

Assessing the Impact of Fintech Adoption on Financial Inclusion and Financial Well-Being among Millennials in Oman

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ABSTRACT

Fintech is ushering in a revolution in financial markets, providing digital solutions to make them smooth, fast, and convenient. It is also closely associated with access to banking, payments, and loans in enhancing financial inclusion. It also boosts behavioural changes toward financial planning that enhance individual financial well-being. The study focuses on the effect of different FinTech adoption factors on the financial well-being of Omani millennials. FinTech Adoption Factors refers to access to technology, financial literacy, convenience, and trust, whereas Financial Well-being is an indicator of the financial health of an individual. Data from 400 Omani millennial FinTech users will be analyzed through Structural Equation Modeling (SEM) to comprehend how these adoption factors aid financial inclusion and hence financial wellbeing among the sampled population. Adoption factors such as access to technology, financial knowledge, and convenience have a direct positive impact on financial well-being; trust and security will have a much weaker effect. Indeed, a better financial mix would also reflect better financial well-being, showing the necessity to focus on critical adoption factors as one moves towards improved outcomes. This study shows how FinTech adoption affects the financial well-being of millennials in Oman, providing some noteworthy empirical evidence to support some realistic suggestions for businesspeople and policymakers. Future studies can look at further variables or geographical areas to build a more comprehensive knowledge about these relationships.

Keywords: Fintech Adoption, Financial Inclusion, Financial Well-being, Millennials, Financial Literacy

1. INTRODUCTION

The emergence of fintech is now termed a revolution in the financial services industry, as people are likely to find such innovative solutions faster and accessible than others (Thakor, 2020). It has changed conventional banking and payment systems, allowing people to manage finances via mobile apps and digital platforms (Gomber, Koch and Siering, 2017). Increasing financial inclusion is usually associated with fintech adoption as it allows people in remote areas without physical banks access to banking, payment, and lending services (World Bank, 2020). This shift to digital has played a big role in extending access to finance and participation from various segments of the population (Demirgüç-Kunt, et al., 2015).

Financial well-being is another key benefit associated with fintech adoption because it enables individuals to improve their financial decision making in ways, they manage the expenses and build savings (Consumer Financial Protection Bureau, 2015). However, factors such as technological access, financial literacy, convenience, and trust in digital services tend to influence the adoption of fintech (Venkatesh, Thong and Xu, 2012). This would apply, in particular, for the millennial generation who are high on-tech friendly and are regular users of digital services, understanding how the fintech adoption influences financial inclusion and well-being within that generation (Arner, Barberis and Buckley, 2016). In this background, this study aimed to identify and analyse the fintech adoption factors and their outcomes among millennials in Oman.

Financial technology has seen rampant growth, often a transformative development in the financial landscape that entails digital solutions enabling greater financial inclusion and better financial management (Thakor, 2020). Nevertheless, while fintech services are becoming more widely accepted, not all those who have access to the technologies are experiencing equal financial affect (Demirgüç-Kunt et al., 2015). The ill-defined angle falls here first because of pending sectoral growth, and second because millennials' financial behavior and well-being relating to the use of fintech remains unclear in Oman (Al-Saedi and Al-Emran, 2021). The degree to which fintech adoption is fostering financial inclusion and improved financial well-being (World Bank, 2020) in this segment is yet to be investigated, which is creating a curtain that shrouds the application of an understanding that will standardize its efficiency.

Besides, accessibility to technology, financial literacy, convenience, and trust established toward digital platforms may work towards enhancing or habit in making use out of fintech (Venkatesh, Thong, and Xu, 2012). The combined roles of those perspectives are seldom studied in contributing toward financial experiences of Omanis over 30-35 years of age (Al-Saedi and Al-Emran, 2021). This lack of compelling evidence makes it difficult to assess if these Fintech intuitively make sense and assist this generation to attain their financial stability and decision-making (Barbara Koranteng, Kefei You, 2024). Responding to this topic adequately is significant in playing off policymakers and fintech providers, thereby lending direction toward their improvements of fin-advice in accordance with continuing financial needs of tech-keen millennials in Oman.

This study is relevant to Oman as fintech is changing how people access financial services. However, its impact on millennials' financial inclusion and well-being is not well understood. Understanding fintech adoption can help improve digital financial services for young Omanis. In its attempt, this study provided some insight into this relationship from the context of Oman, particularly in light of the quick adoption of fintech but the clear gap in research on it. The major objectives of this study are to identify the major fintech adoption factors among millennials in Oman. The study is carried out to examine the impact of fintech adoption factors on Financial Inclusion as well as on Financial Well-Being among Millennials in Oman. The study is also conducted to identify effect of Financial Inclusion on Financial Well-being and relationship of Fintech Adoption Factors with the Financial Well-being of Omani millennials.

2. EXISTING KNOWLEDGE

The way that financial technology adoption impacts financial inclusion and financial well-being in different areas has been studied widely by many research scholars. Fintech has made it easier for people to access digital financial services. In India, Asif et al. (2023) found that fintech companies have facilitated financial inclusion, especially for the middle class. According to Demirgüç-Kunt et al. (2018), digital financial solutions allow people from remote and disadvantaged areas to access financial services. Le et al. (2019) confirmed the finding that financial inclusion is better with rising literacy and economic growth; however, unwelcomes such as unemployment are challenges.

Yet another key indicator of fintech adoption is financial well-being, which refers to the overall state of the finances and economy of an individual. After observing a strong relationship between wellness and good financial habits-being large savings and sound spending- Comerton-Forde et al. (2020) indicated that they have better financial well-being. Although higher financial literacy may lead to better decision-making ability in finance and less financial difficulty, as Bucher-Koenen et al. (2024) showed in the case considered in their work in Germany, Moenjak et al. (2020) pointed out that with insufficient digital financial awareness, people will have obstacles in utilizing fintech services to the fullest score, which in turn may restrict their financial well-being.

