stage should be used as the building blocks to evolve a training programme by adapting earlier versions of the training. This would lead to an enhanced approximation of an effective financial management training model for non-finance managers working in small enterprises.

To arrive at the successive approximation model, the feedback process should involve quantifiable data. This would involve statistical analysis to assess the level of financial management confidence at each stage of the iterative cycle as well as the level of adoption of the training. However, the substantial analysis would be from qualitative feedback data from questionnaires pre and post training sessions, analysis of observation notes and interviews conducted post training and then going through an analysis process of this feedback data. The process of evaluation of the data is set out in chapter 4.

This point is clear in that self-evaluation, or self-efficacy, of financial management competence is improved and the adoption will increase through an adaptive iteration process. This is significant as it sets out in detail the method to build an effective financial management training programme for non-specialists.

A second key finding, summarised and discussed in section 5, indicates that by undertaking the iteration process, and adapting the training programme through this process, then the financial management information needs of the participants will be identified and included through this iterative adaptive course development process. This was found using the grounded theory approach of research where the responses were analysed to find any consistent themes in the data that could be linked to a relevant theory. This conclusion is a significant contributor to the level of understanding and adoption as the training programme was developed. This is because, in simple terms, the survey questions identified the reasons for enrolling onto the training course. The contents of the course from iteration one onwards was pre advertised on the course syllabus. Post course qualitative responses set out the parts of the course the trainees found useful and crucially the parts they could be used and adopted in their workplace to help solve a financial information need at their work. By adapting each iteration of the training programme based on these responses the training programme met the financial information needs of the participants and hence became more effective for the participants. As a result, the level of adoption from the training programme increased in the latter iterations as it was more customised to the pressing management accounting information needs of the targeted profile persons who attended the training.

This process is consistent with the contingency theory of management accounting. As explained extensively in the literature chapter, contingency theory of management accounting is based on the principle that the appropriateness of managerial accounting techniques is contingent upon the financial information needs of that organisation. Additionally, the management accounting used in the organisation needs to change depending on contingency factors that impact its financial performance. These contingent factors could be the economic environment, social changes, competition behaviour or technological factors that affects the organisation and so requires new management accounting information to deal with that factor change, (Otley, 2016). Therefore, by adapting the financial management training programme to meet the management accounting needs of the participants the training programme is logically more effective as it is being customised to be in line with the participants management accounting information needs at that time. The feedback data shows that understanding and adoption is increased through each iteration as the training programme is customised to meet the management accounting information needs of the participants and their organisations.

This is a significant finding of the research and a significant revelation in making financial management work-based training more useful and relevant. There could be criticism that this is obvious, that by making work-based finance training more attuned to the financial information needed by the organisation then obviously it will be more relevant. But what is set out in this research is how this process of adapting the work-based financial management training to align it with the prevailing financial information needs of the targeted group has the same theoretical basis and justification as the basis of why organisations change the management accounting information they use at any one time. This gives more credibility of the conclusion that the financial management training course should be adapted based on the prevailing environmental financial information contingency needs.

A related sub conclusion on this phenomenon is that for the iterative design process to aid the identification of the prevailing financial management information contingencies it would be more productive if the participants enrol on a ‘sector focussed’ financial management training programme. This will enhance and improve the process of fine tuning the course to the prevailing management accounting information contingencies in that sector. This was the case in the fourth and final iteration of the training programme where all the delegates were managers with no finance training who worked for small to medium sized charities. This fourth, sector specific iteration, went through small adaptations in a second phase of delivery as explained in chapter 3, the methodology section. By doing this there was a higher concentration of management accounting needs found in the feedback data. This was based on the prevailing environmental factors affecting the management accounting needs of that specific sector. For example, those in the charity sector who attended were concerned with understanding the new reporting requirements of UK Financial Reporting Standard; FRS 102 that specifically relates to charities. This was introduced in 2019 and has a significant impact on the financial reporting of small charities.

Therefore, overall, this proves that by undertaking an adaptive iteration process of training programme design then the financial management information needs of the participants will be met as these needs will be found and included through this iterative adaptive course development process.

As mentioned, from a theoretical perspective to increase adoption from the training then the contingency theory of management accounting must be considered and incorporated into the design of the financial management training programme.

