



UNIVERSITI TEKNOLOGI MARA

**FINTECH AND BLOCKCHAIN:
A BIBLIOMETRIC ANALYSIS**

**AIZA NOORSURAYA MUHAMMAD ABKARI
2020988771**

Thesis submitted in partial fulfillment
of the requirements for the degree of
Bachelor of Business Administration
(Investment Management)

Faculty of Business and Management

February 2022

ABSTRACT

This bibliometric analysis aims to provide quantitative information on FinTech and Blockchain. Specifically, this study focuses on publishing trends, research areas, major contributing journals, countries and organizations, most productive authors, and articles with the highest citations. A total of 5,808 documents related to FinTech and Blockchain were gathered from the Web of Science Core Collection (WoSCC) database, covering the period 2015 - 2021. The study notices that finance research has developed significant bibliometric velocity. The citations and publications on the other hand are expected to increase in the future. USA, China, and England published the most documents. Moreover, these countries were still outperforming all other countries with the highest citations. MIT, The Hong Kong Polytechnic University, RMIT University Melbourne, and UCL had the most articles published while Harvard University, National Bureau of Economic Research, Montpellier Business School, and Hong Kong Polytech University led the institutions globally based on citations. Asongu; S.A., Shahbaz; M. and Choi T.M. appeared to be the most prolific authors while the highly cited researchers were Shahbaz; M., Choi; T.M. and Nasir; M.A. Technological Forecasting and Social Change, Energy Policy and Journal of Business Research were the top three most active journals that published articles related to Fintech field. Using co-occurrence analysis, (i) technological development, (ii) artificial intelligence (AI) and digital transformation, (iii) blockchain technology and sustainable supply chains, and (iv) blockchain and digital currency were the existing main research hotspots in the FinTech field. However, the issue coming from a lack of awareness about new technology development will escalate the difficulties and have an impact on FinTech's product quality performance. Besides, those who dismiss FinTech may not recognize that they are contributing to the technology's future ineffectiveness. Lastly, Blockchain technology, digital currency, and Covid-19 can be considered as future research directions.

TABLE OF CONTENT

	Page
AUTHOR'S DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENT	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
CHAPTER ONE	1
INTRODUCTION	1
1.1 Introduction	1
1.2 Background of the Study	3
1.3 Problem Statement	4
1.4 Research Questions	5
1.5 Research Objectives	5
1.6 Significance of the Study	5
1.7 Scope of the Study	6
1.8 Limitation of the Study	6
1.9 Definition of Term	7
1.10 Summary	8
CHAPTER TWO	10
LITERATURE REVIEW	10
2.1 Introduction	10
2.2 FinTech in Finance	10
2.3 Blockchain in Finance	11
2.4 Summary	11

ACKNOWLEDGEMENT

First of all, I wish to thank God for giving me the opportunity to embark on my degree and for completing this long and challenging journey successfully. I would like to express my gratitude and appreciation to my supervisor Dr Tan Yan Ling for her support, suggestion, patience and guidance for me to complete this research.

In addition, I would like to thank my family and friends for their help, encouragement, and motivation throughout this research. Not to forget, appreciation for the other lecturer who gives guidance and comments along the process in completing this research paper.

Finally, this thesis is dedicated to the loving memory of my very dear late father and non-stop support from mother for the vision and determination to educate me. This piece of victory is dedicated to both of you. Alhamdulillah.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

Based on Nassiry (2018), financial service providers are putting in place a new technology system that serves as a decentralization mechanism for financial systems. Decentralization is the practice of removing third-party who have traditionally been involved in the sector from its inception. As a result, the presence of a blockchain system can assure the security of data transmitted among a large number of users without the need for third-party intervention. (Tapscott, 2016). According to Marr (2017), FinTech began as a back-end system and has now expanded to include the development of technologies that improve the financial services system, such as transaction processing. The origin of financial technology known as FinTech started in the year 1993, when the name of the Financial Services Technology Consortium was initiated by one of the largest projects from Citicorp to facilitate technological cooperation. In 1995, Well Fargo became the first bank that offered an online checking account system. After decades, everyone cannot imagine their financial lives without the convenience and anytime access of the online banking system, according to Popovski (2018).

FinTech symbolizes the invention application of technology in finance (Nicoletti, 2017). Nevertheless, the world is shaken by the tragedy of the financial crisis 2008 followed by the sub-prime crisis has led to the global financial system being on the edge of systemic collapse for quite some time (Abdelsalam, 2021). The global crisis was considered as one of the turning points for Fintech as a game-changer. Due to the crisis, surely it had a catalyzing effect on the growth of the FinTech sector in terms of post-crisis regulatory reforms, financing gap, operational cost reduction, public perception, and technology. While the recovery from the crisis was ongoing (Ahmi, Tapa & Hamzah, 2020), finance and banking institutions technologies have moved forward with different types of revolutions such as integrating into e-finance modernization, internet technology, social networking services, social media, artificial intelligence, and big analytic data, in addition, has