

ANALYSIS BIBLIOMETRICS APPLICATION OF TECHNOLOGY ACCEPTANCE MODEL IN ISLAMIC FINTECH

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ABSTRACT

The rapid advancement of technology has led to the emergence of Islamic fintech as an innovation in digital financial services with the potential to enhance financial inclusion. However, public understanding of its use remains limited, resulting in cases of misuse and losses for users and companies alike. This study aims to analyze the factors influencing the acceptance of Islamic fintech using bibliometric methods. Employing a qualitative descriptive approach, data was collected through the *Publish or Perish* software and analyzed using VOSviewer to map the development of research on the Technology Acceptance Model (TAM) in Islamic fintech. The findings reveal significant growth in Islamic fintech journal publications in 2020, with "fintech" being the most frequently used keyword. Furthermore, the author analysis identifies Rabbani as the primary contributor. Research on the application of TAM in Islamic fintech remains scarce, but this model has proven effective in predicting technology acceptance. By understanding the factors influencing technology acceptance, companies can develop better strategies to expand their user base and enhance consumer trust in their services.

Keywords: TAM, Islamic Fintech, Bibliometric, VOSviewer

INTRODUCTION

along with As time goes by , technology is also getting better develop No except in Indonesia itself , where in Indonesia technology develop Enough rapid. One of them technology digital information , where development technology This digital information is very changing behavior public in aspect life. Development technology start to penetrate to various sector one of them is sector finance. Although No become something new but perpetrator industry technology finance or what is called fintech competing launch friendly innovation society. Fintech has become dimensions important in industry service finance Because continuous innovation continuously (Ana Tony Roby Candra, 2020) . Islamic banking is all something related to Islamic banks and Islamic units includes institutional activity business , and ways and processes in carry out activity his efforts (Eva Indah Sari, et al., 2021) . Bank implements three function main , receive saving money, lending money, and giving money service remittances (Abdul Nasser Hasibuan, et al., 2022)

Development This can seen from various achievements achieved by Indonesia in several year last. Where, at the time This Indonesia is successful to achieve



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position second in Islamic Financial Development Indicator (IFDI) index. Even in 2019, Indonesia had be in position first in the world in matter index this, surpassing the countries of Malaysia and the United Arab Emirates. As we know know that, IFDI index This is a index measurements used For assess and see development industry Islamic finance of a country. So, if a country has index of value tall so give description that the country's Islamic financial industry develop with fine from side amount and also from the governance side (Maimuna, et al., 2020). Banks are institution intermediation for Customer savings and financing, besides other functions in service service finance (Siti Ratna Sari, et al., 2020)

Although development industry Islamic finance in Indonesia today This it is very satisfying, but development This Still Not yet followed by developments *Islamic Financial Technology* or *Islamic Fintech* (Muhammad Rizal, 2018). This is can seen from amount transaction trading *Islamic Fintech* in Indonesia which is still left behind compared to with other countries such as Saudi Arabia, Iran, United Arab Emirates and Malaysia.

For Can give support towards programs and policies government related with development industry this Islamic finance , then required studies empirical about reception *Islamic Fintech* This is in the community. Although Thus , research and studies that discuss about reception *Islamic Finance* This still very limited the amount until moment This (Susanne Chishti, et al., 2016) . TAM theory is a model first introduced and developed by Davis, to explain about determining factors level reception technology computer. Then along with the walk time , this model Then used in a way wide For explain about reception A innovation and or technology , including in it is Islamic Fintech (Riska Safitri, 2021) .

Bibliometrics is method statistics or mathematics used For study and measure pattern change and obsolescence useful literature For know development from specialized literature. Analysis bibliometrics can to study various literature information like journals , articles , books , theses and works scientific others in focus the analysis can also be different in accordance with desire the writer for example analyze authorship , trends topic , analysis citations and so on (Ardat Ahmad, et al., 2021) .

This matter useful For to know and measure how far has the development progressed literature researched information as well as can become tool evaluation for literature information Therefore , the novelty in the research. This is do study with meta analysis method use bibliometric mapping a number of publication scientific about *Technology Acceptance Model* (TAM) in *Islamic fintech*. Based on background behind said , researchers interested For stage study about acceptance of Islamic fintech. With Thus , research This take title " **Analysis Bibliometrics Implementation Technology Acceptance Model in Islamic Fintech**".

LITERATURE REVIEW

Bibliometrics

Bibliometrics was introduced by *Pritchard* in 1969 as " the *application of mathematical and statistical methods to books and other media of communication*" It



means is bibliometrics is application mathematics and methods statistics For books and communication media others. Based on understanding said , can put forward that bibliometrics is applied science his research on bibliography , literature and information media others that can made into tool For evaluate and view development a discipline science. Object main study analysis bibliometrics is journal scientific , because is literature containing results study original or implementation A theory or explanation theories and ideas so that is information of a nature direct from work research. This is also what ultimately make journal scientific become knowledge public , as well as archive general that can read by whom just every moment (Nur Fauziah Siregar, 2021) .