It would be essential that the financial information need for this contingency is covered in the financial management training to increase self-evaluation of financial competence. To not do so would result in a gap in the training programme to meet the financial information needed in that sector. The results from the fourth iteration of the responses showed the uptake of the training was good after six weeks post training programme and that it could meet a financial management contingency within the organisation. This is a much higher adoption rate than earlier iterations as seen from the results and analysis chapter. This is due to the financial management training being perceived to be effective after the iterative training design process as the final version of the training programme covered the financial information needs of the sector specific small enterprises.

Therefore, the specific conclusion of this research confirms the literature in this matter that suggested that financial training for small enterprises is ‘beneficial in improving the financial literacy when the finance training is targeted to meet the training needs of the organisation,’ (Chepkemoi, et al, 2017) and that the training developed ‘needs to be ‘funnelled’ towards targeting small businesses strategic needs’, (McKenzie, 2021). In other words, the contingency theory of management accounting must be incorporated into the training programme design to increase relevance and adoption of what is taught.

The last conclusion of the research study is in relation to who the training programme should be aimed at to make the training as effective as possible. In the discussion chapter it was reflected that the background of most of those who attended the financial management training were non finance managers who worked in small enterprises and undertook finance work to some capacity in their roles in the small enterprise but had no or little previous training in financial management. These people would in general undertake key financial management work within their organisations without receiving the right training. The fact that most people who attended were of this profile was expected as the training courses were clearly communicated as being suitable for those who fitted this profile.

Another recurring theme of the participants found in the feedback data over the various iterations of the training programme were that those persons attended the training course were persons who have been invested by their organisations to learn and absorb new information. They were also identified as being best positioned to recognise new information and to embed it within the organisation to extend the level of the organisation's financial management information. Again, in simple terms these are the people who the organisations think will be the best suited to attend the training to get the most out of it for the benefit of the organisation in that they will bring in new knowledge that will improve the operation of the small enterprises. These types of persons attending the courses tended to be those who agreed with their employer, the small enterprise, that they were the most suitable person to attend the training to get the most out of it as they were best suited to absorb and increase their own capacity to learn, ultimately to the benefit of the small enterprise. This phenomenon is consistent with the principles of absorptive capacity theory. Absorptive capacity theory was also covered extensively in the literature chapter, but to recap it is the rate or quantity of information that an organisation can absorb. It means the more an organisation seeks out new and status quo challenging knowledge, the greater the opportunity for the organisation to develop its potential absorptive capacity, (Cohen, et al, 1990). To increase an organisation's absorptive capacity the organisation must identify the key persons within the organisation that can recognise the value of new external knowledge and be in the best position to acquire, and assimilate, and then exploit new external knowledge for the benefit of the organisation, (Griffith, et al, 2003).

This is the final point of conclusion of the research project, and it is significant; that absorptive capacity theory applies to developing an effective training programme of financial management for non-finance managers in small enterprises. Therefore, the persons attending the training should be those identified by the small enterprise that are in the best position to recognise and absorb new information and to apply it to push the capacity limits of knowledge within the small enterprise. In this case it will be the limit of financial management skills within the small enterprise.

These key theories are the key conclusions of the research project: that a constructivist iterative adaptive process should be undertaken to develop an effective financial planning training programme for non-finance managers who undertake finance work in small enterprises.

Secondly, by undertaking the iterative adaptive design process the key financial management information needs of the participants are found. Then by adapting the course to include these needs the training course is customised to be more relevant to the financial information needs of the participants. It is necessary that the process goes through stepped adaptations rather than just one cycle and finalised. This has been covered in the literature chapter when reviewing the iterative adaptive theory where authors have explained there is a best number of iterations in the process. In 2019, Eby wrote that when using the principles of iterative design a quick perfect outcome is an impossible dream. But a successive approximation model should be arrived after four iteration cycles, and that anymore beneficial adaptations in further cycles will have a quick diminishing return on the effort of undertaking those cycles.

Specifically, using the iterative cycle design approach for the financial management training programme for non-finance managers in small enterprises, the issue is that there is so much to cover in this field of management accounting that it would be impossible for a trainer to know what to include in a short, focussed training programme. The amount of management accounting information that will need to be excluded is large and so only a process of trying and testing will ease the filtering process to know what to include and what not to include in the final training programme.