Other important fintech adoption factors are trust and technological access. Bekele (2022) indicated that having access to mobile phones and internet serves a great deal in furtherance of financial inclusion in Kenya and Ethiopia. Trust and security are paramount, as Amnas et al. (2024) establish that the higher the trust the public has in the providers of fintech services and their sense of security in using their platforms, the more likely they are to adopt these services. These studies show that fintech adoption improves financial information and enhances financial well-being when the individuals have technology access, trust in the financial service views and understand its use.

In Oman, fintech adoption is in a developmental stage and the regulatory body CBO is taking huge initiatives to promote the use of fintech in each and every field. One of such initiative is National fintech strategy which was

announced I CBO's 2022 annual report (Central bank of Oman, 2022). Another study which investigated the adoption of mobile wallet payment services among rural Omani millennials concludes that the adoption is influenced by self-efficacy to a greater extent among all other factors such as attitude and intentions, perceived security and technology (Ghouse SM, 2025). Dr C Radha Priya, et.al (2024) in their study stated Fintech adoption in Oman which studied the bank Customer's prospective outlined that a significant majority reported a high awareness of fintech services in Oman with almost 48 percent of the respondents using Fintech weekly.

Sweetline Sujee (2024) in their book Adoption and proliferation of digital technology in the banking Sector of the middle east stated that the consumer's acceptance of digital banking in the middle east with the current infrastructural, religious and cultural challenges, only a fraction of the market is included. Factors such as social influence, price value and habit has a positive influence on the continued use of fintech applications. (Abed S. S, 2024). In a study in 2024 by Nasrina Issa Mauji the purchase behaviour of millennials comparatively to other age groups in Qatar and the results showed that the performance expectancy, effort expectancy and the price value greatly contributed to the adoption of financial technology among the millennials (Mauji N, 2023).

The research conducted on fintech adoption has primarily been concentrated in developed countries, while studies related to millennials in Oman, trust, security, and convenience factors have remained largely unexplored (Al-Saedi and Al-Emran, 2021). In addition, there is little evidence around how fintech adoption influences the financial behaviour and well-being of millennials, hence the need to research further on the same.

3. CONCEPTUAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

3.1 Fintech Adoption

The term "Fintech Adoption" indicates to the process through which such products or services are accepted and embraced within the domain of individuals, small businesses, large corporations, or institutions in terms of investing, payment processing, or action-based Forex trading. Technologies that provide necessary support include mobile banking, digital wallets, peer-to-peer lending, and blockchain-based solutions, which aim to improve financial services' operations, accessibility, and convenience (Thakor, 2020).

Fintech adoption means the acceptance and use of fintech services by users (Amnas et al., 2024). In this study, fintech adoption will be understood as the process by which individuals are increasingly using digital financial services to meet respective goals regarding payments, savings, loans, or investments, delivered via the web and mobile platforms (Srivastava, Mohta and Shunmugasundaram, 2024). Adoption of fintech is becoming increasingly acceptable and studied, as it offers convenient, speedy transaction processing compared to traditional banking (Iluba and Phiri, 2021). Millennials, the tech-savvy populace of today, favor the usage of fintech services (Krupa and Buszko, 2023). The study attempts to analyze what determines the usage of fintech by Omani millennials. Its objective is to identify how fintech adoption can enhance financial access and overall health for this segment.

3.2 Fintech Adoption Factors

Four important factors affect Fintech adoption among the Omani millennials: ease of access to technology, financial literacy, convenience, and trust and security. Easy access to technology gives additional millennials a doorway to connect with fintech services without any hassles. Good financial knowledge allows a better understanding of these platforms and how to use them. Convenience makes these services time-saving and as easy-to-use options. Trust and security matter as well- millennials are likely to adopt fintech when they feel their money and information are secure. When such situations cohere positively, it leads Omani millennials towards the adoption of fintech solutions and feeds the development of digital financial services.

3.2.1 Technological Accessibility

Technological accessibility is defined as the conception and construction of technology so that it can be used by all people, including persons who have physical limitations or disabilities. This includes both physical access to devices, software, information, and services used by and specifically designed for the differently abled: with visual barriers, auditory barriers, motor barriers, or cognitive barriers (World Wide Web Consortium, 2018).

Technological accessibility entails having the right tools, which includes smartphones, internet connection, and fintech apps for using digital financial services (Wanof, 2023). For millennials in Oman, variable internet access and easy technology is essential for the fintech to work. Therefore, the absence of these tools hampers acceptability of digital financial services (Abu Daqar, et al., 2020). Hence, this research seeks to assess how technology access relates with the use of fintech and whether better access helps improve people's engagement with financial services. Thus, for this reason, the sub-hypothesis includes the following:

H1: Technological Accessibility has positive influence on the Financial Inclusion of Omani millennials.

3.2.2 Financial Literacy

Financial literacy refers to an individual's capacity to comprehend and apply different financial competences, including personal finance management, budgeting, saving, investing, and understanding financial commodities and services, thereby enabling individuals to make real-world decisions (OECD, 2020).

This equals to having a good basic understanding of finance and also use these in an elaborate manner for running digital finance by competent uses of services (Fitriani, Fenti and Santi, Fitri, 2023). It also explains how well the millennials of Oman are poised with accurately using financial products while also inspecting the possibility of such knowledge enhancing their uptake of fintech. On the part of this increased perception of financial understanding improving towards better financial decision-making is specified with increased financial inclusion, and on that note, the study forms the following hypothesis:

H2: Financial Literacy has positive influence on the Financial Inclusion of Omani millennials.

3.2.3 Convenience

Convenience refers to the ease of use, access, or achievement that usually saves in time and effort. In the context of technology or services, it portrays the capability of a product or system to be more user-friendly and to meet the requirements of its users (Berry, Seiders, and Grewal, 2002).

