

A Qualitative Review on Digital Financial Inclusion using N-Vivo

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The purpose of this study is to assess the state of research on digital financial inclusion. The method is a qualitative one that makes use of secondary data from articles that were published and indexed by Scopus between 2005 and 2022. This data was processed using Microsoft Excel 16 and analyzed using Nvivo 12 Plus software, which performs automatic coding and classification to create a structured file system. The results of this study suggest that Islamic economic research is beginning to increasingly focus on digital financial inclusion. The majority of the 595 articles that were published claimed that the economy and mobile services are related to digital financial inclusion. "Financial", "digital", "inclusion", "services", "study", "development", "mobile", "finance", "technology", and "economics" are the words that frequently appear with the most frequency in journals with digital financial inclusion subjects. Unusually, there are variations in the sentiment analysis findings. Whereas the sentiment is relatively favorable when it is evaluated based on the title, index keywords, and abstract, the sentiment is quite negative when it is evaluated based on the author keywords. This study is anticipated to contribute to the present academic studies on digital financial inclusion. The results of terms that still have room to grow can be used to guide future studies on digital financial inclusion.

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INTRODUCTION

Europe as a whole is where the internet was first extensively accepted as a financial distribution medium. Due to this development, the internet is more efficient than conventional media (Barbesino et al., 2005). Additionally, the state of the world economy and the quickening of technical advancement (Al-Okaily et al., 2021; Gharaibeh & Arshad, 2018; Pousttchi & Turowski, 2004). Therefore, implementing financial inclusion through digital finance might be a significant opportunity for many nations around the world to help economic growth and financial stability.

Additionally, a number of international financial organizations have created a range of systems to assess financial inclusion. The G20 Financial Inclusion Indicators, published by GPFI and sponsored by the World Bank Data Group, are the data gateway that is frequently utilized to construct this system. These metrics assess the quality of financial services usage and access both domestically and internationally. Indicators to gauge the adoption of digital payments and access to digital infrastructure were introduced to the portal in 2016. A thorough index of digital financial inclusion can be created using the improved G20 Financial Inclusion Indicator System's digital financial features. In order to increase access to financial services and promote economic development in underserved market segments, users can use digital financial inclusion (Shen et al., 2021).

Financial service consumers, digital financial service providers, governments, and the economy can all gain from digital finance and financial inclusion (Ozili, 2018). More than 38% of adults, according to the World Bank, do not have access to conventional financial services. Financial inclusion aids in bridging the gap between financial access and physical, digital, and psychological use. Cash is gradually fading away in today's digital world as a relic of antiquated banking practices and societal norms, which make having a bank account advantageous. He intends to gain financial services and assist people in breaking the cycle of poverty by merging modern financial technologies (Chu, 2018). In order to help lower poverty rates in developing and rising economies, the G-20 and the World Bank

have spearheaded programs to enhance financial inclusion in developing countries (GPFI, 2010).

Given that this topic is intriguing and is frequently addressed by academics and practitioners, there has been a significant amount of research on digital financial inclusion, suggesting that it has the potential to be expanded. This study will compile and synthesize research on digital financial inclusion from various publications published in journals with a Scopus index. The automatic coding software Nvivo 12 Plus is used to handle and evaluate the data. As a result, this study provides a survey of the literature on the growth of digital financial inclusion by looking at the conceptual content of different publications that are Scopus indexed.

LITERATURE REVIEW

Financial inclusion is the formal use of financial services by those who are underprivileged or have low incomes (Beck et al., 2007). Financial inclusion, according to the UN Report, is the sustained supply of cheap financial services that draw the underprivileged into the formal economy (UN, 2016). In order to reduce poverty and promote economic growth, financial inclusion entails expanding the number of (mainly poor) people who have access to formal financial services, primarily through bank accounts. More financial inclusion enables people to start businesses, save money, and invest in their education, which lowers poverty and boosts the economy (Beck et al., 2007; Bruhn & Love, 2014).

