The inflected of fintech solutions on financial performance in SMEs: An analysis of the IT industry in the UAE

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A B S T R A C T

This study investigates the impact of introducing financial technology (Fintech) on increasing the financial viability of small and medium enterprises (SMEs) operating in the IT sector in the United Arab Emirates (UAE). By identifying the obstacles that SMEs experience while dealing digital transformation, this study aims to show how the emerging financial technologies, including digital banking, peer-to-peer lending, and AI applications, can drive enhancements in financial utilization and the innovation of banking products, cost-cuts, increased organizational productivity, and better client experiences. A quantitative research approach was implemented, and the research tool used was a structured questionnaire developed to capture respondents' data from 250 respondents from SMEs in the UAE. Descriptive and inferential statistics of correlation and regression analysis were done using the stratified random sampling technique. Results indicated that fintech adoption enhances financial performance in SMEs. Specifically, increased accessibility shows a strong positive correlation with financial performance ($r = 0.998$, $p < 0.01$), while enhanced efficiency and improved customer experience also show strong correlations ($r = 0.635$, $p < 0.01$). The variable "Increased Accessibility" showed the most significant effect on the financial performance of SMEs, with a highly significant positive correlation and the strongest predictive value in the regression analysis. This study concludes that the implementation of fintech solutions offers significant opportunities for improving the financial performance of SMEs and recommends increased investment in fintech and appropriate regulation for that purpose.

1. Introduction

Small and Medium Enterprises (SMEs) contribute enormously to the world's economy but face serious difficulties when obtaining basic financial products and services that enhance their operations (Yoshino & Taghizadeh-Hesary, 2018). Some examples of these challenges include high standards of borrowing, high standards of security, and the long time taken to consider security. Although conventional banks are essential to the financial system, they are sometimes inadequate to meet the SMEs' specific needs, thus hampering their ability to expand and innovate (Ndikubwimana, 2016). Financial Technology (Fintech) encompasses new technologies that increase and facilitate the delivery of financial services (Bagh et al., 2017). Such advancements include digital banking and peer-to-peer money lending and AI as solutions to financial advisory. Fintech is a form of technology used to improve and automate financial processes to deliver better financial services to organizations (Almashhadani & Almashhadani, 2022; Elia et al., 2023). Over the years, the global fintech market expanded more rapidly and reached about USD 226.71 billion in 2023. It is expected to a grow rate of 16.8% between 2024 and 2032 (Razavi & Habibnia, 2024), signifying the need for adopting otherwise integrating such technologies in various fields (Arnaut &

Bećirović, 2023).[1] Fintech solutions offer the chance to approach the problems for SMEs in the framework of the conventional financial institutions by new efficient, and comparatively inexpensive mechanisms. (Lestari et al., 2020). For instance, the mobile solutions in payments and digital wallets can improve the efficiency and effectiveness of the payments. In this respect, the peer to peer money lending marketplace can open up prospects for funding, while, with the help of AI tools in finance, recommendations as well the management of risk can be made less erroneous. (Muhtasim et al., 2022). The existing conventional banking services can challenge SMEs mainly because they involve high lending standards, high collateral demand, and lengthy processing time (Amoako-Adu & Eshun, 2018). The Khalifa Fund for Enterprise Development survey 2019 revealed that 65% of SMEs in the UAE had challenges getting finance from conventional banks. These challenges are compounded by the relatively expensive banking services and a dearth of the right and relevant financial products for SMEs (Owusu, 2019). Similarly, conventional banks mainly target big and established businesses with sound financial records, thus neglecting many SMEs for the required finance (Lu, 2018). SMEs are prospective of experiencing hard time in meeting some of the high collateral requirements that most of the traditional banks set due to inability to avail viable security (Rahman et al., 2017). Moreover, the long and complicated approval procedures can affect funding to minimize the opportunities for enterprises and businesses, thus preventing SMEs from grabbing timely business opportunities (Rajamani et al., 2022).

