

# Analysis of the Impact of Fintech Firms' Lending on the Expansion of Service Base Companies in Jordan

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**Abstract:** The purpose of this research was to analyze the impact of lending by fintech firms on the expansion of service-based companies in Jordan. The study's population included 210 service-based enterprises located in Jordan. The research used a sample size of 136 respondents from registered service-based enterprises in Jordan. The researchers used a structured questionnaire to gather data from the participants. The data acquired in this study were evaluated using a combination of basic percentage calculations and Pearson product moment analysis. The research has reached the conclusion that the lending activities of Fintech firms have a noteworthy impact on the expansion of service-based companies in Jordan. The study suggests that it would be advantageous for the Fintech service provider to engage in advertising efforts aimed at promoting their services, with the goal of increasing the adoption of their mobile money product among a wider range of business professionals. This would lead to an increased number of entrepreneurs using Fintech as a means to augment the expansion of their businesses. The scope of the research was limited to a small number of service-based organizations. However, it is important to include other service-based companies that were not included in this study. To get a comprehensive understanding, a comparison study should be conducted to explore other characteristics that were not addressed in the current research. The field of financial technology (fintech) has seen significant growth in recent years. This growth can be measured by the degree of utilization observed in various fintech applications and services.

**Keywords:** Fintech, lending, service-based companies.

## 1 Introduction

Fintech is a fast-growing tech sector that provides online alternatives to traditional banking services. Financial technology companies compete in consumer payments, asset management, and lending to individuals and businesses [1, 2]. Small business lending has increased from \$121 million in 2013 to \$2 billion in 2018 [3], contributing to the industry's average of nearly \$12 billion in quarterly organizations through the first half of the year. 19 fintech lenders originated over 250,000 Paycheck Protection Programme (PPP) loans totaling \$6 billion, and financial institutions like Cross River Bank, WebBank, and Celtic Bank made PPP loans on behalf of fintech lenders [4]. New lenders compete with more strictly regulated banks, creating regulatory and coordination issues [5]. 2018 (Philippon). Despite significant investments and rising activity, fintech lenders are lightly regulated. Few studies have examined fintech's SME financing potential [6]. Two online-only small business lenders have expanded into markets where traditional banks have declined due to state-level banking system changes. They agree with us that loans from these two fintech companies are riskier. All these studies, including [7] have been limited in their analysis of fintech lending because they have only had access to publicly disclosed data from specific fintech lenders, which does not include all possible borrowers.

Financial technology, also referred to as FinTech, pertains to the provision of technologically sophisticated financial products or services. Consumer standards undergo transformations as a result of advancements in technology, such as the proliferation of cellphones and the widespread use of the Internet [8]. Numerous autonomous businesses, nascent ventures, and organizations of moderate scale prioritize the development of financial infrastructure solutions that possess the potential to pose a challenge to established financial markets. Financial technology, sometimes referred to as fintech, has emerged as a prominent term in the realm of developing financial apps and related products by entrepreneurial small enterprises (9-11). This summary provides a good overview of the intricate domain of financial technology start-ups [12]. In contrast to the inherent characteristics of technology, the process of establishing a start-up may rapidly generate a

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narrative that centers on the said start-up. In practical application, financial innovations extend beyond the realm of financial technology and are often used by banks, microfinance institutions (MFIs), and conventional service-oriented enterprises. The rapid and recent advancements in financial technology within the financial sector of Jordan, particularly in small and medium-sized enterprises, have prompted stakeholders to question the sufficiency of the technologies being implemented. There are stakeholders that express enthusiasm towards adoption because of the many benefits it offers, such as facilitating the efficient and expeditious provision of services. However, there are other stakeholders who exhibit reservations about the associated hazards [1]. This risk is linked to the inadequate technical proficiency and infrastructure of these technologies.

Furthermore, it was underscored by the speaker that the achievement of inclusive small company growth is contingent upon the augmentation of competitiveness inside the domestic enterprise market, including small firms [13-15]. The proliferation and rapid advancement of the Internet and information technology (IT) throughout the 1990s were observed by scholars [16]. These developments created a worldwide and cost-efficient market and networking infrastructure for corporations. Despite the substantial expenditures made in information technology (IT) over the last several years, proving the direct influence of such investments on the profitability of organizations has proven to be a very challenging task [17-20]. When examining the developing world and Jordan's economic system, it becomes evident that Jordan primarily operates as a liquidity-based economy. This is shown by the fact that over 90% of capital remains outside the banking system. In contrast, the United States exhibits a far lower proportion, with just 4% of its currency being outside the financial system.

