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### Exploring the Mediating Effect of Financial Knowledge on Technological Innovations and Financial Accessibility

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## Abstract

**Purpose:** This study investigates the role of technological advancements in fostering an inclusive financial system, with financial knowledge serving as a mediating variable. Through an extensive review of contemporary academic literature, the research analyzes core themes, drivers, and the influence of technological innovations on expanding access to financial services. The objective is to explore how technology facilitates financial inclusion by bridging accessibility gaps and how financial knowledge enhances the utilization of these technological advancements. **Design:** The study employs a quantitative research design, aiming to evaluate the impact of technological advancements on financial knowledge and inclusive financial participation. Data were collected through structured surveys across diverse demographic and geographic groups. The surveys assessed the frequency of financial technology usage, participants' levels of financial knowledge, and their experiences with inclusive finance. **Methodology:** A mixed-method approach was adopted, integrating quantitative surveys with qualitative semi-structured interviews involving key stakeholders. Data were analyzed using statistical techniques, including PLS-SEM modeling, to explore the relationships between technological advancements, financial knowledge, and financial inclusion. Findings identify digitalization, FinTech solutions, and user adoption as significant drivers, with financial knowledge acting as a critical mediator. **Findings:** The results reveal that technological innovations, such as mobile banking and digital payment platforms, significantly reduce the financial service accessibility gap, especially in underserved markets. Financial knowledge amplifies these benefits by enabling users to make informed decisions and effectively utilize financial technologies. This synergy contributes to the broader adoption of inclusive financial services and improved economic participation. **Implications:** These findings have important implications for policymakers, practitioners, and researchers. Policymakers can design targeted interventions and policies to address barriers to financial technology adoption. Practitioners may incorporate these insights into financial education initiatives and service delivery mechanisms to enhance their relevance and effectiveness. This research provides a scientific foundation for developing sustainable economic strategies that prioritize financial inclusion and poverty reduction. **Keywords:** Technological Advancements, Financial Knowledge, Inclusive Finance, Financial Inclusion, FinTech, Digital Payments

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## **Introduction**

### **Background of the Study**

The technology innovation covers great many fields, mobile banking, digital payments, block chain, and AI are some of these. A second and not less important aspect of tech innovation expanded the access to financial services among those whom the basic financial services were not available before due to geographic obstacles and infrastructure deficiencies Shah, S. M., & Ali, A. (2022). The other side of the issue is that the moment financial literacy enables individuals to understand financial products, manage their money perfectly and negotiate the formal world of finance. Technology-oriented innovation, which embraces financial literacy, is a method that the inclusive finance initiative uses to promote financial access and self-dependence of the disadvantaged group of the society.

Technology has dramatically changed the finance sector, and it has created a digital platform through which millions of people who were not traditionally part of the financial system, gain access and gain independence. Encompassing financial equality, which means that each and every individual can obtain inexpensive and right fit financial products, is the basic rung in reducing poverty and uplifting economies Vyas, V., & Jain, P. (2021). The financial literacy is vitally important for people to take the right-based and well-informed financial decisions and correctly use the financial services. This essay review analyzes the role of technology as an innovation, which is influenced by the literacy financial principles, that progresses towards an inclusive finance, where important aspects, determinants, and examples of success will be explored.

As numerous factors lie behind the role of technological innovation and economic literacy in increasing in an inclusive nature of finance. Infrastructure is a precondition for new technology dissemination, compliance and partnership with institutions are crucial factors for the adoption of fintech and providing financial education programs. Socioeconomic factors comprising of income level, education, cultural behaviors have a great potential to determine the level of access and utilization of financial services and hence, demonstrate that the concentrated focus and supportive efforts are the key here for inclusive policies Shah, S. M., & Ali, A. (2022).

### **Problem Statement**

This study addresses a critical research issue: the role of technological advancements and financial knowledge in accelerating inclusive finance efforts. While their importance in mitigating socio-economic disparities has been acknowledged in recent years, significant knowledge gaps remain regarding the factors that influence their effectiveness, particularly in addressing the needs of underserved

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populations. These uncertainties hinder the development of scalable, evidence-based strategies for enhancing financial accessibility. By investigating these gaps, this research aims to provide actionable insights to inform policies and practices, ultimately contributing to a more equitable financial ecosystem.

