Journal Development Manecos

ISSN: 2988 - 5957
Vol. 1 No. 2, 2023
Page: 87-96

Evaluating Financial Technology's Global Impact on Banking Efficiency and Customer Satisfaction Across Diverse Regions

Nabila Putri Amiruddin[1], Dhea Aulia Putri[1], Sri Fitriani Hasanuddin[1]

[1]Institut Bisnis dan Keuangan Nitro

*Corresponding Author: Nabila Putri Amiruddin

Email: nabilaputriamiruddin@gmail.com

Article Info

Article History:

Received May 22, 2023
Revised June 20, 2023
Accepted: July 01, 2023

Keywords:

Financial Technology, Banking Efficiency, Digital Payments, Blockchain, Customer Satisfaction.

Abstract

This research aims to first assess FinTech's effect on the worldwide banking industry, specifically in terms of adoption, efficiency, and customer satisfaction, of key applications. In this context, a quantitative, cross-sectional survey was completed with 478 respondents, comprising banking professional and FinTech users from North America, Europe, Asia, Africa, and Latin America. The study measured the impact of digital payments, online lending, blockchain solutions and robot advisors on customer conversion rates and quantum fund. The study shows that FinTech applications have a positive impact on banking productivity and customer satisfaction levels, especially in the developed countries because of sound legal environment and technologies. Thus, for Africa and Latin America, which have a relatively low level of FinTech development, the following problems are relevant: accessibility and security. These challenges can be effectively captured by t-tests, ANOVA, and multiple regression, the study suggests the requirement for a regional approach to improving the function of FinTech in global banking. Consequently, this study adds more comprehensive and comparative view to the existing literature on the impact of FinTech on the global banking systems and underscores the need for regulatory changes in promoting sustainable FinTech growth. In conclusion, this research makes important contribution to the literature regarding the role of FinTech for improving the inclusiveness and effectiveness of the global financial ecosystem.

Introduction

The monetary sphere has evolved significantly during the final few decades and mostly as a result of emergence of Financial Technologies or FinTech. New to the financial lexicon, FinTech or a fusion of 'economic technology,' encompasses an incredibly broad range of technologies and solutions that seek to enhance and streamline the shipping and usage of monetary offerings. This evolution has now not most effective consult with the new shape of the normal banking sector, however has also opened a brand-new world of possibilities and complications. It gives a full signification of the impact, progress, and features of the worldwide attitude on FinTech's function in constructing innovative banking structures (Cumming, et al., 2023).

In the past, the conventional banking techniques cantered with actual department, manual processes, and limited entry (Wewege et al., 2020). These systems, though sound, started to become slow in their ability to adapt to the underlying technology and client demands for convenience and speed (Sudarmo, et al., 2021). Challenges associated with conventional banking methods have emerged as even more apparent with the advent of internet and cellular technologies that created opportunities for the development of internet financial services (Murinde et al., 2022).

FinTech up to date itself as a disruptive force, with using expertise to allow new corporate services and new monetary merchandise that meet the wishes and necessities of an altering citizenry and economy (Jameaba, 2020). FinTech covers digital payments, online loaning, blockchain creation, robot-advisory, and other (Jarvis & Han, 2021). They have influenced

DOI: https://doi.org/10.71435/604093

particularly facets of the banking undertaking and has resulted in enhanced performance, decreased cost and best customers experience (Matthews, et al., 2023).

It is inside the field of digital payments where one of the most beautiful works of FinTech platform stems out. The availability of mobile phones, and internet connections have made mobile payments and e-wallets popular (Oughton et al., 2021). Some examples of such technologies include PayPal, Alipay, and Venmo that has brought about performance change in transactions by offering customers secure, fast, and convenient mechanisms of payment (Acker & Murthy, 2020). This has brought about decreased demand for coins and bodily branches of the monetary institutions hence extending availability of economic services (Prates, 2021).

Every other new big development is the online lending platforms. Conventional banking loans are usually time-consuming and come with so many conditions that stop many people and small-scale businesses from being approved for loans (Awotunde et al., 2021). Many FinTech companies together with Lending Club and Prosper employ knowledge analysis and gadget gaining knowledge of algorithms for higher credit score evaluation and faster credit score approval (Omeragić, 2023). They have extended individuals get right of entry to to credit products, hence facilitating monetary inclusion and monetary improvement.