An inclusive financial system gives everyone, especially the poor, the chance to transfer money, build their capital, and lower their risk (Ozili, 2018). Financial inclusion, as defined by Presidential Regulation Number 82 of 2016 concerning Inclusive Financial Strategy, is the state in which every community member has access to a range of formal financial services that are of high quality, timely, seamless, and safe, at prices that are reasonable given their unique needs and capacities.

Meanwhile, professionals defined the term "digital finance" as referring to financial services that can be accessed by mobile devices, personal computers, the internet, or cards connected to digital payment systems. The same point was made by Manyika et al. (2016), who defined digital finance as

financial services provided by mobile devices, the internet, or credit or debit cards.

Financial service providers and fintech companies have introduced a variety of new financial products in the areas of company finance, financial-related software, and new forms of client contact (Gomber et al., 2017). Although there isn't a single definition for "digital finance," there is general agreement that it refers to all goods, services, technological advancements, and infrastructure that allow people and businesses to access credit, savings, and payment options online (through the internet) without having to physically visit a financial service provider.

METHODOLOGY

This study used a qualitative methodology. Qualitative approaches have the advantages of abundant data collection, valid coding, and trustworthy interpretation (Moretti et al., 2011). This

study draws on literature reviews from a variety of online journals that are indexed by Scopus. 595 Scopus-indexed journal publications with digital financial inclusion were published between 2005 and 2022. NVivo 12 Plus software is used to evaluate the data after it has been processed with Microsoft Excel 16 in order to automatically use and group the data in the file into sentences, paragraphs, or other distinct text strings. To produce a structured file structure for this research, the Nvivo 12 Plus program automatically performs coding and classification (Huang et al., 2020). This study will present the findings of research trends in terms of words, language, and sentiment connected to the discussion of digital financial inclusion by automating the text analysis method.

RESULT AND DISCUSSION

Meta-analysis

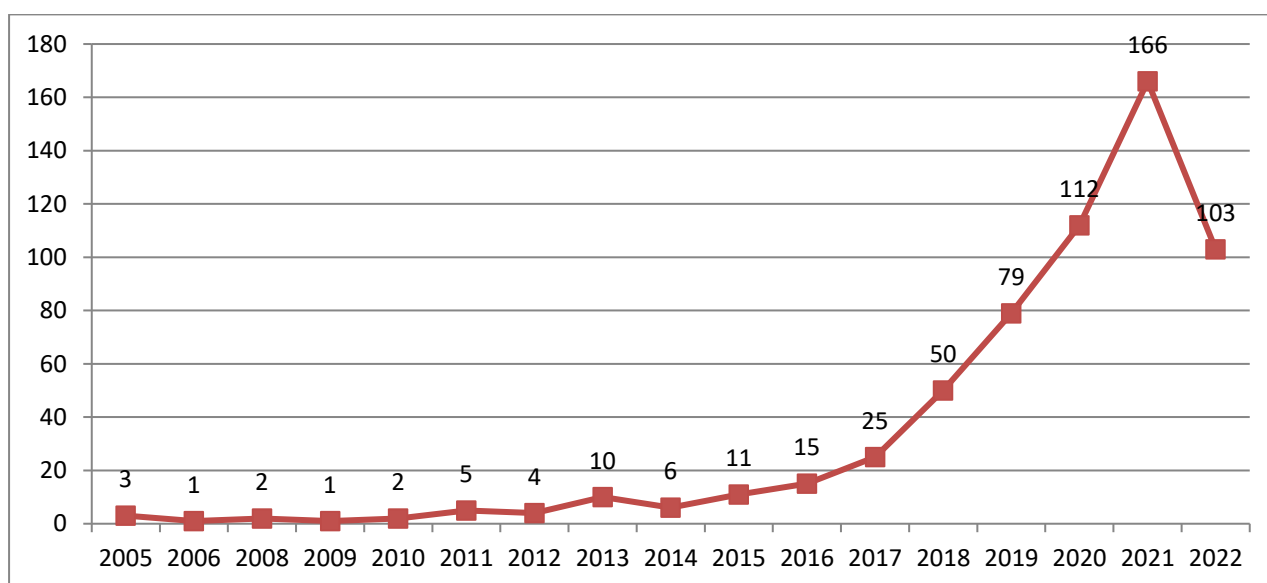


Figure 1. Number of Journal Publications with the theme of digital financial inclusion for the period 2005-2022