## **Research Objective**

The research objective of the study is to explicate the connection between technological innovations, financial literacy, and inclusive finance, concentrating on the way technology acts as a factor for developing financial services and increasing of financial inclusion, and whether other factors rise or fall (the mediating role of financial literacy in this process) Shah, S. M., & Ali, A. (2022). The study aim is to offer perspectives about ways in which technology drives financial inclusion that are generated by the mechanisms in question, and shows the two ways through which financial literacy matters for people and how they are using fintech solutions and accessing inclusive finance and the interconnection of them in the creation of inclusive economic development.

## **Research Question**

**RQ1:** How does technological innovation, such as mobile banking and digital payments, contribute to expanding access to financial services among underserved populations?

**RQ2:** What role does financial literacy play in mediating the relationship between technological innovation and inclusive finance outcomes?

## **Significance of the Study**

Technological innovation encompasses advancements such as mobile banking, digital payments, block chain technology, and artificial intelligence. These innovations enable financial services to be efficiently delivered to underserved and geographically isolated areas that are often excluded from mainstream financial systems due to limited infrastructure or remoteness (Shah & Ali, 2022). By leveraging these technologies, barriers to financial access are reduced, enhancing the reach of financial services.

At the same time, formal financial knowledge equips individuals with an understanding of financial products, effective money management, and the ability to navigate both formal and informal financial systems. Combined with technological innovations and widespread financial education, initiatives aimed at inclusive finance can extend financial services and economic empowerment to marginalized groups, overcoming limitations tied to financial status and social disparities.

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## Motivation of Study

This goal is motivated by the prevailing fact that financial inclusion is not available to all segments of the society due to lack of access to financial resources and capability to be literate in financial matters. The rate of technology advancing unremittably bringing changes to the financial conditions. Globalization needs help from others more affluent parts of the community. The study reviews the relationship among revolutionary innovation, financial literacy and inclusive finance achievements with the objective of determining the option that would result in optimal outcomes for inclusive finance initiatives.

## Literature Review

### Unified Theory of Financial Inclusion (UTFI)

The Unified Theory of Financial Inclusion focuses on identifying barriers and enablers of financial access, such as socio-economic factors, technological infrastructure, and regulatory policies. This theory highlights the role of financial technology (FinTech) in mitigating traditional challenges like geographical remoteness and lack of physical banking infrastructure. It provides a framework for analyzing how innovations like mobile banking, block chain, and digital payments enhance financial accessibility while driving social and economic benefits (Pandey et al., 2022). UTFI underscores the importance of targeted initiatives to address disparities in financial inclusion and the relevance of technology-driven solutions in bridging these gaps.

### Diffusion of Innovations (DOI) Theory

Developed by Everett Rogers, the Diffusion of Innovations (DOI) theory explains how technological advancements spread within a population, emphasizing factors like perceived usefulness, ease of adoption, and compatibility with user needs. Within the context of financial services, DOI theory is instrumental in understanding how mobile banking, digital wallets, and AI-driven platforms are adopted by diverse demographics. This theory also sheds light on the role of social influence, education, and communication channels in promoting financial literacy and the adoption of inclusive financial technologies (Vyas & Jain, 2021).

### Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) focuses on the perceived **ease of use** and **usefulness** of technology as determinants of user adoption. In this study, TAM informs the dynamics behind users' adoption of financial technologies like internet banking and electronic payment systems. These preferences are shaped by individuals' comfort with technology and their trust in its utility, ultimately

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influencing financial inclusion outcomes. By highlighting the psychological and behavioral factors affecting technology uptake, TAM provides insights into designing more user-centric financial services.