### Statement of the Problem

The term "technology" is synonymous with the programs that support banking services, such as electronic transfers, data analysis, participatory modes, and cryptocurrencies, when considering the context of each component of the stated dimensions. New firms and startups that provide financial services or IT support networks are the "organizations" referred to in the sources. Investments being liquidated to provide expansion capital for these businesses is what the term "capital flow" refers to. Part of the mechanism is making changes to the business model or developing new ones that improve the quality of life for customers in some way (e.g., via more visibility, easier access, lower prices, etc.). The 'computer application for financing and the provision of services' is an example of how these activities make use of technological advances. By creating alternatives to traditional facilities—like doing away with the bank as a middleman—financial institutions have proved the revolutionary power of financial technology. The report's subsequent sections would look at how these disruptions affect the financial health of service businesses.

### Objectives of the Study

1. Determine the extent to which service-based enterprises in Jordan use Fintech firm loans.
2. Assess the effect of Fintech company lending on business savings and loan ratio.
3. Evaluate the effect of Fintech company lending expansion on service-based businesses.

### Research Questions

1. How prevalent is Fintech business financing among Jordanian service companies?
2. What is the effect of Fintech company lending on business savings and loan ratio?
3. What effect does Fintech company financing have on the development of service-based companies?

### Justification For the Research

The results of this research should help fill in the gaps in our knowledge on how fintech affects SMEs. The results of this study may also inform policymakers in a variety of government agencies. For instance, when an educational program is being created, its creators would be informed. The findings of this study will help the owners of many SMBs adopt new forms of financial technology, giving such businesses a foothold in emerging markets and a competitive edge via the introduction of cutting-edge products. On the one hand, the study will help microbusiness owners and operators comprehend the market impact of this technology as it relates to the ever-increasing sophistication of financial technology.

It would help businessmen, particularly those in charge of small and medium-sized enterprises, understand how to make good use of financial services. Researchers engaged in this area of study would be influenced by the results of these studies, increasing the likelihood that they would take effective preventative measures.

Policymakers and the public will get enlightening information on how FinTech has influenced the growth of service-based businesses. The findings will be included in plans for regulating future technologies. Policymakers will also hear how this impacts the activities and hurdles faced by SMEs in the current environment.

## FinTech overview

Business that makes innovative use of technology to provide financial services is often referred to by its acronym, FinTech[4, 8]. Because it is effective and efficient in meeting people's needs for money management, it continues to get press as a developing trend, particularly in the industrialized world [4, 9]. COVID-19 has portrayed fintech as the key to improving the digital economy, since customers may place orders and make payments using mobile platforms. The usage of FinTech has allowed service-based businesses to thrive despite the economic climate. Especially prevalent in emerging regions, FinTech disrupts and transforms traditional financial services including payments, banking, credit, and enforcement. There is no agreed-upon definition of fintech [10]. The following academics were used to provide a summary of the concept in the study: For [11], fintech was cited as an example of a highly innovative and potentially game-changing service technology product. According to Freedman's definition of fintech as value, model, and processing [12], the term refers to the practice of encrypting money, contracts, stocks, and bonds, among other financial assets. Fintech refers to the use of technology to facilitate financial services. Biological structures have emerged as a result of global FinTech innovations that show an inclusive regard for European purchasers. Customers in Europe are enthusiastic about new approaches to managing their finances [14], making the region a hotbed for the development of FinTech. Europe has been the only continent to adopt FinTech in recent years. According to EY's Global FinTech Adoption Index 2019, the percentage of cautiously dynamic buyers in the Netherlands (73%), Ireland (71%), and Great Britain (64%), and Germany (64%), Sweden (64%), and Switzerland (64%), was higher than the global average (64%). In 2015, a key year for the Overview Report [15], 14% of carefully active investors were advocates of FinTech. This is indicative of the rapid speed of growth in the UK. Particularly, service-based businesses have expanded and thrived because to developments in financial technology. After barely seven years in business, a few European computerized banks have attracted a sizable client base and are increasingly influential in regional and worldwide markets. Companies focused on providing a service to customers have realized the incredible potential of financial technology to enhance their customer care [16]. Furthermore, they are working together in fintech ecosystems. Key causes in the fast expansion of FinTech in Europe among SMEs include the open banking and SME operations stipulated by the EU's updated Payment Service Directive, PSD2. Eastern Africa's retail and service sectors may be the region's most advanced area of financial innovation as of late [17]. Whatever the case may be, developments in FinTech affect how users make purchases on the site. Online-only shops have arisen in East Africa, just as they have everywhere else. One of the most successful examples of an internet store in East Africa is Jumia. You may pay for your Jumia purchases, bookings, and deliveries with your mobile currency, a MasterCard, or cash on display, all from the comfort of your own home. Those economies have embraced FinTech services as a means to improve the efficiency of their businesses and expand their customer bases. According to data from the Kenya Bureau of Statistics (KBS), in 2016 alone, 40 percent of all SME owners initiated cellular company applications, 29 percent of service-based businesses were registered, and 49.3 percent had pliable cash for business executions. More investigation finds that nine of the biggest names in Financial Technology have extended credit to the service sector in the form of loans or installment payments [18]. The investigation uses statistics from Kenya, which show that flexible trading has been growing at a faster rate than P2P instalments, with an 85.5% share in 2017 compared to 8.4% for the latter.