Bibliometrics is a evaluation quantitative from pattern publication from all communication micro and macro together with his authorship with use calculation mathematics and statistics, as well as bibliometrics is a evaluation quantitative from pattern publication from all form communication Good micro and also macro together with his authorship with use calculation mathematics and statistics (David Richardo, 2013). Application bibliometrics second is application VosViewer that is A device useful software For mapping based on network data and at the same time For visualization and exploration map the (Alfitman, 2019).

Financial Technology

Financial Technology is one of the form implementation technology information in the field finance. As a result , it emerged various financial models new started first by Zopa, namely institution finance in the UK that runs service lending money. Then the financial model new through device soft (Sastya Hendri Wibowo, 2022) . In Islam the system financial give role main For push allocation efficient Power finance and resources real power for various diverse goals and objectives. Functions this is the end leading to allocation efficient source power , rapid accumulation of physical and human capital , and development more technology fast , which in turn push growth economy (Iqbal, et al., 2008) .

Sharia *financial technology* is combination from innovation technology information with products and services in the field finance and technology that speeds up and facilitates business process of transactions, investments and distribution of funds based on sharia values. In implementation Sharia financial technology in Indonesia has also begun get attention from government with the issuance of a related Fatwa with Sharia Fintech by the National Sharia Council of the Indonesian Ulema Council (DSN-MUI) Number 117/DSN-MUI/II/2018 concerning Service Financing Based on Technology Information based on Sharia Principles (Yudha, et al., 2020).

Technology Acceptance Model (TAM)

Acceptance Model Theory Technology (Technology Acceptance Model) was developed from the Theory of Reasoned Action (TRA) by Davis in 1986. TRA was developed by Icek Ajzen and Martin Fishbein in 1980. The TRA theory was derived from study previously started from theory attitude (theory of attitude) which studies



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about attitude and behavior. TRA was born Because not enough success studies that test theory attitude, namely connection between attitudes and behavior (Wiji Nurastuti, 2011).

Behavioral Theory Planning (*Theory of Planned Behavior*) is development more Far from TRA. In 1988, Ajzen added A unfinished construct is in TRA. Construct This called with perception control behavior (*perceived behavioral control*).

METHODS

Study This Google Scholar indexing database has been done since May 2023. Research Time This done in a way gradually , namely started since May 2023. Approach research used in research This is study qualitative descriptive (Adhi Kusumastuti, et al., 2019) . Research qualitative is method new Because its popularity not long ago, the method this is also called postpositivistic Because based on post- positivism philosophy , and as method artistic because of the research process more nature not enough patterned (Albi Anggito, et al., 2018) . Unit of analysis in study This is something that refers to the subject study (Afrizal, 2017) . Unit of analysis in study This is unit certain things that are taken into account as subject research. Subject study is individual , object or organisms that are used information needed in research data collection (Sugiono, 2017) . So the subject in study This is the data that is in Google Scholar.

As for the data sources used is the primary data obtained in the field in a way directly by the author and secondary data yes obtained from studies library (Amsal, et al., 2020). Data collection techniques used in this research This use help device soft Publish or Perish (PoP) on the Google Scholar publication database based on the keyword " *Islamic Financial Technology* ". Other instruments such as Delay is also necessary prepared. Process metadata search and retrieval through the Google Scholar database using Publish or Perish (PoP) application. The procedure is as follows: data analysis in research This use steps from analysis bibliometrics, namely .

- 1. Define keywords search
- 2. Search results beginning
- 3. Narrowing results search
- 4. Completing Initial Statistical Data
- 5. Data analysis

Data validity techniques are with use technique technique triangulation (Asfi Manzilati, 2017) . The data checking used that is :

1. Provision Observation

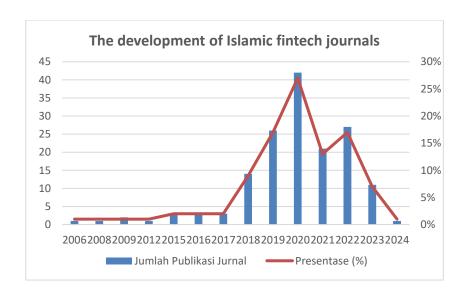
Provision observation mean to determine characteristic features from elements in very relevant situation with problem or current issue searched and then decide than things said in a way detail.