## **Technological Innovation and Financial Inclusion**

Technological advancements which has manifested itself through the innovation of financial technology (fintech) consumer finance can be termed as the present financial request Shah, S. M., & Ali, A. (2022). Innovations like mobile banking, digital payments, block chain technology, and artificial intelligence (AI) have provided a sort of targeted financial service especially to the populations that are living in the areas which have low access to such service like in the underserved and remote areas. For example, M-Pesa, an app that allows mobile phone users to send, receive, and save money in Kenya, is a great revolution in financial inclusion by allowing people to send, save, or receive money via their mobile phones (Jack & Suri, 2014). Such mobile money platforms were then adopted by a number of other countries and thus people from a far ambiguous of those countries can now utilize these platforms to meet their banking needs (Mas and Radcliffe, 2010).

On the other hand, digital payment platforms such as PayPal and Square have gained popularity in recent years and created an intermediary for transactions in businesses and among consumers, hence, rendering cash and bank channels outmoded (Bose & Pal, 2018). Block chain technology, the first paying version for cryptocurrency transactions such as Bitcoin, has a broader range of application in financial services where it contributes towards transparent and secure peer-to-peer transactions across the borders Vyas, V., & Jain, P. (2021). Besides, block chain technology helps in cross-border remittances and digital identity management. Not only that, but the utilization of AI and machine learning by the algorithms has rapidly gained popularity for credit scoring, risk analysis and financial advice that is customized to each person, making the financial services more cost-effective and inclusive to all (Beck et al. 2020).

## **Financial Literacy and Inclusive Finance**

Be it the birth of e-wallets or the introduction of AI-powered chatbots for personalized chats on banking services, these progressive technological developments have unlocked and enabled accessibility to financial services for masses Shah, S. M., & Ali, A. (2022). Nevertheless, financial literacy is fundamental to empower common men and women who can utilize these opportunities to improve their financial condition Pandey, A., Kiran, R., & Sharma, R. K. (2022). Financial literacy can be defined as the possession of knowledge

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about personal finances management, which includes budgeting, saving, borrowing, and investing, plus, it also means forming positive attitudes towards money. Studies revealed that there usually are stronger ties between financial literacy and financial inclusion outcomes, when the latter is responsible for the quality of financial decisions and wellbeing (Lusardi & Mitchell, 2014).

Numerous researches indicate that functions organized to enhance financial literacy and equip the individuals to handle and surmount complicated financial systems significantly boost financial literacy Vyas, V., & Jain, P. (2021). The Financial Literacy and Education Commission in the United States and the National Strategy for Financial Education in the United Kingdom are the two good examples where they have been effective in addressing financial illiteracy through educational platform like school curricula, community workshops, and online resources (Atkinson & Messy, 2012). A further innovation, the usage of gamification approach and peer support way of learning, has been employed to motivate people and educate them particularly underprivileged groups among the population (Cole & Shastry, 2009).

Given that the area of technological innovation and financial education functions together has the opportunity to increase the impact of inclusive finance and stimulate sustainable economic growth Shah, S. M., & Ali, A. (2022). Through the use of fintech solutions, financial services ranging from payment to lending may then be made accessible to all, irrespective of geographical location, by reducing the expense of transactions and tailoring the products to the requirements of the historically overlooked people Pandey, A., Kiran, R., & Sharma, R. K. (2022). Even as innovative financial tools have provided more access and convenience for consumers in recent years, their success largely depends on individuals' comprehension and application of such tools, an indication of the critical role of financial literacy.

## Research Model



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## **Research Hypothesis**

**H1:** How does technological advancement influence access to financial services?

**H2:** To what extent does financial knowledge mediate the relationship between technological advancement and access to financial services?

## **Research Design**

This quantitative method is the dimensional to examine the nexus between revolutionary technology, financial literacy in practice of inclusive finance. It is not merely the descriptive statistics that it produces, but it also provides an overall view of the happening which subsumes the resulting analytical data. Through this study, we will use a quantitative approach acknowledging the dynamics of the link between technology, economic literacy, and inclusive finance in a thorough manner. Such an approach plays the role of a vital link between hypotheses and conclusions while permitting the research to probe the empirical data more profoundly, as this framework is useful for analyzing numerical information and drawing conclusions that are statistically significant. Through the implementation of a quantitative approach, it is planned that the study based on the role of technological innovations and financial literacy in the achievement of inclusive outcomes will quantify their influence to add a dimension that will allow a more comprehensive understanding of the phenomenon under investigation.