The number of Scopus-indexed journal publications on the subject of digital financial inclusion is listed in this section. Over the course of 17 years, from 2005 to 2022, 595 journals have been published while zakat was being studied. Figure 1 illustrates the tendency for a varying and large rise in the quantity of journal papers with the topic of digital financial inclusion. The newspaper did, however, have a vacancy in 2007. As a consequence, 166 journals were published in 2021, which is when

the majority of journal publications on the topic of digital financial inclusion were found. Unfortunately, 103 articles of journals with a focus on digital financial inclusion were published the following year. As a result of the data being accessed on June 28, 2022, there can be a rise in the number of Scopus-indexed journal publications on digital financial inclusion. The chance to publish more articles in journals with the topic of digital financial inclusion is still available.

Word Cloud Analysis

In this study, frequency analysis seeks to identify issues based on the highest word repetition of the data gathered. A high frequency of occurrence is indicated by the presence of words with huge font sizes. To further identify one word from another, various word colors are employed. The findings reveal that among the 100 relevant words, “financial”, “digital”, “inclusion”, “services”,

“study”, “development”, “mobile”, “finance”, “technology”, and “economics” have the largest number of frequency occurrences. Nvivo 12 Plus Wizard automatically calculates this proportion (Huang et al., 2020). Other intriguing terms like “banking”, “social”, “fintech”, “information”, “countries”, “system”, “access”, “health”, and others may also emerge in the automatic code that displays.



Figure 2. Word Cloud

Hierarchy Chart

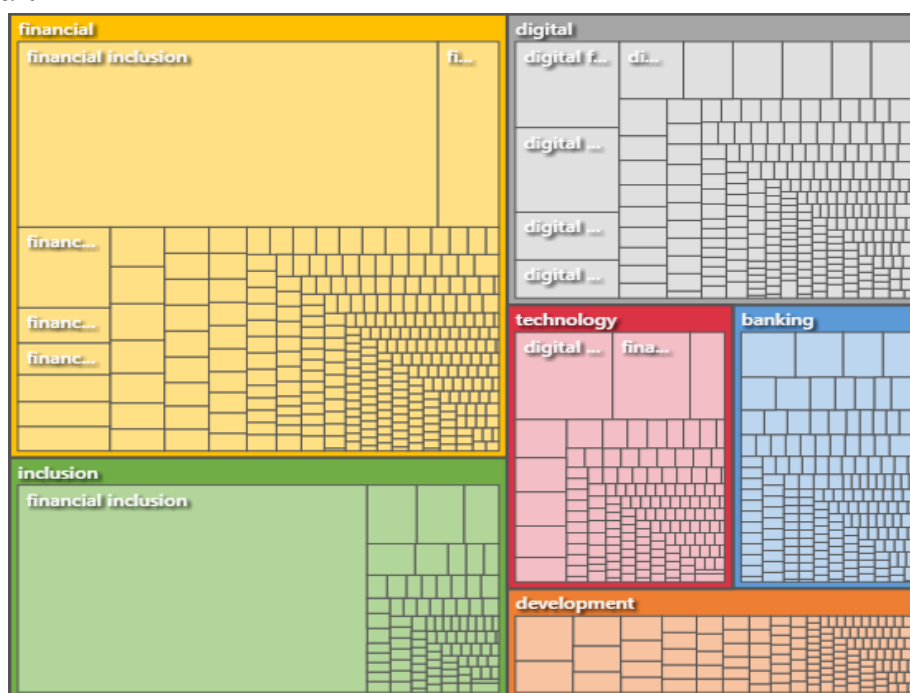


Figure 3. Hierarchy Chart

According to the coding, it automatically creates a hierarchy chat by bringing up a number of pertinent terms that frequently emerge, such as “financial”, “inclusion”, “digital”, “technology”, “banking”, and “development”.