Blockchain generation and cryptocurrencies have also left an influential impact at the financial quarter. Blockchain offers a distributed and sound approach toward recordkeeping, eradicating the middlemen and increasing verity. Other digital currencies such as Bitcoin and Ethereum have brought new perspectives in digital currencies challenging the traditional cash and finance (Agarwal, 2020). Banks and other financial institutions are turning to blockchain for a number of packages, including cross-border bills, smart contracts and fraud detection.

Robo-advisors are every other FinTech innovation that has shaken the wealth control business. These computerized systems give monetary advice and portfolio control for a fragment of the cost of outdated advisors (Grealish & Kolm, 2021). Betterment, Wealth front, and have placed investment services a readily available for a wider and larger target population that is younger and more tech-savvy.

The global advancement in the FinTech starts and differs in the various regions (Kowalewski & Pisany, 2023). Namely the United States of America has been on the forefront of FinTech development with the support of a strong startup ecosystem and large mission capital investments as pointed out by Frost in 2020. The region with strict regulations and connecting economic markets has also observed tremendous growth of FinTech. The Asia region especially China and India had quick FinTech emergence due to high uptake of mobile money and an enabling environment policy. Competition has also borne great capability in Africa and Latin America emerging markets, which are applying FinTech to solve monetary inclusion challenges.

However, the upward thrust of FinTech is not without some problems. Regulatory issues are a key issue since the innovation process often moves faster in comparison with the regulator's capacity to maintain the pace. Read, it is crucial to create evidently digital money environment guaranteeing customer defines, information secrecy, and cybersecurity. Also, the conventional banking institutions encounter issues of system adaptation to emerging technology since the approach could be costly and cumbersome. Nevertheless, many organizations have embraced a cooperate model; working with FinTech corporations to take advantage of; their technological savvy and enhance; service delivery portfolios.

DOI: https://doi.org/10.71435/604093

Method

This research work used the quantitative method to evaluate the position of FinTech in the current era banking system around the world. The work emphasized quantitative data collection to establish the extent of use, effectiveness and customer satisfaction towards key FinTech applications in banking. This study adored the cross-sectional survey design to establish data at one point in time in different regions. This design was considered deliberately to attain a general appreciation of the current effect and implementation of FinTech in banking globally. The first research question focused on determining the impacts of the FinTech applications like digital payments, online lending and credit, blockchain technology, and robo advisory to the performances of traditional banking systems. The target population comprised two main groups: actual or potential banking employees working for financial organizations and users of FinTech services in banking sectors. Slightly more than half of them participated through online surveys that were conducted through a stratified random sampling method that included North America, Europe, Asia, Africa and Latin America. To analyze the usage patterns in different geographical regions and obtain many-sided results, the study established stratification based on regional differences in banking systems.

The achievable target sample of 385 respondents was estimated with a Cochran's formula that sought to provide a level of confidence of 95% and a margin of error of 5%. Since there is always a possibility of non-response, the survey questionnaires were administered to 500 respondents and data obtained from 478 respondents, giving the survey an overall response rate of 95.6%. Data were administered through an online questionnaire e-mailed to participants, linked to commercial and professional listservs, and posted on our social media accounts. It was conducted over a three-week period to ensure that participants who could not respond immediately could do it later. In this study, participants were first read and signed an informed consent form that described the purpose of the study, anonymity and informed rights to withdraw.

The survey instrument was designed specifically for this study and consisted of 25 closed-ended questions, structured into four sections: These include, age, gender, occupation, geographic region, and their level of awareness with Fintech services. Products that established how often and what kinds of FinTech services are consumed such as digital payments, online lending, application of blockchain technology, and robo-advice services. Questions assessing how effective and useful FinTech is seen by respondents in the context of banking performance, availability and customers' satisfaction. All the questions developed for this study were in the Likert scale with responses ranging from 1 (Strongly Disagree) to 5 (Strongly Agree) and were applied to evaluate the satisfaction with the speed and convenience of the FinTech services as well as the overall experience with FinTech services. The issue related to regulatory and legal difficulties, the problem and concern related to data security, and more importantly, the participants' perspective of the sustainability's FinTech in banking's system.

The instrument was pilot tested on 50 respondents to ensure that the items were clear and reliable and to check on their internal consistency. A few changes were made based on the pilot as feedback to make descriptions more precise in an effort to assess content validity. To assess the reliability, Cronbach's Alpha coefficient was calculated, which turned out to be 0.82; it is evidently acceptable to consider the coherence among the survey items. To address the first concern of content validity, where scholars have suggested the participation of experts to improve the language and comprehensiveness of a given questionnaire, the current questionnaire was presented to a panel of career experts in FinTech and Banking. The sample items used in this study were all selected with a view of measuring what they were intended to

DOI: https://doi.org/10.71435/604093

measure, concepts such as satisfaction, service efficiency and perceived difficulties were tested for their construct validity by subjecting the measurement items to a factor analysis test.