### An Overview of Fintech Firms in Jordan

The fintech industry in Jordan is still in its infancy, but it's growing quickly. The number of fintech companies in the Middle East and North Africa (MENA) area more than doubled from 46 to 105 between 2013 and 2015. Demand for easily available digital financial services, the availability of alternative financing sources, and the push by governments to increase financial inclusion all point to rapid expansion over the next several years. It has been estimated that by 2020, the Middle East and North Africa would be home to 250 fintech firms. 70% of Jordan's population is under the age of 30, and the country's high Internet penetration and sizable unbanked population have been cited as reasons for the industry's optimism about its prospects in Jordan. In Jordan, some of the most well-known companies are the peer-to-peer lending platform Liwwa, the bill payment and payment service provider MadfoootCom, and the cloud POS solution provider POSRocket, which mostly serves small and medium-sized businesses (SMEs). In recent months, Jordan has seen the debut of a number of initiatives meant to foster the country's burgeoning startup and fintech sectors. For example, in 2018, the Innovation Startups and Service-Based Firms Fund (ISSF) was established with funding of US\$98 million to improve and expand the entrepreneurial ecosystem by providing, through its partners, a variety of programs and trainings. The Central Bank of Jordan and the Jordan Loan Guarantee Incorporation are the only stockholders in the ISSF. Therefore, financial technology has an enormous effect on service industries, and businesses who fail to adapt may fall behind the competition permanently. A company may be able to save both money and time by partnering with a fintech company.

### The Growth of FinTech Lending and Service-Based Firms in the Business Sector

An examination of various categories within the field of Financial Technology (FinTech) and their effects was conducted to assess the extent of Small and Medium-sized Enterprise (SME) development in relation to FinTech. The study revealed that the implementation of mobile financial transactions resulted in enhanced operational efficiency for Service-based

companies. This observation was made during an analysis of the influence of mobile money technologies on the growth and progress of Service-based enterprises. Mobile financial transfers are advantageous in terms of time efficiency in corporate transactions. Furthermore, the use of mobile applications may serve as a means to enhance customer engagement and facilitate informed decision-making as well as the exchange of information. The introduction of M-PESA by Safaricom in Kenya has facilitated the growth and expansion of service-oriented firms [9]. This is due to the fact that the service offers efficient and simplified means of payment for goods and services, as well as facilitating the advancement of commercial transactions. M-PESA enables individuals to engage in activities like as borrowing, investing, transferring funds, and making payments using SMS technology, hence facilitating study on the impact of mobile telephony apps on small and medium-sized enterprises [10]. Mobile financial transfers provide small and medium-sized firms an opportunity to decrease their operating expenses, enhance their potential to broaden their market connections, and therefore augment their profitability. According to their research on mobile money use, service-based enterprises generally viewed financial transactions on mobile telephones to be more convenient compared to bank-based financial transactions [11]. As a result of their capability to facilitate financial transactions, users are able to mitigate transportation costs. The author of reference [12] emphasized the perspective that strategic management units (SMUs) serve as tools for facilitating organizational operations, translating goals into tangible results, and influencing the overall competitiveness and profitability of the organization. The significance of mobile financial transactions and their associated technologies extends beyond a single determinant.

