The Jewellery Quarter Industry Cluster - halting terminal decline and providing practical support to Birmingham's original creative industry

Survey Results September 2022

Beverley Nielsen, Dr Steve McCabe, IDEAS, Birmingham City University, Greg Fattorini, MD, Thomas Fattorini Ltd

Abstract

This survey was commissioned to review how best to support further growth in the Birmingham Jewellery Quarter Industry Cluster through the development of a Creative Incubator and Hub. Data was collected from firms operating within this area to support the development of a 'Creative Incubator and Hub', defined as "an organization designed to accelerate the growth and success of existing and entrepreneurial companies in JQ-IC through an array of business support resources and services that could include physical and virtual space, capital, coaching and skills development, common services provision, networking connections and promotion."

This survey builds on an earlier survey conducted in 2016 and aims to:

- 1. Carry out deep-dive research to map the interconnected nature of the Jewellery Quarter Industry Cluster (JQ-IC) and the links between the companies involved. This will establish key connections, components, strengths and weaknesses in the value chain. We will look to establish any issues with skills gaps. The survey is intended to enable us to identify which parts of the cluster need strengthening whilst also identifying potential for growth, start-ups, relocation and promotion
- 2. Conduct a detailed options appraisal, including consultation with relevant stakeholders, to establish the best model for a JQ Creative Incubator
- 3. Conduct a fundraising options appraisal for the delivery of the recommended model(s)

The survey was funded by the Greater Birmingham and Solihull Local Enterprise Partnership and conducted by the Institute for Design, Economic Acceleration & Sustainability (IDEAS) at Birmingham City University, on behalf of the JQDT and the Jewellery Quarter Cultural Action Zone.





Contents

Executive summary	3
Recommendations	4
SWOT Analysis	6
Summary Findings in response to Research Questions	7
Introduction to the Jewellery Quarter Industry Cluster	13
Historical Overview of the Jewellery Quarter Industry Cluster	19
The 2022 JQ-IC Survey for Jewellery Quarter Development Trust	25
Priorities for Jewellery Quarter Creative Incubator & Hub	62
Jewellery Quarter Industry Cluster Funding Options	64
References	67

NB: THIS REPORT SHOULD ONLY BE FORWARDED, COPIED OR CITED WITH THE AUTHORS' PERMISSION

Executive Summary

The Institute for Design, Economic Acceleration & Sustainability (IDEAS) was commissioned by the Jewellery Quarter Development Trust (JQDT) to undertake a study of Jewellery Quarter Industry Cluster (JQ-IC) operators to ascertain answers to the questions posed in the abstract.

A survey was developed and posted online via Freeonline surveys leading to over 35 responses, or around 7% of the total estimated cluster by number and around half by value, with the largest proportion of respondents coming from manufacturers, whilst also including representatives from all segments – jewellery retailers, designer makers, luxury producers and operators from the regalia, civic insignia, trophies and medals segment which has enjoyed notable high profile contracts in recent years including the medals for the 2022 Commonwealth Games, hosted so successfully earlier this year in Birmingham. However whilst this research covered creative industries involved in jewellery production and retail, it did not cover the creative industries based in the Jewellery Quarter involved in delivering creative services or creative content production.

This research builds on the survey work undertaken in 2016 by IDEAS, with the results of both surveys illustrating a successful, interconnected and productive cluster with a global reputation, respected for excellence in the design, production and sales of low volume niche jewellery, regalia and allied trades.

The cluster draws heavily on firms in the Jewellery Quarter for the value generation process with an estimated 77% local value content from tier 1 suppliers. It is estimated that over 600 firms employing over 4,100 local people are generating revenues of over three quarters of a billion pounds in 2022. However due to fragmentation of the cluster into the various segments outlined and a culture of secrecy there is little real communication between firms and no overarching strategy focussed on the requirements for cluster growth and competitiveness.

Despite many recent successes, the industry is in a parlous state of decline due to pressures brought about through acute skills shortages, especially in practical hand and bench skills, affecting the ability of this highly interdependent cluster and the firms within it to fulfil larger orders. Apprenticeships have declined by 45% over six years, falling from 51 in 2016 to 28 trainees considered as apprentices and employed in 2022.

Reasons for the decline include:

- Acute skills shortages
- Lack of talent and weak links to educational institutions
- Inability to develop and coordinate sufficient or appropriate apprenticeship processes and delivery
- Shortages of suitable properties at reasonable rentals
- Lack of funding for start-ups and grow-on opportunities
- Fragmentation of the cluster, making it more difficult to trade
- Poorly promoted nationally & internationally as a centre of excellence
- No central voice, or overarching body with a focus on growth of this cluster
- Not recognised by the city region as world class and our original creative industry
- Invisibility of the cluster

These issues have reached a point of no return in the opinion of the respondents. Even larger firms, previously relatively well insulated from skills shortages, were acknowledging that without some

action to address these, the cluster was facing terminal decline. They recognised the need for industry-led action to specifically address skills and governance deficits amongst other needs.

The proposal to set up a Creative Incubator and Hub was seen as providing the stimulus required in facilitating greater coordination of an otherwise fragmented cluster in seeking to meet these challenges with support for this initiative having grown since the 2016 survey where 93% of respondents were in favour of this option to a near unanimous position in 2022. A membership model necessitating industry support and funding is proposed in the first instance with possible additional funding support identified through Enterprise Zone and Trailblazer sources.

Recommendations

- 1) The Creative Incubator and Hub is recognised as a vital resource to support wider business growth and competitiveness. It should be based at a physical location within the Jewellery Quarter, effectively forming a flagship for the cluster with a focus on growth and competitiveness and linking together JQ-IC operators with this objective in mind. However, this does not need to be a new-build and could be located in an existing building, with existing spaces identified and requiring further assessment. It could also extend into a dispersed network of activities within the JQ-IC reaching into other centres of excellence within jewellery and allied trades including training on existing machinery and digital programmes. It should provide practical skills development training through hand and bench skills courses and the coordination of apprenticeships opportunities. It should also provide low-rent and access to funding opportunities for start-ups and spin outs, further accelerating growth and employment. It could enable mentors from established businesses to be linked to start-ups. Finally, it should be responsible for developing a brand encompassing the various aspects of the business undertaken in the Jewellery Quarter and the segments that make up Birmingham's original creative industry, as well as responding positively to growing consumer concerns, such as over ethical sourcing and sustainability building on Environmental, Social & Governance (ESG) and Equality, Diversity & Inclusion (EDI) policies.
- 2) Creative Incubator and Hub organisational entity the JQ-IC should form a corporate entity, either Company Limited by Guarantee, Beneficial Society or Charitable Trust to run the Creative Incubator and Hub. This would deliver corporate leadership of the initiative, with business interests prioritised, ensuring a focus on growth, practical skills, funding, startup support, governance and branding. Directors would be allocated dependent on funding into the new venture and membership funding would fit well with a company limited by guarantee, with this new corporate entity also fulfilling the requirements for any appropriate public sector funding including Enterprise Zone and apprenticeship Trailblazer funding.
- 3) Birmingham Property Services at Birmingham City Council have a role to play in assisting the continued integrity of JQ-IC through the development of a coherent strategy targeting businesses in the Jewellery Quarter Industry Cluster given the high levels renting from the City Council and vacant stores available elsewhere in the city. This would further facilitate sustainability and growth, especially for vulnerable start-ups and early stage new ventures, essential to the dynamism and innovative capacity of this cluster.

- 4) Links to schools need to be developed as they are currently weak. Positive initial discussions are taking place with Aston University Engineering Academy School and it is hoped these can be translated into actions that facilitate a flow of young talent into the sector. Schools such as Shireland Collegiate Academy, a Design-focussed academy, could provide another option for employers looking to take on young recruits. T Levels need to be further assessed and understood as part of the progression package.
- 5) Links to Colleges, FEI, HEI and Trade Associations will be important in enabling further business support through, for example STEAMhouse incubation and acceleration support, Goldsmiths' Centre and other college support with apprenticeship provision, workshops, specialist training and short courses. In turn this should lead to further linkages through Knowledge Transfer Partnerships, practical research and development, as well as student internships and placements. For these students, progression opportunities should also be well sign-posted into further courses at all levels of advancement.
- 6) Umbrella Branding needs to be developed which tells a much stronger story about the JQ-IC authenticity and its various segments as outlined. This should be international in focus, taking into account broader governance implications, linking to environmental and societal impacts including more explanation of ethical sourcing and enabling greater dialogue with global luxury firms and other business clusters, local people, visitors, younger talent and students, world class skills development and career progression opportunities, product overview, design and longer-term aspirations.
- 7) Funding initially should be raised from within the JQ-IC firms to drive a shared and business-led focus in developing the Creative Incubator and Hub. This would not be focussed on capital but rather revenue funding to support skills training in the first instance, identified as their top competitive priority by JQ-IC firms. If Enterprise Zone, Shared Prosperity Funding or Trailblazer funding can support the project to meet the aims and objectives established as priorities by the businesses in the JQ-IC, then these options should be pursued.

Summary of JQ-IC Strengths Weaknesses Opportunities and Threats (SWOT)

After extensive interviews held with over 35 respondents during July and through to September 2022 which had followed a similar level of survey engagement with the JQ-IC firms in 2016, this SWOT analysis seeks to summarise the key areas of strength, weakness, opportunity and threat for this cluster, (Chart 1).

Strengths	Weaknesses
 Highly successful city centre authentic manufacturing cluster with its pedigree rooted in Birmingham City's origins growing out of the industrial revolution and Boulton, Watt and Murdock's business and innovation successes JQ-IC employing 4k local people, almost twice as many as Hatton Garden Jewellery Cluster Globally recognised prestigious cluster drawing on Birmingham's and Britain's heritage producing wide range of jewellery, medals, regalia, including most recently medals and baton for Commonwealth Games hosted in Birmingham 2022 High level of interconnectedness and local content purchased within JQ-IC, over 70% sourced from JQ Birmingham Highy productive sector with revenues per head estimated at over £180k in both 2016 and 2022 surveys Resilent industry with almost 80% of those surveyed over 20 years old Strong investment intentions at 70% compared to business in general This mature cluster continues to evolve and take market share with 14% of the sample, or 7% each had grown between 20-30% and 30-50 	 insufficient visibility, understanding and promotion of the Jewellery Quarter Industry Cluster, its relevance to Birmingham's authenticity and heritage, its achievements and global stature Branding and domestic reputation insufficiently developed to reflect stature of cluster Insufficient specialised hand and bench skills to ensure viability and already impacting on growth and order taking Apprenticeships and practical work-based learning is not meeting industry need Too few young people entering industry and too few links to schools Industrial premises under threat from residential development Too little low-rent space for newcos and young graduate designer makers Fragmented governance arrangements do not promote strong, visible voice for the cluster Cluster not recognised for specialising in luxury or hand-crafted 'one of a kind' goods, with too little productive engagement with other luxury sectors in West Midlands including automotive, cultural and creative industries Cluster is not embedded in regional governance including WMCA, GBSLEP, BCC or anchor institutions including universities and creative industries Too little support for startups hindering acceleration and growth
Opportunities	Threats
 High growth in luxury goods markets globally continues with more women gaining economic independence, predicted to reach \$317,490million by 2028, from \$236,820million in 2021, representing at a CAGR of 4.2% between 2022-2028 (Marketwatch, 2022) and \$269bn to \$355bn 2022-2027 (EMR, 2022) Links to other successful luxury, culture and craft sectors in the West Midlands enabling greater profiling and promotion of the JQ-IC Development of Creative Incubator and Hub to meet urgent skills development needs of JQ-IC Strategic links can help facilitate growth and sales including with the Company of Master Jewellers, CMJ and Houlden Group, providing greater access to retail buyers and into Goldsmiths and BCU/local skills providers 	 Lack of specialised hand and bench skills Lack of industrial premises and space Lack of business, management admin, tech and sales skills Poor branding providing insufficient support for cluster in gaining new market share Too little support for startups providing fresh ideas, designs and innovations Ongoing governance failures and fragmentation with too little unity of voice Weak links with Higher education and schools failing to providing talent pipeline to meet JQ-IC requirements

Chart 1: SWOT analysis of the Jewellery Quarter Industry Cluster 2022

- UNESCO Convention on intangible heritage could provide opportunity to further

promote JQ-IC

Summary Findings

1. Deep dive research to establish key connections, components, strengths and weaknesses in value chain, including skills gaps and what needs strengthening and supporting

JQ-IC business metrics

- The Jewellery Quarter Industry Cluster is estimated to include over 600 firms, including over 100 jewellery retailers, generating around £767million revenues and employing over 4,100 people, or almost double the employment in the Hatton Garden Jewellery Cluster estimated at around 2,000
- An estimated £415 million revenues were generated by the more than 30 firms responding to the 2022 survey, compared with £165 million revenues generated by 28 firms in 2016, in part reflecting substantial increases in the price of gold, especially impacting revenues in bullion companies
- The sample was heavily focussed on manufacturing jewellers, or suppliers into this part of
 the cluster, making up 52% of respondents. 30% categorised themselves as from 'other'
 activities including auctioneering, retail horologists, manufacturing silversmiths, platers,
 button, badge and uniform producers, engravers and including the Assay office providing
 quality certification. A further 9% were retail jewellers, with 6% representation by designermakers and 3% education providers.
- Revenues per head were broadly in line with those in 2016 at £184k, with average revenues
 per head in 2022 calculated at £186k, (excluding Cooksongold in both cases) well in excess of
 national average revenues per head of £118k and for medium-sized business averaging
 £171k revenues per head
- 77% of respondents were from companies over 20 years old, with many well over 100 years old and the average age of firms responding in 2016 at 78 years old, reflecting a mature and well-established cluster contributing tax revenues, rates and successful track records as local employers
- In the past two years 17% of respondents had grown between 5-10%; 17% by 10-20%. 14% of the sample, or 7% each, had grown between 20-30% and 30-50%, showing that this mature cluster continues to evolve, innovate and take market share
- The JQ-IC shows high levels of interconnectedness with 77% of tier one suppliers based in the Jewellery Quarter representing high levels of local content, for some as much as 90%-100% dependency on local suppliers. This compared to the automotive cluster with 44% of tier one local vehicle content
- The business model of these firms requires a flexible combination of craft and technology applications with ease of access facilitating business responsiveness and in turn competitiveness
- There was a continuing decline in specialist skills as artisans, outworkers and crafts people
 with hand and bench skills continue to leave the Quarter, impacting the integrity of the
 cluster and negatively affecting opportunities for growth, for example in their ability to take
 on large scale new orders
- 70% of the sample are planning to invest more in the coming three years, compared to 50% investment intentions amongst the wider business community
- The JQ-IC firms are versatile with almost two thirds of respondents selling into other sectors including automotive, cited most frequently, dental, electrical, military, film, arts, culture,

- giftware, computer games, architectural, interiors and built environment, sports, civic, fashion, retail and hospitality industries
- Many of the firms in the JQ-IC fall within the DCMS definition of Creative Industries products with a substantial proportion of the products made sold into firms also involved in the Creative Industries strengthening the integrity of this sector in our city and region
- Some JQ-IC businesses are closely involved in luxury goods sectors. With high growth in luxury goods markets globally as more women gain economic independence, this market is predicted to reach \$317,490 million by 2028, from \$236,820 million in 2021, representing a CAGR of 4.2% between 2022-2028 and providing greater opportunities for growth amongst these cluster operators
- Two thirds of companies surveyed exported, but in general the percentage exported is low at between 5-15% of company revenues
- 45% of firms' exports have performed worse since Brexit, with 45% performing the same and 20% performing better – but all acknowledged the increased bureaucracy associated with this export trade

JQ-IC Property Pressures

- Located in a designated 'urban village' of 264 acres, protecting space for industrial activities
 remained a critical issue for the cluster with space under constant pressure from residential
 development with around 10,000 residents currently living in the Jewellery Quarter. The City
 Council's role and that of the JQDT were considered vital in safeguarding and promoting
 sufficient industrial premises at appropriate rents required for the ongoing successful
 operations of the JQ-IC
- With 66% of firms renting as a proportion of the sample in 2022, this has increased from 2016 when 44% of the sample were renting premises. Whilst fewer companies had seen rent increases it was seen as less of a threat to their survival in 2022 compared to 2016 when 85% of firms reported rental increases as a threat to business viability. However, it was still an issue of significant concern requiring management, together with appropriate governance and planning oversight
- It was proposed that Birmingham Property Services develop a dedicated strategy and oversight in dealing with JQ-IC firms
- Businesses were split regarding their ability to re-locate out of the Quarter, with their views
 reflecting a similar position to 2016: almost half stated they would be able to relocate whilst
 the other half were physically embedded within the JQ-IC business cluster

JQ-IC Skills Requirements

- 69% of firms were experiencing skills shortages in 2022, in line with figures being experienced by business nationally, with 5%-33% of all positions unfilled, depending on the business.
- There is an urgent need for hand and bench skills training to replace an ageing and retiring workforce, so much so that one manufacturer had stated that without this training he feared the cluster may cease to exist within 5-6 years
- Beyond hand and bench skills, a wide range of business management, commercial administration, design, sales and market appreciation skills, were in short supply

- 84% felt not enough young people were coming through into the JQ-IC for replacement purposes
- 67% of respondents did not recruit graduates from the School of Jewellery, a trend which had grown since almost all vocational and diploma courses had been cut
- Closer links to schools were seen as important with just 8% of the sample having any connection
- Building on the 2016 survey when respondents had applauded the Engineering Academy
 established by WMG at the University of Warwick, in 2022 they applauded the work at Aston
 University in setting up their Engineering Academy, with design academies such as Shireland
 Collegiate, being seen as possible feeder colleges into apprenticeship schemes and T Levels
- More careers advice and support in schools to raise the profile of the JQ-IC was judged essential
- Apprenticeships in the JQ-IC had declined by 45% between 2022 and 2016. Amongst the sample employing 877 people, there were 28 apprentices or trainees in 2022, or just over 3% of all those employed, with these being outside the scope of the Apprentice Trailblazer standard and employed in 7 of the 31 firms or by 22.5% of the total sample. This was in contrast to the 51 apprentices in 2016 out of 899 employees, representing 5.6% of all staff and with training taking place amongst 70% of the sample
- The poor administration of apprenticeship schemes was noted with all current trainees falling outside the Apprentice Trailblazer standard. Firms noted the lack of clarity around decisions about when funding was available. Complaints were made about funding firms had been due not having been received, along with in-house costs of administration being too high to make these sustainable. The challenges of integrating apprentices into small teams was noted given the large numbers of SMEs within the cluster
- T-Levels, as replacements to engineering BTecs, were not widely understood with 55% of firms, mostly larger, seeing them as positive
- Some firms were trying to create collaborative practical learning platforms as a means of providing young talent with access to software and the equipment required to establish their businesses – a practice recognised as requiring greater support
- Benefits of links with higher education included access to talent, knowledge transfer partnerships and grant funding as well as online and course provision for existing staff
- New learning platforms and opportunities were being explored with the Creative Incubator and Hub seen as one such opportunity if managed and led to meet business need

JQ-IC Branding

- There is no recognised overarching or internationally focused branding for the JQ-IC under which the story of this successful cluster and all its facets or segments can be told. In part this is a feature of fragmented governance, reflecting the conflicts between a planning focus, the requirements of the Assay Office and of the business community which was, in itself, split into differing segments, with educational providers sitting to one side and no structures pulling all the partners together
- The failure of the governance arrangements to-date suggests the requirement for a means
 of providing a stronger voice for the JQ-IC. Forming a corporate entity and board which
 would oversee the development of the Creative Incubator and Hub and bringing together
 the industry cluster and segments within that is a priority. This would be business-led whilst
 also encompassing the Assay Office, the JQDT, the National Association of Jewellers, the

education providers and the City Council, but with a focus on promoting the growth of the JQ-IC, its skills requirements, growth and entrepreneurship agendas, in turn helping to provide a greater coherence to the activities of the JQ-IC and governance oversight for the new Creative Incubator and Hub.