These challenges limit SMEs from having adequate capital funding that can help in the financing of the expansion innovation and competitiveness (Indrawati, 2020). Therefore, the majority of SMEs turn to fintech services as an adequate substitute for the banking market. (Temelkov & Gogova Samonikov, 2018). Fintech provides more relaxed credit standards, fewer security demands and shorter time of credit granting compared to banks, which is why SMEs can use Fintech to avoid the financial barriers set by conventional banks (Messina, 2019). Fintech has utilized new opportunities to enhance SME's financing by offering far-reaching solutions to the issues that affect SMEs (Maulana et al., 2022). In particular, fintech applications like the Peer to peer lending and crowdfunding may open additional possibilities for SMEs to attract investors and receive credit without depending on regular bank credit (Ivashchenko et al., 2018). Blockchain technology can boost the processes of finance transactions and make them more secure; on the other hand, AI analytics can provide valuable information about the advancements of SME financials (Javaid et al., 2022). Furthermore, fintech solutions can enhance financial accessibility by providing financial products to underserved or unbanked SMEs (Salampasis & Mention, 2018). By introducing digital payment systems and mobile banking services, these institutions will be able to get to the SMEs located in remote and hardly accessible regions and equip them with the necessary means to bring their financial management to a qualitatively new level (Bagale et al., 2021). Hence, through technology in their operations, SMEs in the fintech industry can develop better financial performance and become more competitive, leading to better input in economic growth and development (Pizzi et al., 2021). This study aims to assess the overall impact of fintech solutions on the financial performance of SMEs, to compare the effects of fintech solutions across different industries and to identify the specific fintech solutions that significantly affect the financial performance of SMEs. Given the above discussion of the research problem, the main research question of this paper is *how fintech adoption can influence financial performance of SMEs operating in the IT industry of the UAE? and which specific fintech innovations are most critical in driving this performance enhancement?*

The existing literature has examined the impact of fintech on financial performance. However, they have left several research gaps. First, most of studies (Hastuti et al., 2022; Alkhawaldeh et al., 2023, Lontchi et al., 2023; Cameroon et al., 2023; Mangifera et al., 2022; Mangifera et al., 2022; Utami & Sitanggang, 2021) examined the influence of Fintech on performance using different sets of data from various countries and regions with very minor examination to SME in the UAE market (Alkhawaldeh et. al., 2023, Lontchi et al., 2023). Moreover, existing studies provided evidence on the general understanding of SMEs, yet they provided no information related to sector-wise analysis within the UAE, especially the SMEs. Another gap is that current research mainly provided cross-sectional research findings which is difficult to assess in the long-term implications of FinTech on financial sustainability. Moreover, although financial satisfaction is mentioned as a vital moderator in various studies, this aspect remains understudied regarding SMEs in the UAE market. Examining the use of fintech on the performance of SMEs operating in the IT sector remains understudied in the UAE market. Filling these gaps helps develop a more comprehensive and accurate view of the impact of FinTech on financial performance in UAE SMEs.

The study contributes to the literature in twofold. First, using a survey of 250 respondents from SMEs, our study intends to display new comprehensive evidence of the impact of Fintech adoption on the financial performance for the SMEs operating in the IT sector in the UAE market. By identifying the obstacles that SMEs experience while dealing with traditional banks, this study also aims to show how the emerging fintech, including digital banking, peer to peer lending, and AI applications, can drive enhancements in financial utilization and the innovation of banking products, cost-cuts, increased organizational productivity, and better client experiences. Further, the study provides evidence on which specific fintech innovations are most critical in driving the performance of SMEs, including cost reduction, increased accessibility to financial services, enhanced operational efficiency, and improved customer experience. Findings indicate the adoption of fintech enhances financial performance in SMEs operating in the IT sector. Specifically, increased accessibility to fintech solutions shows a strong positive correlation with financial performance ($r = 0.998$, $p < 0.01$). It follows that enhanced efficiency and improved customer experience also show strong correlations ($r = 0.635$, $p < 0.01$) with performance. Increased accessibility showed the most significant impact on the financial performance of SMEs, with a highly significant positive correlation and the strongest

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[1] Source: https://www.expertmarketresearch.com/reports/fintech-market

predictive value in the regression analysis. This study concludes that the implementation of fintech solutions offers significant opportunities for improving the financial performance of SMEs and recommends increased investment in fintech and appropriate regulation for that purpose.

The remainder of the study is organized as follows: Section 2 offers the literature review, conceptual framework, and hypotheses development. The methodology and data are addressed in Section 3. In Section 4, the results and analysis are discussed, while Section 5 provides the discussion of the results. The conclusion is summarized in Section 6.