Service-based firms are referenced in continuous financial transactions that may include substantial amounts of money or cover considerable distances, as stated by [13]. Indeed, the use of 13 mobile money transactions enables individuals to save expenses and enhance efficiency by facilitating more affordable and streamlined financial transactions. A research study was undertaken to examine the effects and use of mobile technologies inside service-oriented organizations [14]. The data for this research study was obtained via the use of a self-structured questionnaire. The survey revealed that a significant proportion of small and medium-sized enterprises had a favourable perception towards the financial gains derived from smartphone use. Additionally, the study revealed that a majority of small and medium-sized enterprises held the belief that the use of mobile banking would result in a reduction in operational expenses. The measurement of financial service use among service-based enterprises in industrialized nations for mobile phones was also conducted using comparable metrics [14].

The advent of mobile phones has facilitated the ability of small and medium-sized enterprises to lease premises and augment their sales, thus enhancing their financial performance and expansion prospects. A study was undertaken in Kenya to investigate the influence of mobile banking in developed nations [15]. Data was acquired from a cohort of 20 service-based enterprises via the use of a semi-structured survey. The available data indicates that the use of mobile banking is yielding favorable outcomes in the realm of financial transactions for small and medium-sized firms. The results of the research also indicate that the use of mobile banking facilitates revenue growth for small and medium-sized firms, hence enhancing their financial efficiency. A research investigation was conducted to examine the mobile money use patterns of service-oriented enterprises in Kenya. A questionnaire was used to gather data from a sample of 356 small and medium-sized enterprise (SME) owners. A questionnaire was used to gather data from a sample of 356 small and medium-sized enterprise (SME) owners. The study's results suggest that a majority of small and medium-sized firms use mobile money as a financial tool. Additionally, the research indicates that the use of mobile money as a financial technology (FinTech) platform has facilitated enhanced performance for service-oriented enterprises [16].

### **Regulatory Challenges of Fintech in Jordan**

Despite the presence of incentives within the fintech sector in Jordan, significant structural and institutional obstacles persist, impeding the expansion of technology-driven finance in the nation. The existing business climate is characterized by its weakness, which poses challenges for the entrance of foreign businesses into the market. Additionally, constraints on market access further hinder the ability of multinational financial technology enterprises to establish their presence. Moreover, the decrease in private and investment capital, which serves as the foundation for the establishment and advancement of financial technology within an economy, has resulted in the emergence of a problem in this domain. The prompt highlights the potential challenges that require prompt resolution, such as the insufficiency of appropriate legal regulations resulting from regulatory gaps that hinder the expansion of the financial technology industry. This is despite ongoing efforts to establish regulatory frameworks for digital financial services and enact legislation pertaining to the issuance of cryptocurrencies. However, it is important to consider that the financial technology industry may face challenges and limitations due to the pricing and quality of Internet and mobile phone services. Despite the significant increase in the use of information and communication technology in recent years, these factors might exert pressure and hinder the growth of the sector. Regrettably, the current level of institutional support required to establish an incubator environment for fintech falls short, as only a limited number of Arab countries have successfully established incubators and accelerators aimed at fostering the growth of startups. These initiatives play a crucial role in enabling fintech companies and institutions to conduct real-world testing of their innovative solutions. Fintech firms have significant



limitations in terms of demand due to the "confidence gap" and insufficient levels of financial understanding among consumers. The use of fintech as a payment channel requires a particular level of assurance in order to mitigate the presence of uncertainty. Furthermore, there exists the challenge of effectively advertising such a service, as well as the issue of the educational attainment of customers in Arab nations. Furthermore, an additional concern arises in the form of cyber risk, whereby the occurrence of cyber-attacks may result in operational disruptions, financial setbacks, reputational harm, and even impede progress unless measures are taken to enhance information security frameworks. According to the International Monetary Fund (2018), fintech businesses face a persistent challenge in the form of stringent adherence to banking secrecy rules and regulations governing money transfers. The International Monetary Fund and the World Bank were requested to collaboratively present proposals on the Bali Fintech Agenda in 2018. This agenda comprises twelve elements that serve as guidelines for governments and central banking institutions to adopt and promote "rapid progress in fintech" [8].