2. Data Triangulation

Data Triangulation is dig truth information certain with use various data sources such as documents, archives, results interview, results observation or also with interview more from One subject considered own corner different view.



RESEARCH RESULTS AND DISCUSSION Research result



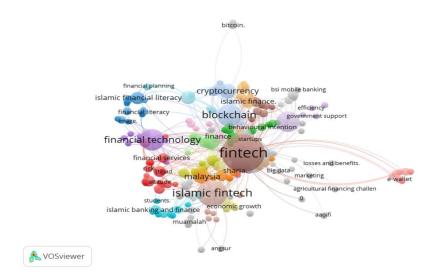
1. Development Study Islamic Financial Technology Field

Development publication journal research in the field of Islamic financial technology from year to year experience an increase that is not significant , thing This can seen from Figure 4.8 where picture the show chart development publication journal study from the year that is not restricted starting in 2006-2024 indexed by Google Scholar. In the graph the can known that publication highest happened in 2020 which has percentage by 27% with amount publication of 42 journals whereas publication lowest occurred in 2006 , 2008, 2012, and 2024 which had presentation by 1% with amount publication of 1 journal. However , in the research this , writer limit analysis on source publication scientific in the form of journal. Therefore that , the author eliminate type publication research that is not journal. In addition , the author also eliminated same title as well as type publications that are not known or No Can accessed.

a. Development map based on keywords

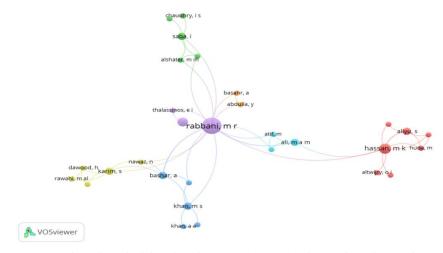
From data processing with using VOSviewer software there is results mapping based on keywords namely Network Visualization mapping that shows existence connection or relatedness between keywords One with other, keywords in different journals. In the picture show map development publication research in the field of Islamic Financial Technology based on keywords, where from picture the can known that development publication research in the field of Financial Technology. Development Map Based on Keywords Islamic Financial Technology based on keywords indexed by Google Scholar with the year that is not determined resulting in 41 clusters.





With The minimum number of keyword occurrences of 1 resulted in 452 keywords and 405 relevant items were found. The most frequently used keywords used in article study The field of Islamic Financial Technology is "fintech" with 47 events and strengths. The total links are 207. While the keywords are rarely used used in article study the field of Islamic Financial Technology, namely "risk management" with only 1 event and power total links is 1.

b. Development map based on author



Study the field of Islamic Financial Technology from 2006 to 2024 already Enough Lots conducted by researchers. From data processing using VOSviewer software there is results mapping study namely Network Visualization mapping. The results of Network Visualization mapping show existence connection or relatedness researcher between One researcher with other researchers in different journals.

In the picture show map development publication study the field of Islamic Financial Technology with period that is not determined Google Scholar indexed started from 2006-2024. From the picture on can known map development publication study Islamic Financial Technology field based on author produces 7 clusters. With minimum number of documents a Author 1 produced 316 authors and found 30 relevant items.



The most author donate publication article journal in the field of Islamic Financial Technology, namely Rabbani with amount article as many as 10 documents with strength total links are 16. While the most rare writer publish article study in the field of Islamic Financial Technology, namely Bashar, A with amount article as many as 1 document and power total links are 2.

Application of Technology Acceptance Model in Islamic Fintech

Based on results the research above after do data processing through puplish or perish from the year that is not determined There are 6 journals related articles with technology acceptance model in Islamic fintech. Can seen that its implementation from 2020-2023.

Journal First conducted by I. Shaikh M with title Acceptance of Islamic financial technology (FinTech) banking services by Malaysian users: an extension of technology acceptance model, application to journals This that is For test reception Malaysian society towards Islamic FinTech, which is offered by providers services in the country and the factors influencing determinants the use of FinTech by individuals (Islamic FinTech) based on principles of Sharia. research This add connection new between CI and the acceptance of Islamic FinTech. From the perspective view theoretical , research This introducing a TAM -based model and incorporating variable new namely CI which enriches Islamic FinTech literature.

Framework study based on TAM which is effort pioneer use theory mentioned above in context acceptance of Islamic FinTech. Therefore that , research This make an effort For contribute to the scarce literature about Islamic FinTech with reason empirical in particular , using framework TAM modified work in arrangement Islamic finance is effort For increase predictivity factor acceptance. Literature show that there is studies limited about acceptance of Islamic FinTech.

Therefore that , research moment This is effort For propose factors responsible answer on acceptance of Islamic FinTech. All variables used in study This Possible can more explain reception somebody such as PEOU, CI and PU. Findings This show that among all factor determinant acceptance of Islamic FinTech, CI is the most influential as has been presented. TAM theory is effective in prediction acceptance of Islamic FinTech.