## **Research Technique**

Quantitative Analysis Business surveys will be designed to assess the extent of individuals' use of technological advances in finance as well as their level of financial literacy and inclusion into the financial service system. Demographic targeting of the survey sample will be performed, ensuring a diverse mix consisting of different social strata and segments of the society. Data gathered through the survey will be analyzed with statistical methods, PLS-SEM modeling to investigate the impact of the drivers of Financial Inclusion, financial literacy, and financial initiatives on sustainable growth. The results highlight that usage, digitalization, and FinTech emerged as significant drivers of FI, that looks into the relations between variables, including those of technology and financial literacy.

## **Data Collection**

The investigators will administrate the inquiry to considered groups of people, which is to use random sampling to ensure that different demographic groups and geographic regions are representative. Data will be collected through the surveys on the users' patterns of



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fintech services usage, their level of financial literacy and preferences for the financial inclusiveness. Surveys will be put on the internet through different ways to get 350 respondents that are representative of different groups of the population. These channels may include internet platforms, areas for community gathering, financial entities, and more when creating public awareness. The collaboration between the research team, local organizations, and community leaders and stakeholders involved is primordial to secure the facilitation of surveys, and also, to increase the enrolment rates.

## Data Analysis

The research will be based on the data obtained through the surveys questionnaires which will involve use sophisticated statistical analysis tools to generate patterns and relevant data. In particular, the tools like regression analysis will be used to catch unsecured connections between the variables of our concern. With the help of regression analysis, we could study how technological advancements affect the financial inclusion outcomes through taking into account the financial literacy level as mediator factor among others. Through regression models, the objective of this study is to uncover the magnitude of the relationship between innovations and people's ability to financial service, and financial literacy as a mediator is to explore that. Additionally, this research may include some additional comparative statistical analyses for assessment of modifying variables which can affect the observed relations. The application of the quantitative analysis approach will be instrumental in determining the specific peculiarities of the association between the technology, financing and the comprehensibility of finances that in effect ensures more inclusive financial system and as a result helps to achieve an in depth understanding of these phenomena.

## Descriptive Statistics

Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean		Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Age	350	1	4	3.11	.044	.821	.675	-.995	.130	.875	.260
Gender	350	1	2	1.40	.026	.491	.241	.410	.130	-1.842	.260
Occupation	350	1	4	2.97	.046	.852	.727	-.744	.130	.167	.260

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Valid N 350

Sample of 350 differs in the mean age that is roughly 3.11 years and is about 0.82 standard deviation, that illustrates a slight deviation from average for ages. The mean of ages is right-skewed (skewness = -0.995) with a few people looking very young. Some people resemble teenagers or young adults. Concerning gender, it mainly appears that the respondents identify themselves as 1 (which could probably mean they are male) with an average of 1.40, whereas the occupation shows the good coverage with an average of 2.97. While both gender and occupation are represented equally, the distribution following a Skewness slight Unbalance as mentioned before. Generally, the statistical data represent the demographic features, in turn, showing the age differences, male/female relationships, and also occupational variations amongst the subjects.

## Correlation

### For Hypothesis 1

Table 2: Correlation Test

#### Correlations

		Technological innovations	Technological innovation has potential	Technological innovation has made the financial services more accessible
Technological innovations	Pearson Correlation	1	-.030	-.086
	Sig. (2-tailed)		.571	.110
	N	350	350	350
Technological innovation has the potential	Pearson Correlation	-.030	1	-.361**
	Sig. (2-tailed)	.571		.000
	N	350	350	350
Technological innovation has made	Pearson Correlation	-.086	-.361**	1
	Sig. (2-tailed)	.110	.000	

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financial services more accessible	N	350	350	350
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\*\* . Correlation is significant at the 0.01 level (2-tailed).