2. Literature Review and conceptual framework

2.1. Technology Acceptance Model

According to Davis (1989), the Technology Acceptance model (TAM) is the fundamental paradigm that is commonly utilized to analyze how consumers embrace and utilize innovations (Park & Park, 2020). According to this theory, consumers' adoption of technology is primarily influenced by two factors: perceived usefulness (PU) and perceived ease of use (PEoU) (Singh, 2022). These factors are important in the context of the navigation of fintech solutions for SMEs. Another factor regarding technology acceptance is perceived ease of use, which reflects the simplicity of solutions, compatibility with other tools, and limited issues (Micheni, 2021). SMEs tend to embrace only those Fintech applications that facilitate simpler transaction procedures and a user-friendly interface (Ogbonna et al., 2024). PU concerns tangible benefits such as improved organizational operations, reduced costs, better financial control, and improved customer relations (Prastiawan et al., 2021). The PEoU notably contributes to the uptake of fintech among SMEs, and their financial performance is consequently enhanced (Ndungu & Moturi, 2020).

2.2. Diffusion of Innovations

The innovation diffusion theory (Rogers, 1962) illustrates how ideas travel across a social system over time via certain routes (Das, 2022). It provides five factors—relative benefit, compatibility, complexity, trialability, and observability that influence how widely an idea may be adopted. Cost-effective, quicker transaction times and enhanced financial management tools could be some of the relative advantages of fintech solutions (Akdeniz, 2022). These benefits are some of the reasons behind the growing popularity of adoption rates for fintech solutions among SMEs (Cumming et al., 2023). Compatibility is the only dimension that considers how congruent an innovation is with existing values, past experiences, and needs of potential adopters (Okour et al., 2021). These would also be the fintech solutions that fit into established business processes and technologies. Compatibility refers to how well an innovation matches potential consumers' prior ideals, circumstances, and requirements (Jiang et al., 2021). Fintech solutions considered complex can encounter resistance unless they come with comprehensive support and training. To solve this issue, they can utilize simplified interfaces and user-friendly design (Nwankwo et al., 2022). Trial ability can be termed as the extent to which an innovation can be experimented with on a limited basis. Observability is the degree to which the results of an innovation are visible to others. Successful case studies and positive testimonials from other SMEs can enhance the observability of fintech solutions which increase their adoption globally (Bureshaid, 2021).

2.3. Empirical Studies

Fintech solutions significantly increase both financial and non-financial performance metrics of SMEs, and increased sales, reduced transaction costs, and enhanced customer satisfaction are key benefits of fintech solutions. It is observed that there are substantial improvements in the financial performance of SMEs due to decreased operational costs and increased access to financial services. AI-based fintech plays a significant role in providing financial services to SMEs, showing a substantial increase in decision-making and risk management in finances, ultimately leading to enhancement in profit and growth. Further, platforms of peer-to-peer money lending and funding have opened new opportunities for SMEs to access finance and decrease dependency on conventional banking systems. This is beneficial for SMEs that struggle to fulfil conventional banks' required stringent money lending criteria. Recent studies show important dynamics in the effect of fintech solutions across the IT industry of the UAE. Due to the adoption of fintech, substantial improvement in operational efficiency and customer service is observed (Lee et al., 2021). Innovations, such as digital transformation and AI- driven customer service tools, have streamlined operations and increased satisfaction of customers (Tatikonda et al., 2022). The IT sector has utilized fintech primarily for better financial management and streamlined processes (Hermiyetti, 2023). According to Alkhawaldeh et al. (2023), SMEs in the Jordanian market have better financial performance due to using fintech experience. In the same way, Hastuti et al. (2021) also consider the relation between investment opportunities, information technology, and financial performance in the SMEs, highlighting the significance of blending IT to support the development and profitability of the SMEs. Although Bigliardi (2013) stated that fintech contributes to enhanced financial performance, Lontchi et al. (2023) argued that fintech improves the performance of SMEs in the Cameroon market, when complemented by a high level of financial literacy. Furthermore, Mangifera et al. (2022) show that digital advancements, which include fintech services, play a role of enabler of financial performance of SMEs; Fintech has a a great potential in enhancing the financial condition of SMEs by making changes to the operation and management efficiency and lower costs while enhancing revenues. Peter et al. (2018, 2020) reveal that the government has an important function in promoting the use of fintech solutions among SMEs for their success. Utami and Sitanggang (2021) also argue that integration of fintech has an influence on the performance of the