- In terms of promoting the Jewellery Quarter, the top three priorities include promoting:
 - the authenticity of the industry cluster
 - the need to develop the Jewellery Quarter branding as an 'umbrella brand'
 - better promotion of the Jewellery Quarter as a destination for commercial opportunities
- These top three priorities for Jewellery Quarter branding were closely followed by the need for further development of a prestige online portal promoting luxury, branded jewellery and goods made in the Jewellery Quarter.
- The authenticity of the JQ-IC could be better protected for example, some governments
 were signatories to the UNESCO Convention protecting intangible cultural heritage
 encompassing the cultural and creative skills that have defined economies. Switzerland
 registered watchmaking on this list but the Convention has not been signed by the UK
 government
- Improving visitor experience to assist in promoting the growing Jewellery Quarter luxury
 offer was mentioned in both 2016 and 2022 surveys and whilst the Quarter was recognised
 as an anchor point on the European Route of Industrial Heritage (ERIH), a tourist route of
 the most important industrial heritage sites in Europe, more needed to be done to promote
 the story of our thriving invisible JQ-IC business activity
- Safety of businesses, residents and visitors, was paramount with too many concerned that this was not being prioritised
- Locally and nationally a targeted offer, itemising products, product style groupings, emphasising hand-crafted, one-of-a-kind, luxury specialist niche production and highlighting the quarter's traditions, heritage and authenticity, combining customisation with high tech features should be promoted via an online platform
- Stronger links to sales platforms and organisations was required with greater opportunities to nurture links both domestically and internationally
- Made in England (2022) and Birmingham Made (2016) branding were seen as options to tie into in promoting the authenticity of the JQ-IC offer with Made in the Jewellery Quarter seen as providing a way of promoting the JQ-IC. Given the former role of the Birmingham Assay Office, whose hallmark used to denote products as being Birmingham made, this was viewed as a powerful means of conveying that so many of the products manufactured in the Quarter were the output of the Jewellery Quarter, especially as many were often highly visible, including the Commonwealth Games medals and baton which had been viewed worldwide
- The link between quality branding and attracting top talent into what many regarded as a
 'vocation' was recognised. Brands such as the V&A and the Tate were cited as well
 recognised in providing a great start for young people interested in pursuing a career in the
 creative industries
- The JQ-IC links into regional governance organisations is weak with little established dialogue with the West Midlands Combined Authority, (WMCA) and Greater Birmingham & Solihull LEP, as well as with anchor institutions including Birmingham City University's School of Jewellery

Support for Start-ups

- Overwhelmingly, by a ratio of more than 4-to-1, it was considered that there was insufficient support for start-ups
- Ease of access to start-up capital was ranked at 4.33 out of 10, with ease of access to growon capital ranked at 4.25 out of 10
- The top three priorities for start-ups were ranked as:
 - business development support
 - mentoring
 - business angel support and facilitating access to funding
- Promoting access to networks for start-ups was recognised as important by ensuring they were not isolated from other businesses and were integrated into the JQ-IC ecosystem
- The Prince's Trust support for start-ups should be drawn upon more actively to provide funding for start-ups on favourable terms and given the challenges around funding equipment, innovative solutions including networked collaborations and lease or hire solutions providing access to equipment and practical training were proposed as start-ups sought to establish themselves in a tough industry during challenging times
- The School of Jewellery and Birmingham stakeholders could play a key role in assisting the JQ-IC enhance its reputation for luxury goods production by assisting with links between luxury, traditional and creative clusters in the West Midlands. For example between luxury producers as well as craft production centres in ceramics, leather and glass in Stoke, Walsall and Stourbridge respectively and beyond. Links to prestigious automotive brands were relevant, recognising Aston Martin had referred to the badges on their vehicles as 'jewels' in their marketing, as well as by assisting with greater links to other leading cultural and creative organisations in the region including the Birmingham Royal Ballet, Birmingham Repertory Theatre, the City of Birmingham Symphony Orchestra, to help raise the profile of this lesser known but highly successful JQ-IC
- 2. Conduct a detailed options appraisal, including consultation with relevant stakeholders, to establish the best model for a JQ Creative Incubator.

JQ Creative Incubator and Hub and services supporting growth

- 93% of respondents to the 2016 survey had supported the formation of a Jewellery Quarter Creative Hub, by 2022 the respondents were near unanimous that this was required if the JQ-IC was to thrive and grow into the future
- Any hub had to be about more than start-ups and incubation. It needed to become a real physical hub for the JQ-IC, pulling together an otherwise fragmented cluster, providing a base for greater solidity in the governance and branding arrangements and enabling the provision of one voice with clear messaging and promotion of the story and offer. However, it did not need to be a new build, space was judged to be available in the Jewellery Quarter which could accommodate JQ-IC requirements and the model could build on links to dispersed training provision such as via student access to machinery in existing firms
- The Creative Incubator and Hub should be business-led, run as a separate entity with either charitable or beneficial society status or as a not-for-profit Company Limited by Guarantee
- When asked to rate service provision provided by the proposed JQ Creative Incubator and Hub, the top three priorities were ranked as provision of low rental specialist space for jewellers, designers and makers; skills development and retail space for luxury items. It was

- felt these could best be provided in a physical space in the Jewellery Quarter possibly linked into dispersed provision across the JQ
- Skills provision would include hand and bench skills development through apprenticeships and looking ahead harnessing T Levels with local schools specialising in engineering and design
- When asked to rank the most critical services supporting business growth, firms ranked
 access to practical skills as their top requirement, followed by more effective branding and
 promotion of the Jewellery Quarter in promoting the JQ-IC, together with the formation of a
 Jewellery Quarter Incubator and Hub
- Low-rent space would help to support start-ups and more established craft businesses which struggled to find a 'shop window' in the Quarter
- A Hub, it was felt, would enable school pupils, students, visitors and residents to observe
 designers, makers and producers at work, to learn more about the sector, its heritage,
 pedigree and economic contribution. It would help to pull together the disparate voices of
 the segments involved in the JQ-IC and facilitate a business-led approach
- Early discussions with Goldsmiths' Centre suggested business-led dialogue in seeking to establish a Creative Incubator and Hub, ensuring business growth, skills, funding and branding requirements, needed to be placed firmly at the centre of any such development

3. Conduct a fundraising options appraisal for the delivery of the recommended model(s)

Funding

- 1) Industry funding: JQ-IC firms should provide funding into a corporate entity enabling them to lead the Creative Incubator and Hub development. This is seen as essential in order to provide industry leadership of this project. Provided it is industry-led, partnership approaches between public and private sectors are seen as adding value where they can meet agreed objectives.
- 2) Enterprise Zone funding: Phase 6 GBSLEP recycling fund should be assessed as it is intended to make available up to £20m of capital funding from 2024/25 onwards to support the implementation of the Strategic Economic Plan (SEP) priorities including providing stronger conditions for growth via business support amongst other objectives. Early indications from GBSLEP are that some funding from this source may be available.
- 3) Shared Prosperity Funding £210 million was awarded to the West Midlands earlier this year for local priorities including supporting local businesses and employment opportunities. Further discussions are required to determine if this funding is available from either WMCA or City Council to support a Creative Incubator and Hub for the JQ-IC.
- **4) Trailblazer funding** is available for firms working together to develop and deliver apprenticeships in their specialised business areas and should be pursued
- 5) **Skills funding** provides individual funding opportunities for Level 3 skills development in a wide range of areas including engineering, digital and business management. Unclear as to specific relevance to JQ-IC
- 6) **Business start-up and grant funding** is available through a range of funds and charities including the Prince's Trust Enterprise programme, Innovate UK and Smart Grants, the Seed Enterprise Investment Scheme and Enterprise Investment Scheme, British Council grants. These would need to be pursued in collaboration with businesses operating with the Creative Hub and Incubator.

Introduction to the Jewellery Quarter Industry Cluster

During its heyday, around 1913, over 70,000 people were employed in the Jewellery Quarter in Birmingham. By 2000 this number had reduced to around 6,000 employees (Cattell J, Hawkins B., 2000). A survey by Nielsen, et al., (2016), suggested there were then around 800 firms with 5k-7k employees located in 264 acres, although this estimate came with the proviso that the total employment and value generated across the Jewellery Quarter was by no means fully understood.

It is estimated in this survey (August 2022) that employment in the Jewellery Quarter Industry Cluster (JQ-IC) stands at around 4,000 people across 600 firms, suggesting continued decline across the whole cluster, matched with pockets of exceptional success as outlined in this paper. This decline is not new, Professor Jane Pollard observed, 'Birmingham jewellers face a stark choice between further decline, to the point of extinction in low value-added markets, or a shift into more design- and knowledge-intensive forms of production.' (Pollard J., 2004) The move to design-intensive production has continued since then but the umbrella brand encompassing the story of the JQ-IC and its many facets or segments has failed to keep pace and perhaps scarcely exists.

Nonetheless, it is stated that the JQ-IC holds Europe's largest concentration of businesses involved in the jewellery trade, and by some estimates produces as much as 40% of all the jewellery made in the UK (Made in the Jewellery Quarter, 2013). It is also home to the world's largest Assay Office, responsible for hallmarking around 12 million items a year. (Assay Office, 2016).

It remains a successful cluster, standing up well in comparison to available data for the London Jewellery Quarter, largely concentrated around 28 acres making up Hatton Garden which accounts for 25% of the UK's precious jewellery manufacturing and includes an estimated 446 firms providing employment for 2,139 people (Bagwell S, 2008).

In the Jewellery Quarter a wide range of manufacturing, designer-maker, outworker and retail businesses compete, collaborate and thrive as part of the little understood Jewellery Quarter Industry Cluster. These companies have particular capacities and capabilities in making to order through their problem-solving, can-do manufacturing ability — a skills-set which has powered a global reputation amongst their client base for the firms involved. This reputation has been enhanced through the combination of individual competencies pooled together amongst competitors to produce heightened capabilities. Situated in close geographic proximity, a large number of businesses are gathered together operating in the B1, B18 and B19 postcodes.

The JQ-IC is a varied cluster producing a wide range of outputs – medals, trophies, badges, regalia, civic insignia, uniforms and decorations, jewellery, pens and watches, presentation boxes, sculptures and artefacts amongst them. The production of these items requires an even wider range of skills from design and production, including high tech engineering and digital, CAD-CAM and CNC processes, along with the refined and honed hand craft and bench skills of the Jewellery Quarter's artisans, specialist processors, distributors, dealers and retailers.

Far from being solely a small and dwindling group, many firms are thriving and challenged by the demands of rapid growth, skills shortages, space constraints, suitable buildings for industrial activity and spatial planning issues, given the greater focus in recent years on residential development in the Quarter with 10,000 residents living there (Jones, A, 2008).

It is often assumed that the Birmingham retail jewellery trade is intimately connected to the jewellery makers and manufacturers and this survey shows that in some instances this is the case, but it is not the majority. Retailers started appearing in the quarter from the 1970s as low-cost

imports began entering the country undercutting domestic manufacturers. To survive manufacturers have had to specialise, focussing on mid and upper price points, in general, although not exclusively. Whilst there are a number of retail manufacturers in the quarter, by far the largest number of retail outlets are importing jewellery with the Jewellery Quarter recognised for its 'value' offer.

Alongside traditional jewellery producers, companies make automotive parts including badges termed as 'jewels', medals, national awards and honours, civic insignia, ceremonial maces, a large range of silverware, badges, sports trophies, buttons, uniform accessories, signs, whistles, pens, interior furnishings, with their associated supply chains including bullion dealers and every stage of processing required to produce final products. One manufacturer commented, "The government regard us as a dying sector, but as a nation we've been 'doing pomp and circumstance' better than anyone else for centuries. Now the new economies are looking to us as leaders and buying from the 'best'. We should be promoting this to overseas markets but in fact we are ignoring it."

Many of these manufacturing firms, artisans, specialist makers and processors are hidden from view, whilst the jewellery shops, for which the quarter is renowned, make up the visible tip of the Jewellery Quarter Industry Cluster, conceptualised below as a diamond-shaped 'iceberg' where the jewellery retailers and some renowned designer-makers are the conspicuous element of this fascinating, highly innovative, creative and resilient industry (Illustration 1).

The governance providing quality assurance is visible in the form of the Birmingham hallmark. Birmingham City Council and the Jewellery Quarter Development Trust have planning oversight. Training and skills provision is split between a number of providers, including the School of Jewellery, part of Birmingham City University, Holts Academy, more recently known as the British Academy of Jewellery, providing diplomas, short courses, apprenticeships and based at the Birmingham Assay Office, the National Association of Jewellers, together with links to national providers including Goldsmiths' Company & Centre and the Gemstone Institute of America, both based in London. The current provision, whilst highly esteemed, is repeatedly stated by respondents to be failing to meet their core demand for hand, bench craft skills as well as some other aspects, including contemporary digital skills, management, sales/marketing skills which are also in short supply. JQ-IC firms want to see a greater presence by the Goldsmiths' Company & Centre in the Jewellery Quarter to help address this deficit. These concerns echo the dilemmas faced by other luxury sectors with researchers noting the need for the industry to pool training needs and organize flexible "training platforms" for high-quality learning sessions on specific know-how for small and large luxury manufacturers, rather than perhaps relying on traditional educational institutions (Hlady-Rispal, Blancheton, 2020).

There is tremendous pride amongst the Jewellery Quarter maker community about their heritage, traditions and origins, along with a strong desire to see the profile of their brands and creations raised. Promoting the Jewellery Quarter for quality production at value prices, or exceptional quality and heirloom 'one-of-a-kind' items to be passed from generation to generation, with greater emphasis on merchandising, branding and presentation, heightening the retail or customer experience, was seen as a requirement, in particular, for those firms involved in Business-to-Consumer(B2C) sales. An umbrella brand was seen as important in opening up the story of the JQ-IC and its varied segments, with infrastructure upgrades including pedestrianisation, along with far greater investment in promotion and online presence facilitating sales directly to global consumers.

A short high-level summary of the history of the Jewellery Quarter and an outline of some of the key elements of this cluster follows, before the key findings from the survey conducted during July - September 2022 are summarised. These findings are compared with those from the survey

conducted in 2016, enabling identification of any notable trends, with conclusions drawn regarding key areas of strength, weakness, opportunity and threat, a review of the case for a Creative Hub and Incubator, as well as how best this might support the needs of this very special creative industry cluster.

Illustration 1: The diamond-shaped Jewellery Quarter Industry Cluster -- the majority of business value added is hidden from view

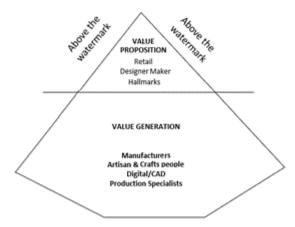


Illustration 1: of Jewellery Quarter Industry Cluster: Value generation below the tip of the diamond-shaped iceberg

Cluster and Creative Industries Definitions

In considering the survey questions, the definition proposed by **Michael Porter (1998)** defining a **cluster** as 'a geographic concentration of interconnected companies, specialized suppliers, service providers, associated institutions and firms in related industries' is considered an essential element in understanding the JQ-IC.

Creative industries have been defined by the UK's Department of Culture, Media and Sport (DCMS) as "those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property" (DCMS 2021), providing a further definition adding to our understanding of undertakings in the cluster in incorporating the activities of the JQ-IC. In addition, many of the commodity product codes falling within the DCMS definition of Creative Industries cover products essential for jewellery and watch manufacture, gold and silversmithing, as well as sculptures, statuary pieces and antiques including Commodity CN8 Codes 71012200, 71039100, 71039900, 71131100, 71131900, 71132000, 71141100, 71141900, 71142000, 71159000, 71161000, 71162011, 71162080. Many of the products made in the JQ-IC are in turn sold by firms also classified in the Creative Industries as defined by the DCMS.

Recent research into French luxury clusters noted that their product complexity necessitated an extensive and deep upstream network of specialized handcraft SMEs. Luxury firms and their local SME partners can receive increasing returns from agglomeration economies by means of guaranteed input quality, regional history, and tradition in "a global picture" of local production (Hlady-Rispal, Blancheton, 2020).

An agglomeration economy, is defined as 'a localized economy in which a large number of companies, services, and industries exist in close proximity to one another and benefit from the cost reductions and gains in efficiency that result from this proximity.' (Glaeser, E.L., 2010)

Luxury Clusters – distinct features

Recent research into luxury clusters reveals that they possess some distinct features, such as requiring a great variety of high-quality resources constantly interacting and influencing each other (Hlady-Rispal, Blancheton, 2020). A review of two French luxury clusters observed that product complexity necessitated an extensive and deep upstream network of specialized handcraft SMEs.

This study highlighted that the mechanisms and nature of value flows in luxury clusters is under-researched. The authors identified the need to envisage value flows among actors more precisely, drawing on business model conceptualization and literature on clusters and luxury industry (Hlady-Rispal, Blancheton, 2020).

The business model approach chosen was adapted from the work of Christoph Zott and Raphael Amit (2010), which looks to conceptualize a firm's business model as a system of interdependent activities transcending the focal firm and spanning its boundaries. The activity system enables the firm, in concert with its partners, to create value and also to appropriate a share of that value. These authors suggest two sets of parameters that activity systems designers need to consider: **design elements** - content, structure and governance - that describe the architecture of an activity system; and **design themes** - novelty, lock-in, complementarities and efficiency - that describe the sources of the activity system's value creation.

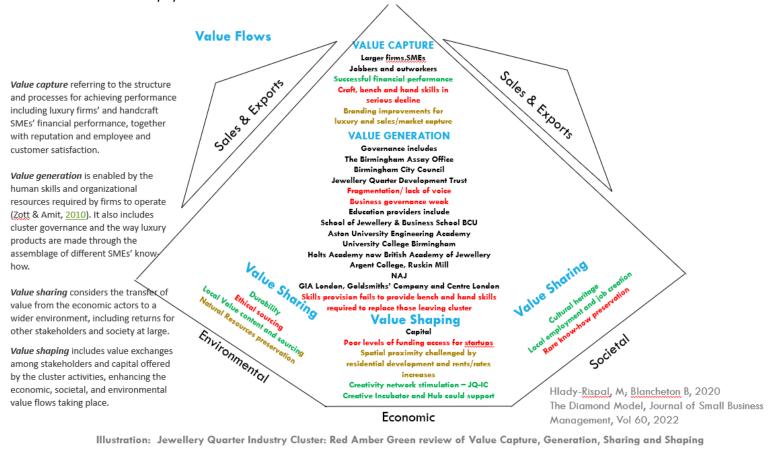


Illustration 2: Jewellery Quarter Industry Cluster: Red Amber Green review of Value Capture, Generation, Sharing and Shaping drawing on the diamond model: a French luxury cluster model embedded in regional heritage, developed by Hlady-Rispal and Blancheton, 2020

To depict the elements of luxury cluster value flows, taking into account the collaborative processes involved, Hlady-Rispal and Blancheton propose a Diamond Model, conceptualizing the clusters' value exchange processes. This model has been adapted here to reflect in outline the position for the JQ-IC using a Red, Amber, Green (RAG) approach to highlight the strengths, weaknesses and challenges facing the cluster within the context of value capture, value generation, value sharing and value shaping as defined by the French researchers to visualise the state of the JQ-IC's integrity against each of these critical themes.

Attributes, Roots and Shoots

The luxury cluster research emphasised that successful organizational performance depends on the identification, processing, and communication of rare know-how with the cluster being able to identify, draw on, legitimise and promote its rare know-how, gaining worldwide recognition through labelling and institutional communication. This in turn required strong governance and cluster management. The findings of this survey (2022) suggest the JQ-IC has not been successful in communicating its rare knowhow, its ability to link and draw on leading technological applications with craft-based hand and bench skills. Given its fragmented governance arrangements, its organisational capacity and voice are fragile.

The French research indicated that developing an attractive location for small luxury craftsmen in relation to leading brands and facilitating the supply of material in small quantities at affordable prices within the cluster was an important element in delivering successful growth. This survey (2022) suggests that there are insufficient spaces at affordable rents for the crafts people required and their numbers are now in terminal decline unless urgent steps are taken.