Convenience refers to how easy, fast, and simple it is to use digital financial services. Fintech platforms let users accomplish financial tasks like payments and transfers quickly and from any location, thus saving time and effort (Shankar, Amit, and Rishi, Bikramjit, 2020). The convenience afforded by fintech is a key driver of its popularity among young Omanis, who consistently opt for it over traditional banking. This study assesses the extent to which convenience influences the adoption of fintech, rendering greater satisfaction with financial services. Accordingly, the following hypothesis is framed:

H3: Convenience has positive influence on the Financial Inclusion of Omani millennials.

3.2.4 Trust and Security

Trust and Security is the confidence or trust that customers have in any platform or system accepting personal information, protecting such information from potential threats and misuse, and facilitating secure transactions. Security refers to measures including encryption, authentication, or data protection, while trust refers to the belief that these measures are reliable and effective (McKnight, Choudhury and Kacmar, 2002).

Trust and security are critical determinants of the intentions to use the fintech services. It is necessary for users to feel that their financial information is secure from fraud and cyberattack (Johan Ariff Jafri et al., 2024). Trust affects the customer's willingness to adopt fintech services by millennials in Oman. This research will examine the importance of trust and security in the adoption of fintech and explore how fintech companies can help to establish trust through secure and safe transactions. The hypotheses therefore being:

H4: Trust & Security has positive influence on the Financial Inclusion of Omani millennials.

3.3 Financial Inclusion

This refers to the availability and accessibility of affordable financial services to each individual and business, especially the services for the underserved or excluded sections of society from the traditional financial system. These services might include access to banking, credit, insurance, and payment systems (World Bank, 2020).

Financial inclusion is all about granting access to affordable or convenient financial products and services for all persons (Dananjani Basnayake, et al., 2024). This study focuses on addressing how the adoption of fintech increases provision to the essential financial services like savings, credit, and payment within the youth of Oman. Through investigating fintech's ability to dismantle traditional barriers of access to finance and encouraging higher financial participation, this research intends to hypothesize the following:

H5: Fintech Adoption Factors have positive influence on the Financial Inclusion of Omani millennials.

3.4 Financial Well-Being

Financial well-being indicates the level of financial security and freedom of choice, person possesses both in the present and the future. Meeting today's financial commitments, confidence in managing one's financial future, and a continued opportunity of options meant for enjoying life would be some factors making up this concept (Consumer Financial Protection Bureau, 2015).

According to research, financial wellness relates to one's ability to manage financial resources, developing conditions of stability and lowering stress while supporting maintaining perception on standing the present situation and expected aspiration for living standards and freedom of financial choice (Brüggen, et al., 2017). This study explores the impact of fintech adoption on financial well-being by improving money management, supporting healthy habits of spending and saving, and reducing distress related to finances (Amnas et al., 2024). The assessment investigates whether solutions related to digital finance enable decision-making regarding finances and improve financial satisfaction of millennials. For this purpose, the current study seeks to propose the following hypotheses:

H6: Fintech Adoption Factors have positive relationship with the Financial Well-being of Omani millennials.

H7: Financial Inclusion has positive influence on the Financial Well-being of Omani millennials.

The Conceptual Model is presented in the following Figure 1.

Figure 1

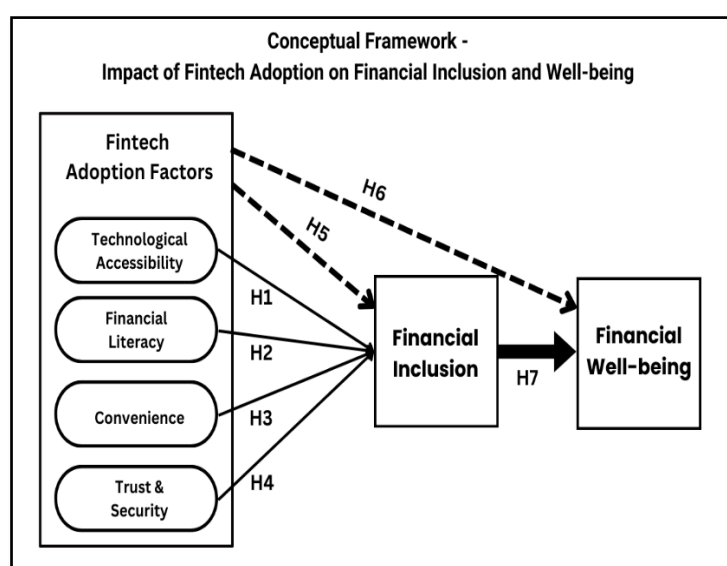


Figure 1. Conceptual Model. **Source:** The Author

4. RESEARCH METHODOLOGY

4.1 Research Design and Sampling

For this study, an exploratory research design was applied to investigate the factors influencing FinTech adoption and their impact on financial inclusion and well-being among millennial FinTech users. The quantitative research method was utilized because it enabled the collection and analysis of numeric data to test hypotheses and to explore relationships between variables (Aliaga and Gunderson, 2002; Muijs, 2004).

Since there are many millennial FinTech users, Cochran's (1963) formula was used to determine the sample size. The calculation was based on a 95% confidence level, an estimated population proportion of 0.5, and a 5% margin of error, resulting in at least 384 respondents. To constitute a representative sample, 450 questionnaires were sent out and 400 valid responses received, which were finally retained, meeting the minimum criteria for statistical analysis.