SMEs through showing better enhancement of the financial control, access to finance and with enhanced innovative rate. The availability of alternative financing through Fintech solutions has enhanced cash Flow management, better and more efficient financial planning, and the financial health of IT SMEs (Soni et al., 2022). Conventional studies demonstrate that companies from the IT segment obtain larger revenues and better margins due to using fintech services (Elsaid, 2023). This implies that the opportunities of fintech might be even higher if it penetrates sectors that are more flexible and progressive (Reyes-Mercado & Reyes-Mercado, 2021). However, gaps still exist, especially concerning the comparative effectiveness of particular fintech services across different industries in the same geographical area. By understanding these differences, more specific information could be obtained for policy decisions by the policymakers and those in leadership positions in the industry. More specifically, particular to the context of the present study, the long-term consequences of fintech adoption on the financial performance of SMEs have not been investigated in detail, including the short to medium-term consequences explored in most of the existing literature. The gap for this study is the impact of regulations on the use of Fintech among SMEs because regulatory environments can either encourage or deter the use of Fintech.

2.4. Conceptual Framework

The conceptual framework of this study is based on how fintech solutions impact SMEs' financial performance in the IT industry of UAE. Four independent variables are used in this study: cost reduction, increased accessibility, enhanced efficiency, and improved customer experience, all of which are hypothesized to positively influence the dependent variable of financial performance indicators such as increased profit, growth in revenue, and cost efficiency. Cost reduction analyzes how fintech decreases operational expenses and transaction costs for SMEs. Increased accessibility explores fintech's role in improving SMEs' access to financial services to markets. Enhanced efficiency evaluates how fintech increases operational processes and SMEs' decision-making efficiency. Improved customer experience evaluates FinTech's contribution to customer satisfaction and loyalty through personalized financial services. By adopting a quantitative research methodology of structured questionnaires and analysis using tests on the SPSS, the study proposes to establish these relations furthermore, the ability of these relations to impact the financial returns of SMEs in the UAE.
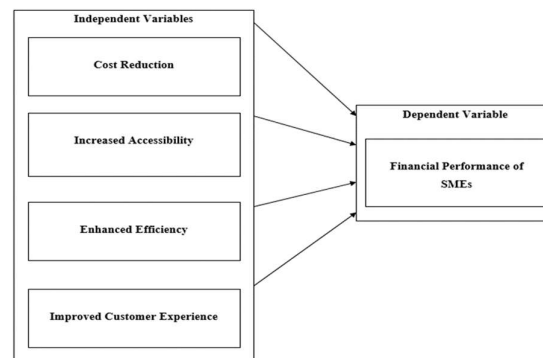
Fig. 1. Conceptual Framework

2.5. Hypotheses Development

H₁: *Higher levels of fintech-driven cost reduction positively correlate with improved financial performance indicators (e.g., profitability cost efficiency) among SMEs.*

H₂: *Increased accessibility to financial services through fintech solutions correlates positively with enhanced revenue growth and market expansion for SMEs.*

H₃: *Enhanced operational efficiency achieved through fintech adoption correlates positively with improved profitability and resource optimization within SMEs.*

H₄: *Improved customer experience from fintech solutions correlates positively with customer retention rates and overall financial performance metrics for SMEs.*

3. Methodology and data

3.1. Research Design

This study used a quantitative research approach, collecting data from SMEs in the IT industry in the United Arab Emirates using the survey technique. This approach is selected due to its capability of collecting a large amount of data necessary to analyze the interaction between the fintech solutions and SMEs' financial performance.

3.2. Population and Sample

The target population for this study will be all the SMEs in the UAE's banking and IT industries. The sample size for this study will be 250 respondents from different SMEs in banking and IT sectors of UAE, sufficient to provide reliable and valid results while ensuring the feasibility of data collection. The sample will be chosen using the stratified random sample technique with subjects from the IT industry. The strata will be defined according to the type of industry, and then a random sample of the SMEs will be taken.

3.3. Data Collection

A close ended questionnaire will be used to gather data in order to identify pertinent factors of interest. There will be many sections to the questionnaire: demographic data, which will gather fundamental details about respondents including their role within the organization, the size of the SME, and duration of operation; fintech solutions, which will gather information on the types of fintech solutions adopted by the SMEs, including digital banking, peer-to-peer lending, blockchain technology, AI tools, mobile payment solutions, and other relevant fintech applications; financial performance, which will measure financial performance indicators of the SMEs such as profitability, revenue growth, cost efficiency, and customer retention rates; independent variables, which will assess the four independent variables—cost reduction, increased accessibility, enhanced efficiency, and improved customer experience—with respondents rating their agreement with various statements on a Likert scale from 1 (strongly disagree) to 5 (strongly agree); and regulatory environment, which will explore the impact of the regulatory environment on the adoption of fintech solutions by SMEs, addressing regulatory support, barriers, and the overall ease of doing business with fintech solutions.