The French experience proposed that ideally, the luxury cluster would be able to provide to a global audience, a historical and cultural narrative based on tradition, rare know-how preservation, people, and cluster development. Once again, in the context of the JQ-IC, its unique story, its roots dating back to the origins of the city of Birmingham, its authenticity spanning diverse segments and its numerous achievements, have not been communicated sufficiently.

Finally, the French research recognised the major challenges in attracting, recruiting, training, and retaining talented people and proposed that the cluster's role should be to pool training needs and organize flexible "training platforms" for high-quality learning sessions on specific know-how for small and large luxury manufacturers, rather than by creating educational institutions, as had been previously stated in cluster literature. With a Jewellery Quarter Creative Incubator and Hub in place it would be possible to develop a range of training to meet the specific needs of the JQ-IC.

These findings provide a valuable basis from which to comprehend the kind of value creation processes taking place in the JQ-IC, as illustrated above, and how this potentially influences the competitiveness and integrity of the cluster as whole.

This value flow model was not used during this survey but may prompt further research into the unique Jewellery Quarter Industry Cluster and its process of value capture, generation, shaping and sharing. It does however provide the opportunity to visualise value flows in the JQ-IC as illustrated above, Illustration 2.

Developing the Jewellery Quarter for a wider range of luxury products has been considered previously and these challenges are by no means new. In 2009 an Action Plan was developed to support the Jewellery Industry Business Support Strategy (JIBSS), through a strategy to support the jewellery industry and its traditional base in Birmingham's Jewellery Quarter. Each Action was proposed as a building block designed to provide a platform to help sustain existing businesses and

support business growth. All actions were judged as having a satisfactory strategic alignment with the then Regional Development Agency's Regional Economic Strategy and as complying with the priorities identified by the Department for Business Innovation & Skills (now known as BEIS) in the Solutions for Business programme. Public and private funding was proposed, however following the financial crisis and credit crunch, public funding contracted making delivery much more challenging (Laughlin, P., 2009).

There is emphasis on the physical development of the Jewellery Quarter through environment and infrastructure improvements, whilst also prioritising marketing, training and business support, all issues prioritised in this 2022 survey for JQDT.

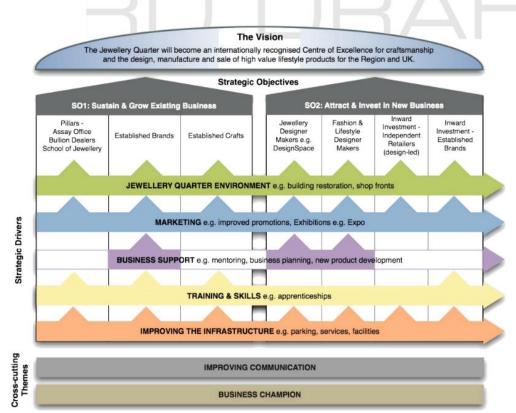


Illustration 3: A Strategic Framework for the Jewellery Quarter, Laughlin P., 2009

Historical Overview of the Jewellery Quarter Industry Cluster

This brief historical overview is included as a means of contextualising and providing insights into the skills sets, modus operandi and a few of the achievements of the Birmingham Jewellery Quarter Industry Cluster.

The city has been home to the production of jewellery, accessories and metalware since medieval times when it was renowned for manufacturing textiles, leather goods, iron tools and pottery. Located on trade routes that ran through the region, it grew rapidly and by the 1520s had become widely recognised for the quality of its metal working. (Cattell J., Hawkins B., 2000)

Trade burgeoned over the next hundred years with over 200 forges in the late 1690s producing a range of swords, canes, boxes, buckles, hilts and fine goods incorporating precious gems stones and rock crystal.

The Birmingham Assay Office was established in 1773, after intensive lobbying by Matthew Boulton and the industry, to provide assaying (testing) and hallmarking of precious metal items (gold, silver, platinum and palladium), with this service remaining central to the cluster to this day.

Between 1761-66, Matthew Boulton's Soho Manufactory, employing 600 people, was producing "toys", buckles, silverware and a range of other items. William Murdock's successful gas lighting, developed from experiments begun in Cornwall, was adopted at Soho before 1800 and from then on spread into other establishments in Birmingham with the gas flame also providing an important source of heat with the Birmingham Gas Light Company formed in 1819. (Stephens, W.B., 1964)

The Jewellery Quarter's expansion was initially based around the area of St Paul's Square where affluent merchants established their homes, including William Murdock, engineer and inventor, who worked closely with Boulton and Watt in developing the steam engine and the steam power essential to the industrial revolution, and whose former home is now the headquarters of JQ-IC firm, Deakin & Francis.

The industrial revolution in Victorian times accelerated the rate and range of items produced with the city gaining the reputation as the "City of a thousand trades". It was known for the quality of its 'toymakers', producing trinkets, boxes and low-value jewellery, known as 'toys' which were the precursors of the contemporary jewellers and goldsmiths. Buckles and buttons were also made in increasing numbers. With ready access to coal, iron ore and artisans, as well as a market eager for these products, expansion and growth continued, facilitated through the 'small masters' able to turn out large numbers of toys on hand-powered machines or simply by hand. (Cattell J., Hawkins B., 2000)

Larger factories were emerging from the 1830s as technological advancements facilitated major advances in production. Elkington and Mason & Co were established having developed the electroplating process, enabling a thin coating of silver onto a base metal. Other products were being produced including Joseph Gillott's invention enabling the mass production of steel pen nibs made at the Victoria Works. Companies like Brandauer were formed after they acquired the first British patent for producing a metal pen in 1808. In early 1800s Birmingham, as the Brandauer website claims, there were more pen factories in the city than the rest of the world put together. The introduction of the UK-wide penny postal service in 1840 led to a surge in letter writing and many of the schools changed from using slates to pens and paper. By 1850 Birmingham was producing almost 500 million pens a year with a predominantly female workforce.

Gold rushes in in California (1848), Australia (1850), South Africa (1886) and the Yukon (1896) along with the introduction of three lower standards of gold alloy – 9ct, 12ct and 15ct, together with turquoise, amethyst and diamond stone discoveries in Australia and South Africa (1850) making jewellery much more affordable, all contributed to further jewellery trade growth, with toy makers switching to jewellery-making in light of rising disposable incomes amongst the Victorian middle classes (Pollard J, ibid; de Propris and Lazzaretti, 2007).

Peck's Trade Directory of Birmingham 1896-97, gives some insights into the tremendous variety of jewellery, metal wares and associated products produced during this period, with the Jewellery Quarter home to iron and brass foundries and manufacturers, polishers, stampers and piercers producing locks, brass cocks, bells and whistles, lamps, stoves, stationery and pencil cases, safes, ships logs and nautical instruments, perambulators and window fittings.

Clustering of related trades became a more regular practice, given makers interdependence on a wide range of processes required to produce jewellery and more intricate metalware, including gold and silver chains. The allied industries of metal and badge making, civic insignia and regalia also continued alongside the production of jewellery, drawing on many shared and specialised skills and processes. In addition, the Jewellery Quarter became the home to a range of jewellery-related institutions, notably an Assay Office, as noted, (1773), the Birmingham Jewellers and Silversmiths Association (later BJSA) (1887) and the Jewellery School (1888) (Pollard J, ibid).

Metal finishing and electroplating led to further expansion of the metalware industries, servicing, not only the Jewellery Quarter, but other sectors including automotive, motorcycles, bicycles, aerospace and maritime. Companies such as W Canning & Co established in 1785 grew from 350 employees in 1914, as producers of equipment for electroplating and specialising in production of polishing lathes, mops, buffs, lacquer and circular brushes, to over 2,000 employees in 1961 when the company manufactured plant, materials and chemicals for the plating, polishing and finishing of metals. Their ranges had expanded at this time to include motor generators, dynamos, control gear for plating and polishing plant, electro-plating chemicals, nickel anodes and salts, lacquers, acids, drysalters and polishing mops and brushes. The company developed various patents including the apparatus and jigs supporting work-pieces for electroplating and treatment baths (Grace's Guide to British Industrial History).

During the post-war years Birmingham's jewellers embraced mass production, adopting innovations such as lost-wax casting allowing the production of multiple, identical castings to be produced simultaneously. But threats to trade included a post-war purchase tax, with labour migrating to higher paid emerging sectors, in particular the automotive and engineering industries which came to dominate production in the region with precious metals shortages which lasted into the 1950s hitting the industry. More recently, overseas competition from lower-wage producers in Thailand, Indonesia, India and China has hit the cluster (Pollard J, ibid).

The Jewellery Quarter Industry Cluster's relative decline has continued over the past thirty years and its survival remains under threat. From the 1970s production relocated offshore to lower wage economies in the Far East but also to Eastern Europe with lower cost goods flooding the market. Shops were opened during this period, selling directly to the consumer and cutting out salesmen. Between 1970 and 2005, the proportion of retailing related activities in the Quarter increased from 5% to more than 40% of total jewellery activities. This was accompanied by a move to high-value added segments and the categorisation of the Jewellery Quarter by Advantage West Midlands as a high-value added consumer cluster (de Propris, Lazzaretti, 2007).

Alongside this trend, the Jewellery Quarter was denoted an urban village for planning purposes in a move to turn it into a Greenwich Village mixed use area. Since then, there has been continuous growth in demand for the development of buildings previously used for production to migrate to residential use. Finally, this cluster has been largely unable to recruit sufficient replacement skills, in light of an ageing artisan and craftsperson workforce currently providing refined hand and bench skills as well as the expertise and know-how across a range of specialised processes. These skills, together with the Birmingham Assay Office, remain an essential anchor to the cluster and are regarded as vital interlinked elements in the successful production of jewellery, metalware, trophies, medals, regalia and civic insignia, along with luxury watches and pens being produced out of the Jewellery Quarter in 2022.

The Jewellery Quarter's hidden gems

It is difficult to fully capture the value created in the Jewellery Quarter. This is partly as the Standard Industrial Classifications (SIC) used in categorising business activities do not reflect the range of activities undertaken. Many of the businesses surveyed do not appear within traditional SIC codes used by the Office of National Statistics (ONS). One manufacturer producing chain, bangles and cufflinks stated, "there isn't a clear category for our business. Looking at the BEIS charts we fit into three categories – findings, precious metals manufacturer and wholesale importer."

Within the SIC codes for manufacturing there are two relating to jewellery production but many firms have commented, as above, on how the SIC codes fail to capture much of their activities along with a high percentage of the value produced within the cluster.

32120 Manufacture of jewellery and related articles	
32130	Manufacture of imitation jewellery and related articles

This dilemma is particularly applicable to those in the JQ-IC involved in the production of medals and trophies, civic insignia and regalia, armoury and ceremonial swords. The JQ-IC has a strong interdependence on a long and largely locally based supply chain including activities such as casting, polishing, plating, tooling, press working, stamping, technical engineering, enamelling, plating, metal spinning, engraving, mounting, gold and silversmithing, antiquing, bronzing and finishing, restoring and repairing, presentation box production, rope stamping, CAD-CAM and design processes, laser cutting and CNC machining, promotion, sales, marketing and digital services. Many of these activities will be classified in unrelated industrial classifications. However, a number of these businesses are providing value into the JQ-IC, whilst also drawing on their core capabilities to provide value into other sectors – for example automotive, dental and film.

Value generation in the JQ-IC is split between different facets of the cluster with some examples of how varied these are provided through the historical context and illustrations outlined below covering medals and trophies, state, civic insignia and regalia, luxury producers, manufacturing jewellers, retail jewellers and designer makers.

Medals and Trophies

The JQ-IC has a world leading medals and trophies manufacturing cluster. Companies involved in in 2022 include:

Firmin & Sons, established 1655 *
Gladman & Norman, established 1910 *
St Paul's Mint, established 1864
Thomas Fattorini Ltd, established 1827 *
Toye Kenning Spencer, established 1685 *
WH Darby, established 1886

These companies have distinguished histories which whilst further enriching the Jewellery Quarter's pedigree and authenticity are too rarely referenced, with few people aware of their distinguished heritage and achievements. The firms marked with * are Royal Warrant Holders.

For the first time in history, all Insignia, Honours and Awards for St James's Palace are manufactured in the Jewellery Quarter in Birmingham.

Some historical highlights

The All England Lawn Tennis Club commissioned Birmingham silversmiths, Elkington & Co, to create their original mens' and ladies' Wimbledon trophies. The Ladies' Single Championship trophy, a silver plate, known as the Venus Rosewater Dish, was produced by Elkington in Birmingham in 1864. The Gentlemens' Singles Trophy, also crafted by Elkington, was produced in 1883 before being purchased by the All England Lawn Tennis club for 100 guineas in 1886.

Following the theft of the original FA Cup trophy from Aston Villa in 1895, when burglars broke into a shop where it was on display, the club commissioned P Vaughton and Sons to make an exact replica of the stolen trophy. Fortunately, three years previously, the company had taken a plaster cast of the trophy so that it could make a miniature for Wolverhampton Wanderers.

The Birmingham-made FA Cup remained in service until 1910, when it was presented to the President of the Football Association, Lord Kinnaird, and replaced by a separate trophy, with the 1910 Cup on display at the National Football Museum in Manchester.

The Football Association Challenge Cup, as it is known today, was designed and manufactured by Fattorini & Sons out of their Bradford facilities being hallmarked in Sheffield in 1911, with another branch of the same family, Thomas Fattorini Ltd being located in the Jewellery Quarter with this story promoted on their website.

Vaughtons had continued to produce medals for the Football League and to maintain a collection of historic athletics medals from the London 1908 Olympics.

Birmingham designer, Bernard Cuzner, created the Olympic Torch for the London 1948 Olympic Games which was made in Birmingham's Jewellery Quarter by Stanley Morris for London's the Goldsmiths' Company which has the torch in its collection today. The London 2012 Olympic Torch was wholly made in the West Midlands in an engineering feat bringing together engineering and jewellery production with the stem made by Premier Group, Coventry, top and bottom caps cast by Alucast in the Black Country, Bullfinch (Gas Burners) Ltd in Birmingham producing the burners and Thomas Fattorini Ltd in the Jewellery Quarter producing the 2012 logo for the torches.

The Lonsdale belts awarded to boxing champions are another high-profile award made in the JQ-IC. The first belts were made in the Birmingham workshop of jewellers, Mappin & Webb from 1909. Thomas Fattorini Ltd were commissioned to make the belts in sterling silver in the early 1980s and have been making them since. It involves a complex process with individual parts die stamped from

silver before being machined and hand finished. These pieces are then attached to the main centre panel, including a large, hand-painted enamel portrait of Lord Lonsdale accompanied by two smaller painted panels. The enamel work is fired in an oven with different colours heated at different temperatures which requires a staged process taking several days or weeks. Finally, the craftsmen polish the metalwork and plate it in 24ct gold before attaching the red, white and blue ribbons.

Medals for the Birmingham 2022 Commonwealth Games were designed locally by three students Amber Alys, with Francesca Wilcox and Catarina Rodrigues Caeiro, from the School of Jewellery at Birmingham City University. They were manufactured in the Jewellery Quarter by Toye, Kenning and Spencer. The designers were inspired by the journey that athletes take to reach their goal of competing at the Games, creating embossed areas, symbolising an aerial map of the West Midlands road and canal network. In addition, the students designed the ribbon and medal box with these elements also manufactured in the JQ-IC.

State, Civic Insignia and Regalia

This segment of the JQ-IC includes many firms producing medals and trophies. One of these, Firmin & Sons, dates back to 1655 and manufactures and supplies military ceremonial buttons, badges, accourrements, and uniforms including the metal cuirasses for the dress uniforms of the household cavalry. Since the 17th century the Firmin House of military tailors has been producing uniforms, including bespoke uniforms for royalty and heads of state, ceremonial uniforms incorporating anti-ballistic material as well as uniforms for bands -- military and civilian, school and marching bands.

Some highlights

The Firmin Sword of Peace is presented annually to units of the British Armed Forces, within the United Kingdom and overseas. When British sword maker, Wilkinson Sword, ceased production in 2005, the manufacture of the Sword of Peace, was taken over by Firmin. This includes the annual presentation of a ceremonial sword to a unit in the Royal Navy, British Army and Royal Air Force, judged as having made the most outstanding contribution to community relations the previous year.

Almost half a million medals for the Queen's Diamond Jubilee in 2012 were made by three Jewellery Quarter businesses which collaborated to produce these on-time and to budget. Gladman and Norman were awarded a £7 million order to supply medals to the armed forces, emergency services, prison staff and others celebrating the anniversary of the Queen's 60 years on the throne. They worked with two other JQ-IC firms -- Toye, Kenning and Spencer and Thomas Fattorini Ltd – to supply 450,000 medals with all the medals, packaging and the ribbons made in the West Midlands.

Demonstrating the appetite for the capabilities of these firms, during August-September 2016, one manufacturer serviced an order for an Eastern European Country (Turkmenistan) which required the help and resources of all their competitors taken together, with every stone setter in the city involved in setting 175,000 stones over a six week period. This pooling of resources allows the JQ-IC to take on very large orders cost effectively as long as the outworker and jobber pool remains intact.

This segment is highly regarded by clients and governments globally – as one manufacturer put it, 'no one does pomp and ceremony quite like the British, with our democracy seen as an exemplar represented through the 'mother of all parliaments''. Countries worldwide agree that this historic pedigree provides a unique authenticity with strong demand from the Middle East, new Eastern democracies and from the Commonwealth.

Luxury Producers

There are many smaller producers of bespoke one-off pieces of jewellery with some established brands well-known outside the JQ-IC. Charles Green, a sixth generation family firm, established in 1824, is a well established luxury jewellery manufacturing brand, harnessing technology and engineering alongside traditional handcrafting techniques to create bespoke jewellery. Deakin & Francis, a seventh generation family business established 1786, is known for their 'one of a kind' luxury cufflinks and having expanded into barware, men's bangles and bracelets, and more recently into homewares and ladies handcrafted jewellery collections. Yard O Led produces a range of mid and upper price point professional writing instruments designed and made by craftsmen and women at their workshop in the Jewellery Quarter drawing on their 200 year history of pen making.

Manufacturing Jewellers

Manufacturing jewellers include Weston Beamor, established 1947, producing at some scale and offering a range of services including casting, 3D scanning and 3D printing solutions, whilst also producing bespoke jewellery. Their sister company, Domino, is a leading jewellery manufacturer of both speciality components and precious jewellery suites. The Hockley Mint, established in 1953, creates classic wedding and engagement rings as one of Europe's largest jewellery manufacturers also producing a range of cast components, findings and precision engineered jewellery parts. There are many other manufacturing jewellers who are much smaller in scale and producing pieces to order, repairing as well as producing some new pieces for their clients.

Jewellery Retailers

There are over 100 specialist retailers according to the Jewellery Quarter Directory with respected reputations and providing employment for local people. However a significant portion of this part of the cluster sits quite separately from the manufacturing segment of the JQ-IC, purchasing the products sold in their shops from lower-cost overseas suppliers, with many of the products they sell being hallmarked in the Birmingham Assay office on arrival in the city.

Designer Makers

There are around 50 Contemporary Designer Makers with many of these locating in the Jewellery Quarter as graduates of the School of Jewellery. They draw on the JQ-IC cluster for key skills and facilities but struggle to find space at low rents required, especially during the startup phase.

Producing contemporary handcrafted bespoke jewellery, these include recognised brands associated with the Jewellery Quarter, including James Newman, Victoria James, Kate Smith, Lora Leedham, Sara Preisler, Nabuko Okumuro, Gavin Mack, Daisy Grice, Norma Murrain's Silver Fish Jewellery Company. Other luxury goods producers have emerged drawing on the hand and bench skills used in the jewellery trade, including Struthers Watchmakers, product designer, David-Louis Hendley whose ranges are used in high profile TV and film productions by hoteliers and as home furnishings, as well as Jack Row, designer and goldsmith, whose luxury pens have retailed via Harrods and the Conway Stewart brands. These entrepreneurs have launched their businesses as graduates of the School of Jewellery, Birmingham City University, where their design and maker skills have been nurtured and refined.