All data were analyzed with the help of IBM SPSS Statistics software. The analysis involved both descriptive and inferential statistics: Descriptive statistics of mean, median, mode, standard deviation and frequency were determined to portray demographic characteristics, FinTech usage profile and satisfaction levels. To compare the mean satisfaction score with different regions T-tests were used while to compare efficiency rating of various FinTech applications One-way ANOVA was used. Therefore, multiple regression analysis results were used to determine the effects of FinTech's (independent variable) on customer satisfaction, banking efficiency, and accessibility (dependent variables).

Result and Discussion

Financial Technology (FinTech) has emerged as a transformative force in the global banking landscape, reshaping how financial services are accessed, delivered, and experienced by consumers. As the demand for speed, convenience, and accessibility in banking increases, FinTech applications such as digital payments, online lending, blockchain, and robo-advisory services have become integral to modern financial systems. These innovations have introduced significant efficiencies and enhanced customer experiences, challenged traditional banking models and prompted financial institutions to adapt. Despite the widespread adoption of FinTech, however, regional variations remain, influenced by regulatory frameworks, technological infrastructure, and market maturity. This study aims to address gaps in the literature by examining the impact of FinTech across diverse banking environments worldwide, providing a comparative analysis that highlights both the benefits and challenges of FinTech integration in banking.

Table 1. Demographic Characteristics of Respondents

Variable	Category	Frequency (N)	Percentage (%)
Age	18-25	96	20.1%
	26-35	191	39.9%
	36-45	119	24.9%
	46+	72	15.1%
Gender	Male	264	55.2%
	Female	214	44.8%
Occupation	Banking Professional	191	40.0%
	Customer	287	60.0%
Region	North America	143	29.9%
	Europe	120	25.1%
	Asia	144	30.1%
	Africa	48	10.0%
	Latin America	23	4.8%

This table provides an overview of the demographic distribution, showing age, gender, occupation, and regional representation of respondents. The largest age group is 26-35, and the respondents are evenly distributed across regions.

Table 2. Frequency of FinTech Service Usage

FinTech Service	Users (N)	Percentage of Total (%)
Digital Payments	407	85.1%
Online Lending	191	40.0%
Blockchain Technology	119	24.9%

DOI: https://doi.org/10.71435/604093

Robo-Advisory Services	144	30.1%

This table illustrates the adoption rate of various FinTech services, with digital payments being the most frequently used service, followed by online lending.

Table 3. Customer Satisfaction with FinTech Services (Mean Scores)

FinTech Service	Mean Satisfaction Score (1-5)	Standard Deviation
Digital Payments	4.5	0.6
Online Lending	3.8	0.8
Blockchain Technology	3.5	0.9
Robo-Advisory Services	4.2	0.7

Satisfaction levels vary across FinTech services, with digital payments scoring the highest, followed by robot-advisory services.

Table 4: Perceived Efficiency of FinTech Services

FinTech Service	Mean Efficiency Score (1-5)	Standard Deviation
Digital Payments	4.6	0.5
Online Lending	4.0	0.7
Blockchain Technology	4.1	0.6
Robo-Advisory Services	4.3	0.6

This table shows respondents' perceptions of each FinTech service's efficiency, with digital payments rated as the most efficient.

Table 5. Accessibility of FinTech Services by Region

Region	Mean Accessibility Score (1-5)	Standard Deviation
North America	4.4	0.6
Europe	4.2	0.7
Asia	4.5	0.5
Africa	3.8	0.8
Latin America	3.7	0.9

Accessibility scores indicate that Asia and North America have the highest perceived access to FinTech services, with lower scores in Africa and Latin America.

Table 6. T-Test Results for Regional Differences in Satisfaction with FinTech Services

Region Comparison	Mean Difference	t-Statistic	p-Value
North America vs Asia	0.2	2.41	<0.05
Europe vs Africa	0.4	3.15	<0.01

This table highlights statistically significant differences in satisfaction levels between specific regions, with significant differences noted between North America and Asia, and Europe and Africa.