The valuation of technical methods in the context of their imputed upside potential and their impact on financial service accessibility using a dataset with 350 responses make the presented information distinctive and interesting. At the beginning of it, there seems to be an insignificant or little connection ( $p=0.571$ ) between technology development and its potential to impact lives, as witnessed by the low coefficient of correlation ( $-0.030$ ). The study indisputably argues that even coveted technology development may not demonstrate the anticipated positive results in improving the access to financial services. To understand the reasons that hinder the actualization of such opportunities, research has to be done to give insight into them.

## For Hypothesis 2

**Table 3: Correlation Test**

### Correlations

		Financial literacy programs should be integrated into	Financial literacy programs	Financial literacy plays a crucial role	Financial literacy technological platforms
Financial literacy programs	Pearson Correlation	1	-.430**	.359**	
	Sig. (2-tailed)		.000	.000	
	N	350	350	350	
Financial literacy plays a crucial role	Pearson Correlation	-.430**	1	-.255**	
	Sig. (2-tailed)	.000		.000	
	N	350	350	350	
Financial literacy programs should be	Pearson Correlation	.359**	-.255**	1	
	Sig. (2-tailed)	.000	.000		

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integrated into technologicalN 350 350 350  
platforms

\*\*. Correlation is significant at the 0.01 level (2-tailed).

An analysis of case studies set put to examine the correlations and significance of multiple components of the personal finance literacy training among the sample of 350 participants. The The result shows these associations are significant ( $p < 0.01$ ) that may lead to the conclusion that those who participate in the programmes are unlikely to find them as important.

## Regression Analysis

**Table 3: Model Summary**

### Model Summary<sup>c</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.086 <sup>a</sup>	.007	.004	.889	.007	2.572	1	348	.110	
2	.623 <sup>b</sup>	.388	.381	.701	.381	71.615	3	345	.000	1.117

a. Predictors: (Constant), Technological innovations

b. Predictors: (Constant), Technological innovations, Financial literacy plays a crucial role, Financial literacy programs should be integrated into technological platforms, Financial literacy programs

c. Dependent Variable: Technological innovation has made financial services more accessible

The inclusion of financial literacy variables significantly improves the model's predictive power, as indicated by the significant increase in R-squared value and the significant F-change statistic ( $p < 0.001$ ).

**Table 4: ANOVA**

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.031	1	2.031	2.572	.110 <sup>b</sup>
	Residual	274.723	348	.789		

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	Total	276.754	349			
2	Regression	107.458	4	26.864	54.746	.000 <sup>c</sup>
	Residual	169.297	345	.491		
	Total	276.754	349			

a. Dependent Variable: Technological innovation has made financial services more accessible

b. Predictors: (Constant), Technological innovations

c. Predictors: (Constant), Technological innovations, Financial literacy plays a crucial role, Financial literacy programs should be integrated into technological platforms, Financial literacy programs

We find significant findings in our ANOVA table evaluating the importance of regression models predicting the availability of financial services. The regression model in the first model, which just takes technical advancements into account as a predictor, explains a substantial portion of the variance in financial service accessibility, as shown by the F-statistic of 2.572 (p = 0.110).

**Table 5: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients		95.0% Confidence Interval for B	
					Lower	Upper
	B	Std. Error	Beta	t	Sig. Bound	Bound
1(Constant)	3.722	.096		38.894	.000	3.534
Technological innovations	-.074	.046	-.086	-1.604	.110	.164
2(Constant)	1.611	.322		4.998	.000	.977
Technological innovations	-.023	.036	-.026	-.621	.535	.094
Financial literacy programs	-.304	.044	-.341	-6.971	.000	.390
Financial literacy plays a crucial role	.462	.051	.422	8.987	.000	.361
Financial literacy programs should be integrated into.	.413	.051	.368	8.067	.000	.313

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technological platforms

a. Dependent Variable: Technological innovation has made financial services more accessible

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All financial literacy variable demonstrates significant associations. Specifically, participation in financial literacy programs ( $B = -0.304$ ,  $p < 0.001$ ), the perceived crucial role of financial literacy ( $B = 0.462$ ,  $p < 0.001$ ), and the belief in integration into technological platforms ( $B = 0.413$ ,  $p < 0.001$ ) positively influence accessibility. This underscores the importance of financial literacy initiatives in enhancing access to financial services.