Also, crucially, one of the key conclusions of the study through literature and through the ground theory approach of this research was to render financial management training for small enterprises as useful and relevant as possible and therefore to increase the chances of adoption of the training it must cover the management accounting information needs that were pressing at that time for the delegates. But this research is about finding effective financial management training, not consultancy. Consultants would meet their clients, who would explain their financial management needs, and then the consultants would provide customised package to meet that need. With financial management training there are delegates from a broad range of work backgrounds. Therefore, there is no way of producing a one size fits all training package. The realistic position is to derive an ‘approximation model’ that can cover the needs of all the delegates, which is the realistic aim of this research. The only way to do that is to focus down onto the key fundamental financial management needs of the collective. As it happens it was concluded that this is eased by having groups in each training programme that are sector focused so that the techniques covered are very much a priority for all enrolled on that course. For example, the need to separate restricted and unrestricted income in charity accounts is only relevant for those managers enrolled from the charity sector.

This approximation of what can be offered that at least covers the main financial information needs of the delegates can only come through a successive process of identification of what works and what does not in terms for the potential of adoption. So, for the contingency theory of management accounting to be adopted in the training programme design, from a practical level it must go through a successive (four to five) cycles to be effective.

The iterative process eases the consideration of the contingency theory of management accounting in the process as it has been found that this theory is key to increasing the level of adoption from financial management training. For this theory to be fully applicable the financial management training programme should go through the iterative adaptive process periodically as the main contingency factors (economic, social, competition and technological) that effect the management accounting information needs of the small enterprise change periodically. What exact period the iterative adaptive process should happen again depends on the level of contingency changes that take place. For example with the fast development of artificial intelligence (AI) and the level of impact it is having on business and the subsequent management accounting information used within organisations it is very probable the iterative adaptive process undertaken for this research project would have to be undertaken again very soon to incorporate the impact of AI has on small enterprise operations and their subsequent management accounting information needs.

The last conclusion was in relation to absorptive capacity theory. This recognised that for the financial management training programme to be effective it should be enrolled by persons from small enterprises who have been identified by them that have the strongest capacity to recognise and absorb new information and implement it within the small enterprise to extend the capacity limits of financial management knowledge within the small enterprise. This will improve the financial management information used in the small enterprise and will increase the probability of adoption of what was taught on the training programme to the overall benefit of the operations of the small enterprises.

The nature of the above conclusions is significant; they form strong practical contributions to the field. Why? They set out the theoretical process to develop a framework for effective financial training for non-finance managers who hold significant financial management duties in their small enterprises. By adopting the basis of this framework then finance training can be designed and provided that will make a real difference to the financial sustainability of small enterprises that receive this training.

The results of the research have attracted interest from the academic community, and two papers from the research, one a summary of the entire project findings and the other on the significance of the contingency theory of management accounting in building effective management accounting training are going through peer review at relevant journals.

The relevance to the training provider is a clear framework that outlines that they must know what the main financial management information needs of small enterprises are at any one time and later emphasise prominence of these in the training programme. This can be achieved by undertaking the iterative adaptive training course build process. But the provider must periodically undertake the iterative evaluation process of new course build to ensure the latest management accounting contingencies are being met in the training, (Herrholtz, 2020). The research has also shown that to maximise the self-evaluation of financial competence and to increase adoption the training programme should include financial management information contingencies that are sector relevant and because of this it would be practical and more effective to run these courses for small enterprises on a sector focussed basis.

Another key practical impact of the conclusions of this study is that for the financial management training to be fully effective it must be targeted, 'marketed,' to persons within small enterprises that have the greatest potential to absorb the new financial management information taught. These targeted individuals will use this training to push the capacity of financial management information within the small enterprise leading to improve financial literacy within the small enterprise. This in turn leads to, as showed in literature, improved financial information used in the small enterprise, improving the chances of being one of the small enterprises that survive beyond five years of starting up.

The implications for impact in this field are potentially significant as the benefits to small enterprises survival and sustainability due to this training are increased. This is verified in literature. For example, in 2009 Lusardi, stated that a financially literate business owner or manager is in a far better position to understand and extricate important information from the financial statements that would allow them to have a deeper understanding of the condition of the organisation and use the financial statements to identify and exploit opportunities for improvement and growth, (Lusardi, 2009). This is borne out from the responses of the feedback from the participants where perceived value of the training is high.

