## Text Mining of News Articles in Financial Times for Open Banking

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## Abstract

Open Banking is an innovative banking paradigm that enables the sharing of financial data between banks and any entity, including a common person and third-party services, for the sake of a wider reach. This sharing takes place through the banks exposing application programming interfaces (APIs). This concept is in contrast to traditional banking, where banks keep their data confidential [1].

There are many benefits of Open Banking; for instance, customers can get provision of a wide range of financial services and products. In this way, they can develop partnerships with banks to innovate novel banking products to facilitate businesses, the ordinary persons, and the banking industry [2]. Whereas the UK government was the first in the world to pioneer the concept of Open Banking in 2017 through the "CMA Order, which established open banking in the UK, the nine largest UK banks and building societies, known as the CMA9, were required to set up and fund a central standard-setting body for open banking. This body is known as the Implementation Entity and was established as Open Banking Limited (OBL)" [3]. However, it has not kept up the pace to lead the world in the broader applicability of Open Banking to maximize the benefits. To understand the reasons behind this potential downfall, this study explores the news articles published in the Financial Times on Open Banking. In particular, we study two recent news articles: "The UK led the world in open banking — and then got left behind" and "UK payment sector urged to develop a system to bypass dominant card networks". We then apply text mining on this data to perform various text analysis techniques like finding the most frequent words, identifying the discussed topics, and sentiment analysis. The application of said AI techniques on this dataset provides a brief overview of what is being discussed. Our results identify the most repeatedly used words as "card", "retail", and "competition" after some apparent words like "UK", "Bank", and "Payment". Similarly, for topic modelling, we identify "payments in banking for businesses", "banking using cards", "banking sector", and "banking competition in the world for retail" as the 4 important topics. Finally, applying sentiment analysis highlights the most positive sentence as "In open banking, the UK has an honest-to-God, FinTech tale of innovative success" and the most negative sentence as "It is surprising really that we do not hear more about open banking from a government desperate for signs of world-beating regulatory prowess." Our findings could contribute the valuable insights about key terms being discussed in Financial Times on the topic of Open Banking. Based on these encouraging results, we aim to apply further state-of-the-art text-mining algorithms to enrich the knowledge of interested audiences.

Keywords: Fintech, Open Banking, Artificial Intelligence, Text Mining

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