4.2 Questionnaire Design and Development

The conceptually developed framework to guide the present study is presented in Figure 1. It presented three major constructs: FinTech Adoption Factors (20 variables), Financial Inclusion (5 variables), and Financial Well-being (5 variables). FinTech Adoption Factors were further segmented into four sub-variables (five variables each), namely: Technological Accessibility, Financial Literacy, Convenience, and Trust & Security. These variables were borrowed from existing literature (Amnas et al., 2024; Brüggem et al., 2017; Ravikumar et al., 2022; Johan Ariff Jafri et al., 2024; Shankar et al., 2020; Fitriani et al., 2023; Venkatesh et al., 2012) and adjusted to fit this study.

The questionnaire had its basis in this conceptual model and utilized a five-point Likert scale which ranged from "strongly disagree" to "strongly agree." This was divided into two sections: the demographic information and the opinion of the respondents on the variables making the research model. To ensure content validity, this questionnaire was reviewed by experts from the FinTech industry and academia.

4.3 Data Collection and Analytical Approach

Given the lack of comprehensive data on active FinTech users, in line with the recommendation of previous studies (Senyo & Osabutey, 2020; Alrawad et al., 2023; Kilani et al., 2023; Amnas et al., 2024), the convenience sampling was thus undertaken to realize the objective of this study. The structured questionnaire was aimed at millennial FinTech users, who include users of digital/mobile wallets, those who use online banking, mobile banking, payment apps, and contactless payment options.

The respondents were assured that the data would be kept completely private and that they were taking part in this research only after delivering an informed consent. Following data collection, 400 were identified as valid responses and suitable for statistical analysis. The statistical tools below, namely, descriptive statistics as well as inferential techniques, including structural equation modeling (SEM), were used to test the hypotheses and obtain insights from the data. The groundwork and recommendation were solely synthesized from this primary data. Structural Equation Modelling is a comprehensive technique which is used by the researches to analyse the complex relationships that are observed among the latent variables. It helps the researchers to test the theoretical models that involves multiple dependent and independent variables together. In this study, SEM was applied due to its ability to capture the direct and indirect effects between constructs such as financial adoption, financial inclusion and financial well-being. Structural equation modelling offers a robust framework to validate the hypothesized relationships and ensure the reliability and validity of the data.

5. DATA ANALYSIS AND DISCUSSION

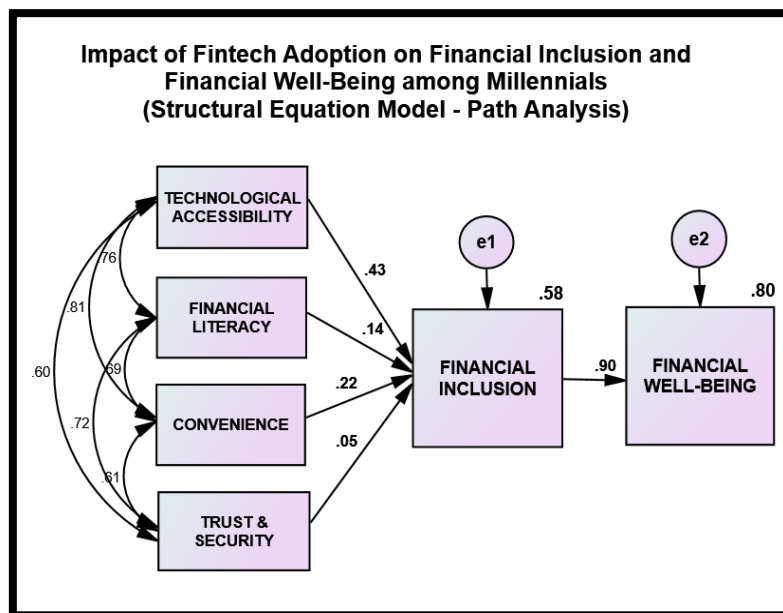
5.1 DEMOGRAPHIC PROFILE AND USAGE PATTERN OF FINTECH SERVICES

The study shows that 59.30% of millennial fintech users in Oman are male. About 58.80% have completed graduation, and nearly 56% are working in salaried jobs. Regarding how long they have been using fintech services, 43% have used them for 4 to 6 years, and around 55% use them 4 to 6 times a week. The main reason for using fintech services is making payments, as reported by 54% of the users.

5.2 ASSESSMENT OF THE STRUCTURAL MODELING (SEM)

Structural Equation Modeling (SEM) is a powerful statistical method used to study relationships between multiple variables at the same time. A common method within SEM is Path Analysis, which looks specifically at cause-and-effect relationships between variables to better understand their influence on each other.

Diagram 1 STRUCTURAL EQUATION MODEL



This study analyzes data from 400 Omani millennial fintech users using SEM through AMOS (Version 23). A 5-point Likert scale survey was used to assess how fintech adoption factors influence financial inclusion and well-being. The model assumes that adoption factors directly impact financial inclusion and indirectly affect financial well-being. It includes four key adoption factors, their interconnections, and error terms to enhance accuracy.

5.2.1 GOODNESS OF FIT INDICES

Absolute fit indices are essential for evaluating how well a proposed structural equation model matches the observed data. These indices help researchers determine whether their model effectively captures the relationships between variables.

Table 1 GOODNESS OF FIT FOR SEM

MEASURE	SUGESTED GUIDELINES**	RESULT VALUES
Chi-square/df (cmin/df)	< 3 Good; < 5 sometimes permissible	1.624
CFI	> .95 Great; > .90 Traditional (Good); > .80 permissible	0.999
GFI	> .95	0.995
AGFI	> .80	0.972
RMR	< .08 or < .09	0.079
RMSEA	< .05 Good; .05 - .10 Moderate; > .10 Bad	0.040
NFI, NNFI (TLI)	> .95 Good	0.997 & 0.996

(** Hu, L.-T., & Bentler, P. M. (1999), Hair, J. F., Anderson, R. E.,

Tatham, (2006) and Hoyle, R. H. (Ed.). (2012)).