Table 7. ANOVA Results for Differences in Efficiency Ratings Across FinTech Services

FinTech Service	Mean Efficiency Score	F-Statistic	p-Value
Digital Payments	4.6	5.12	<0.01
Online Lending	4.0		
Blockchain Technology	4.1		
Robo-Advisory Services	4.3		

DOI: https://doi.org/10.71435/604093

ANOVA analysis shows significant differences in perceived efficiency across FinTech services, with digital payments rated as significantly more efficient.

Table 8. Regression Analysis of FinTech Adoption on Key Banking Performance Metrics

Dependent Variable	Independent Variable	Coefficient (β)	p-Value
Customer Satisfaction	Digital Payments	0.45	<0.01
	Online Lending	0.30	<0.05
Banking Efficiency	Blockchain Technology	0.40	<0.01
	Robo-Advisory Services	0.35	<0.05
Accessibility	Digital Payments	0.50	<0.01

This regression analysis shows the significant impact of FinTech adoption on customer satisfaction, banking efficiency, and accessibility, with digital payments having the strongest influence.

Table 9. Challenges in FinTech Integration

Challenge	Frequency of Respondents Reporting (%)
Data Security	60%
Regulatory Compliance	55%
Integration with Traditional Banking	45%

This table outlines key challenges to FinTech integration, with data security being the most frequently mentioned.

Table 10. Instrument Reliability and Validity

Measure	Value
Cronbach's Alpha	0.82
Content Validity	Confirmed by expert review
Construct Validity	Factor analysis confirmed

This table shows the reliability and validity measures of the survey instrument, demonstrating high internal consistency and validated constructs.

The survey results also reveal that digital payments have the most usage rates of the FinTech service at 85.1%, followed by online lending at 40%, and robot-advisory service at 30.1%. This situation can be explained by the latest studies pointing to people's growing use of digital payment systems because of their time-saving features (Elkin et al., 2021). However, this research goes further than previous research by comparing the findings across regions and has found that North American and Asian participants have the highest accessibility and satisfaction levels regarding digital payment solutions than other regions like Africa and Latin America. These findings are contrary to prior research, which, more often than not, was developed from a single region perspective and offers fresh perspectives to understand the global drivers and requisite regional structures for FinTech (Tarín et al., 2022).

This research also seeks to fill another significant research gap concerning the position of FinTech services in the development of the third world countries. Research carried out in the past focuses mainly on the developed countries (Lema et al., 2021), however in this research due to the implementation of the stratified sampling across different regions the differences in the availability and level of satisfaction has been noticed especially in the countries of Africa and Latin America. This supports the recent studies directing to improve the infrastructure and

DOI: https://doi.org/10.71435/604093

supportive policies for the global inclusion of FinTech services (Ediagbonya & Tioluwani, 2023).

These findings suggest that customers are most satisfied with Digital payments (mean = 4.5) followed by online lending and blockchain technology. As examined in existence work by Ranjith et al. (2021), consumer preferences have shifted to digital payments systems since they enhance transaction speed and reliability. Building on these debates, this study contributes by showing that, whereas satisfaction with digital payments is high, the efficiency perception scores showed regional differences. Asia and North America have a greater importance for absolute accessibility than other regions, The findings indicate that supporting infrastructures for these technologies influence the satisfaction level of the users.

Also, the digital payment means efficiency score, which is 4.6, and robot-advisory services with a score of 4.3, agree with prior research that FinTech applications enhance banking efficiency. Though this study has some resemblance surveys are different but this study has found the contrast of regional efficiency perceptions especially in regulatory and infrastructural elements affecting satisfaction in less developed regions. This regional analysis fill literature gap, as prior works most of the time discussed efficiency gains independently or under constant environment without a discussion on how efficiency gains differ from one region to the other (Teixeira et al., 2021).

It is seen that there is a great disparity across regions; Asia and North America, amongst others, boast the highest percentage of FinTech websites' availability, supporting the evidence provided in the literature, which indicates that these two regions possess a superior digital environment for FinTech implementations (Khan et al., 2022). However, this study builds on this by emphasizing the importance of localized infrastructure in determining FinTech prospects. However, regions like Africa and Latin America experience accessibility constraints lead by regulations, security, and infrastructural constraints hence a low uptake of digital payments and robot- advisory services (Mazzuca, 2021). Through such identification, this study responds call for more regional approaches to the consideration of FinTech access.

According to the survey, data security challenges (42.86%) are the most overwhelming when considering the adoption of FinTech in Nigeria. These findings concur with other contemporary analysis by Shu & Liu (2021), who identified security as the chief area of concern to consumers. Still, this study brings novelty in analyzing security and regulation concerns with lower rates of adoption in some areas including Africa and Latin America. These related issues shed light on the importance of encouraging the appropriate policies and implementing relevant legislation to suit the emerging economies, an area that was considered important in the recent calls for the policy reforms to enhance the FinTech accessibility in the worldwide (Du et al., 2023).