In H. Usman's research with title *Integrating trust, religiosity and image into technology acceptance model: the case of the Islamic philanthropy in* Indonesia which in study This support theory action reasoned and TAM. Which relationship between perception convenience usage and perception utility with TAM determined by belief and religiosity. Then in A. Nugroho's research, with title *Islamic Financial Literacy and Intention to Use Gopay in Yogyakarta: Extended Theory of Acceptance Models* which in study This show that literacy Islamic finance impact positive to benefits and convenience use.

Perception Usability and Perception convenience use influential positive to intention using Go-Pay. existing products. Based on survey, average number of fintech companies on the rise by 13%, while volume increased by 11%. Survey the find that Fintech wallet electronic Literacy Islamic finance has an impact direct on intention using Go-Pay; Literacy Islamic finance through perception benefit influential positive to intention using Go-Pay.



In addition , through perception convenience usage , literacy Islamic finance has an impact positive to intention using Go-Pay. In the study Alnsour , entitled Islamic financial technology acceptance: An empirical study in Jordan , in study This state that Based on literature , only There is A little study about adoption technology Islamic finance , therefore that , research This aiming For propose reason adoption This. Every factors used in study This like perception innovation consumer , perception usability , and perception simplicity usage , maybe can explain reception with more effective.

The result show that innovation consumer is influencing factors , influence biggest on what technology finance Islam will accepted. The TAM hypothesis is proven. succeed in predict adoption technology finance Islam. Clear understanding about connection between elements and impacts special factors This to reception can obtained with separate factors determinant unique that influences technology Islamic finance , such as innovation consumers , perceived benefits , and simplicity use.

P there is research furthermore that is research conducted by H. Usman, whose research is entitled *The exploration of the role of sharia compliance in technology acceptance model for e-banking* (*case: Islamic bank in Indonesia*). Research This find that SC, knowledge about SC and belief against SC has significant influence to satisfaction Islamic bank customers who use e-banking.

Findings most important in study This is SC, knowledge about SC and belief against SC in general significant to moderate connection between PU and PEOU with satisfaction customer. Originality / value : Originality study This explore SC role , knowledge about SC and trust in SC in all relationship , and expressed in the original TAM For explain satisfaction customer.

Study This Not yet Once applied to research previously, especially research on e-banking of Islamic banks in Indonesia. This study highlight the importance of SC in TAM expansion, as factor differentiator between e-banking provided by sharia banks and conventional banks, as well role knowledge and trust in SC.

After see a number of journal the that study about TAM on Islamic Fintech still A little his research. With implementing TAM as theory research is very effective in prediction acceptance of Islamic FinTech. So TAM does not only help take a picture user behavior in using Islamic Fintech , but will also help in maintain existing customers there is. With better understanding Good about factors that influence reception technology by users , companies can develop a more comprehensive strategy effective For expanding user base and increasing consumer confidence to service they.

Limitations Study

Study This done with compile step by step such that appearance in order to obtain results best. However study with perfect result still very difficult done. This is because of there is various limitations that can influence results research. Among limitations faced researcher during do research and compilation thesis This is as following:

- 1. Limitations material material from study this, like lack of source books that explain more details about existing theories in study This.
- 2. In doing do workmanship study This researcher Still Lots error in use applications used For process data with Good.



Even though thus researcher still try with all the researcher 's ability have so that the limitations faced No reduce meaning and also results from study this. Finally with all effort and work hard as well as help all party , writing work scientific in form thesis This completed.

CONCLUSION

Based on results research and analysis in Chapter IV regarding development study Islamic Financial Technology field, map development publication study the field of Islamic Financial Technology with prone to the year that is not determined there is from 2006-2024 so that can concluded that:

- 1. Development study Islamic financial technology field prone to time that is not restricted there is from 2006-2024 with the highest Google Scholar database namely occurred in 2020, namely by 27% with amount publication of 42 articles journal study.
- 2. Development map publication study Islamic Financial Technology field based on keywords generated 41 clusters from 405 keywords. The most frequently used keywords used in article study The field of Islamic Financial Technology is fintech.
- 3. Development map publication study Islamic Financial Technology field based on writer produced 7 clusters from 30 authors, with the most writers donate publication article journal in the field of Islamic Financial Technology, namely Rabbani.
- 4. Implementation of TAM in Islamic Fintech Still A little his research that is there is as many as 6 articles. With implementing TAM as theory research is very effective in prediction reception Islamic FinTech. So TAM does not only help take a picture user behavior in using Islamic Fintech , but will also help in maintain existing customers There is.

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