In this study, the Chi-Square statistic for goodness of fit (CMIN) is 1.624 with 4 degrees of freedom, significant at $p < 0.05$ ($p = 0.047$). This supports the acceptance of the alternative hypothesis, indicating that the model fits the data well. The Comparative Fit Index (CFI) is 0.999, exceeding the benchmark of 0.90, while the Goodness of Fit Index

(GFI) and Adjusted Goodness of Fit Index (AGFI) are 0.995 and 0.972, respectively, both above the acceptable threshold of 0.90.

The Root Mean Square Residual (RMR) is 0.079, within the acceptable limit of 0.09, confirming a good fit. The Root Mean Square Error of Approximation (RMSEA) stands at 0.040, indicating a favorable fit. Additionally, the Normed Fit Index (NFI) and Non-Normed Fit Index (NNFI) values are 0.997 and 0.996, respectively, reinforcing the conclusion of a well-fitting model. All absolute fit indices meet acceptable standards, suggesting that the model is suitable for further analysis and interpretation.

5.2.2 PARAMETER ESTIMATES

In addition to evaluating the overall model fit, examining the significance of estimated parameters is essential, as these act like regression coefficients. In this study, regression weights for 4 out of 5 variables were statistically significant. The critical ratio (C.R.) values, which function as standard normal deviates, need to exceed 2.00 to be considered significant at the 0.05 level. In this analysis, 4 variables met this criterion, confirming their importance in explaining the relationships between Fintech adoption factors, financial inclusion, and financial well-being among Omani millennial Fintech users.

Table 2 PARAMETER ESTIMATES - REGRESSION WEIGHTS

			Standardised Estimate	Unstandardised Estimate	C.R.	P
Financial Inclusion	<---	Financial Literacy	.152	.063	2.414	.016
Financial Inclusion	<---	Technological Accessibility	.524	.078	6.753	***
Financial Inclusion	<---	Convenience	.248	.065	3.829	***
Financial Inclusion	<---	Trust & Security	.056	.057	.983	.326
Financial Well-being	<---	Financial Inclusion	.791	.020	40.323	***

Table 2 presents both standardized and unstandardized factor loadings. These loadings indicate the strength and direction of relationships among variables.

Technological Accessibility:

The standardized estimate for this factor is 0.524, indicating a strong positive influence on Financial Inclusion. The unstandardized estimate is 0.078, with a critical ratio (C.R.) of 6.753, which is statistically significant at $p < 0.001$. Therefore, H1 is supported. A relevant study conducted by Ozili (2018) highlights technological accessibility, especially in the form of mobile phones and internet connectivity plays a crucial role in enhancing services among underserved populations.

Financial Literacy:

The standardized estimate is 0.152, showing a moderate positive influence on Financial Inclusion. The unstandardized estimate is 0.063, with a C.R. of 2.414, which is significant at $p < 0.05$. This supports H2. This finding is well supported by previous researches. A study conducted by Grohmann (2018) found that the individuals with higher levels of financial literacy enhances the individual's understanding of financial products and services there by reducing the hesitation and increasing the confidence in using digital and traditional financial services.

Convenience:

The standardized estimate of 0.248 demonstrates a significant positive influence on Financial Inclusion. The unstandardized estimate is 0.065, with a C.R. of 3.829, significant at $p < 0.001$. Thus, H3 is validated. This finding aligns with the conclusions reached by Alalwan (2017) in their study factors influencing fintech adoption of mobile banking by Jordanian bank customers extending UTAUT2 model. The research found that Convenience is the major

driver in fintech adoption which in turn significantly contributes to the financial inclusion by making financial services more accessible to the users.

Trust and Security:

This factor has a standardized estimate of 0.056, indicating an insignificant influence on Financial Inclusion. The unstandardized estimate is 0.057, with a C.R. of 0.983 and a p-value of 0.326. Consequently, H4 is not supported. This finding aligns with the findings of the study conducted by Sharma, (2019) which examined the role of trust in adoption of mobile wallets and found that although trust is generally important, its influence is reduced when the users prioritize convenience, speed and ease of use specifically among the millennials.

Impact of Fintech Adoption Factors

The analysis supports the hypotheses that fintech adoption factors collectively have a significant positive impact on financial inclusion among Omani millennials. Technological accessibility, financial literacy, convenience, and trust and security are essential contributors, with varying degrees of influence. The combined effect of these 3 out of 4 factors explains a substantial portion of the variance in financial inclusion, emphasizing the importance of adopting user-friendly, secure, and accessible fintech services to drive broader financial engagement in this demographic. Thus, H5 is supported.

Impact of Financial Inclusion on Financial Well-being

Financial Inclusion significantly influences Financial Well-being, with a standardized estimate of 0.791 and an unstandardized estimate of 0.020. The C.R. is 40.323, significant at $p < 0.001$. Therefore, H7 is supported.

Inter-construct correlations were mostly positive and significant, indicating meaningful connections between variables. Although some factors had stronger effects than others, all contributed collectively to Financial Inclusion and Well-being. The model explained about 58% of the variance in Financial Inclusion and 80% in Financial Well-being, demonstrating its effectiveness in capturing the dynamics of fintech services among millennials in Oman.

5.3 CORRELATION ANALYSIS

H6: Fintech Adoption Factors have positive relationship with the Financial Well-being of Omani millennials.

A Pearson product-moment correlation analysis was performed to assess the relationship between fintech adoption factors and the financial well-being of Omani millennials. Since all p-values are below the 0.01 significance level ($p = 0.000$), the null hypotheses were rejected, confirming strong positive correlations among the variables.