Earlier research has provided a detailed discussion on how FinTech has positively impacted banking efficiency and customers' satisfaction but few comparative studies on FinTech across different regions, developed and emerging targeting. This research therefore addresses this lack by presenting a study centered in a specific region on the subject of FinTech adoption and satisfaction with services recommended by the market to depict how infrastructure and support mechanisms from governments enhance the ability of the consumers to grasp the services and determine the effectiveness of the services being provided by the market. Also, the present study compares various FinTech applications such as digital payments and robot-advisory services and provide a rich view of each application and its effect on satisfaction and efficiency measures thereby moving beyond the discourse that mobilizes FinTech in general/massive terms (Polinesi, 2020).

DOI: https://doi.org/10.71435/604093

The use of a stratified sample and an attractive response rate increases the external validity of the study results in different banking contexts. These methodological choices mitigate the biases of single-region research designs, provide a comprehensive perspective on FinTech's global penetration and re-emphasize the need for regulatory intervention, particularly in developing geographies. Future research may expand on these results in that further empirical investigation could be conducted using longitudinal data to establish or compare the direction and dynamics of the relationship between regulatory changes and technological developments and FinTech consummation over time (El Said, 2021).

Conclusion

This research shows that the physical applications of FinTech more particularly; the digital payment, online lending operations, block chain technology, and robo-advisory services notably affect efficiency of banks, level of customers' satisfaction and access to services across various geographical areas. In their cross-sectional survey, the authors find significant gaps at the regional level, with North America and Asia enjoying superior infrastructures and regulatory environments as well as robust satisfaction with FinTech services, while regions such as Africa and Latin America face issues of accessibility, security and supportive regulations. The conclusion highlights that regional policies and infrastructure development seem to be the most crucial factors for achieving a just distribution of FinTech services for people worldwide. Therefore, the identified critical gaps may be addresses by FinTech that contributes to the improvement of financial inclusion as overall bank innovation across various global contexts.

References

Acker, A., & Murthy, D. (2020). What is Venmo? A descriptive analysis of social features in the mobile payment platform. *Telematics and Informatics*, *52*, 101429. https://doi.org/10.1016/j.tele.2020.101429

Agarwal, N. (2020). Central bank digital currency and alternative currencies: parallel paradigms. *International Journal of Blockchains and Cryptocurrencies*, *1*(4), 374-388. https://doi.org/10.1504/IJBC.2020.112510

Awotunde, J. B., Adeniyi, E. A., Ogundokun, R. O., & Ayo, F. E. (2021). Application of big data with fintech in financial services. In *Fintech with artificial intelligence, big data, and blockchain* (pp. 107-132). Singapore: Springer Singapore. https://doi.org/10.1007/978-981-33-6137-9_3

Cumming, D., Johan, S., & Reardon, R. (2023). Global fintech trends and their impact on international business: a review. *Multinational Business Review*, *31*(3), 413-436. https://doi.org/10.1108/MBR-05-2023-0077

Du, J., Shen, Z., Song, M., & Vardanyan, M. (2023). The role of green financing in facilitating renewable energy transition in China: Perspectives from energy governance, environmental regulation, and market reforms. *Energy Economics*, *120*, 106595. https://doi.org/10.1016/j.eneco.2023.106595

Ediagbonya, V., & Tioluwani, C. (2023). The role of fintech in driving financial inclusion in developing and emerging markets: issues, challenges and prospects. *Technological Sustainability*, *2*(1), 100-119. https://doi.org/10.1108/TECHS-10-2021-0017

El Said, G. R. (2021). How Did the COVID-19 Pandemic Affect Higher Education Learning Experience? An Empirical Investigation of Learners' Academic Performance at a University in a Developing Country. *Advances in Human-Computer Interaction*, *2021*(1), 6649524. https://doi.org/10.1155/2021/6649524

DOI: https://doi.org/10.71435/604093

Elkin, L. A., Kay, M., Higgins, J. J., & Wobbrock, J. O. (2021, October). An aligned rank transform procedure for multifactor contrast tests. In *The 34th annual ACM symposium on user interface software and technology* (pp. 754-768). https://doi.org/10.1145/3472749.3474784

Frost, J. (2020). *The economic forces driving fintech adoption across countries*. Basel: BIS.