1. Deep dive research to establish key connections, components, strengths and weaknesses in value chain, including skills gaps and what needs strengthening and supporting

The 2022 JQ-IC Survey for JQDT

This survey was conducted to support the Jewellery Quarter Development Trust (JQDT) with the aim of developing a robust evidence base, assessing the need and support required for a Jewellery Quarter Creative Incubator and Hub, in underpinning and accelerating the growth of the Jewellery Quarter Industry Cluster (JQ-IC).

It followed a survey by the same authors, conducted in 2016, driven by a different rationale to the 2022 research, in that it was focussed around the planning considerations required to ensure there was sufficient space for JQ-IC businesses including new start-ups, wider manufacturing and retail requirements, as well as an assessment of the likely growth or contraction of the cluster along with other relevant policy recommendations made to support the sustainable growth of the cluster as a new Neighbourhood Plan was being formulated. This survey was commissioned by Greg Fattorini, MD, Thomas Fattorini Ltd, and conducted by IDEAS at Birmingham City University to ensure that the views of the Jewellery Quarter Industry Cluster (JQ-IC) were heard and fully articulated as part of this consultation, in particular ahead of two referenda of residents and businesses operating in the Jewellery Quarter, scheduled to take place during 2016-17 and in particular as the Neighbourhood Plan would supersede Birmingham City Council planning regulations (JQ Conservation Area Supplementary Planning Guidance, January 2002), in identifying zones for industrial activity.

Respondents to JQ-IC survey 2022 and 2016

There were over 35 respondents to the 2022 survey and 28 respondents to the 2016 survey with every participating firm listed below. The survey was geared towards gaining 'deep dive responses' rather than taking a volume approach. Whilst a couple of respondents completed the survey online themselves, over 95% were talked through the survey providing the opportunity for greater insights, illustrative anecdotes and supporting evidence regarding the state of the cluster.

2022 JQ-IC Survey respondents	2016 JQ-IC Survey Respondents
-	J Hudson & Co Ltd Acme Whistles
-	Alabaster & Wilson Ltd (Ceased Trading)
-	Bickerton Jewellery
-	C Brandauer & Co Ltd
-	Charles Green & Son Lt
-	Euro Mounts & Findings LLP
-	WJ Sutton Ltd
-	Juniper Jewellers
-	Genius of the Lamp Ltd
-	Gladman & Norman Ltd
-	GL Bicknall & Sons - Bicknall Jewellers Ltd
-	Guildsman Jewellery Gallery LLP
-	Paramount Jewellery Ltd
-	Toye Kenning & Spencer Ltd
Weston Beamor	Weston Beamor
Firmin & Sons Ltd	Firmin & Sons Ltd
Thomas Fattorini Ltd	Thomas Fattorini Ltd

Deakin & Francis Ltd Deakin & Francis ltd
James Newman Ltd James Newman Ltd

Jack Row

Struthers Watchmakers Ltd Struthers Watchmakers Ltd

Jack Row

Davran Ltd Davran Ltd

Han-Goldwyn Ltd Han-Goldwyn Ltd

LJ Millington SilversmithsLJ Millington SilversmithsART Engraving ServicesART Engraving ServicesBirmingham Assay OfficeBirmingham Assay Office

Cooksongold UK
WH Darby Ltd
Cooksongold UK
WH Darby Ltd

CE Plating Ltd Birmingham Case Makers Ltd Fellows Auctioneers Ltd Element Bespoke Jewellers Morflin Precision Castings Ltd A Wardle & Co (Casters) Ltd Hockley Mint Ltd VJQ Lifestyle Ltd HS Walsh & Sons Ltd Singers Rethreading Ltd Hockley Watch Centre -

Manna Jewellers Ltd BM Finishers Bodenham & Shorthouse Birmingham Pewter Frilly Industries/We are Frilly The Goldsmiths' Centre -

Greater Birmingham & Solihull LEP - School of Jewellery Birmingham City University

Aston University Engineering Academy

University College Birmingham Shireland Collegiate Academy

NAJ -

The Hockley Flyer

Co-Creative Jewellers Ltd

Total employed in sample 2022 v 2016

There were 877 JQ-IC employees in the 2022 sample compared to 899 employed in the 2016 sample.

Total revenues 2022 v 2016

An estimated £415million revenues were generated by the firms responding to the 2022 survey compared with £165million in 2016, in part reflecting precious metal commodity price increases and recent volatility, in particular due to the impact of these on revenues at Cooksongold which saw income increase from £265.9m in 2018 to £357.6m in 2019, although it then fell back again in 2020 to £300m, the latest full set of accounts available at Companies House.

Revenue Bands

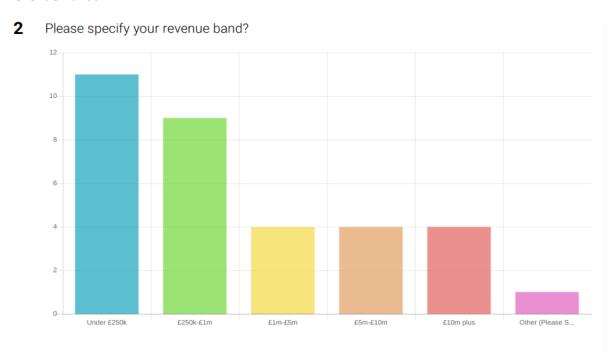


Chart 2: Revenue bands of respondents to JQ-IC survey, 2022

The largest group of respondents, 34%, were micro businesses with under £250k revenues; 28% of firms had revenues of between £250k-£1m; the rest of the respondents were split evenly at 13% each in revenue bands of £1m-£5m £5m-£10m and £10m plus, reflecting the broad spread of businesses operating in the JQ-IC.

This was in contrast to the 2016 survey where 20% of the sample had under £250k revenues, 30% had revenues of between £250k-£1m, 22% were generating £1-5m revenues and 20% had revenues of between £5m-£10m with just 8% generating revenues over £10m.

Revenue Growth

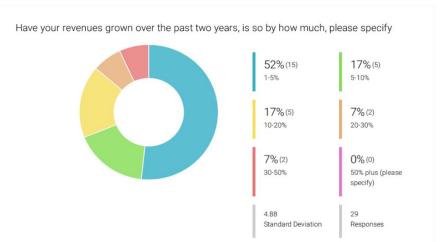


Chart 3: % Revenue growth by band for respondents to JQ-IC survey, 2022

For the majority of firms there was no or little evidence of a post-Covid growth bounce in revenues with 52% showing either stable or slow growth at under 5%. A further 17% had grown over the past two years at 5-10%, with a further 17% growing at 10-20%. 14% of the sample, 7% each, had grown

significantly at between 20-30% and 30-50% showing that this mature cluster continues to evolve, innovate and take market share.

Estimated size of JQ-IC including retailers in JQ

The JQDT conducted research (2019) covering 308 businesses in JQ-IC employing 2,124 FTE employees. However, comprehensive as this research was, it did not include many firms represented from the manufacturing cluster, companies such as Cookson Gold, some brand-led firms such as Deakin & Francis, Firmin & Sons, and many of the tier 1 suppliers drawn on for this survey. Over half of the firms listed as tier 1 suppliers to companies surveyed for JQDT during 2022 were not listed on this database, indicating the potential for perhaps double the employment outlined in the 2019 research with perhaps as many as a further 300 firms working within or servicing the JQ-IC. On this basis it is estimated that employment within the Jewellery Quarter Industry Cluster could consist of over 4,100 people, taking into account manufacturing and supply chain employers.

Revenue per head

Recognising the potential for distortion through inclusion of Cooksongold revenues in the sample, revenues per head have been calculated excluding that business' revenues and employees. On that basis they are broadly in line with those in 2016 at £184k, with average revenues per head in 2022 calculated at £186k.

Accounts & Legal, (2018), calculated average UK revenues per employee amounted to £118k.

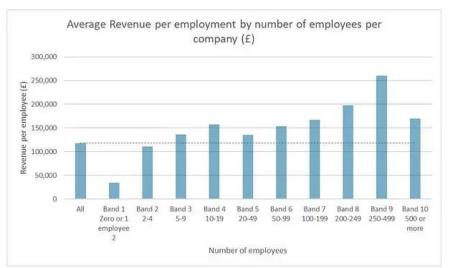


Chart 4: Revenue per employment by number of employees per company (£)

Grant Thornton/CEBR research into Medium-Sized Businesses (MSBs) consistently shows these firms as being more established, being spurs to growth, investing more in R&D, with average revenues per employee at £171k (UK MID-SIZED BUSINESS REPORT 2014).

Research by IDEAS into the JQ-IC in 2016 suggested average revenues per employee in the JQ-IC sample surveyed stood at £184k. 2022 research suggested revenues per employee in the region of £186k. These figures indicate high levels of productivity from a sample including mature, well-

established medium-sized businesses innovating and gaining new market share with a strong reputation global reputation for excellence amongst their client base.

On the basis of these figures annual revenues generated by firms within the JQ-IC are somewhere in the region of £767 million generated annually in the heart of Birmingham within a cluster employing around 4,000 local people with high productivity reflected in average revenues per head estimated at £186k.

Business Age

The JQ-IC is a mature cluster and the sample reflected this, with just 7% of respondents under 3 years old, 3% 3-10 years old, 13% between 10-20 years of age and 77% over 20 years old and many of these were over 100 years old. In 2016 the average age of survey respondent firms was 78 years old reflecting this as a well-established business cluster, consistently contributing taxes and rates and providing employment to local people, in many cases generations of members from the same family.

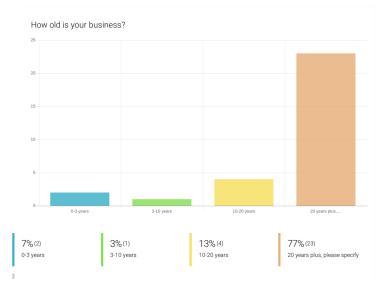


Chart 5: Average age of business responding to JQ-IC survey, 2022

This is almost an inversion of the UK position as depicted in Chart 6, showing the average for company ages with the largest segment, 40% aged 1-4 years old and the second largest number, around 22% aged between 5-9 years old. Historically, the average age of UK companies has been relatively young with this average gradually declining from 10.7 years in 1999 to 2000 to 8.5 years in 2020 to 2021 (Official Statistics, 2021).

The age profile of the JQ-IC businesses, their maturity in having weathered wars, recessions and downturns, suggests great resilience amongst the cluster, with its anchor businesses having strong foundations. This well-established business cluster has been consistently contributing taxes and rates as well as providing employment to local people, in many cases via generations of members from the same family for well over 100 years.

Percent
45
40
35
30
25
20
15
10
<-1 1-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50+

Chart 6: Age profile of companies on the total UK register for 2021

Chart 6 Corporate Age profile

Source: Companies register activities 2020 to 2021, Companies House.

Value Generation

Early stage review of value generation and shaping demonstrates significant proportions of local value content is created by companies working together as part of the Jewellery Quarter Industry Cluster, as illustrated below. The results of this survey suggest, through mapping a selection of tier 1 suppliers, a high level of mutual interdependency and trading linkages between companies. The chart below shows a small sample of companies surveyed which buy bullion from Cookson Gold as their tier one supplier. Blue outlines indicate companies based in the JQ, red outlines indicate companies based in the UK but outside the JQ and green outlines indicates companies based overseas. Whilst this does not provide evidence of the total value of content generated in the JQ-IC it does indicate an actively networked and interdependent cluster.

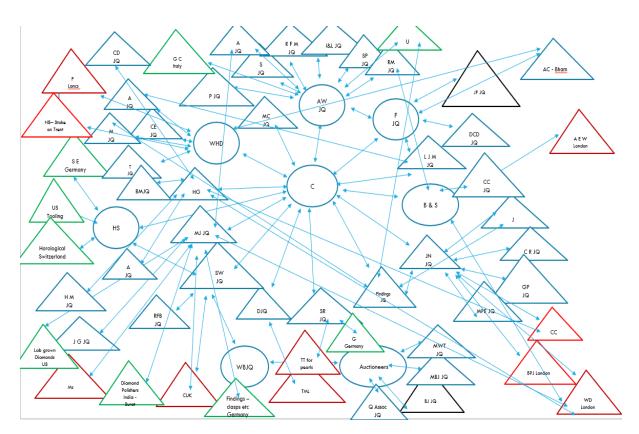


Illustration 4: Sample of companies based in JQ-IC purchasing from Cooksongold (noted as 'C') as their tier 1 suppliers (Note: names removed from all companies)

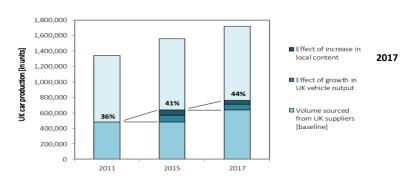


Figure 1: Two factors drive compound growth in the UK automotive parts sector

Chart 7: Growing the Automotive Supply Chain, Local Vehicle Content Analysis Source: Holweg M, et al, (2017), SMMT

Analysis of the tier one suppliers to companies in the sample sourcing from Cooksongold suggested that 12.5% of tier 1 suppliers were based overseas with 87.5% of tier one suppliers based in the UK. 17% of tier one suppliers were from the UK but not the JQ meaning that over 70% of tier one suppliers were based in the Jewellery Quarter, with 77% of tier one suppliers located in the JQ-IC across the sample taken as a whole.

This high level of mutual interdependency at tier 1 can be compared to research by the UK Automotive Council which has highlighted growing levels of onshoring in that sector, with the parts sourced by UK car manufacturers from UK-based first-tier suppliers increasing in value terms from 36% in 2011, to 44% in 2017 as illustrated above (Holweg, M., et al, (2017), SMMT).

Supplier location

The chart below shows a segment of Jewellery Quarter supplier firms by location with black indicating a Jewellery Quarter location, red indicating a UK location outside of the JQ and green indicating an overseas location. As can be seen, the majority of firms and their suppliers are based in the Jewellery Quarter. Products not sourced from the Jewellery Quarter are purchased elsewhere due to lack of availability and/or price. Most companies operating in the Jewellery Quarter Industry Cluster are overwhelmingly dependent on this cluster for their supply chain with some companies specifically 100% dependent on it and almost all stating that it was their preferred option to source locally wherever possible.

Company	City	Country
Finaids	Bury Lancashire	UK
Norton Bridge Metal producer	Stoke on Trent	UK
Metalor	JQ Birmingham	UK
Argex	JQ Birmingham	UK
Clark Diamonds	JQ Birmingham	UK
CE Plating	JQ Birmingham	UK
Tooling 2000	JQ Birmingham	UK
Betts Metals	JQ Birmingham	UK
Specialist Engraving		Germany
US Tooling		USA
Horological specialist		Switzerland
HS Walsh	JQ Birmingham	UK
Hockley Mint	JQ Birmingham	UK
Argem	JQ Birmingham	UK
Julie's Gemstones	JQ Birmingham	UK
Lab Grown Diamonds		USA
Mastermelt	Buxton	UK
Diamond Polishers	Surat	India
Cousins	Essex	UK
RF Bevan	JQ Birmingham	UK
HS Walsh	JQ Birmingham	UK
Struthers Watchmakers	JQ Birmingham	UK
Manna Jewellers	JQ Birmingham	UK
Han Goldwyn	JQ Birmingham	UK

WH Darby	JQ Birmingham	UK
Plataurum	JQ Birmingham	UK
Graphicarbo Crucibles		Italy
Aujen	JQ Birmingham	UK
Solderite Manufacturing	JQ Birmingham	UK
Morflin Castings	JQ Birmingham	UK
RF Polishing	JQ Birmingham	UK
Davran	JQ Birmingham	UK
I&L Jewellery Manufacturing	JQ Birmingham	UK
Alex Wardle	JQ Birmingham	UK
S Pyzer Moulds	JQ Birmingham	UK
Rapid Models CAD	JQ Birmingham	UK
Umicore		EU
Firmin & Sons	JQ Birmingham	UK
John Farley Gem Setting	JQ Birmingham	UK
DC Design	JQ Birmingham	UK
LJ Millington	JQ Birmingham	UK
Bodenham & Shorthouse	JQ Birmingham	UK
Cold Cure Enamelling	JQ Birmingham	UK
Allied Copper	Birmingham	UK
A E Ward	London	UK
James Newman	JQ Birmingham	UK
Jewelcast	JQ Birmingham	UK
CR Gems	JQ Birmingham	UK
Glenn Parry Stone Cutter	JQ Birmingham	UK
Euro Mount Findings	JQ Birmingham	UK
Marc Phelps Engraver	JQ Birmingham	UK
Curteis Chain	Ellesmere	UK
Bass premier Jewellery	London	UK
Weissbart Diamonds	London	UK
Midland Watch Traders	JQ Birmingham	UK
MB Jewellers	JQ Birmingham	UK

Britannia Jewellery	JQ Birmingham	UK
Queensgate Associates	JQ Birmingham	UK
Singers Rethreading	JQ Birmingham	UK
Ting Ting	Somerset	UK
TML Consumables	Worcester	UK
Weston Beamor	JQ Birmingham	UK
Findings		Germany
Cookson Gold	JQ Birmingham	UK

Chart 8: Sample of JQ-IC suppliers by location; black = JQ location; Red = UK location; Green = overseas location

Business activity and specialisation

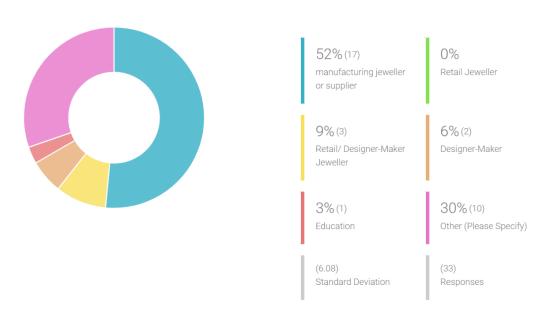


Chart 9: Business categories of respondents to JQ-IC survey 2022

The sample was heavily focussed on manufacturing jewellers, or suppliers into this part of the cluster, making up 53%. 31% of respondents categorised themselves as from 'other' activities including auctioneering, retail horologists, manufacturing silversmiths, platers, button, badge and uniform producers, engravers and the Assay office providing quality certification. A further 9% were retail or designer-maker Jewellers with 6% representation by designer-makers.

Investment Intentions

The investment intentions within the JQ-IC are surprisingly buoyant, given the supply chain, inflation and export challenges facing business more widely, with 70% of business expecting to invest more over the next three years.

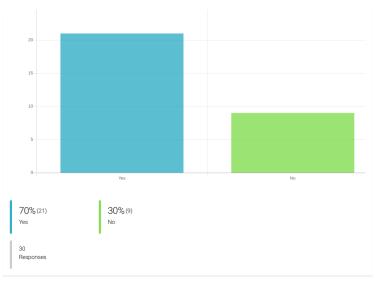


Chart 10: Investment intentions of respondents to JQ-IC survey 2022

This is in contrast with latest survey evidence from the Institute of Directors' Economic Confidence Index(ECI), (August 2022, IoD), showing a 50/50 split with as many firms planning to cut investment as increase it, the weakest reading since October 2020. The CBI Quarterly Industrial Trends survey (July 2022, CBI) showed investment intentions for the year ahead had firmed up compared to April for plant and machinery (+17% from +9%) product and process innovation (+10% from +1%) and training (+10% from -3%). The IoD ECI survey showed confidence remaining very low at -54 in July, only slightly higher than June's -60 with 69% of employers either very, or quite pessimistic about UK economy, with just 15% optimistic about the outlook. With inflation at a 40-year high, a third of firms cited this as the most common reason for pessimism. Difficulties in the UK's trading relationship with the EU was a factor for 20% of respondents as the introduction of customs checks and border delays were hampering exports (Weardon G, 2022).

Jewellery Quarter Industry Cluster Business Activities

As the chart below shows, JQ-IC respondents were involved in a wide range of activities in the jewellery manufacturing and production supply chain. In addition to the elements outlined above, other activities cited included laser cutting, watchmaking trades, rethreading, rope stamping sheet metal working (armour smithing); metal spinning, lapidary, lost wax casting, stamping, watch repair mounting and setting, cufflink, tie pin and money clip manufacture, bracelets, chains, earrings, pendants production, gemstone and diamond sourcing and setting, repair and restoration, antiquing and bronzing finishing, rhodium plating, gold, silver and platinum finishing, design services and online sales, remodelling and repairing, engraving, presentation case manufacturing and product certification.