Table 3 RELATIONSHIP BETWEEN FINTECH ADOPTION FACTORS AND FINANCIAL WELL-BEING OF OMANI MILLENNIALS

VARIABLE	N	‘r’ VALUE	P - VALUE	RELATI ONSHIP	REMARKS	
					SIGNIFICANT	RESULT
Technological Accessibility and Financial Well-being	400	0.690**	0.000	Positive	Significant	Rejected
Financial Literacy and Financial Well-being	400	0.621**	0.000	Positive	Significant	Rejected
Convenience and Financial Well-being	400	0.646**	0.000	Positive	Significant	Rejected
Trust & Security and Financial Well-being	400	0.521**	0.000	Positive	Significant	Rejected

Fintech Adoption Factors and Financial Well-being	400	0.703**	0.000	Positive	Significant	Rejected
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****.** Correlation is significant at the 0.01 level (2-tailed).

Specifically, the “Technological Accessibility” factor demonstrates the strongest correlation ($r = 0.821$), while the “Trust & Security” factor shows a weaker correlation ($r = 0.521$) with the financial well-being of Omani millennials. The study reveals a strong positive relationship between fintech adoption factors and financial well-being, with an overall correlation of 0.703. This indicates that fintech adoption factors are positively related to the financial well-being of Omani millennials, supporting H6.

The following Table 4 presents the results of the hypotheses test in summarised way:

Table 4
SUMMARY OF HYPOTHESES TESTING

Hypothesis	Variables	P Value	Decision
H1	Technological Accessibility h Financial Inclusion	0.000	Supported
H2	Financial Literacy h Financial Inclusion	0.016	Supported
H3	Convenience h Financial Inclusion	0.000	Supported
H4	Trust & Security h Financial Inclusion	0.326	Not Supported
H5	Fintech Adoption Factors h Financial Inclusion	0.000	Supported
H6	Fintech Adoption Factors Q Financial Well-being	0.000	Supported
H7	Financial Inclusion h Financial Well-being	0.000	Supported

Based on these findings, the hypothesis testing in this present study suggests that technological accessibility, financial literacy, and convenience have a positive influence on financial inclusion. All the variables were tested with a significant p-value of less than 0.05. Trust and security were found not significantly impacting it. Factors for fintech adoption jointly showed a significant positive impact in favour of financial inclusion and financial well-being. Furthermore, financial inclusion was found to have a substantial and significant positive influence on financial well-being that justified the importance of these factors to engage and assure the financial well-being of Omani millennials.

6. SUGGESTIONS AND RECOMMENDATIONS

The study of the seven hypotheses suggests that access, financial literacy, and convenience of the general public aid in enhancing the service of financial inclusion with regard to Omani millennials. Hence, access to fintech services must be improved, especially regarding technology and digital platforms. Moreover, financial literacy improvement and programs on the benefits and uses of fintech services would also help financial inclusion for millennials. Lastly, fintech companies should prioritize the ease of use of their services, with convenience being a key priority. The analysis revealed that the technological accessibility has the strongest positive influence on financial inclusion (standardized estimate = 0.524, $p < 0.001$), which supports hypothesis H1. In Oman, increasing smartphone penetration and government initiatives to improve digital infrastructure are contributing factors. Therefore, continued investment in digital infrastructure and internet accessibility—especially in rural and semi-urban must remain a priority for policymakers and the Central Bank of Oman to further drive inclusive growth.

The study also highlights the practical recommendations to the policy makers for Expanding the digital infrastructure to prioritize the rural connectivity and mobile internet accessibility by Digitalisation of Oman programs. Strengthening the financial education by creating financial literacy among the youth, preferable the university students. Optimize the user experience by focusing on creating smooth and fast service to enhance the convenience factor. Sustain the regulatory factors by creating strong cybersecurity measures to ensure long term user confidence.

Experts and researchers are still working to assess the appropriate determinant of the contribution or implication of financial inclusion. In this sense, however, the findings reveal that “Trust and Security” did not give a better output to evaluate and measure on financial inclusion. This means fintech companies will have to ensure that they build strong trust and are fully transparent when they make promises of secure systems to protect their clients’ data from any form of compromise. As fintech is inclusive, further financial inclusiveness means better financial health among the referred audience. Their thrust should, therefore, be to steer all-inclusive financial theories focusing on the policies intended to seek accessibility to elevate the general Financial Well-being of typical Omani millennials.

7. CONCLUSION

The study concludes that the connections between the factors of fintech adoption with considerable implications for financial inclusion and well-being for Omani Millennials. Results indicate that the accessibility of technology, financial literacy, and convenience foster financial inclusion, which, in turn, promotes well-being. However, trust was not a major influencing factor in financial inclusion, implying that these factors are worthy of further investigation. This research would be useful in understanding the influence of fintech adoption on financial behavior by other generations as well, besides the Omani Millennials. Other potential avenues that future researchers could take are to differentiate between demographic groups when looking at the influence of fintech adoption or conduct longitudinal studies to understand the long-term effects on financial inclusion and well-being.

The study has limitations. Since it is mainly a cross-sectional study, the data collected gives just a present state view and is incapable of date-tracking change. Plus, being a bit focused on Omani millennials, the findings cannot be extended to other regions easily. These recommendations might either be group focused on specifics or additionally longitudinal studies may be done in the future to identify other areas of impact on financial inclusion and well-being from an extended perspective. This study contributes to the ever-widening body of Fintech literature by empirically validating the role of various factors such as ease of use, technological access, convenience of use and financial literacy in promoting the financial inclusion in Oman.

The study presents various practical recommendations for practitioners and policymakers. Some practical recommendations include enabling an easier method of access of technology, improving financial literacy, and enhancing convenience in servicing millennials by fintech companies. Issues dealing with trust and security remain the most fundamental to gain customers' acceptance. In essence, the study re-emphasizes financial inclusion as a critical factor in enhancing financial despite being a compelling study as a strong base for all future agendas to support the financial empowerment of millennials in Oman.