3.4. Data Analysis

The data will be examined using the Statistical Package for the Social Sciences (SPSS) application, along with a variety of statistical methods: The usage of fintech solutions by SMEs, as well as the demographic features of the sample, are summarized using descriptive statistics; the internal consistency of the questionnaire items is assessed using Cronbach's alpha to ensure the validity of the constructs; multiple regression analysis to test the hypothesized relationships between the independent variables (cost reduction, increased accessibility, enhanced efficiency, and improved customer experience) and the dependent variable (financial performance).

4. Results and Analysis

4.1. Demographic Analysis

The characteristics of respondents such as demographics are crucial to facilitating the research question and the research hypotheses. A selected group of respondents has also a direct impact on the reliability and validity of the research findings. Survey participants should be chosen to closely match the characteristics and demographics of the target respondents and ensure that the research findings reflect their preferences, opinions, and behaviors of financial technology and its application on financial performance in the SME market. This analysis shows the demographic analysis for age, gender, occupation, education and years of work experience for the survey respondents. The results of this analysis are summarized in Table 1.

Table 1
Personal characteristics of the participants

		Freq	%	Valid %	Cumulative %
Age	20-30 Years	109	43.6	43.6	43.6
	31-40 Years	60	24.0	24.0	67.6
	41-50 Years	81	32.4	32.4	100.0
	Total	250	100.0	100.0	
Gender	Male	137	54.8	54.8	54.8
	Female	113	45.2	45.2	100.0
	Sum	250	100.0	100.0	
Job	Financial Analyst	1		0.4	0.4
	IT Manager	3	1.2	1.2	1.6
	Digital Transformation Specialist	124	49.6	49.6	51.2
	Customer Relationship Manager (CRM) Specialist	122	48.8	48.8	100.0
	Total	250	100.0	100.0	
	High school diploma	31	12.4	12.4	12.4
	Associate degree	72	28.8	28.8	41.2

Education	Bachelor's degree			58	23.2	23.2	64.4
	Master's degree			89	35.6	35.6	100.0
	Total			250	100.0	100.0	
	11-15 Years			3	1.2	1.2	1.2
Years of	16-20 Years			124	49.6	49.6	50.8
Experience	21+ Years			123	49.2	49.2	100.0
	Total			250	100.0	100.0	

The "Valid %" column confirms that the percentages are calculated based on the valid data, and the "Cumulative %", reaching 100% when each characteristic is combined in the table. The age distribution of a group of 250 respondents outlines that the largest age group, making up 43.6% of the total, is between 20 and 30 years old. Those aged 31 to 40 years comprise 24% of the group, while the 41 to 50 years age bracket represents 32.4%. Altogether, this accounts for the entire sample population, with cumulative percentages reaching 67.6% by the age of 40 and 100% by age 50. The distribution of gender shows that out of the total, 137 are male, making up 54.8% of the sample, while 113 are female, accounting for 45.2%. The table also contains the distribution respondents across various job occupations. The majority are either Digital Transformation Specialists (124 individuals, 49.6%) or Customer Relationship Manager (CRM) Specialists (122 individuals, 48.8%). There are also 3 IT Managers, making up 1.2% of the sample, and just 1 Financial Analyst, accounting for 0.4%. Furthermore, the educational background of the respondents is reported in Table 1. Among them, 12.4% have a high school diploma, 28.8% hold an associate degree, and 23.2% have completed a bachelor's degree. The largest proportion, 35.6%, has a master's degree. Cumulatively, 41.2% have an education level of an associate degree or less, while 64.4% have at least a bachelor's degree, with all participants accounted for in the total 100%. The table also summarizes the years of experience among a sample of 250 individuals. Most have significant experience: 124 people (49.6%) have 16-20 years of experience, and 123 people (49.2%) have over 21 years. Only a small number, 3 individuals (1.2%), have 11-15 years of experience. In summary, the demographic characteristics are of great support to the hypothesis testing and the validity and reliability of the data.