Jeweller supplier, please show your position in the supply chain indicating which part(s) your convolved in, see below

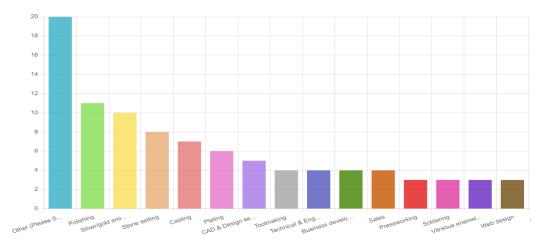


Chart 11: Supply chain position of respondents to JQ-IC survey 2022

Company versatility

Almost two thirds of respondents sold into other sectors including automotive, cited most frequently, dental, electrical, military, film, arts, culture, giftware, computer games, architectural, built environment, sports, civic, fashion, retail and hospitality industries. This versatility demonstrated the inability of firms to be identified from Standard Industrial Classification (SIC) codes.

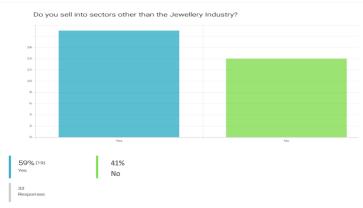
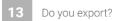


Chart 12: JQ-IC respondents supplying other sectors 2022

Jewellery Quarter Industry Cluster Exports

62% of companies surveyed exported, but in general the percentage exported was low at between 5-15% of revenues. Most agree there is an opportunity with greater marketing to improve exports but exporting to the EU had become more challenging since Brexit with most citing increased bureaucracy and paperwork making it more expensive and time-consuming as outlined.



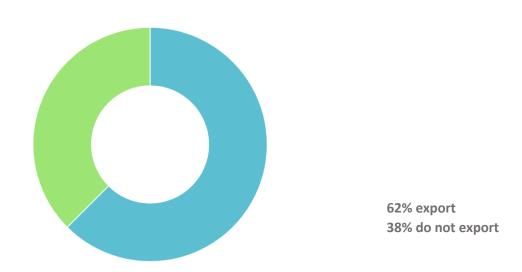


Chart 13: percentage of JQ-IC business respondents exporting 2022

On aggregate Europe was the most favoured destination with taking just under 60% of exports with North America the next largest destination taking over 30% of the remaining exports and Asia or Oceania taking the remainder.

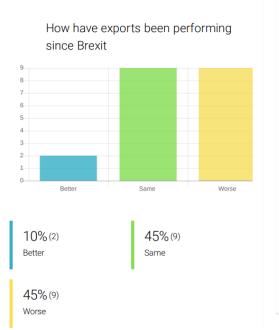


Chart 14: JQ-IC respondents' export performance since Brexit

Ireland was an important destination for various exporters with one respondent stating:

"It's been very difficult since Brexit as we need to complete more paperwork. When we have queries we do not get proper answers. We are getting parcels returned and we do not know why. We do deal with public as well and we are going into Europe - Germany, Spain and France and face the same issues there.

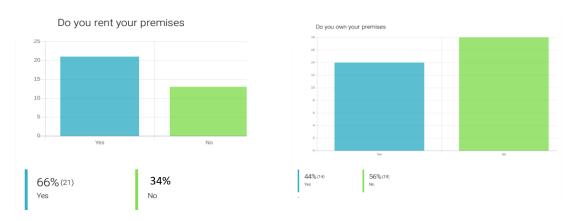
"It does make life difficult in Southern Ireland where I have 50-60+ accounts. This is a nightmare since Brexit. We used to be able to post stuff over for a ring this would have cost £10, now it's costing £30-40 and customers are saying they will buy from Germany or France as there is so much additional expense.

"Sometimes when it's over there, it can be caught in customs and you don't know why it's being held up. We have to pay the VAT up front at 23% otherwise it does not get through. Customers also have to pay a surtax which we think they should not pay and we have had a government minister here and he could not give an answer as to why this is having to be paid. It should have only applied to overseas manufacture.

"We have to fill in a carnet when we visit and last time this cost £900 and this is not an easy process as you have to itemise every piece with you. We used to have to do this 40 years ago before EU was formed. In spite of all this, our exports are nonetheless holding up. Leaving the EU has put extra barriers in the way of trade and additional costs for customers making us less competitive. On a large order the additional costs are not a big problem but on a single ring this is a big issue."

Another company stated that they were thinking of stopping exporting to Ireland as the paperwork had increased so much since Brexit. In only 10% of cases exports were performing better since Brexit with 45% performing worse and 45% the same.

Jewellery Quarter Property



Charts 15 and 16: Percentage of JQ-IC respondents renting or owning their premises

With around two thirds of the sample renting property, these businesses are very dependent on landlords and how frequently rents are increased, how well property is maintained and the surroundings in terms of balancing the interests of tenants and residents with businesses operating from the Jewellery Quarter.



Chart 17: Percentage of JQ-IC respondents experiencing rent increases

At 66%, the percentage of firms renting as a proportion of the total sample in 2022 was higher than the 44% who were renting in 2016. Whilst some had experienced large increases and were struggling to cope with them, more firms at the time of the survey did not articulate this as a critical threat with 55% of firms experiencing rent increases in the past five years.

In 2016 all those (100%) renting and 56% of the total sample interviewed saw rent increases as a critical threat to their business viability. In 2016 85% of all companies interviewed saw increasing rents and rates as a threat to the ongoing viability of the Jewellery Quarter Industry Cluster as a whole.

In 2016, the City council was, in the vast majority of instances, depicted as an absentee landlord failing to fulfil its obligations under its leasehold agreements, with the various departmental teams involved with renting, rates, planning and property services, failing to share information or take a holistic view of the businesses and their requirements, or indeed any strategic overview on how best to assist the Jewellery Quarter whilst acting in a coordinated or collective manner.

The position regarding Birmingham City Council (BCC) as a landlord was, in 2022, more evenly split. Whilst some renting from Birmingham City Council were experiencing rent increases, there were statements reflecting the City Council's moves to deal with businesses in a more sympathetic manner and being helpful to them as small companies facing many challenges. A number noted: "BCC have been quite good to me and have increased rent gradually." "When I took over our lease 7 years ago, we were just changing the name on the lease and BCC agreed to a slight yearly increase." "I rent from BCC. They are OK as landlord."

However negative comments persisted with some respondents observing, "There are things that need doing which do not happen until I moan and moan. We have been trying to get a new lock on our gates for two years as the current one is in two halves."

"They increased the rent by 60% about 5 years ago when I took over the business. I changed the name and they did a rent review on change of ownership and they decided it was not reflective of

what other people were paying." Other comments included, "No one has anything good to say about BCC." "We have seen quite large increases renting from the Council".

This lack of coordination between City Council departments noted in the 2016 survey had impacted on the viability of younger businesses and start-ups. In one instance that year a 25% rent increase had been demanded from a business start-up after four years renting from the council and following a £40k investment by them into the building. When the business asked for a smaller rent increase they were threatened with an eviction noticing giving 6 days' notice to leave.

In a further instance cited in 2016, the start-up signed a leasehold agreement in a near derelict building, described as having 'holes in the walls and where an electrician they later called in declared the wiring to be dangerous'. They claimed that whilst the City Council were initially helpful, they filled in the forms incorrectly and later had three years back payment on rates claimed from them. They then found themselves passed from pillar to post between the small business rates relief team, the discretionary rates relief team, Property services, Birmingham Valuation office, noting that none of these teams seemed to speak to each other or coordinate clients across them. They spent hours on phone calls to the City Council - letters, calls, wrong information provided on which they acted only to be told by another team in City Council that they had done the wrong thing. They were asked to prove that they did not have the money to pay the supposed outstanding back rates.

For these reasons operators had been continuing to look for alternative locations to operate from and in 2016 the following reasons were given as prompting this reaction:

- 1) Communications with the Council were costing money, were time-consuming and stressful
- 2) Contracts were handed out to tenants with a 'bums on seats' mentality rather than caring about the types and sizes of businesses
- 3) Conditions of property were a constant challenge
- 4) Value of properties were prohibitive, especially to start-ups looking to embark on new ventures in the Jewellery Quarter.

In 2022 businesses continued to look to move to other locations although given the high levels of interdependency within the supply chain many were caught in a quandary where they would like to move out, but would find it practically very difficult to operate if based elsewhere.

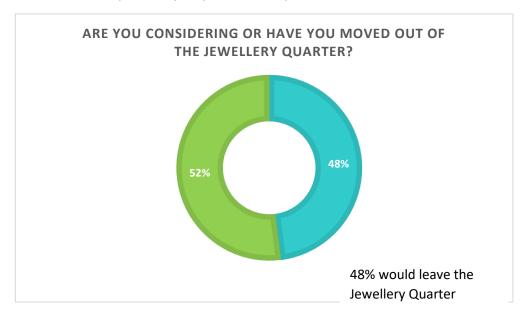


Chart 18: Percentage of JQ-IC respondents considering moving out of Jewellery Quarter

Nonetheless, as availability of space was regarded as critical to the ongoing successful future of the cluster and with manufacturing space being insufficiently protected along with continued escalation in rentals, firms were still looking to move out the Jewellery Quarter which would, in turn, continue to undermine the integrity of the cluster.

The ability of business to relocate to alternative locations suggested the need to provide greater stability for the JQ-IC firms through greater awareness of this cluster, the benefits it brings to the City and the opportunities it offers for accelerating growth and further wealth and job creation. For Birmingham Property Services in the City Council it suggests that a coherent strategy targeting the needs of businesses in the Jewellery Quarter would be beneficial all-round facilitating stability and growth for these businesses and integrity of the cluster.

Comments included respondents noting:

"We don't think it would suit to move out of the JQ as it is a hub where people come for Jewellery and watches."

"We would never move from JQ - we did spend some time in Rubery but here we are we can walk up the road for diamonds or gold."

"I would always keep a base in the JQ because I can continue doing the work we are doing. As regards to our suppliers we have about 3-4 people who work sub-contract for us and they are also based in the JQ, so I need to be based here."

"We own our building but we are considering moving due to business rates, lack of support from the council and the general run down state of the area we have to work in."

"It's difficult to move out of the JQ as the costs would be prohibitive. We may not be able to set up our existing operation in new location without substantial additional costs. (New Effluent treatment plants etc..)."

"We would like to move but we have not moved as we have so much tonnage of lathes and equipment in the JQ. The thought of moving out is very challenging as a result. The JQ is, however, a lovely place to work."

"Given the opportunity to move that would suit our business, we would seriously consider moving."

"We are not considering moving as the JQ has all the facilities that our business needs and wants and also it is good for our brand to be located in the JQ. We have strong links with School of Jewellery and have five student workers temporarily supporting the business, a practice which we've been doing for years."

Some firms had actually moved out of the Jewellery Quarter, with one noting:

"We have moved out of the JQ. We were housed in a Victorian hovel so that every time it rained we were flooded out. The premises were not fit for purpose and I worked with the landlord on a renovation project but it was turned down by the council as the premises were listed and the roof which needed replacing was not allowed by Historic England (HE) who would only allow it to be replaced to original condition which was beyond our budget. HE were interested in the historic context not the living context. It made the renovation a non-starter and the whole thing has now gone to rack and ruin. Our landlord would be happy to sell to convert to apartments and all the restrictions will suddenly disappear as the building escalates in value."

Skills Shortages

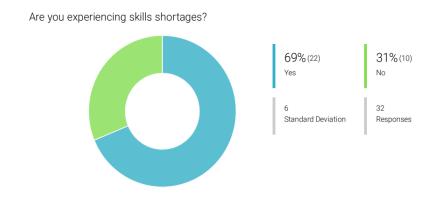


Chart 19: percentage of JQ-IC respondents experiencing skills shortages

At 69%, levels of skills shortages in the Jewellery Quarter are very much in line with those being experienced by employers nationwide. The Open University Business Barometer 2022 (OUBB) highlighted that more than two-thirds (68%) of SMEs currently face skills shortages, rising to 86% in large organisations. The OUBB noted that 28% of businesses reported having had to turn down work or being unable to bid for work due to their staff shortages affecting growth prospects, with more than half (52%) of large organisations planning to increase investment in staff training over the next year, compared to 47% of SMEs. Overall, skills shortages were estimated to be costing £6.6 billion per year in the UK, due to recruitment fees, raised salaries, temp hires and training for employees taken on at a lower level than expected. (Open University Business Barometer, 2022)

A large proportion of JQ-IC firms commented on a high level of unfilled positions and staffing gaps representing anything from 5%-33% of all positions in any one business, with many commenting on the very significant challenges they faced when seeking to recruit people. Some smaller firms commented on the 'Catch-22' in looking to recruit young talent — with many firms so busy at present it would take so much time to train someone which they did not have so they didn't even embark on this process as a result.

These gaps were in multiple areas, with high levels of concern about practical bench, hand and craft skills which were retiring, leaving the Jewellery Quarter and not being replaced through any available training, but with all types of skills in short supply including sales, administration, design.

This echoed the results of the 2016 survey where concerns were expressed regarding the need for more practical training – the bench skills comprising craft, specialist and engineering skills, along with greater understanding of materials, precious metals and stones. However, in 2016 JQ-IC businesses wanted to see an increased emphasis on developing – high tech skills, IT, business and commercial management skills, design, along with far greater emphasis on market understanding and the ability to apply skills acquired in the context of business need. Most businesses were keen to work with education and training providers to offer access for students to machines during vacations and to offer visiting lectures and mentoring.

During interviews in August 2022 the need for greater specialised bench skills was once again highlighted to a greater extent than the wider skills, although the need for these remained. For example, Firmin & Sons noted:

"Yes, where we have found impossible to recruit is sheet metal work in armoury - not surprising as they do it to a very high end and are trained to a very high spec and this does not really exist anymore. We are now setting up to train some more people in this art form."

Another respondent added, "It's a dying art in bronzing and antiquing and there are not many platers about. These are dirty old grubby businesses and many people would prefer to be in front of the computer rather than playing with cyanide."

But more general skills were in decline or short supply too, including tool-making, engineering, sales and digital skills. Many firms would no doubt sympathise with one respondent who commented, "We have three vacancies or about 5% of our positions unfilled at present in admin, receptionist type roles. We had 7 interviews for a receptionist last week and not one turned up!"

Working in the jewellery or allied businesses was seen as a vocation and finding young people who were committed to the trade remained demanding, especially as links to schools were very few in number and teachers were unaware of opportunities in this sector with no careers advice available aimed at openings in the JQ-IC.

Various firms noted their concerns at the lack of young people coming into the industry:

"We need some succession planning but it's quite difficult to attract young people. We have 3-4 unfilled positions. We want to invest in people and we want to invest in hand and bench skills as a 200 year old company. We have a 40-year old owner who's looking to invest in more interesting machinery where some would be computer-based and require some CAD and we need social media skills too. We think we have lacked an approach as the Jewellery Quarter where we have built a prestige reputation around our craft. We need to move with the times, keep our heritage alive, but have a contemporary side to it too."

"Yes – we would like another jeweller and another shop assistant. It's hard to find the right person. They have to have the moral and ethical background we have as a family. We also suffer from pilferage so we have to be careful who we take on. It's relatively easy for someone to pick up an small item of lower value and take it."

"It's very important that shop assistants in early stages of career have right ethos and see this as a vocation where they are doing this as they believe it and they in turn are nurtured as an asset. It's very helpful for young talent to have access to mentors and people from across the sector who have worked here for years and have insights that they can share these and accelerate the learning process for upcoming talent."

"There's going to be, in next ten years, a lack of people in the Jewellery Quarter doing what needs to be done...When I started 33 years ago there were a lot of companies taking on apprentices — now no young people are learning the bench and technical skills. A lot is being done by CADCAM. What we see is students in the School of Jewellery being taught by computer and not by hand. You can't repair jewellery by computer."

It is interesting to note that in conversation with recent post-graduates from the School of Jewellery that they were interested in learning hand and bench skills as well as working with firms and crafts people in the Jewellery Quarter. They expressed disappointment in the lack of dialogue, openings and apprenticeships enabling them to stay and work in the area post graduation. One stated:

"There are not enough apprenticeships available and School of Jewellery graduates would be interested in doing these especially if we had opportunities to learn more about engraving, stone setting, mounting."

A leading trade association noted:

"It's important how we're presenting the sector to young people, returners and mid-career people, so they can access career options in the sector and progression routes and this needs to be done better and become more visible.

"We need to ask questions like how many benches does the Jewellery Quarter need to fill in any one year? What do our leading employers need annually? What does the BAJ need to provide? A lot of this comes down to expectations and transparency of routes available as well as career outcomes.

The NAJ had worked with BCU to map onto the Gemmology degree the units required to become a practicing valuer. The aim was to start building up a profile online for people of all ages so could see what they need to study to get to where they want to get to with the intention of widening participation opportunities, noting the importance of linking everyone together across sectors within jewellery.

Finally firms noted supply chain skills shortages, vital, given the interconnected nature of these businesses, noting the impact of "shortages when outsourcing to other watchmakers, engravers, lapidarists, tool makers."

Missing Skills

12 10 8 6 4 2 Stone setting Toolmaking Engine Turning Technical & Eng. Polishing Silverigold smi. Vitreous enamel. Resin enamellin precious stone CAD & Design se Moodworking

Chart 20: JQ-IC respondents rankings of missing skills

As highlighted in the chart above, a large range of practical hand, bench and specialist technical skills were in critical short supply, especially as so many with these skills were retiring and leaving the industry. An MD of one of the leading firms noted that if this skills shortage was not addressed in the next 5-6 years the cluster would struggle to survive.

Skills shortages listed above included, in order of priority, stone-setting, polishing, soldering, plating, tool making, silver and goldsmithing, vitreous enamelling, engine turning, resin enamelling, technical and engineering skills, precious stone suppliers, casting and CAD and design services along with woodworking. Others mentioned as being in critical short supply included: hand engravers, rethreaders, mounters, jobbers, repairers, spot-welders, rope-stampers, hand engravers, case makers, along with all bench and hand skillsets, general management, administration, website and sales skills.

In speaking with the editor of the Hockley Flyer it was apparent that the most frequent job vacancy adverts were for mounters which appeared about four times as often as any other position. Job adverts appearing throughout 2022 included: mounters; metal spinners; account managers; CAD designers; setters; polishers; production assistant; accounts assistant; talented jeweller; jewellery repairer; polisher; silversmiths; electro platers; 3D printing technician; silversmiths; watch technician; bench hand improver; jewellery sales consultant; micro setter; enameller trainee; quality controller.

One respondent noted that there were probably now 'more businesses here (in the Jewellery Quarter) which are non-related rather than related to the jewellery trade.' Whilst these were welcome they were sorry their cluster was, to their minds, 'largely ignored'.

A presentation case manufacturer, especially critical to the trophies, medals and regalia segment of the cluster, noted:

"There used to be 30 companies doing what we do 40 years ago. Now it is just us in Birmingham. Our business is a mixture of craft and manufacturing. A presentation case will be made initially in wood as standard woodworking. A manmade board and timber carcass is required to provide a wooden box. The wooden box is then covered with a variety of materials - paper-based, leather-based or fabric based. Likewise the insides are also lined with these materials. The tools of this trade are scissors, scalpel, glue roller or brush and the ability to work and manipulate those materials and to cover the wooden carcass. It takes three months to train someone to be earning their wage at a basic level. It takes two years, plus, as a minimum and nearer to five years to train someone to be totally independent and competent. This is not a quick process."

The accelerating decline of the Jewellery Quarter was noted by many respondents:

"The JQ-IC is in terminal decline - we can see it in the number of companies which there used to be compared to now. There has been a big decline. There are not sufficient new young people coming through and the promotion of the JQ-IC and this special cluster is essential. Excalibur, House of Litkin, where I started and Gallery & Abbey Crest, Alabaster & Wilson. So many. We do need to attract new talent. I left the School of Jewellery 30 years ago and I don't know if they are still doing basic skills at bench, but probably it's more computer skills. That's fine to have computer skills, but you still need the hand and bench skills. Someone needs to set stones, set jewellery, hand engrave from time to time, polish, enamel. All this is required by the JQ-IC."