REFERENCES

- [1] Abu Daqar, Mohannad & Arqawi, Samer & Karsh, Sharif. (2020). Fintech in the eyes of Millennials and Generation Z (the financial behavior and Fintech perception). *Banks and Bank Systems*. 15. 20-28. 10.21511/bbs.15(3).2020.03.
- [2] Abed, S. S., & Alkadi, R. S. (2024). Consumer continuous use of and satisfaction with Fintech payment applications in Saudi Arabia: towards an integrated model. *Journal of Financial Reporting and Accounting*.
- [3] Aliaga, M., & Gunderson, B. (2002). *Interactive Statistics*. Thousand Oaks, CA: Sage.
- [4] Ali, C. R. P. M. J., Alqamashoui, K. D. A. A. H., Nuzhat, M. S. M. F. M., Rawdha, S. A. A. K. M., & Al Balushi, A. S. (2024). FINTECH ADOPTION IN OMAN-BANK CUSTOMER'S PERSPECTIVE. *Journal of Southwest Jiaotong University*, 59(2), 662-676.
- [5] Alrawad, Mahmaod, Abdalwali Lutfi, Mohammed Amin Almaiah, and Ibrahim A. Elshaer. (2023). Examining the influence of trust and perceived risk on customers intention to use NFC mobile payment system. *Journal of Open Innovation: Technology, Market, and Complexity* 9: 100070.

- [6] Al-Saedi, K., & Al-Emran, M. (2021). Fintech Adoption in Oman: Challenges and Opportunities. *International Journal of Advanced Computer Science and Applications*, 12(5), 1-8. <https://doi.org/10.14569/IJACSA.2021.0120501>
- [7] Amnas MB, Selvam M, Parayitam S. (2024). FinTech and Financial Inclusion: Exploring the Mediating Role of Digital Financial Literacy and the Moderating Influence of Perceived Regulatory Support. *Journal of Risk and Financial Management*. 17(3):108. <https://doi.org/10.3390/jrfm17030108>
- [8] Arner, D. W., Barberis, J., & Buckley, R. P. (2016). The Evolution of Fintech: A New Post-Crisis Paradigm? University of Hong Kong Faculty of Law Research Paper No. 2016/017. <https://doi.org/10.2139/ssrn.2676553>
- [9] Asif, Mohammad, Mohd Naved Khan, Sadhana Tiwari, Showkat K. Wani, and Firoz Alam. (2023). The Impact of Fintech and Digital Financial Services on Financial Inclusion in India. *Journal of Risk and Financial Management* 16: 122. <https://doi.org/10.3390/jrfm16020122>
- [10] Barbara Koranteng, Kefei You (2024). Fintech and financial stability: Evidence from spatial analysis for 25 countries, *Journal of International Financial Markets, Institutions and Money*, Vol.93, 102002, ISSN 1042-4431, <https://doi.org/10.1016/j.intfin.2024.102002>
- [11] Bekele, W. D. (2022). Determinants of financial inclusion: A comparative study of Kenya and Ethiopia. *Journal of African Business*, 24(2), 301–319. <https://doi.org/10.1080/15228916.2022.2078938>
- [12] Berry, L. L., Seiders, K., & Grewal, D. (2002). Understanding Service Convenience. *Journal of Marketing*, 66(3), 1-17. <https://doi.org/10.1509/jmkg.66.3.1.18505>
- [13] Brüggén EC, Hogreve J, Holmlund M, Kabadayi S, Löfgren M (2017). Financial well-being: a conceptualization and research agenda. *J Bus Res* 79:228–237. <https://doi.org/10.1016/j.jbusres.2017.03.013>
- [14] Bucher-Koenen, T., Janssen, B., Knebel, C., & Tzamourani, P. (2024). Financial literacy, stock market participation, and financial wellbeing in Germany. *Journal of Financial Literacy and Wellbeing*.
- [15] Cochran, W. G. (1963). *Sampling Techniques* (2nd ed.). New York, NY: John Wiley and
- [16] Comerton-Forde, C., de New, J.P., Salamanca, N., Ribar, D.C., Nicastro, A., & Ross, J. (2020). Measuring Financial Wellbeing with Self-Reported and Bank-Record Data. *Economic Anthropology eJournal*.
- [17] Consumer Financial Protection Bureau (CFPB). (2015). Financial Well-Being: The Goal of Financial Education. Retrieved from <https://www.consumerfinance.gov/data-research/research-reports/financial-well-being/>
- [18] Dananjani Basnayake, Athula Naranpanawa, Saroja Selvanathan, Jayatilleke S. Bandara (2024). Financial inclusion through digitalization and economic growth in Asia-Pacific countries, *International Review of Financial Analysis*, Vol.96, Part A, 103596, ISSN 1057-5219, <https://doi.org/10.1016/j.irfa.2024.103596>.
- [19] Demirgüç-Kunt, A., Klapper, L., Singer, D., & Van Oudheusden, P. (2015). The Global Findex Database 2014: Measuring Financial Inclusion Around the World. *World Bank Policy Research Working Paper* 7255. <https://doi.org/10.1596/1813-9450-7255>
- [20] Fitriani, Fenti & Santi, Fitri. (2023). Does Financial Technology and Financial Literacy Enhance Financial Inclusion? (Evidence from Several Countries). *East Asian Journal of Multidisciplinary Research*. 2. 4977-4992. [10.55927/eajmr.v2i12.6905](https://doi.org/10.55927/eajmr.v2i12.6905).
- [21] Gomber, P., Koch, J. A., & Siering, M. (2017). Digital Finance and FinTech: Current Research and Future Research Directions. *Journal of Business Economics*, 87(5), 537-580. <https://doi.org/10.1007/s11573-017-0852-x>
- [22] Ghouse, S. M., Shekhar, R., & Chaudhary, M. (2025). Driving financial inclusion: exploring mobile wallet adoption among rural Omani millennials. *Journal of Islamic Marketing*, 16(4), 1229-1257.
- [23] Grohmann, A. (2018). Financial literacy and financial behavior: Evidence from the emerging Asian middle class. *Pacific-Basin Finance Journal*, 48, 129-143.
- [24] Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate data analysis* (6th ed.). Uppersaddle River, N.J.: Pearson Prentice Hall.
- [25] Hoyle, R. H. (Ed.). (2012). *Handbook of structural equation modeling*. The Guilford Press.
- [26] Hu L. & Bentler, P. (1999). Cutoff criteria for fit indexes in covariance structure analysis. Conventional criteria versus new alternatives, *structure equation modeling*, 1-55.
- [27] Iluba, E. and Phiri, J. (2021). The FinTech Evolution and Its Effect on Traditional Banking in Africa—A Case of Zambia. *Open Journal of Business and Management*, 9, 838-850. doi: 10.4236/ojbm.2021.92043.