Sentiment Analysis

As seen in the figure 4, the Scopus index includes publications on digital financial inclusion that have

produced a lot of sentiments. Based on a review of the title, index keywords, author keywords, and abstract, this study groups the sentiment analysis findings. The title, index keywords, and abstract were all subjected to sentiment analysis for this study, and the results show that the somewhat positive category has the highest number of entries.

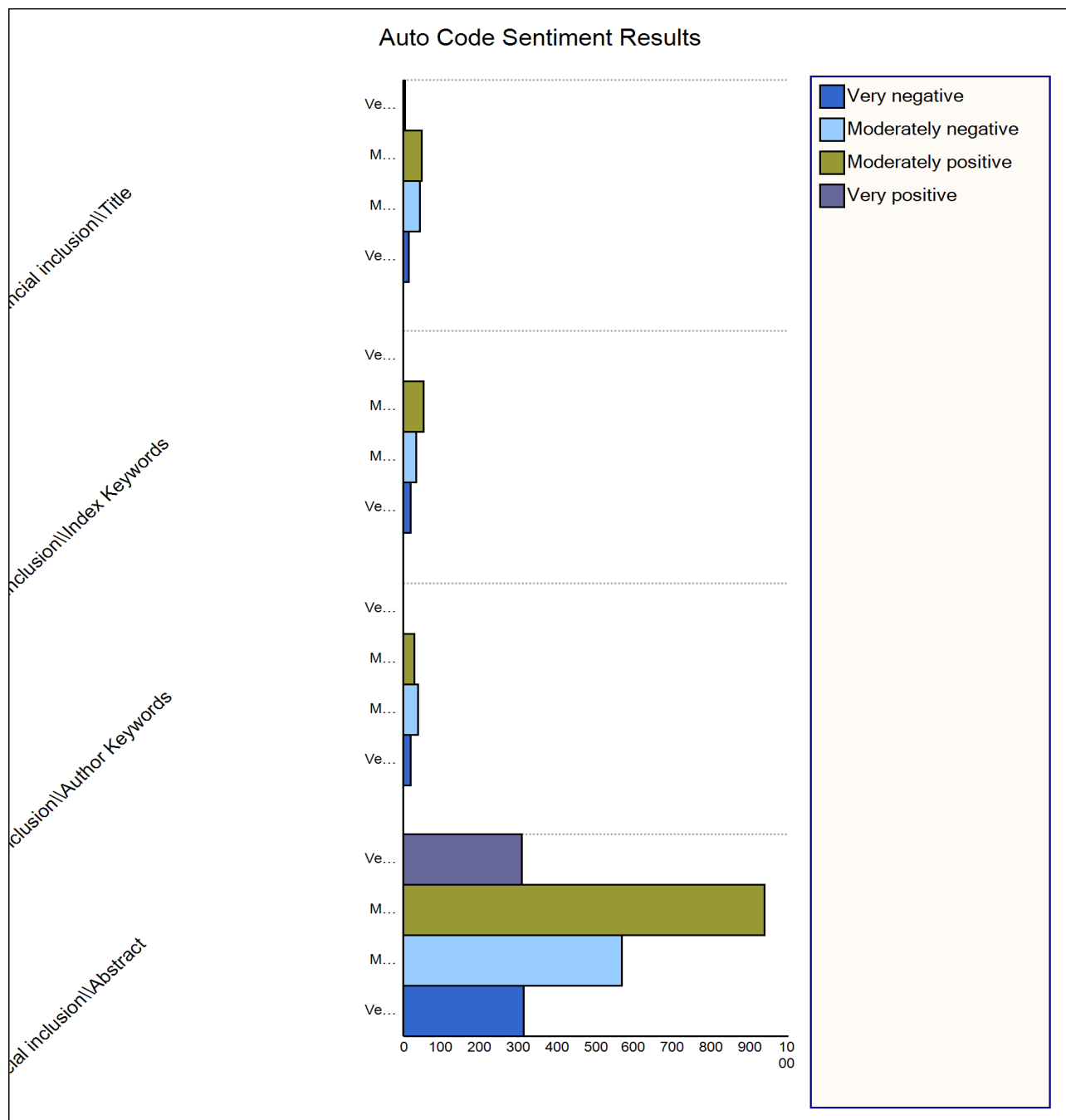


Figure 4. Sentiment Analysis

In the meanwhile, the sentiment results from the index keywords' sentiment analysis are overwhelmingly unfavorable. Accordingly, it can be concluded that, overall, the development of research on digital financial inclusion from 2005 to 2022 is fairly encouraging from the numerous literature sources indexed by Scopus. The index keyword, however, lists a lot of disappointing results.