Luxury watchmaker and School of Jewellery graduate, Rebecca Struthers commented on the pressing challenges of skills shortages facing the wider industry cluster on Radio 4, in a programme first aired on 13th July 2022 (2022, Radio 4). Dr Struthers said:

"The UK does not subscribe to UNESCO Convention to protect intangible cultural heritage encompassing the cultural and creative skills that have defined economies. Switzerland registered watchmaking on this list. Should we care that artisan-making is struggling? Although it will never

grow to provide the jobs of centuries past, there is growing interest in preserving old things. A more sustainable option....

"It's hard to advise aspiring watchmakers because when I look back I find the ladder I climbed has been pulled up behind me. Of all the vocational courses I took to start me on this journey, not a single one still exists. The National Diploma I took in jewellery and silversmithing has long gone. A free course doomed for being unprofitable in the current academic climate. The three-year taught British Horological course that played such a vital role in starting my career has been replaced by a more academic degree. The exams used to cost just a few hundred pounds a year whereas the new course comes complete with its £9,250 a year price tag.

"While the British Horological Institute (BHI) still offers their course by distance learning, it means that students now need to set up their own workshops, an extremely costly exercise, or find an endangered watch or clock maker willing to let them use their workshop. Even the Master's Degree I took in History of Art and Design, tailoring it to the study of horology as no masters in horology exists, has been axed.

"The British School of Watchmaking opened in Manchester in 2006 to try to help plug the gap. Some of their students are lucky enough to gain sponsorship covering both their tuition fees and their living expenses which are exchanged for a prescribed term of service for their brand sponsor upon graduation. It's undoubtedly helped – although the opportunities to build on these skills to become the Master Watchmakers of the future are limited. The big brands need servicing technicians, not Masters.

"So how can we set out to provide the Masters of the future unless we set out to provide training in these skills? Organisations like the Heritage Crafts Association and the Association of Heritage Engineers are doing good work to address the problem, but if generations to come are to have the chance to fall in love, as I did with the art and science of watchmaking, we need to pay more attention, or else we'll run out of time."

Young Talent

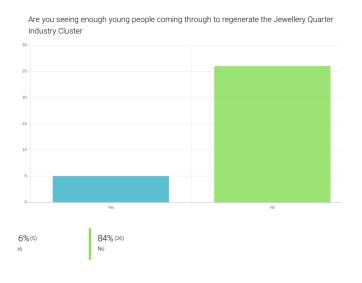


Chart 21: Views on Young Talent entering JQ-IC

Given fears about the Jewellery Quarter generating insufficient skills to replace its needs, it was indicative of the scale of this challenge that 84% of respondents were not seeing enough young people coming through to regenerate the Jewellery Quarter.

JQ-IC Graduate Recruitment

Few firms were recruiting graduate jewellers, with 67% not taking on graduates and just 33% recruiting graduates from the School of Jewellery.

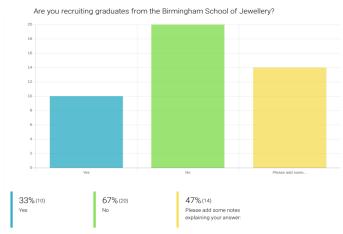


Chart 22: Percentage JQ-IC respondents recruiting graduates

Graduate skills sets were not considered relevant to many of the SME firms' requirements. There was a general view that they wanted to be designer makers and jewellers and were not interested in 'getting their hands dirty' or working in an industrial context. However, the design skills were appreciated and larger firms in particular were taking on graduates in this area.

Whilst some firms were taking on graduates as temporary or casual workers, others were being recruited into gemmology, but there were many concerns that graduates were not being provided with the skills appropriate to business and market requirements.

These statements chimed with wider views held by employers and were not specific to the JQ-IC. Research by the New Economics Foundation found 80% of employers are of the view that current graduates lack the skills needed to be work ready and that education institutions needed to work more closely with business sectors to help identify and train the skills required to meet future demand. (New Economics Foundation, 2021). Additional research by The Institute of Student Employers found that 23% of companies were planning to switch from hiring university or college leavers to young people with only school-level education, whilst a report by the Learning and Work Institute (L&W) in 2019 found that the UK skills shortage would cost the country £120 billion by 2030 (Owen J., 2020)

The overwhelming view was that jewellery schools needed to train more practical hand, bench and craft as well as specialised skills, including mounters/polishers/setters/engravers/chasers, as a priority given that these were no longer being trained by larger manufacturers which had been far more numerous in the past. The jewellery schools were seen as catering more for Jewellery designer-makers, not manufacturing jewellers, with too little emphasis on the business and management skills required to make a successful career in the JQ-IC a point which was noted repeatedly and by almost every respondent:

"The School of Jewellery does not service the Jewellery Quarter and has not done so for a long time. It is looking more to overseas students taking degrees and not looking at meeting practical needs of this industry. There is no focus on the hand and bench skills which are dying out. There are no longer enough larger manufacturers."

"The School of Jewellery provides degree-based training and the JQ is actually missing the apprentice polishers, setters, modellers, etc....It has a fantastic international reputation but its primary aim should be about serving the Jewellery Quarter. The School *for* Jewellers no longer exists but the need still exists."

"The School of Jewellery is turning out designer makers and I do not trust academic skills sets in terms of my business needs. I want someone who is going to saw pierce base metal for cap badges."

"Whether the School of Jewellery is providing the full range of skills students require to make a living in the trade is an issue which we are trying to address, but more still needs to be done. If you're being taught how to make something that's great, but in real world you may need to make that piece in less time than you take at college."

The French luxury cluster had noted the same dilemma amongst its firms. Given the business model prevailing in higher education, the challenges of providing vocational training were recognised with more flexible training solutions run by the industry offering an alternative approach. French luxury clusters had acknowledged the need for the cluster themselves to organize flexible "training platforms" for high-quality learning sessions meeting the requirements of their specific know-how for both small and large luxury manufacturers, rather than by creating or depending on educational institutions, as had been previously stated in cluster literature.

The School of Jewellery, Birmingham City University emphasised their current short course offering which although suspended during Covid had resumed once again and offered 8 to 33 week evening course programmes covering a range of topics including: stone setting, gemmology, wax carving, enamelling, silver smithing and forging. Twelve week courses were priced at £240 with 33 week courses costing £595. The School of Jewellery also offered foundation and diploma courses in Diamond Grading and Gemmology.

School of Jewellery management noted that for them to run a successful degree course, they required 30 students per year group to make it viable. "The barriers for us are the economic viability of courses with small numbers. Our short course programme is popular and we hope we can communicate this as effectively as possible with those in the trade and studying, so they're fully aware of the breadth and depth of the offer."

They stressed their willingness to facilitate greater outreach into the local community and desire to create environments which would help foster knowledge exchange, craftsmanship and encourage the development of greater entrepreneurial spirit.

The School of Jewellery's management noted they were keen to work with all businesses, stressing an 'open door' policy and desire to provide innovation and research across the cluster. They recognised more needs to be done in terms of linking into schools and inspiring the next generation of Jewellery makers, horologists and gemmologists and were keen to work with the local business community to achieve this objective. They also emphasised their interest in promoting more Open Days for schools at the School of Jewellery with opportunities for knowledge exchange, for upskilling teachers, for outreach and schools visits, as well as linking to initiatives, such as the National Saturday Club.

A few notable highlights from the School of Jewellery were noted:

- Regaining the Goldsmith's Craft & Design Council College Trophy in 2022 the 5th time in 6
 years to win that accolade
- The Queen's Anniversary Award in 2019 with the medal and ceremonial scroll on show in the School of Jewellery atrium
- Three School of Jewellery students designed the Winners Medals and the Commemorative Medals, the ribbons and boxes for the Commonwealth Games held in Birmingham in July & August 2022
- A successful Knowledge Transfer Partnership with SBS insurance, winning Innovate UK's
 'Best of the Best Business Impact' award, with the School of Jewellery developing further
 KTP projects with Diamond Centre Wales and Firmin & Sons, using industry experienced
 graduates to embed new applications of digital technology and management for these
 companies.
- A change in the Exhibition Hall colour, possibly familiar to followers of a recent television jewellery-based competition show which the School is not allowed to name under a nondisclosure agreement!

In summary, the BCU School of Jewellery has a strong history of short courses for trade and other practitioners, though in recent years short course programmes had not been run during the pandemic for obvious reasons. This year they launched a new collection of these and were delighted to report a high enrolment rate already. This reaffirmed both the demand for this kind of provision and the School of Jewellery's place as a provider. They had also scheduled a number of tailor-made courses for local employers and were willing to explore opportunities to deliver similar.

Alongside the provision by the School of Jewellery, Birmingham City University has facilities in the Jewellery Quarter based at St Paul's Square which may provide opportunities to meet the requirements outlined in this report.

It is worth reiterating that on speaking with graduates they emphasised their interest in learning practical hand and bench skills, participating in apprenticeship learning and working with companies in the Jewellery Quarter. There was a strong feeling that insufficient dialogue was taking place between companies and the School of Jewellery as well as other institutions and that a Creative Incubator and Hub might provide the opportunity to nurture these relationships and ongoing dialogue. One went so far as to state the following in emphasising the need to build stronger and more constructive relationships:

"In our experience many companies only hire students because they can pay them minimum wage, but they end up performing the same tasks everyday with little to no creativity. Some businesses may add additional training for them but this is often delayed or comes later down the line the more they've worked for the company. But again, even finding an open position for students is difficult without experience or having background knowledge from prior special uni courses (e.g. stone setting, CAD, engraving, mounting, etc). It's true that everyone needs to start from somewhere but I believe in some cases, companies prey on the desperation of students that are trying to find a job and over-promise and don't deliver either in regards to pay or to extra training."

The British School of Watchmaking is an independent school, set up in Manchester to train watch makers in high end movements for Rolex and other luxury brands. As this had been established by the retailers to meet their requirements, not previously being met by established colleges, they had established this training school and were running it as a charity. It was very niche, providing

expensive, highly targeted training which was largely paid for through bursaries. It was seen by the industry as one practical example of employers taking ownership of the challenges facing them.

The Goldsmiths' Centre in London was a very successful model offering training for young people (16-24), as well as student apprenticeships run through college or university. They offer support to business start-ups in their first years of business as well as to more established businesses. A graded membership offer, including gold membership, enables students and businesses to access tutors and mentors. Short course training is also available with hot-desking facilities and meeting room options for prestige members. This is enabling a greater pooling of knowledge and expertise than is available in the JQ-IC as currently constituted.

This institution is responsible for administering grant funding to various countries and regions of the UK including to Persistence Works, Sheffield and Scottish Goldsmiths Trusts. In recent years funding had also been granted to the Bishopsland Educational Trust (Reading) and other projects providing training including the Masterpeace Academy established by Norma Murrain in partnership with the Benevolent Society in Birmingham. The Centre had invested prior to lockdown in expanding the apprenticeship scheme offered in Midlands with grant funding to assist:

- 1. Expansion of the Goldsmiths' Company Apprenticeship Scheme to the Midlands research and business case (2019)
- 2. Crafts Council Grant to support outreach into City Schools in partnership with BCU (2019)
- 3. Grant to Argent College in partnership with Cooksongold to set-up training facility (2020)
- 4. Grant to MasterPeace Academy via Jewellers Benevolent Society (2021)
- 5. Grant to MasterPeace Academy to support delivery costs Goldsmiths' Company Global Majority Fund (2022)
- 6. Launch of Goldsmiths' Company Apprenticeship Scheme in the Midlands (2022)

The Goldsmiths' Centre had also worked with the Greater Birmingham & Solihull Local Enterprise Partnership in assessing opportunities for a disbursed workshop project (2020) and is currently working with a consortium of employers to explore cooperation with Aston University Engineering Academy along with a number of employers and retail buying groups linked to skills training.

The establishment of independent colleges focussed on practical hand, craft and arts skills increasingly been drawn upon to address the deficit of more academic-oriented course provision. One of the authors of this report has led the establishment of two such independent educational establishments in arts and crafts-based learning and outdoor education. Both of these organisations have been set up as companies limited by guarantee to enable greater business focus given the high thresholds set by the fiduciary duties of charitable trusts in considering risk reward ratios regarding investment options. Funding has been gained from charitable foundations, local authorities and feepaying income. One model has successfully taken education out of the local authority as non-core and failing provision into the independent sector where it has since seen a doubling in revenues over an eight year period. The other, an arts college, is in early stages of development but is nonetheless a good example of the community taking leadership with welcome support from two local authorities contributing £800k startup capital in total and one local charitable trust contributing £700k, with each institution gaining a seat at the board.

Apprenticeship provision

Amongst the entire sample of 31 companies employing 877 people there were 28 apprentices or trainees with all these falling outside the scope of the Trailblazer Apprentice standard. These

amounted to just over 3% of all those employed across just 7 of the 31 firms or by 22.5% of the total sample.

This was noticeably fewer than in 2016 when 70% of businesses were training for the future but even then, this was happening in insufficient numbers to replace the industry; of 899 employees in the 2016 sample 51 were apprentices represented 5.6% of all staff employed.

Apprenticeship provision is a priority area for further growth to meet the industry needs. Trailblazer funding is available when clusters become appropriately organised with the role of the Creative Incubator and Hub seen as important in delivering on this agenda.

With regards to taking on apprentices, Firmin & Sons noted some of the challenges of finding those interested in specialised skills development:

"We have 1 x 20 year-old apprentice who is doing very well. We have two apprentices in total -- one doing dye sinking and one doing sales. We would like armoury apprentices but we're finding it hard to find people. For silversmithing and similar we are not in a position to take on people where we have greatest dearth of skill. We could take on someone in polishing."

Companies regretted that the schemes did not appear to be well administered with two firms stating they had never received the funding support due to them for their apprentice and this was despite repeated follow up. Most firms stated they were too small to take on apprentices and some cited candidate expectations as being 'unrealistic'. Many had poor experiences of these schemes in the past. One stated, "with decent management of the apprenticeship process it might be different, but we tried four times and every time it was absolutely useless for us and the candidates."

A good process for vetting candidates was cited as essential. One applied to Kickstart to get funding for young people but was turned down. One stated they would be encouraged to take on an apprentice with some funding, such as via Kickstart, noting it was 'a balance between making money and supporting upcoming talent'.

One claimed the former YTS scheme had been positive with further concerns about the short-term nature of work for freelance employees and jobbers in the trade along with the inability for many, even medium-sized firms to commit to longer contracts. Integrating young people into highly specialised and established teams was seen as a challenge, with changes in the manufacturing processes and concerns of new apprentices being poached following investment in this process:

"I would like to look at apprentices but it's a funny industry. You get people who've been doing it for 20-30 years. It's hard to integrate new people into a world where people are very possessive. People are very secretive about how they do things as they fear they are going to lose their jobs."

"When I came into the Jewellery Quarter it was very manufacturing based. We produced 100 of the same rings. That kind of work is no longer there to teach young people the hand skills. Every piece belongs to someone so you cannot teach a young person skills when working with something that's a one-off."

"If my son decides to come into the business this may change but he does not want to get his 'hands dirty'. We do not have the time to put into an apprentice, especially considering when we have in the past, they generally get poached from other companies in the area once we have taken the time and investment to train them."

One larger manufacturer commented:

"I have been wondering recently about how to bring an effective apprenticeship into the JQ. This would need this to cover design, financial, admin, sales. Local schools don't promote becoming a jeweller as a career. Universities don't turn out the hand and bench skills. The Goldsmiths' centre is absolutely required in the Quarter. We have recently embarked on our own training scheme as it's so hard to source skills reliably in the Quarter. We have 12 apprentices based here. If our trade does not take training on board then it will cease to exist in 5-6 years. The Government pays to train in construction and now we have micro chip producers coming to Coventry and they take all the available labour. But we can offer a good career to people who are practically focussed and may not necessarily be the most academic. We would like to see a Goldsmiths' Centre in the Quarter as they have the pedigree in bench skills and we would like to see this approach spread out nationally."

Not all experience with apprenticeships was negative, with one firm noting:

"I have two apprentices employed - one is mature and one is 18-24. The mature one is a woodworker and the young lady, 19, started initially in administration and then proved she had excellent manufacturing skills so I moved her into lean manufacturing. We have just spent some money on new CNC machinery and she is working with new technology on new machinery and new processes in production."

The former local Spin Fair was mentioned as a positive way to meet with younger people and promote openings in the industry. One respondent noted the hidden nature of the sector and the impact of this on gaining funding and profile, stating:

"Gaynor Andrews (formerly) from the School of Jewellery was very good at meeting with industry and she would listen to the challenges. We only have a couple of leading manufacturers now including Weston Beamor and the Hockley Mint. We used to have many more ready to take on the young people. We never got any funding in this sector. It's always been forgotten about. Here we are 20 years later and I have a 90 year old who makes lockets for me as we bought his firm when he retired 20 years ago. Once he goes we will stop making lockets as there is no one else. We use outworkers, but the people who are there have no extra time to do more work. We still use a lapidary wheel which will put a very smooth surface on jewellery ahead of polishing. I have been buying second hand wheels to keep this going. We lost our polisher four years ago and we have someone that we trained who came from the School of Jewellery and we taught him engraving and mounting until he went on his own and does outworking. He still does a day and a half polishing for us. No one applied last time we advertised."

Attracting new talent could be supported through greater promotion of recent entrants and successful manufacturers, jewellers and designer-makers. One interesting response highlighted an unusual switch from Jaguar Land Rover into the Jewellery Quarter by a trained and qualified engineer who noted the particular satisfaction of working as a jeweller in the JQ-IC, stating:

"Up to five years ago I worked for JLR as systems engineer to define and create architecture for EVs focussed around electronic software Up to five years ago I worked for JLR as systems engineer to define and create architecture for EVs - focussed around electronic software. The owners (brothers who are my uncles) had two shops with a manufacturing facility and they decided to retire. I was being told I was wasting my time at JLR, not being paid well enough and not using my expertise. I was an engineer having done my apprenticeship at Rover in Longbridge, but I also grew up in my dad's business as a child where tasks would be given to me. With them retiring from our business, started by my grandad 45 years ago as a shop, with the rest of business started 50-60 years ago, if I had not come back into this industry my dad's skills would have been lost. But it is very satisfying.

"My father and my uncles have created a great legacy in terms of jewellery which they have made with a great customer base which is already there. When customers are satisfied with your jewellery it's a great feeling to get. I am seeing young people coming through but they all want to do CAD design and use a laser but when it comes to making intricate jewellery we're talking individual pieces of jewellery it would take longer to do it on a bench but the quality of it being handmade would be different and could not be reproduced."

T Levels

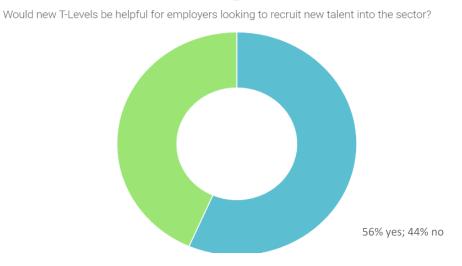


Chart 23: Views on whether T Levels are helpful to JQ-IC employers

T Levels, or technical-based qualifications, were introduced by government in 2020 as replacements to BTecs in engineering, and these new options were not widely understood, especially amongst the smaller firms, with more than half seeing some potential for these, primarily larger employers. T Levels are 2-year courses designed in collaboration with industry and equivalent to 3 A Levels providing students with the skills required in industry. T Levels will offer students classroom learning and 45 days of on-the-job experience with an employer.

Educational Links

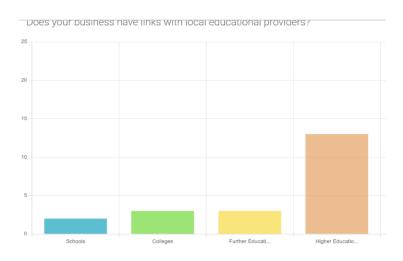


Chart 24: Links with educational institutions

Half the respondents had links with higher education suggesting there is an opportunity to expand this dialogue and interaction given the proximity of institutions to the firms in the JQ-IC.