## Discussion

This study explored the relationships between financial knowledge, technological advancements, and access to financial services. The findings revealed strong interconnections among these variables, underlining the importance of integrating both educational initiatives and technological progress to enhance financial inclusion. While technological advancements alone showed limited direct impact on improving access to financial services, incorporating financial knowledge into the framework substantially enhanced the predictive capability of the model. Specifically, participation in financial education programs and recognizing the value of financial knowledge played a critical role in improving access to financial services. These insights highlight the multifaceted nature of financial inclusion, emphasizing the need for holistic approaches that synergize technology and education.

## Future Research

Future investigations could assess the effectiveness of advanced technologies such as block chain and artificial intelligence in overcoming barriers to financial service access. Additionally, longitudinal studies might evaluate the sustained impact of financial education initiatives on individuals' financial decision-making and overall economic well-being. Comparative studies across diverse geographical and socioeconomic settings could also provide a deeper understanding of the factors that drive the success of inclusive finance efforts.

## Conclusion and Recommendations

In conclusion, technological advancements and financial knowledge emerge as critical enablers of inclusive finance, empowering individuals to access and use financial services effectively. To further advance financial inclusion, stakeholders—such as policymakers, financial institutions, and non-profits—should prioritize the following:

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- a) Investing in digital infrastructure to expand the reach of financial technologies to underserved areas.
- b) Designing and implementing targeted financial knowledge programs that cater to specific demographics.
- c) Fostering collaborations among multiple stakeholders, including the public and private sectors, to maximize the impact of financial inclusion initiatives.

## Reference

- Ahmed, Rizwan Raheem, Dalia Streimikiene, Zahid Ali Channar, Riaz Hussain Soomro, and Justas Streimikis. 2021. E-banking AlBenJasim, Salah, Tooska Dargahi, Haifa Takruri, and Rabab Al-Zaidi. 2023. FinTech Cybersecurity Challenges and Regulations: Aleemi, Abdur Rahman, Fatima Javaid, and Syed Sajid Hafeez. 2023. Finclusion: The nexus of Fintech and financial inclusion against Allen, F.; Demirgüç-Kunt, A.; Klapper, L.; Martinez Peria, M.S. The foundations of financial inclusion: Understanding ownership and use of formal accounts. *J. Finance. Intermed.* 2016, 27, 1–30.
- Alrawad, Mahmaod, Abdalwali Lutfi, Mohammed Amin Almaiah, and Ibrahim A. Elshaer. 2023. Examining the influence of trust and Al-Slehat, Zaher Abdel Fattah. 2023. Fintech and financial inclusion: The mediating role of digital marketing. *Business: Theory and Amnas, Muhammed Basid, Murugesan Selvam, Mariappan Raja, Sakthivel Santhoshkumar, and Satyanarayana Parayitam.* 2023.
- Arner, Douglas W., Ross P. Buckley, Dirk A. Zetzsche, and Robin Veidt. 2020. Sustainability, FinTech and Financial Inclusion. *European Bahrain Case Study. Journal of Computer Information Systems*, 1–17. [[CrossRef](#)]
- banks' market power. *Heliyon* 9: e22551. [[CrossRef](#)] [[PubMed](#)]
- Basu, P.; Srivastava, P. Exploring possibilities: Micro finance and rural credit access for the poor in India. *Econ. Political Wkly.* 2005, 4017, 1747–1756.
- Beck, T.; Demirgüç-Kunt, A.; Honohan, P. Access to financial services: Measurement, impact, and policies. *World Bank Res. Obs.* 2009, 24, 119–145.
- Beck, T.; Demirgüç-Kunt, A.; Levine, R. Finance, inequality, and the poor. *J. Econ. Growth* 2007, 12
- Bhanot, D.; Bapat, V.; Bera, S. Studying financial inclusion in north-east India. *Int. J. Bank Mark.* 2012, 30, 465–484.
- Business Organization Law Review* 21: 7–35. [[CrossRef](#)]
- Carbo, S.; Gardener, E.P.M.; Molyneux, P. Financial exclusion in Europe. *Public Money Manag.* 2007, 27, 21–27.