FINDINGS

The rise of digital financial inclusion has been the subject of numerous research; therefore, the findings of this study are contradictory. Although it is relatively young and the observation period is only 17 years, research on digital financial inclusion has been ongoing since 2005 and is indexed by Scopus. As many as 595 publications that were found and are indexed by Scopus serve as evidence for this. Though there will be benefits and drawbacks to this research topic, overall, it displays a reasonably positive sentiment. The examination of the word clouds reveals that the terms "financial," "digital," "inclusion," "services," "study," "development," "mobile," "finance," "technology," and "economics" are those that recur most frequently in this research. Additionally, the automatic coding of the hierarchical structure resulted in the issue of digital financial inclusion, which is associated with the words "financial", "inclusion", "digital", "technology", "banking", and "development".

"Services", "mobility", and "economic" are just a few of the intriguing terms that were discovered and used as findings as a consequence of this investigation. In the problem of digital financial inclusion study, the word "services" is mentioned. The services in the DFI issue illustrate how banking services based on digital technology are developing. This is thought to be practical and useful, and it can facilitate community life (Barbesino et al., 2005; David-West et al., 2020; Jain et al., 2022; Khaba et al., 2021; Lapina et al., 2021; Mariscal & Rojas-Lozano, 2020; Neog, 2019; Sandhu & Arora, 2022; Silva et al., 2017).

While this is going on, the term "mobile" frequently comes up in discussions about digital financial inclusion (Belousova & Chichkanov, 2020; Björkegren & Grissen, 2020; Chu, 2018; David-West

et al., 2020; Haddad et al., 2019; Ibtasam et al., 2017; Jakhiya et al., 2020; Kemal, 2018; Koomson et al., 2021). According to Chu's (2018) research, mobile technologies can increase digital financial inclusion. Everyone, especially those living below the poverty line, has access to and can get basic banking services, such as savings, loans, insurance, and other financial services, thanks to mobile technology. Those without a bank account can access financial services and escape the cycle of poverty by integrating digital financial instruments.

Additionally, the topic of digital financial inclusion covers the economy (Chen et al., 2021; Junarsin et al., 2021; Khaba et al., 2021; Liu et al., 2021; Ozili, 2018; Pradhan et al., 2021; Thathsarani et al., 2021). Honohan (2004) asserts that the advancement of financial inclusion entails ensuring that every member of the economic system has simple access to formal financial services in order to maintain a connection with the economy. In this regard, studies by Dahlman et al. (2016) demonstrate how the digital economy can promote inclusive development while boosting growth and productivity. As a result, in light of the necessity for this study to be created, it is anticipated that future studies on digital financial inclusion, including its implementation and administration, will be explored further.

CONCLUSION

This research focuses on studies from 2005 to 2022 that have been published in a variety of literary works with a digital financial inclusion subject. 595 journals with a Scopus index were used to compile the data. The findings indicate that over the course of the 17-year observation period, there has been a fluctuating growth in the development of digital financial inclusion. Words like financial, digital, inclusion, services, study, development, mobile, finance, technology, and economics have the largest frequency distributions. The hierarchy chart contained a number of additional words, including financial, inclusion, digital, technology, banking, and development. Additionally, this study presents quite encouraging sentiment analysis findings on research on digital financial inclusion from diverse works indexed by Scopus.

Particularly in studies pertaining to Islamic economics, some of the pertinent terms discovered in this study can be further explored. It also requires encouragement from academics to participate in studies on digital financial inclusion so that information can be incorporated into Islamic economic practices.

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