Few companies had links with further education or colleges, at 12% of respondents and just 8% of firms had any links to schools, indicating this is an area where greater interaction is required in future.

Whilst many firms had no links with educational providers, for those that did there was a wide range of relationships including with the School of Jewellery, Birmingham Institute of Creative Arts, School of Visual Design and the Business School at Birmingham City University, British Academy of Jewellery and the National Association of Jewellers were mentioned, along with Birmingham, Aston & Coventry Universities.

The focus of the existing links was not only on jewellery making, but included community arts activities, business administration, Knowledge Transfer Partnerships (KTPs) and accessing grants. No research connections were mentioned. The diminishing relevance of the School of Jewellery to the industry cluster was noted with great regret, along with programmes for day release students which used to be run out of the School of Jewellery.

The newly appointed senior management of the School of Jewellery noted that they were keen to engage more fully with the local industry and develop strong connections with as many businesses as possible recognising this as a priority.

Benefits of Educational Links

Despite the concerns voiced about appropriate practical training provision by educational providers, there were many benefits listed flowing from these relationships including accessing new talent, providing support for various apprentice schemes, bringing on new employees and inspiring young people about the opportunities in the sector to ensure access to future talent. Design skills acquired at educational institutions were recognised and seen as essential, although ensuring a practical focus was also a priority. For some it was cited as a 'win-win-win' with 'income-generating work providing positive outcomes and benefits for the students, educational establishments and my business being delivered'.

One respondent noted business improvement benefits from working with the School of Jewellery stating:

"These relationships (through KTPs) have been useful and through Frank Cooper who was extraordinarily helpful in enabling us to build a really useful relationship in Rotherham which would not have happened without his intervention and delivered lead-time reduction from 2 years to 6 months."

A further business noted:

"I have benefitted from this relationship as they have done some good courses online. The School of Jewellery was helpful when I attended a CAD course there. The Assay Office provides gemstone and diamond courses. They have a diamond lab too. It is not quite GIA (Gemstone Institute of America, London) standard, but our version of it."

Another noted how they had benefited from various departments within higher education in Birmingham, stating:

"There are tranches of funding every so often and Aston University will call and ask if they can help. I have been supported by them on specific projects such as introduction of new tech, eg new CNC machines - 2 lasers, 1 printer and router. But all have different proprietary software and routers so I wanted to attempt to use one off-the-shelf design software that would work for all the machines. Aston University found a way around this. We did not have to design our own software. Aston went through lots of CAD CAM packages and found one that worked on all of them. Now we have to train on this software which is incredibly expensive. I'm not aware of any support for us to do this training. It's an AutoCAD programme - Fusion 360 and works out at £1k per head for couple of days training. Not a lot for a larger company, but for us, it is. One of my younger trainees is university trained. I am going on a Birmingham City University programme starting in September – 'Help to Grow Management' and I've been dealing with Jill Middleton, Business Engagement Officer with the Business School."

Collaborative Educational Links

With young graduates and new companies struggling to access expensive software and equipment as they sought to establish themselves, one company noted how they were trying to promote greater access for students to digital and software technologies by providing access to lease or hire packages, given the likelihood that purchasing access could be too expensive. They stated:

"We support the School of Jewellery with prize giving events and do tooling displays for them too. We are looking to do demo days on our software. We are trying to support training of CAD in the industry and to support young people's access to rent or hire the software whilst they're building their customer base. We are trying to highlight this particular software within the school and then work with the CAD company to allow beginners to rent or hire the package."

Another respondent noted the impact on the JQ-IC of the Fellowship & Design Scheme run from 1994-2002. James Newman had come up through this route. It was later taken over by BCU and turned into DesignSpace 2000 but when the funding ran out it was closed.

The importance of the Fellowship scheme was in developing the bridge engagement for students and industry or entrepreneurial stepping stones. Students need to see progression routes and opportunities. Business needs access to appropriate talent enabling them to offer further development options along with mutually advantageous relationships to be established.

The School of Jewellery noted its interest in linking more into local students and schools to ensure a clear talent pipeline and the importance of doing this with the industry to ensure alignment of industry and higher education goals.

The Jewellery Industry Innovation Centre (JIIC) was also noted for its role in enabling greater collaborative links between education and industry having been set up by School of Jewellery. It was recognised for the assistance it provided to companies within the high value added goods/small products industry, and allied trades. Its offer of client centred consultancy, expertise and problem solving in a range of industry related techniques including CAD/CAM, rapid prototyping, surface finishing, reverse engineering, laser scanning/welding/marking, design strategy management and implementation, concept to prototype/research and development (R&D) support, as well as new technology applications was recognised as a beneficial addition by firms.

New provision was coming on stream with University College Birmingham (UCB) providing courses in engineering, digital and sustainable construction in the heart of the Jewellery Quarter on Charlotte Street, with their offer including the launch of a new Creative Incubator aimed at supporting cookery, hairdressing and beauty students. UCB had enrolled 250 students in their first term onto their newly launched courses, BTec level 2, with opportunities for progression into higher education as well as apprenticeships. A range of digital course provision was already available with UCB open to the opportunities of working with companies in the Jewellery Quarter in terms of placements and progression, as well as apprenticeships in time.

Careers Advice

More careers advice promoting opportunities and links with businesses in the Jewellery Quarter were recommended:

"We need more young people to know more about what is available in careers in the JQ. There are no hand engravers in the quarter....We need to educate young people about what is available in schools. Why are young people not involved? It's not degree course that's needed but a practical skills based course - could be an apprenticeship. I work the diamond engraving machines and learned this from my dad who was an apprentice many years ago."

2022 respondents agreed with survey results from 2016 that developing greater focus on raising awareness of the cluster from a much earlier age at school was seen as the way forward, learning from industry leading approaches, such as that taken by WMG, University of Warwick which has recently launched its highly successful Engineering Academy with 540 pupils attending in its first year, leading onto practically focussed industry-led Degree, Post Graduate and CPD programmes. The dialogue generated through this approach led in turn to greater collaboration on projects, research, knowledge transfer and IP exploitation. They noted the commencement of the Engineering Academy school by Aston University recognising the opportunity for links to this and other academy schools locally.

Schools Links

With just 8% of respondents having any links to schools this was an area where firms recognised more urgent progress was required.

As one business observed, this became complex because of safeguarding issues, noting, "We would love to be able to link to schools and offer A Level student experience but teachers would have to come and inspect and this is too time-consuming."

Both 2022 respondents and those from 2016 agreed on the need to develop greater focus on raising awareness of the cluster from a much earlier age in schools, learning from industry leading approaches, such as the Engineering Academy started by WMG, University of Warwick, enabling transitions to practically focussed industry-led degrees, post graduate and CPD programmes. The dialogue generated through this approach led in turn to greater collaboration on projects, research, knowledge transfer and IP exploitation.

The establishment by Aston University of their Engineering Academy school was also noted with approval. Options for these linkages were being actively explored by the larger firms who were working to establish clear progression opportunities with highly regarded local academy schools,

including for example Shireland Collegiate Academy, Smethwick, specialising in design.

Services Supporting Business Growth

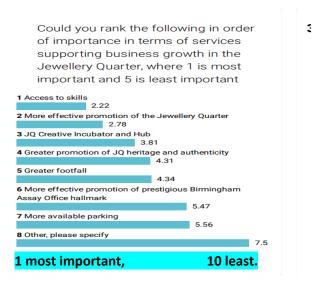


Chart 25: Ranking services supporting business growth for JQ-IC respondents

Companies were asked to rank in order of importance the most critical services supporting business growth. Access to skills was the most highly ranked for respondents, followed by more effective promotion of the Jewellery Quarter and the formation of a Jewellery Quarter Incubator and Hub. Greater promotion of the Jewellery Quarter's heritage and authenticity, more footfall and greater promotion of the hallmark were all listed with more available parking the lowest ranked of the options provided. Covid had changed buying habits with several references to the importance of a well presented and comprehensive website covering the many aspects of the Jewellery Quarter Industry Cluster.

One Auction House noted:

"Our online experience has been extraordinarily successful and allows us to reach people who would not otherwise know about us. Over the last 10-15 years we have changed from principally a 'trade' auction house to being more public facing. Previously our private clients would have been c15% and now represent c55% of our business. If one ever did get to set up a hub then the IT companies in the quarter should be able to provide the mentors to assist our start-ups in promoting their online presence. JQ sets mediocre ambitions and achieves mediocrity on a regular basis!"

Support for Start-ups

Overwhelmingly, by a ratio of more than 4-to-1 it was considered that there was insufficient support for start-ups. Business development support, access to business mentors followed by accessing business angel funding were listed as the top three priorities for start-ups. Ease of access to start-up capital was ranked at 4.33 out of 10, with ease of access to grow-on capital ranked at 4.25 out of 10. When asked what had been the biggest challenges faced by start-ups answers varied considerably from lack of low-cost retail space for independent and micro businesses, business management know-how, including how to manage accounts, produce cashflow forecasts, predict and access market opportunity, sales expertise including pricing and gaining market share, with two

respondents adding the following comments highlighting challenges around funding required equipment and online promotion:

"Funding is very challenging - would be great to have a Prince's Trust type of scheme where you borrow to buy equipment but on advantageous terms and pay back when you establish your business."

"Online has proved very challenging. Having something online is one thing but understanding if it will work and one that looks good are challenges... I then need to put the right products online and how do I know what they are. I have to access retail trends surveys and reports. We can benchmark against other jewellers but they might have got it wrong."

One further respondent noted the importance of understanding the cluster and networking within this, something which is not known by many start-ups:

"If you have been in the trade for awhile you build personal networks. I would think it would be hard if you do not have a personal network. If on coming out of college you got a contract for 100 necklaces it would be much harder to fulfil this contract not knowing who can supply which elements."

A further respondent emphasised this point, noting:

"In terms of assisting new businesses coming through we need to make sure they are not isolated from other businesses. They need to be part of the ecosystem. In terms of the ecosystem mentors are really hard to find - I have a mentor from another industry. Very hard to connect this industry up due to secretive nature of businesses. However people can share when you make an effort. I have worked to bring together a group of jewellers."

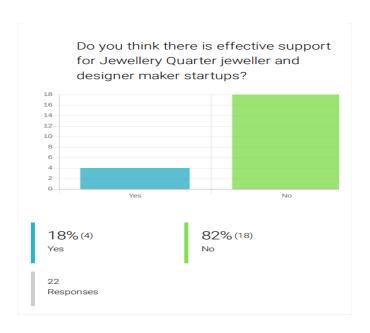


Chart 26: Ranking effective support for start-ups in JQ-IC

When asked if there might be more larger businesses could do to support start-ups, the respondents ranked options as outlined in the chart below with sharing marketing platforms, followed by the ability to access and share non-patented technologies and promote new talent in showrooms as the three top ranked services for support.

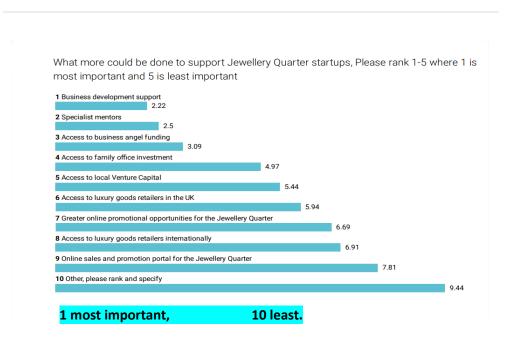


Chart 27: Ranking support for start-ups in JQ-IC

Accessing equipment in a viable manner as start-ups was noted:

"Providing access to equipment remains a challenge. It's hard for students to gain startup funding post-graduation, so more can be provided with access to equipment and practical training this would help them to get going in a tough industry."

One example of what was effectively a spin-out from a larger more established business had occurred with the respondent commenting on the greater opportunities in the JQ-IC for luxury business growth, especially if more focussed collaborations were incentivised:

"This business is a spin-out from an established JQ-IC business in terms of some client insights which were shared with the newco. However, there is otherwise no link between these two businesses. Mentoring to the newco (new company) is provided by MD of the established business on an informal basis. The newco sees many opportunities to expand into luxury goods markets for top level luxury clients. The Jewellery Quarter image does not meet aspirational needs of this client base and needs further work to enable this sort of market opportunity to really take off. I think that even though the current model of the School of Jewellery turning out designer makers has its gaps, the luxury market properly harnessed could drive far greater sales volumes with better reputation management and greater, more sophisticated online promotion into targeted luxury markets - in particular building on links to automotive and other successful clusters based in the WM. If these sales are achieved then the technical skills could be back-filled offering young people more opportunities through apprenticeships related to business growth and order fulfilment."

Another SME business which was being revived under new ownership made observations on assistance which could be provided by larger companies to support start-ups stating:

"You can't get any retail units but I would love to have this. I have a shop on the first floor but no one knows I am here. I faced extortionate rents to try to get this in the first place. In terms of more established businesses they could provide cabinet space to emerging businesses and new talent to help promote them more widely. I have often thought of this for myself. But difficulties include them not telling you when they sell stuff. I think for School of Jewellery this might really help students to learn what sells and what doesn't."

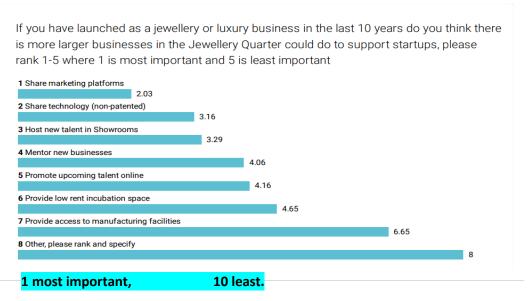


Chart 28: Larger business support – ranked options by JQ-IC start-ups

City Council engagement

The active guardianship of the JQ-IC by the council was a concern in both 2016 and 2022. Firms were concerned that due to the cluster's lack of profile and the belief that the cluster was in terminal decline, decisions were being made which did not take into consideration their impact on the JQ-IC and its integrity. Recent decisions included the impact of the Clean Air Zone (CAZ) and converting industrial premises to residential use on the cluster. Firms stated:

"The City Council is not protecting the Jewellery Quarter when it takes some decisions. For example, elderly people working in the JQ-IC have packed up following the introduction of the CAZ. I have heard from others working in Jewellery Quarter that there has been a mass exodus following that. Once they go the skills and knowledge goes too.

"The Council is shutting down industrial premises here - presumably because it does not get rates from small businesses and it does (get tax payments) from residents once they have been turned into flats. But fewer and fewer workers are based here and this means a smaller cluster. The Council likes the shops and the idea of a 'Golden Triangle' but not the manufacturers who have been here for so long. If there was free parking for JQ-IC members of the cluster or the CAZ did not apply to members of the cluster this might be a real help. I have just ordered a courier and heard that he won't pick up from the JQ since the introduction of the CAZ. So I have to drive over to Aston and drop my delivery off with them."

In the 2016 survey more business parking was noted as one of the top priorities, highlighted by 89% of that sample with reductions in parking permits, costs of parking for staff and lack of availability of van permits cited as reasons holding back business efficiency and ultimately competitiveness and

productivity, with parking permits cited as being given to residents at the expense of business. However this issue was not raised as such a priority in 2022, perhaps reflecting the impact of post pandemic working practices on parking availability in the Quarter. One commentator noted:

"The parking is OK in the Jewellery Quarter, I spend £400 a year on parking in the multi storey. The CAZ is not a great thing - but poor air quality is having an impact on our children so it's a difficult issue. It does stop people coming into the JQ and even people not affected think they are affected. So it's good in principle but it has not been applied very well. Maybe it should have been in a smaller area in central Birmingham and then widened out so people understood the issues first of all. People do not go online to check whether their car is one that will be charged."

JQ-IC Branding

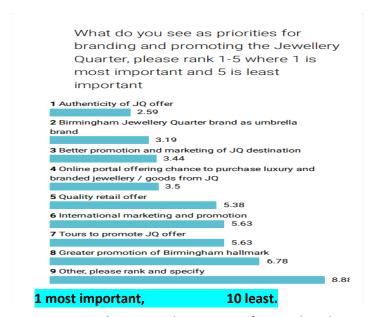


Chart 29: Ranking priorities for JQ-IC branding

In terms of priorities for promoting the Jewellery Quarter, the authenticity of the industry cluster offer was ranked as the top priority, followed by the need to develop the Jewellery Quarter branding as an 'umbrella brand' encompassing all aspects of the JQ-IC, in turn followed by better promotion of the Jewellery Quarter as a destination. This was closely followed by the need for an online portal promoting luxury, branded jewellery and goods from the Jewellery Quarter. All other options including quality retail offer, international marketing and promotion, tours of the Jewellery Quarter and greater promotion of the hallmark, were ranked considerably lower by respondents.

The quality, authenticity and uniqueness of the artefacts, jewellery, trophies and civic insignia produced in the Quarter were well recognised by those working there but otherwise by too few people. Telling the story of the JQ-IC, its authenticity and roots to the origins of Birmingham as the original creative city were required.

To help encourage greater footfall, the quality of experience in the Quarter was seen in 2022 as in 2016 as an important priority. One firm commented:

"There are some amazing businesses in the JQ - people and buildings and heritage. But we are fighting the internet, amazon and chains which are selling goods very cheaply. For that touchy feely

thing of the Jewellery Quarter we need to make it somewhere really nice to walk around as a priority. To feel safe in the JQ because you don't. We are on the edge of not the finest area of Birmingham and you hear stories of people being robbed walking around. In the old days people would walk around with all sorts of goods, but this does not happen anymore."

These concerns echo those raised in 2016 when it was considered that the Jewellery Quarter needed to move from being considered a destination known primarily for its low-priced jewellery offer – of predominantly imported jewellery – to offering quality jewellery made in Birmingham at value prices with Bicester Village (quality and branded products offered at value prices) seen by many as an inspiration for this vision. Some expressed frustration that the Birmingham Christmas market did not come as far as the Jewellery Quarter.

In 2016 companies felt promotion of the Quarter could be better achieved through targeted local, national and international campaigns.

Locally & Nationally - through a targeted offer for sale itemising products, product style groupings, and emphasising hand-crafted or low volume, specialist, niche production, highlighting the quarter's traditions, heritage and authenticity, combined with customisation with high tech features and versatility of available options. 'Birmingham Made' was seen as a priority and in light of this focus, although there was concern about the use of the well-known Birmingham anchor hallmark by the Assay Office in Mumbai with a desire to see an alternative stamp used for products hallmarked overseas.

Internationally - illustrating and emphasising the skills and capabilities of the JQ-IC as a one stop shop for minting coins, the design and manufacture of unique jewellery and the manufacture of national awards honours, medals, and bespoke hand crafted silverware.

In 2022 concerns over lack of sufficient promotion of the cluster's various segments and the story of the jewellery Cluster as a whole continued. There was a greater focus on 'Made in England' branding, in contrast to the 2016 survey when Birmingham Made was considered useful for these purposes, linking this to the anchor hallmark from the world renowned Birmingham Assay Office.

Coverage of the Commonwealth Games medals designed and made in the Jewellery Quarter was well regarded, but for example the baton for the Commonwealth Games which was made, in part, in the Jewellery Quarter had not been sufficiently promoted, with individual companies complaining that they had not been able to tell their story of the part they had played with one stating:

"We cast the baton for the Commonwealth Games and wanted to promote this, but we were not allowed to by the Commonwealth Games team. The rest of companies involved were based in Coventry and Warwickshire, plus one other company tech company based in the Big Peg in the Jewellery Quarter. Our competitors were posting regardless but we were not posting or promoting our involvement."

The impact of the pandemic on a rapid move to greater online purchasing habits was noted with one manufacturer commenting:

"I have been holding discussions recently with the CMJ (Company of Master Jewellers) and Houldens, jewellery buying groups as the pandemic has literally changed the world and things are being bought online more than ever. We are seeing huge revenue growth - more than ever before. +25% LYR and +30% this year. +10-15% for last 6 years. Bridal wave will be through by 2024 but we anticipate strong growth will continue."