As one respondent said: ‘This training has helped me to cope with the added financial work I need to do in my day-to-day job running the charity. I feel that much of what I am doing is right and this training session has reassured me this is the case. But it has also given me new insights on how I can improve the financial data I use for the sustainability and growth of the charity. This type of focussed training is essential and should be widely made available’: Manager of a small charity who took part in the third and fourth iteration of the training programme.

The contribution of the research is significant not only as the results are thorough and detailed. They are also based on systemic research on the relevant literature and significantly, been evaluated through a very robust longitudinal research project over eighteen months through the iterations, with the active participation of sixty-nine non finance managers from various small enterprises. It is their active and excellent involvement and engagement that makes this research as important as it is as they in effect found the solutions to a problem that directly affects them.

6.5 Where the Work is Heading.

As of late spring 2024, preliminary work has already started on a new project that is and extension of this research study to have more in-depth study of impact using the findings of the research. The project is to investigate the medium-term impact on the internal operations of customised financial management training on small to medium sized third sector organisations. This study will undertake a longitudinal investigation of the impact of tailored, customised focussed financial management training for non-finance employees of small to medium sized Third Sector organisations.

This research project will support building skills in finance and accounting within the charity sector, which is key to ensuring its long-term sustainability. Ensuring that third sector organisations have the capacity to adapt and thrive in challenging circumstances and continue to support the extremely vulnerable service users they provide critical service to.

This project involves the provision of financial management training to non-finance managers of third sector organisations. The research then analyses the participants' reactions to the training provided to them and studies their beliefs of its effectiveness. The impact is measured in the levels of responses of the training on helping participants to advance their career and in its contribution to their employing organisation's operational effectiveness.

Improved financial management of participant third sector interface organisations in Scotland, specifically in Tayside and Perth & Kinross, has already been reported through testimonials from the relevant directors of participant organisations.

In the spring of 2025, the project will incrementally roll out the training provision to other third sector interface organisations in Scotland with potentially hundreds of more third sector organisations affected. The research team will have discussions with United Kingdom (UK) wide third sector intermediary / interface teams to expand this training provision throughout the UK and provide the template terms of reference for training provision in this sector.

The research findings of the project are expected to inform academic literature but also lead to a framework model for effective financial management training for third sector organisations. This will result in the development of an executive education policy framework across the UK third sector, with educational framework and resources provided as an output of the research.

The project has already attracted seed funding of £5,000 in the form of a grant from the Research and Innovation Services of the University of Dundee. The title of the Grant was "Developing a Framework for Effective Financial Management Training for Third Sector Organisations." Funds have been used for venue booking costs and industry partner administrative support September 2024 to July 2025.

The project's findings are expected to inform academic literature and lead to a framework model for effective financial management training for third sector organisations, resulting in the development of an executive education policy framework across the UK third sector, with educational framework and resources provided as an output of the research.

On a personal level, the fact my Doctorate studies is now quickly progressing into work that will and is already having a material benefit to charities who provide invaluable life improving service to their service users is of enormous personal satisfaction. Making a real difference with my academic wok is very humbling but motivates me to continue the in-depth work involved.

6.6 Limitations of the Study.

In common with all research there are inherent limitations. These are the following headings:

6.6.1 Summary of the limitations associated with control sample.

The fact the sample used is a controlled sample could be seen as being a limitation of the research. A controlled research sample is where 'all variables other than the independent variable are controlled or held constant so they don't influence the dependent variable', (Bhandari, 2022). The independent variable in this project was the training programme assessed and the dependent being the reaction and impact on the trainees who attended. The training programmes were advertised to small enterprises widely throughout the eastern and central regions of Scotland through the University website and marketing channels as well as through partner government organisations.

Therefore, in terms of the objective of the research, which is to derive a programme for effective financial management training for small enterprises, the conclusions from the findings of the data is only from those who attended the training and therefore it could be concluded that the fact that so many did not attend the training is a negative variable and has to be taken into account; what was it about the advertised training programme that did not encourage more to attend, many of those who could have potentially benefit from the training. The problems of a controlled group in a sample are that there is not enough randomisation as the group selected already have something(s) binding them (Nichol, et al 2010). In this case it was the fact that the participants wanted the financial training that brought them to the training and allowed them to take part in the feedback process. This is the common factor that bound all the participants; therefore, the population was not truly random. No attempt was made to query those who did not attend the training or indeed attended the training but decided not to take part in the feedback process.