Grealish, A., & Kolm, P. N. (2021). Robo-advisory: From investing principles and algorithms to future developments. *Machine learning in financial markets: A guide to contemporary practice. Cambridge: Cambridge University Press. https://doi.org/10.1017/9781009028943.005*

Jameaba, M. S. (2020). Digitization revolution, FinTech disruption, and financial stability: Using the case of Indonesian banking ecosystem to highlight wide-ranging digitization opportunities and major challenges. *FinTech Disruption, and Financial stability: Using the Case of Indonesian Banking Ecosystem to highlight wide-ranging digitization opportunities and major challenges (July 16 2, 2020)*. https://dx.doi.org/10.2139/ssrn.3529924

Jarvis, R., & Han, H. (2021). FinTech innovation: Review and future research directions. *International Journal of Banking, Finance and Insurance Technologies*, *1*(1), 79-102.

Khan, T., Abimbola, S., Kyobutungi, C., & Pai, M. (2022). How we classify countries and people—and why it matters. *BMJ Global Health*, *7*(6), e009704. https://doi.org/10.1136/bmjgh-2022-009704

Kowalewski, O., & Pisany, P. (2023). The rise of fintech: a cross-country perspective. *Technovation*, *122*, 102642. https://doi.org/10.1016/j.technovation.2022.102642

Lema, R., Kraemer-Mbula, E., & Rakas, M. (2021). Innovation in developing countries: examining two decades of research. *Innovation and Development*, *11*(2-3), 189-210. https://doi.org/10.1080/2157930X.2021.1989647

Matthews, K., Thompson, J., & Zhang, T. (2023). *Economics Of Banking, The*. World Scientific.

Mazzuca, S. (2021). *Latecomer State formation: Political geography and capacity failure in Latin America*. Yale University Press.

Murinde, V., Rizopoulos, E., & Zachariadis, M. (2022). The impact of the FinTech revolution on the future of banking: Opportunities and risks. *International review of financial analysis*, *81*, 102103. https://doi.org/10.1016/j.irfa.2022.102103

Omeragić, N. (2023). *FinTech tools, regulations and limitations in achieving sustainable development goals* (Doctoral dissertation, [N. Omeragić]). https://doi.org/10.2478/ejthr-2023-0008

Oughton, E. J., Lehr, W., Katsaros, K., Selinis, I., Bubley, D., & Kusuma, J. (2021). Revisiting wireless internet connectivity: 5G vs Wi-Fi 6. *Telecommunications Policy*, *45*(5), 102127. https://doi.org/10.1016/j.telpol.2021.102127

Polinesi, G. (2020). Network metrics for FinTech services: an application on robot-advisors and crypto assets.

Prates, M. M. (2021). Money in the twenty-first century: From rusty coins to digital currencies. *Ohio St. Bus. LJ*, *15*, 164.

DOI: https://doi.org/10.71435/604093

Ranjith, P. V., Kulkarni, S., & Varma, A. J. (2021). A literature study of consumer perception towards digital payment mode in India. *Psychology and Education*, *58*(1), 3304-3319.

Shu, S., & Liu, Y. (2021). Looking back to move forward: A bibliometric analysis of consumer privacy research. *Journal of Theoretical and Applied Electronic Commerce Research*, *16*(4), 727-747. https://doi.org/10.3390/jtaer16040042

Sudarmo, S., Arifin, A., Pattiasina, P. J., Wirawan, V., & Aslan, A. (2021). The Future of Instruction Media in Indonesian Education: Systematic Review. *Al-Ishlah: Jurnal Pendidikan*, *13*(2), 1302-1311. https://doi.org/10.35445/alishlah.v13i2.542

Tarín-Vicente, E. J., Alemany, A., Agud-Dios, M., Ubals, M., Suñer, C., Antón, A., ... & Mitjà, O. (2022). Clinical presentation and virological assessment of confirmed human monkeypox virus cases in Spain: a prospective observational cohort study. *The Lancet*, *400*(10353), 661-669. https://doi.org/10.1056/NEJMoa2207323

Teixeira, R., Nogal, M., & O'Connor, A. (2021). Adaptive approaches in metamodel-based reliability analysis: A review. *Structural Safety*, *89*, 102019. https://doi.org/10.1016/j.strusafe.2020.102019

Wewege, L., Lee, J., & Thomsett, M. C. (2020). Disruptions and digital banking trends. *Journal of Applied Finance and Banking*, *10*(6), 15-56.

DOI: https://doi.org/10.71435/604093