### **Service Base Companies: Digital Credit and Business Growth**

Service-oriented organizations are seeing ongoing advantages from the use of mobile financial providers that provide digital lending services, such as M-Shwari, KCB-MPesa, and Tala. These providers assist in addressing insurance-related challenges faced by these companies. This study aims to examine the robust correlation between mobile financing and debt, as shown by previous research [8]. Corporate economic progress has been documented. The efficient movement of products and services, a conducive investment climate, and the preservation of the environment were identified as key factors. Service-oriented organizations can consider the use of smart devices as a means to optimize their financial operations and enhance connection with their clientele. This entails the adoption of smart devices for the purpose of streamlining credit transactions and facilitating efficient exchange of information. Service-based enterprises have the potential to decrease debt collection costs by enhancing consumer engagement, since it enables consumers to conveniently make their requests for 28 items at their own convenience. Due to their focus on generating income rather than relying on debt, service-based organizations are likely to see a growth in their revenues.

A research was conducted using a database of 74 nations revealed that small and medium-sized firms (SMEs) need financial support in order to compete with larger enterprises. Entrepreneurs that possess an interest in such enterprises face a predicament. It has been postulated that a significant number of foreign banks inside the malfunctioning credit registry are not only enabling access to financial resources, but also imposing extra banking constraints on small and medium-sized enterprise (SME) obligations. The findings of their research demonstrated that the availability of financial resources for service-oriented enterprises is contingent upon the extent of engagement with financial analysts, including marketing strategies, financial expertise, technical proficiency, and operational capabilities [9].

Academic researchers have primarily focused their attention on service-based companies. A finance model specifically designed to assess the availability and structure of credit for such companies has determined that automation represents an optimal approach for executing political and financial policies. Furthermore, the model suggests that the implementation of institutional measures is necessary to ensure both eligibility and affordability of credit [10]. The study findings suggest that technology has the potential to effectively streamline complicated processes. This study examines the relationship and dynamics of financial access and interaction between financial institutions and small and medium-sized enterprises (SMEs).

Service-oriented organizations may enhance their financial accessibility via the use of digital solutions, hence leading to increased profitability. Nevertheless, the persistent challenge of securing funding persists for service-oriented enterprises mostly as a result of insufficient access to pertinent information. The presence of asymmetry, a scarcity of accounting papers, a deficiency in collateral, and restricted availability of bookkeeping resources. The structured lending plan is associated with broad connections to physical divides [11]. The aforementioned limitations Many service-based enterprises have relied on informal loans obtained from their relatives and associates.

## **Research Methodology**

### **Research Design**

Research design is the overarching plan that will be used to lead the whole investigation. To examine the impact of fintech companies' lending on the growth of SME, a descriptive research methodology was chosen as the optimal framework to collect data and analyze the results inside Jordan. According to [8], research design is the method used to execute the study and outline how the data will be gathered and analyzed. The study's descriptive approach was perfect for elucidating the responder and uncovering characteristics that would be useful in addressing the issue.

### **Population of the study**

A population is a subset of a larger group from which researchers choose a representative sample for analysis. The

population, as defined by [8], is the sum of all elements or entities from whom a researcher sought to draw a representative sample for the study. 210 service-based companies in Jordan are included in the study's population.

### Sample and Sampling Technique

The sample size used for the study was 136 registered service-based companies in Jordan using [8] formula.

**Table 1: Sample Size**

Service base firms in Jordan	Number	Percentage
The consultant and investment group	22	16.2
The Arab international for education and investment.	32	23.5
Jordan shipping lines.	21	15.4
Jordan hotels and tourism.	33	24.3
Jordan electric power	28	20.6
<b>Total</b>	<b>136</b>	<b>100</b>

### Instrument for data collection

The study relied on a survey designed to measure worker inspiration and productivity. Data on both the independent and dependent variables were collected and the research relied on a revised version of Likert's original rating scale.