There could be a multitude of specific reasons why many individuals did not attend the training or reply to the feedback questions or volunteer for follow up interviews, and this could be an avenue for further research with the aim of improving the uptake of targeted training programmes for small enterprises.

However, this research is examining how to build a model of effective financial training based on feedback on the experience of the training. This can only be based on those who are willing to take part by attending and therefore these are self-selected participants in an educational intervention and therefore the researcher is able to generalise on these conclusions. Therefore, this was research that involved a selected sample whose feedback in their experience will influence the outcome. This is the basis of research experiments from medical to commerce, (Blandford, et al, 2008).

6.6.2 Time limitations

The project from iteration 1 to 4 was eighteen months. A longer period of development might have resulted in more profound changes to the training programme that could have resulted in higher understanding and adoption, but this is uncertain.

To assess the level of sustained understanding and adoption the participants were assessed six weeks to two months after the training programme. For adoption there could have been a variety of practical reasons why adoption had not taken place at that point and a longer period post training may have shown a higher level of adoption as more time to embed these newly taught and valued techniques. This was shown in the feedback.

6.6.3 No note taking during interviews.

It is recognised that most social science research interviews are often recorded and analysed using analytical software to prove trends and themes that will help to build a theoretical summary of the results. The focus in the current research was to test the principles of programme design operating or lacking in each iteration rather than the personal constructs of individual participants.

This approach of not recording the interview verbatim is different from most social science research interviews where they are usually recorded and analysed using analytical software to prove trends and themes that will help to build a theoretical summary of the results.

Within the current literature, there is a prevailing view that having an exact record of an interview is more legitimate way to derive authenticity than other methods of managing interview data. In research underpinned by theoretical frameworks such as grounded theory, it is imperative that researcher is closely familiar with the text and this facilitates the research design and the philosophical approach to the research, (MacLean, et al. 2004).
Therefore, to deviate from this approach needs to be explained and justified. The rest of this section lays out the rationale of the approach taken about capturing interview feedback based on the relevant literature that has investigated this question: to record, or not to record?
A researcher can take notes during the interview on the interviewee's responses and summarise these notes later to capture the key essential elements discussed that are relevant

to the research's objectives or undertake a full recording of the interview verbatim either through traditional audio / video recording mechanisms or through online meeting platforms that will record and transcribe a meeting, (Hill et al, 2022).

The key factor on the decision to record an interview or not should be for the researcher to be clear to themselves what it is they are trying to gain from the interviews and if capturing every word spoken in the interview and analysing every detail fulfils their objectives, (MacLean et al, 2004).

The most correct method of capturing what was said in detail during a research interview is to record the participant's own words in full. This would be especially important when discussing complex topics where it was necessary to drill into the nuance of what was said by the interviewee in order establish a theme that is relevant to helping the researcher get to the answer to what is being assessed on the interviewee. These nuances or even important core issues discussed could be missed if the interviewer does not have a correct record of what is said and this could leave the research findings incomplete or even lead to wrong conclusions, (McMullin, 2021).

There are also practical benefits of recording the participant's own words. It allows the interviewer to focus and immerse themselves in the moment, give them time to explore their first reactions, rather than constantly pausing to write up notes and therefore lose the moment. There can also be nothing subjective or opinionated about what was said by the interviewee during the interview, (Rutakumwa, et al, 2019).

Post recording, the laborious process of writing down what was recorded on tape is now a redundant task due to the wide use of transcription software that has an accuracy rate of 98.6% of the dialogue recorded, (Loubre, 2017). As a result, transcribing interviews is a means to inherently improve the rigour of qualitative research. Interviews can take place online with the use of meeting platforms such as Microsoft Teams and Zoom and the dialogue recorded automatically and written through their transcription facility. Their accuracy of recording what has been said improves continuously during a meeting as they use Automated Speech Recognition that updates the record of what was said as the software recognises the speech patterns of those who are talking, (Wang et al, 2024)

A verbatim record of the interview allows researchers to be closer to their data when a correct record is available to absorb the main points during the interview, in reflection at their own pace, (Britten, 1995). Verbatim transcripts also provide an audit trail of data analysis if needed to be independently verified, (Halcombe, 2006). Having a recording of the conversation allows researchers to slowly prove a more immersed empathic understanding of what was conveyed during the interview, (Fasick, 2001).