The link between talent attraction and branding which promoted the authenticity of the Jewellery Quarter Industry Cluster and the breadth of skills as well as interdependency of companies was noted by several respondents:

"Slowly but surely the trade is disappearing. People who used to make things in workshops used to make things for luxury retailers. For example Adam Veevers funded his business through selling cutlery to Habitat and retailers. We make a lot of art, brassware - door handles, chess sets, trophies - small and large in batches of 50 or so and these go all over the world. Much that is random is made here but it is not covered and it is not understood. 'Weird and wonderful' is what we specialise in. We cannot do the standard as this is done overseas or by Weston Beamor. Talent is required but we need superb branding to attract the talent."

Another added:

"The larger businesses also have their own challenges in trying to retain their talent. Many of us are older and we are carrying on as we have done. But we do need young people who want to get their hands dirty and understand their materials. This can't be done just with CAD or without this handson understanding.

"We need a more prestigious brand that will attract this young talent - just as other sectors do – the V&A, Tate etc where they are considered great starts for young people interested in a career in the creative industries. This industry is otherwise in decline and the fact that we have lost so much industrial space to apartments is good at one level, but the industry has been left behind and has not been supported. Great to see new businesses in the Quarter but sad that our industry is in decline. We tried to get £20k towards our CAD machine but we got no support. The last 20 years has been such a struggle it really has. You don't want it to fold away and we make a good product. We are well known in the trade and this is probably why we are still here and also because so many people have closed their doors in the last three years.

With some JQ-IC businesses closely involved in the luxury goods sectors and with strong growth in luxury goods markets globally continuing as more women gaining economic independence and predicted to reach \$317,490million by 2028, from \$236,820million in 2021, this represented a CAGR of 4.2% between 2022-2028 (MarketWatch 2022), with opportunities for growth and market share acquisition which could be supported with strong branding propositions.

The handcraft skills and ability of firms to produce bespoke jewellery, or 'one of a kind' as promoted by Deakin & Francis on their website was referenced multiple times, with one firm stating:

"I think there is a market for bespoke specialised handmade pieces. Hard to know how big this market is. But yes, there is a market for craft and specialised craft goods in Birmingham. The appeal of making something unique and handmade is much better than something that is reproduced. Yes, I think there is much more we can do to produce craft handmade goods and build our reputation for this. Price range can be quite broad. There was a JQ Fair last week (21st July 2022) but we only heard about it on the day, so promotion to the cluster needs to be better. We have a number of workshops and showrooms in the quarter. There is a good trail and shopping centre, so we have all the ingredients of a good hub with museums and food. It is something worth talking about."

A further respondent commented:

"Branding of the Jewellery Quarter is very important as Aston Martin call our badges 'jewels' and they refer to the fact that they are manufactured in the Jewellery Quarter, stating that each one is,

'Handmade in the Jewellery Quarter'. We are fighting against cheaper goods and have not learned the lessons of prestigious goods branding. But we do the best in manufacturing and there is no better opportunity to fly the flag than now. We have the businesses here and we need to create the businesses as 'events' to help people see what is here. We need people to see and understand more about our history. I still walk round looking at buildings and thinking how cool they are. People go to Hatton Gardens like that and we have Peaky Blinders, but we need to make more of it."

Strong and visible branding tied into the national brand was emphasised by one firm who stated:

"We need *Made in England* branding. Need shops to think of this too. The National Association of Jewellers (NAJ) should be involved in this and should be pushing this. Getting the shops to even look at your items or those made in the Jewellery Quarter is very hard. In Ireland they will look and buy, but in England they will not."

One organisation noted how the big luxury groups who are investing in the future of their luxury products were important to this piece. This required co-ordinated cluster governance and this was not being managed at present. As they stated:

"There is no storytelling and insufficient thinking about our consumers and how their values have changed in terms of concerns over ethics and sustainability of our supply chains. We seem to be waiting for the point when things change rather than being on the front foot. Thinking strategically about how our supply chain is working and using a more powerful storytelling approach is now required.

"The Assay Office is not the vehicle to do this, even with its esteemed history, it has its own business to attend to. The public sector cannot influence this. In our context we are drawing on ESG and EDI models including sustainability. Lot of young businesses and designer makers are emerging and they are very cognisant of these issues. The larger firms, especially those which are B2C are on the front foot increasingly, but mid supply chain do not really think about these issues so much."

2. Conduct a detailed options appraisal, including consultation with relevant stakeholders, to establish the best model for a JQ Creative Incubator.

Priorities for Jewellery Quarter Creative Incubator and Hub

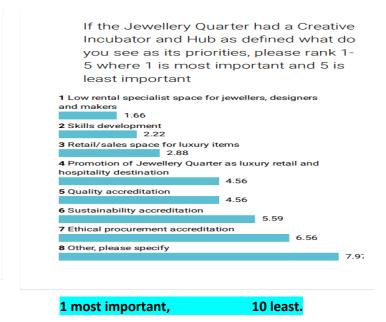


Chart 30: Ranking priorities for Creative Incubator and Hub for JQ-IC

The top three priorities for any Creative Incubator and Hub were ranked as:

- i) provision of low rental specialist space for jewellers, designers, makers and allied trades
- ii) skills development
- iii) retail space for luxury items.

Other lower priorities included promoting the Jewellery Quarter as a luxury retail and hospitality destination and provision of quality, sustainability and ethical accreditation.

Low-rent space was ranked as the top priority given it was important for new graduates, trainees and apprentices, with one firm noting:

"Low rental, full stop, for newly qualified Jewellers. They have nowhere to go. The JQ is becoming a jewellery retail area - just a lot of shops but not necessarily the manufacturing that backs that up. We are losing the manufacturing heart of the Jewellery Quarter which is being turned into apartments and Birmingham does not need any more apartments, but it is losing its manufacturing heart. Losing youth, new ideas, new desire to be in the trade, new skills. It may help to link the umbrella brand and the one-stop shop together as part of the Creative Hub so people know what is available in the JQ. In terms of start-up support we need funding, promoting, skills support, mentoring - it's all vital so I cannot rank it."

In 2016 93% of respondents agreed that a JQ Hub was required to provide progression opportunities for graduates in terms of developing further their practical and commercial skills in seeking to develop careers in the JQ-IC.

One option where designer-makers could start new businesses for no or low rent, whilst being supported through further training offers for under graduates and apprentices. The Hub, it was felt,

would enable visitors and residents to observe designers, makers and producers at work, learning more about the sector, its heritage, pedigree and economic contribution.

In light of the JQ-ICs lack of profile, the severity of the skills challenges it was facing, together with the general lack of awareness of its existence, successes and achievements, it was agreed that any JQ Creative Incubator and Hub needed to be housed in a physical location, although not necessarily a new build, based in the Jewellery Quarter which could serve as a beacon or centre signalling to all interested parties the activities housed there and the careers and business opportunities within the JQ-IC. This could be accompanied by dispersed training activities across businesses in the Jewellery Quarter linked into the hub through board oversight and enhanced communications between firms.

3. Conduct a fundraising options appraisal for the delivery of the recommended model(s)

JQ-IC Funding options

1 Industry funding

One option proposed by those surveyed in 2016 involved collecting and pooling funding from local JQ-IC employers giving them greater control over training provision. By working together the JQ-IC could set up a consortium drawing down courses from different providers to meet specific training and skills requirements and based at employer premises throughout the quarter. A membership model would enable further subscription income to be collected as an approach which had worked well for the Goldsmiths' Centre, widely seen as a role model by firms in the JQ-IC.

Depending on the corporate model established to run a Creative Incubator and Hub, firms could invest start-up funding in return for ownership, board seat and influence over its development.

Industry-led discussions ongoing within the JQ-IC were reviewing whether charitable status or a charitable community benefit society being a community benefit society with exclusively charitable purposes, would be appropriate for the Creative Incubator and Hub. The risk profile of charities and the focus on their objects are defining issues when setting up these organisations. A charitable community benefit society must only undertake activities that further its exclusively charitable objects. This means that a charitable community benefit society which intends to engage in trading activities that are neither in pursuit of its primary purpose, nor ancillary to that purpose may have to establish a trading subsidiary to carry out this trade.

A company limited by guarantee (CLG) can be set up as a not-for-profit organisation where surpluses are reinvested to meet core objectives. As no shares are issued, there is no distribution of any surplus to shareholders. For tax purposes charitable objectives of these organisations provide effective charitable status and treatment whilst affording a more commercial approach to risk profiling. The CLG model can attract charitable and local authority funding as well as industry member funding.

2 Enterprise Zone (EZ) funding:

Greater Birmingham & Solihull LEP have highlighted as a possible source access to Enterprise Zone funding.

Enterprise Zones were established to unlock key development sites, consolidate infrastructure, attract business, support training and create jobs. Business rates growth generated by the Enterprise Zone is kept by the relevant local enterprise partnership and local authorities in the areas for 25 years to reinvest in local economic growth as a commitment to long-term economic growth and enabling Local Enterprise Partnerships to reinvest in site development and other local initiatives, such as workforce skills development.

In the context of the Jewellery Quarter, the Enterprise Zone Investment Plan (EZIP) 2019 consolidates two existing investment plans: City Centre EZIP (2014) and the Curzon Investment Plan (2016) with a strategy focussed on delivering a phased programme of £460m of projects in the period 2019-2028. The programme aims to unlock the major growth opportunities by removing barriers to development, creating a supportive environment for investment, job creation and growing the city and regional economy.

It will be supported by a set of financial principles by which investment decisions to allocate EZ resources are made and robust governance arrangements to oversee the programme. The key areas for investment will be:

- Strategic site investment.
- Infrastructure.
- Business support.

Phases 6-9: Longer Term Strategic Priorities

Phase 6 GBSLEP recycling fund makes available up to £20m of capital funding to support the implementation of the Strategic Economic Plan (SEP) and its four strategic priorities.

- Industrial Strategy.
- A world leader in innovation and creativity.
- Taking full advantage of global connections.
- Stronger conditions for growth.

This investment is part of the local resources that are aligned to support the delivery of the Strategic Economic Partnership (SEP) vision and growth strategy. Funding from the EZ will be available as the business rates income becomes available from 2024/25 onwards. Therefore, this will be able to support projects which require funding towards the end of the SEP period. The LEP will put appropriate arrangements in place for the governance of this fund. (Birmingham Big City Plan, 2019) At this stage it is not understood what funding might be available from this potential funding source.

3 Trailblazer Funding

The Government has introduced Trailblazers to:

- ensure that employers are in the driving seat: employers are to design the apprenticeship standards making them more relevant.
- increase the quality of apprenticeships: the new apprenticeships require apprentices to complete a rigorous assessment throughout their programme giving employers confidence in the competence of the apprentice and providing apprentices with transferable skills.
- simplify the system: employer-designed standards will be concise and easy to understand, describing the knowledge, skills and behaviours (KSBs) expected of a fully competent operative.
- give employers purchasing power: empowering businesses to act as customers; putting control of funding in the hands of employers.
- From 2020, only Trailblazers will be eligible for apprenticeship funding and from May 2017, providers will no longer receive direct funding from Government to fund apprenticeship programmes. Instead, employers will decide which provider they want to deliver their apprenticeship and confirm when payments should be made through the Digital Apprenticeship Service (DAS).

There are no age restrictions to adults undertaking apprenticeships in England.

- Employers who pay the Apprenticeship Levy Full funding is available up to the amount paid into the Levy "pot" within the digital apprenticeship service account. Funding beyond this is subject to the rules for non-Levy payers as below.
- Employers who do not pay the Apprenticeship Levy Employers must pay a proportion of the costs. The rate of co-investment is 5% of the total price of the apprentice's training, with the government covering the remaining 95% of the cost, up to the funding band maximum.

Each apprenticeship is allocated to one of 30 funding bands, which range from £1,500 to £27,000 with bands available on the web page for the Institute for Apprenticeships & Technical Education. (Employer Skills Funding Guide, 2021; Build UK, 2017)

4 National Skills Funding

This funding is available to individuals wishing to upgrade their skills levels. For people, 19 or over, not already possessing a level 3 qualification or higher, it is possible to access this qualification at no cost. Level 3 is equivalent to an advanced technical certificate or diploma, or A levels. If individuals already have a level 3 qualification or higher, but earn below the National Living Wage annually (£18,525 from April 2022) or are unemployed, they can also access these qualifications for free. This is regardless of any qualifications they already have. Courses available cover a wide range relevant to JQ-IC skills gaps including engineering, digital, business management. No feedback on relevance of the content of these courses to the JQ-IC has been received at this stage.

5 Shared Prosperity Funding

£210 million was awarded to the West Midlands earlier this year with this funding set to be spent on local priorities including supporting local businesses and employment opportunities as well as reviving high streets. Further discussion will be required to determine if any of this funding might be available from either WMCA or City Council sources to support a Creative Incubator and Hub for the JQ-IC.

6 Business start-up and grant funding

A range of funds and charities exist to support business start-ups and to assist in accelerating business growth. These include the Prince's Trust Enterprise programme, Innovate UK and Smart Grants, the Seed Enterprise Investment Scheme and Enterprise Investment Scheme, British Council grants, Business Boost competition, with a range of different funding promoted via the Greater Birmingham and Solihull LEP growth hub website Home | GBSLEP Growth Hub | Business Funding. Universities also help in providing access to grant funding through initiatives including incubator and acceleration assistance via STEAMhouse and as outlined in this report. A Creative Futures Incubator has been established in the past six months by University College Birmingham working in partnership with University of Warwick offering grants to students for enterprise opportunities with other universities including Aston University amongst others providing access to grant and development funding.

Assoc Prof Beverley Nielsen, **Director**, **Institute for Design**, **Economic Acceleration & Sustainability** (IDEAS), Birmingham City University

Dr Steven McCabe, Associate Professor, Institute for Design, Economic Acceleration & Sustainability (IDEAS), Birmingham City University

Greg Fattorini, Managing Director, Thomas Fattorini Ltd

References:

Accounts & Legal,(2018), Average UK employee generates £118,000 of revenue per year, 21st

August 2018, Average UK employee generates £118,000 of revenue per year | Accounts and Legal

<u>Assay Office (2016) Hallmarking of precious metals, Gold hallmarks, Silver hallmarks</u>". <u>Archived</u> from the original on 3 May 2016

Bagwell S, (2008) Creative clusters and city growth, Creative Industries Journal, 1:1, 31-46, DOI: 10.1386/cij.1.1.31 1

BBC, (2022) Dr Rebecca Struthers on Four Thought, Making Time, 16th July 05.45, Radio 4, <u>BBC Radio</u> 4 - Four Thought, Making Time

Birmingham Big City Plan, (2019), Enterprise Zone Investment Plan, Greater Birmingham & Solihull Local Enterprise Partnership, May 2019,

Birmingham City Centre Enterprise Zone Investment Plan.pdf

Build UK, (2017), Developing a Trailblazer Apprenticeship Guidance, May 2017, <u>Trailblazer-Guidance-May-2017.pdf</u> (builduk.org)

Cattell J, Hawkins B, (2000), The Birmingham Jewellery Quarter, an introduction and guide, English Heritage

CBI, (2022), Quarterly Trends Survey, <u>Manufacturing output and orders ease</u>, <u>but investment intentions recover - CBI/Accenture quarterly Industrial Trends Survey</u>, 25th July 2022, CBI

Companies House Official Statistics, (2021), Company Register Activities 2020-21, 24 June 2021, Companies register activities: 2020 to 2021 - GOV.UK (www.gov.uk)

DCMS, (2021), Sector Economic Estimates Methodology, Updated 26 August 2021, DCMS Sector Economic Estimates Methodology - GOV.UK (www.gov.uk)

De Propris L., Lazzaretti L., (2009), MEASURING THE DECLINE OF A MARSHALLIAN INDUSTRIAL DISTRICT: THE BIRMINGHAM JEWELLERY QUARTER. Regional Studies, Taylor & Francis (Routledge), 2009, 43 (09), pp.1135-1154. 10.1080/00343400802070894. hal-00526545

Employer Skills Funding Guide, (2021), Cogent Skills for Science industries, <u>Microsoft Word - Joint Employer Skills Funding Guide Final (nssguk.com)</u>

Expert Market Research, (2022), Global Luxury Goods Market: By Product: Watches and Jewellery, Perfumes and Cosmetics, Clothing, Bags/Purse; By Distribution Channel: Offline, Online; By End User: Women, Men, Others; Regional Analysis; Historical Market and Forecast (2017-2027); Market Dynamics; Competitive Landscape; Industry Events and Developments, <u>Luxury Goods Market Size</u>, Share, Demand, Research 2022-2027 (expertmarketresearch.com)

Glaeser E, (2010), Agglomeration Economics, The University of Chicago Press

Grace's Guide to British Industrial History, W. Canning and Co - Graces Guide

Hlady-Rispal, M, Blancheton, B, (2020), The diamond model: A French luxury cluster model embedded in regional heritage, Journal of Small Business Management, 60:2, 420-446, DOI: 10.1080/00472778.2020.1716588

Holweg, M., Davies, P., Wood, M., (2017), Growing the Automotive Supply Chain, Local Vehicle Content Analysis, Automotive Council UK, SMMT, <u>Automotive-Council -Growing-the-UK-Automotive-Supply-Chain-Analysis June-2017-1.pdf</u> (smmt.co.uk)

Laughlin, P., (2009), JEWELLERY INDUSTRY BUSINESS SUPPORT STRATEGY AND ACTION PLAN (Third Draft), A report to the Jewellery Quarter Regeneration Partnership by: Private 2 Public Ltd, JIBSS_Action_Plan_3rd_Draft1.pdf

<u>Official Website of Birmingham's Jewellery Quarter</u>, (2013), Made in the Jewellery Quarter, <u>Archived</u> from the original on 28 January 2013

MarketWatch, (2022), Global Luxury Goods Market Size and Growth 2022 Analysis Report by Upstream Raw Material Suppliers, Major Players Product Types and Forecast to 2028, August 2 2022, Global Luxury Goods Market Size and Growth 2022 Analysis Report by Upstream Raw Material Suppliers, Major Players Product Types and Forecast to 2028 - MarketWatch

New Economics Foundation, (2021), UK FACES A SKILLS SHORTAGE WITH ONLY 6% OF WORKERS UPSKILLING FOR A NEW JOB PRE-PANDEMIC, October 2021 UK faces a skills shortage with only 6% of workers upskilling for a new job pre-pandemic | New Economics Foundation

Nielsen B, McCabe S, Fattorini G., (2016), Jewellery Quarter Industry Cluster, Factors Affecting Competitiveness, IDEA, Birmingham City University

Open University Business Barometer, (2022) Navigating the Skills Landscape, British Chambers of Commerce, June 2022, <u>The Open University Business Barometer 2022 report | Open University</u>

Owen J, (2022), Firms spend record £6.6bn plugging skills gaps, report finds, People Management, September 2020, <u>83971 (peoplemanagement.co.uk)</u>

Peck's Trade Directory of Birmingham (1896-97), <u>Peck's Trades Directory of Birmingham, 1896-97:</u> <u>Advertisers - Graces Guide</u>

Pollard J., (2004) From Industrial District to 'Urban Village'? Manufacturing, Money and Consumption in Birmingham's Jewellery Quarter, Urban Studies, Vol. 41, No. 1, 173–193, January 2004

Porter, M, (1998), Clusters and the New Economics of Competition, Harvard Business Review, November-December 1998, Clusters 1.pdf (fundacionicbc.edu.ar)

Stephens, W.B., (1964) 'Economic and Social History: Industry and Trade, 1500-1880', in *A History of the County of Warwick: Volume 7, the City of Birmingham*, pp. 81-139. *British History Online* http://www.british-history.ac.uk/vch/warks/vol7/pp81-139 [accessed 21 September 2022].

UK MID-SIZED BUSINESS REPORT (2014), Agents of growth The power of mid-sized businesses, Agents of growth (grantthornton.co.uk)

Weardon G, (2022), UK businesses slash investments due to soaring prices and Brexit, 1 August 2022, The Guardian

Zott, C., Amit, R., (2010), Business Model Design: An Activity System Perspective, Long Range Planning 43 (2010) 216e226, Elsevier, <u>Business Model Design: An Activity System Perspective (marclemenestrel.net)</u>