4.2. Reliability Analysis

The reliability analysis for the dataset, as measured by Cronbach's Alpha, is 0.927 for 25 items. This high Cronbach's Alpha grade demonstrates good internal consistency among the scale's components, implying that the items consistently assess the same underlying notion. Generally, a Cronbach's Alpha value above 0.7 is acceptable, and values above 0.9 are considered excellent. Therefore, a value of 0.927 demonstrates that the scale used in this study is highly reliable, ensuring that the results are consistent and dependable (see Table 2).

Table 2
Reliability statistics using Cronbach Alpha

Cronbach's Alpha	No. of Items
0.927	25

4.3. Correlation Analysis

The correlation analysis reveals significant positive relationships among the variables affecting the financial performance of SMEs, with all correlations being important at the 0.01 level. Cost reduction shows a perfect correlation with enhanced efficiency and improved customer experience (1.000**) and a strong positive correlation with increased accessibility (0.638**) and financial performance (0.635**). Increased accessibility correlates with enhanced efficiency and improved customer experience (0.638**) and almost perfectly with financial performance (.998**). Enhanced efficiency and improved customer experience also exhibit perfect correlations with each other (1.000**) and strong correlations with financial performance (0.635**). These findings indicate that improvements in cost reduction, accessibility, efficiency, and customer experience are closely linked to enhanced financial performance in SMEs, suggesting that strategic enhancements in these areas can lead to substantial financial benefits for these enterprises (see Table 3).

Table 3
The summary of the Pearson correlation analysis

		Cost Reduction	Increased Accessibility	Enhanced Efficiency	Improved Customer Experience	Financial Performance of SMEs
Cost Reduction	Correlation	1	0.638**	1.000**	1.000**	0.635**
	2-tailed Sig		0.000	0.000	0.000	0.000
	No	250	250	250	250	250
Increased Accessibility	Correlation	0.638**	1	0.638**	0.638**	0.998**
	2-tailed Sig	0.000		0.000	0.000	0.000
	No	250	250	250	250	250
Enhanced Efficiency	Correlation	1.000**	0.638**	1	1.000**	0.635**
	2-tailed Sig	0.000	0.000		0.000	0.000
	No	250	250	250	250	250
Improved Customer Experience	Correlation	1.000**	0.638**	1.000**	1	0.635**
	2-tailed Sig	0.000	0.000	0.000		0.000
	No	250	250	250	250	250

Financial	Correlation	0.635[**]	0.998[**]	0.635[**]	0.635[**]	1
Performance of	2-tailed Sig	0.000	0.000	0.000	0.000	
SMEs	No	250	250	250	250	250

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

4.4. Regression Analysis

The model summary indicates a very strong relationship between the predictors (Improved Customer Experience and Increased Accessibility) and the financial performance of SMEs, with a multiple correlation coefficient (R) of 0.998. The R Square value of 0.995 suggests that these predictors can explain 99.5% of the variance in financial performance. The adjusted R Square, also at 0.995, confirms the high explanatory power of the model after adjusting for the number of predictors. Additionally, the standard error of the estimate is 0.0507625, indicating that the model's predictions are very close to the actual data points. This high level of explanatory power suggests that improvements in customer experience and accessibility are crucial for enhancing the financial performance of SMEs (see Table 4).

Table 4
The summary of the model

Model	R	R^2	Adjusted R^2	Std. Error
1	0.998[a]	0.995	0.995	0.0507625

a. Predictors: (Constant), Improved Customer Experience, Increased Accessibility

Additionally, ANOVA analysis indicates that the regression model, which includes Improved Customer Experience and Increased Accessibility as predictors, significantly explains the variability in the financial performance of SMEs. The regression sum of squares is 131.631, with a mean square of 65.815 and an F-statistic of 25,541.121, which is highly significant (p = 0.000). This suggests that the predictors account for a substantial portion of the variance in financial performance. The residual sum of squares is 0.636, indicating minimal unexplained variance. Overall, the model is statistically significant, affirming that improved customer experience and increased accessibility are critical factors influencing the financial performance of SMEs (see Table 5).