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[HTTPS://BULLETINOFMANAGEMENT.COM/INDEX.PHP/JOURNAL](https://bulletinofmanagement.com/index.php/journal)

- Claessens, S. Access to Financial Services: A Review of the Issues and Public Policy Objectives. Oxford University Press on behalf of the World Bank. 2006. Available online: <https://openknowledge.worldbank.org/handle/10986/16428> (accessed on 1 October 2020). Complexity 9: 100070. [CrossRef]
- Customer Satisfaction and Loyalty: Evidence from Serial Mediation through Modified E-S-QUAL Model and Second-Order
- Demirgüç-Kunt, A.; Klapper, L. Measuring financial inclusion: Explaining variation in use of financial services across and within countries. Brook. Pap. Econ. Act. 2013, 2013, 279–340.
- Demirgüç-Kunt, A.; Klapper, L.; Singer, D.; Van Oudheusden, P. The Global Findex Database 2014: Measuring financial inclusion around the world. World Bank Policy Research Working Paper 7255, 2015.
- Financial Management 16: 505. [CrossRef]
- GPFI. Global Standard-Setting Bodies and Financial Inclusion for the Poor: Towards Proportionate Standards and Guidance, White Paper. October 2011. Available online: <https://www.gpfi.org/sites/gpfi/files/documents/White-Paper-Global-Standard-Setting-Bodies-Oct-2011.pdf> (accessed on 21 April 2020).
- Gwalani, H.; Parkhi, S. Financial inclusion—Building a success model in the Indian context. Procedia Soc. Behav. Sci. 2014, 133, 372–378.
- Huang, J.; Nam, Y.; Sherraden, M.S. Financial knowledge and child development account policy: A test of financial capability. J. Consum. Aff. 2013, 47, 1–26.
- Sustainability 2022, 14, 11061
- Huston, S.J. Measuring financial literacy. J. Consum. Aff. 2010, 44, 296–316.
- Kurukshetra University; Chaudhry, A. Financial inclusion in India: A state level study. Int. J. Econ. Manag. Stud. 2016,
- Liu, F.; Walheer, B. Financial inclusion, financial technology, and economic development: A composite index approach. Empir. Econ. 2022, 2, 63.
- Lusardi, A.; Michaud, P.-C.; Mitchell, O.S. Optimal financial knowledge and wealth inequality. J. Politi. Econ. 2017, 125, 431–477.
- Maria, P. Does Financial Inclusion via Microfinance Reduce Poverty? Learning without Borders. 2016. Available online: <http://www.learning-without-borders.com/does-financial-inclusion-via-microfinance-reduce-poverty> (accessed on 10 January 2020).
- perceived risk on customers intention to use NFC mobile payment system. Journal of Open Innovation: Technology, Market, and PLS-SEM. Engineering Economics 32: 407–21. [CrossRef]



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Practice 24: 183–93. [[CrossRef](#)]

Rillo Alladin, D. Overview of financial inclusion in Asia. In Asian Development Bank Institute and Asia-Pacific Finance and Development Centre Financial Inclusion in Asia: Country Surveys; ADBI: Tokyo, Japan, 2014.

Sarma, M. Index of financial inclusion. Ind. Counc. Res. Int. Econ. Relat. 2008, 215, 1–32.

Sharma, D. Nexus between financial inclusion and economic growth: Evidence from the emerging Indian economy. J. Financ. Econ. Policy 2016, 8, 13–36.

Understanding the Determinants of FinTech Adoption: Integrating UTAUT2 with Trust Theoretic Model. Journal of Risk and