As said, there is a prevalence of opinion in literature that if you are undertaking qualitative research that involves extensive interviews with participants then these interviews should be fully recorded and transcribed. It is the norm, what is expected, especially in social science research and the value and the veracity of the data behind the research is questioned if transcription did not take place, (Kowal, 2014).

There are also practical reasons why an interview should be fully recorded rather than trying to recollect the key facts later. Studies have shown that after two minutes people have forgotten more than 90% of what was said in an individual to individual(s) exchange. However, this is where there is a standard conversation taking place, the so called ‘acquaintance small talk,’ the types we meet every day where the experience was pleasant, but we may not remember much about the conversation, (Wengraf, 2001).

But even taking all that into consideration, there is a significant movement in literature that suggests that verbatim recordings of interviews can devalue the research process and are not always the most applicable and effective method of gaining full benefit from a research interview, (Halcombe, 2006).

For starters there are practical problems with using verbatim transcription. Reviewing a recorded interview that was extensive could be very time consuming, depending on the interview length, (Fasick, 2001). That may not be a reason in itself to dispense with recording and transcribing the interviews, but the lengthy process of analysing tens of thousands of words of transcript could devalue the purpose of identifying meaning from the interviews that relate to the research questions posed as the researcher may find the process tedious and so miss crucial intricate elements of the discussions through general and intellectual fatigue, (Wengraf, 2001).

Referring back to the fact that only 10% of what is said in a meeting is remembered five minutes after the meeting has ended, (Wengraf, 2001), it has been found that when some information that is imparted has its importance emphasised by one party or the other either by stating this is important information or through the other asking a question that they know the answer will be important then that information is retained much more so by the person within the conversation who notes it’s importance, (Stafford et al, 1984).

This increase in remembering conversations that involve important facts increases when notes are taken during a meeting. When interviewers note down important facts or assumptions during or post interview then this has proved to be superior to extracting those key essential elements from an interview from a verbatim transcription, (Halcombe, 2006). This is especially true when practical measures such as asking the interviewee to pause for a minute while important points just discussed are written down. By writing down the key things stated at the time the researcher is also able to capture the full ambiance and nuances of what was meant at the time, this is something that may be lost or at least diminished when reviewing the recording of the conversation some days or weeks later, (Rutakumwa, et al, 2019). Although a recording is an absolute fact of what was said, the subsequent challenges in verbatim transcription and then the inherent challenges of coding reduce the value of such data collection as the process of interpretation runs the risk of becoming too technical, too methodical more remote and less intuitive, (Fasick, 2001).

Even ardent qualitative researchers empathise field note writing when listening to recordings or reading interview transcriptions as a way of crystallising the researcher's interpretations and conclusions while going through the meeting record. This can be enhanced by checking with the interviewee during or / and after the interview if the key points that were noted down and the interpreted meaning from them reflects the interviewees intention when said during the interview, (Wengraf, 2001). This was the approach that was adopted in this research project.

Another important potential issue with recording of interviews is the unconscious biasness that could take place both by the interviewee and the interviewer. In other words, both parties might feel more comfortable and say things that they would not if they were being recorded.

There is both a conscious and unconscious relaxation when the person is not being recorded, while recording interviews can lead to unintentional reservations and over careful responses and can lead to the interviewer being overly formal with the questioning. Such a phenomena can lead to key information being withheld resulting in the analysis of the interviews being incomplete and hence devalued, (Bergelson et al, 2022).

However, recordings of the interview can also protect against 'intentional bias and leading' by the interviewer. This is a common occurrence especially from less experienced researchers who may not really understand the harm they are doing to their own research by leading the questions. Though it is unlikely a third party will undertake a full audit quality check line by line of the interview that may spot leading questioning, the interviewer themselves may find that they consciously or unconsciously discipline themselves against leading as they know the discussion is being recorded and transcribed for record, (Knott et al, 2022).

This section covered the possible criticism that not recording the interviews conducted verbatim may be considered a limitation.

6.7 Data Availability Statement

The data that support the findings of this research are available from the corresponding author, (PC), upon reasonable request.

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