- [28] Johan Ariff Jafri, Syajarul Imna Mohd Amin, Aisyah Abdul Rahman, Shifa Mohd Nor (2024). A systematic literature review of the role of trust and security on Fintech adoption in banking, *Heliyon*, Vol.10, Iss.1, e22980, ISSN 2405-8440, <https://doi.org/10.1016/j.heliyon.2023.e22980>.
- [29] Kilani, Abd Al-Haleem Zaid, Dana Kakeesh, Ghazi A. Al-Weshah, and Mutaz M. Al-Debei. (2023). Consumer post-adoption of e-wallet: An extended UTAUT2 perspective with trust. *Journal of Open Innovation: Technology, Market, and Complexity* 9: 100113.
- [30] Krupa D, Buszko M. (2023). Age-dependent differences in using FinTech products and services-Young customers versus other adults. *PLoS One*, 18(10):e0293470. doi: 10.1371/journal.pone.0293470. PMID: 37883388; PMCID: PMC10602263.
- [31] Le, T. T., Dang, N. D. L., Nguyen, T. D. T., Vu, T. S., & Tran, M. D. (2019). Determinants of financial inclusion: Comparative study of Asian countries. *Asian Economic and Financial Review*, 9(10), 1107–1123. <https://doi.org/10.18488/journal.aefr.2019.910.1107.1123>.
- [32] Lusardi, A. (2019). Financial literacy and the need for financial education: evidence and implications. *Swiss J Economics Statistics* 155, 1. <https://doi.org/10.1186/s41937-019-0027-5>
- [33] Mauji, N. I., & Abu-Shanab, E. A. (2023). Are millennials in Qatar making m-commerce the future of online shopping?. *International Journal of Sustainable Society*, 15(3), 266-293.
- [34] McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). Developing and Validating Trust Measures for e-Commerce: An Integrative Typology. *Information Systems Research*, 13(3), 334-359. <https://doi.org/10.1287/isre.13.3.334.81>
- [35] Moenjak, T., Kongprajya, A., & Monchaitrakul, C. (2020). Fintech, financial literacy, and consumer saving and borrowing: The case of Thailand.
- [36] Muijs, D. (2004). *Doing Quantitative Research in Education with SPSS*. London; Thousand Oaks, CA; New Delhi: Sage Publications. <https://doi.org/10.18276/ejsm.2016.20-01>
- [37] Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa istanbul review*, 18(4), 329-340.
- [39] OECD (2020). Financial Education in Europe: Trends and Recent Developments. Retrieved from <https://www.oecd.org/finance/financial-education/>
- [40] Ravikumar, T., B. Suresha, N. Prakash, Kiran Vazirani, and T. A. Krishna (2022). Digital financial literacy among adults in India: Measurement and validation. *Cogent Economics & Finance* 10: 2132631.
- [41] Sharma, S. K., & Sharma, M. (2019). Examining the role of trust and quality dimensions in the actual usage of mobile banking services: An empirical investigation. *International Journal of Information Management*, 44, 65-75.
- [42] Sujee, S., & Solanki, R. (2024). Adoption and proliferation of digital technology in the banking sector of the Middle East. In *Handbook of Banking and Finance in the MENA Region* (pp. 3-23).
- [42] Senyo, Prince Kwame, and Ellis L. C. Osabutey. (2020). Unearthing antecedents to financial inclusion through FinTech innovations. *Technovation* 98: 102155
- [43] Shankar, Amit & Rishi, Bikramjit. (2020). Convenience Matter in Mobile Banking Adoption Intention?. *Australasian Marketing Journal (AMJ)*. 28. 10.1016/j.ausmj.2020.06.008. Sons, Inc.
- [44] Srivastava, S., Mohta, A. and Shunmugasundaram, V. (2024). Adoption of digital payment FinTech service by Gen Y and Gen Z users: evidence from India, *Digital Policy, Regulation and Governance*, Vol. 26 No. 1, pp. 95-117. <https://doi.org/10.1108/DPRG-07-2023-0110>
- [45] Thakor, A. V. (2020). Fintech and Banking: What Do We Know? *Journal of Financial Intermediation*, 41, 100833. <https://doi.org/10.1016/j.jfi.2019.100833>
- [46] Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. *MIS Quarterly*, 36(1), 157-178. <https://doi.org/10.2307/41410412>
- [47] Wanof, M. (2023). Digital Technology Innovation in Improving Financial Access for Low-Income Communities. *Technology and Society Perspectives (TACIT)*. 1. 26-34. 10.61100/tacit.v1i1.35.
- [48] World Bank (2020). The Global Findex Database 2020: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19. Retrieved from <https://www.worldbank.org/en/publication/globalfindex>
- [49] World Wide Web Consortium (W3C). (2018). Web Content Accessibility Guidelines (WCAG) 2.1. Retrieved from <https://www.w3.org/TR/WCAG21/>