Table 5
The summary of the one-way ANOVA test results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	131.631	2	65.815	25541.121	0.000[b]
	Residual	0.636	247	0.003		
	Total	132.267	249			

a. Dependent Variable (DV): Financial Performance
b. Predictors: (Constant), Improved Customer Experience, Increased Accessibility

The coefficients in Table 10 for the regression model reveals that Increased Accessibility significantly predicts the financial performance of SMEs, with an unstandardized coefficient (B) of 1.002 and a highly significant t-value of 174.385 (p = 0.000). This indicates that for each unit increase in accessibility, the financial performance increases by 1.002 units. In contrast, Improved Customer Experience has a non-significant effect on economic performance, with a coefficient of -0.003 and a t-value of -0.611 (p = 0.542). The constant term is also non-significant. This suggests that while accessibility is a strong predictor, customer experience does not significantly impact the financial performance in this model (see Table 6).

Table 6
The summary of the regression results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.009	0.019		0.440	0.660
	Increased Accessibility	1.002	0.006	1.000	174.385	0.000
	Improved Customer Experience	-0.003	0.006	-0.004	-0.611	0.542
	Cost Reduction	0.614	0.047	0.635	12.932	0.000
	Enhanced Efficiency	0.614	0.047	0.635	12.932	0.000

a. Dependent Variable (DV): Financial Performance of SMEs

5. Discussion

This study established that there is a positive relationship between the use of fintech solutions to the financial performance of SMEs in UAE being inclined towards the IT industry (Sreenu, 2024). The comparison yields multiple insights into the role of fintech innovations in influencing FP growth and the differentiated impact in the two sectors (Abbas et al., 2024). The fintech solution ensures increased accessibility which is of huge importance because it results in revenue enhancement and market penetration for SMEs (Maulana et al., 2022). The use of Fintech Platforms such as peer to peer lending services, and digital payment systems which used to be hard to secure from the conventional institutions, can be accessed now (Agarwal & Zhang, 2020). This sort of changed access to finance has enabled business growth and SMEs have been able to grasp new opportunities in the market (Megersa, 2020). The significant positive relationship between the dependent variable of

'Accessibility' and the financial performance of the SMEs proves that fintech results in improving the inclusion of SMEs in the financial market and helps in their development (Munguti & Wamugo, 2020). This research proves that efficiency for SME's has to be increased and this leads to better profits and the use of resources. It is possible to disclose that fintech tools affect different business functions, such as financial and customer-related ones and that the overall efficiency of these processes is higher. The increase in efficiency reduces other costs and enhances the job done by business operations leading to economic effects. The analysis presents the fact that SMEs that permit fintech for operations have better chances of having higher profitability and sustainable business outcomes. Furthermore, to support the research hypothesis, the study affirmed the correlation between the enhanced customer interactions through the integration of fintech solutions and customers' retention of SMEs and their overall financial performance. The fintech solutions ensure that efficient financial services are tailored closer to the customers, therefore making them satisfied and loyal in their transactions. This in turn results in repeat business and as we well know repeated business equals constant incomes for SMEs. Hence, based on the presented research results, the firms that improve the customer experience when applying fintech are also expected to achieve superior financial results in their businesses. Comparing the structure of banking to that of IT industries reveals the increasing complexity of the fintech environment. The two sectors have reserved specific advantages that reflect their financial status following fintech's adoption: For the IT sectors, higher revenues and better margins outperform the banks' sectors. This means that the introduction of fintech solutions may be even more impactful in industries that are more flexible and innovative concerning accepting technology solutions. Higher level of adaptability of the IT sector can be explained by technological readiness of the sector to accept fintech solutions and appropriate new tools for managing its finances.

6. Conclusion

The study stresses that SMEs in the UAE have a great opportunity for financial performance improvement due to the development of fintech solutions. Alternately, the cost reductions, accessibility, efficiency upgrades, and implementation of customer-friendly technologies of Fintech enable SMEs to compete in today's marketplace effectively. Based on the analysis, it is concluded that it would benefit both the companies and the fintech firms to increase their investments in the solutions with the additional focus on more supportive regulation to achieve the most benefits for the SMBs. Further studies should examine the consequences of fintech usage and the effect of regulatory policies on the fintech environment for SMEs. The study on the effects of fintech on SMEs in the UAE has several limitations. The sample size of 250 SMEs may not cover all SMEs, limiting generalizability. The use of self-reported data in the questionnaires may lead to social desirability bias and inaccurate self-evaluation. The cross-sectional design of the study has temporal limitations. To improve the study, future research should use longitudinal designs, a broader population, systematic analysis, and qualitative methods like surveys and focus groups. These methods will help understand the barriers and facilitators to fintech implementation and provide a more comprehensive understanding of SMEs' experiences and perceptions.

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