Each variable was given a score between 0 and 4 on an internal scale that ranged from "Strongly Agree" (SA) to "Disagree" (D) to "Strongly Disagree" (SD) if the question was written favourably. Items written in a negative tone were scored higher.

### Validation of the Research Instrument

Some registered Service base companies in Jordan were entrusted with validating the research instrument. The goal was to guarantee that every aspect of the questionnaire adequately addressed the study questions and was written at a level that the respondents could comprehend. Finally, the validation process aimed to establish the reliability and validity of the instrument. Ultimately, the devices were deemed reliable enough for clinical application.

### Reliability of the Instrument

The study author used a Pearson Product Moment Correlation (PPMC) analysis to assess the accuracy of the tools. Twenty non-registered Service base companies in Jordan were chosen at random to participate in the pilot project. The reliability coefficient calculated from the data gathered was 0.72. This result demonstrated the instrument's dependability.

### Procedure for data collection

The questionnaire was sent to the sampled registered Service base companies. Agency secretaries helped the researcher hand out and collect filled-out questionnaires on the spot. The researcher used this technique to make efficient use of time and prevent questionnaires from going missing. Only 103 of the total number of copies printed were gathered at the end for further study.

### Method of data analysis

The collected data were analyzed using appropriate statistical technique such as descriptive statistics for research questions while Pearson Product Moment Correlational analysis was used to test the null hypothesis.

### Data Analyses and Discussion of Results

**Table 2: Analysis of Research Questionnaire Administered**

Questionnaire distributed	Questionnaire Returned	Questionnaire not returned	Percentage returned	Percentage not returned
137	103	34	75.2	24.8

Source: Field survey 2023

Table 2 shows a breakdown of questionnaire distributed, returned, and not returned from the respondents. A total of one hundred and thirty-seven (137) were administered and one hundred and three (103) questionnaires representing 75.2% were returned, while thirty-four (34) representing 24.8% not returned.

**Table 3: Distribution of Respondents by sex**

Sex	No. of Respondents	% of Respondents
MALE	41	39.8
FEMALE	62	60.2

<b>Total</b>	<b>103</b>	<b>100</b>
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Source: Field survey 2023

Table 3 shows that 41 respondents representing 39.8% of the sample population were male while 62 respondents representing 60.2% of the population were female.

**Table 4: Age Distribution**

Age	No. of respondents	% of Percentage
20 – 25	21	20.4
26 – 30	24	23.3
31 – 35	17	16.5
36 – 40	31	30.1
41 – Above	10	9.7
<b>Total</b>	<b>103</b>	<b>100</b>

Source: Field survey 2023

Table 4 shows that 21 respondents representing 20.4% of the sample were between the age brackets of 20 and 25 years; 24 respondents each representing 23.3% were between the age bracket of 26–30 years; 17 of the respondents representing 16.5% were 31–35; also, 31 respondents representing 30.1% of the sample were between the age limit of 36–40 years; and 10 respondents representing 9.7% were within the age limit of 41 and above years.

**Table 5: Marital Status Distribution**

Status	No. of Respondents	% of Respondents
Single	32	31.1
Married	50	48.5
Divorced	9	8.7
Widow/Widowers	12	11.6
<b>Total</b>	<b>103</b>	<b>100</b>

Source: Field survey 2023

Table 5 above shows that 32 respondents representing 31.1% of the sample were single, 47 respondents representing 48.5% of the sample were married, only 9 respondents representing 8.7% of the sample were divorced, as well as only 12 respondents representing 11.6%

**Table 6: Educational Qualification Distribution**

Qualification respondents	No. of Respondents	% of Respondents
WAEC/NECO	20	19.4
OND	16	15.5
HND/BSC	27	26.2
MSC	31	30.1
PHD	9	8.7
<b>Total</b>	<b>103</b>	<b>100</b>

Source: Field survey 2023

Table 6 shows that 20 respondents representing 19.4% of the sample were WAEC/NECO holders; 16 respondents representing 15.5% were OND/NCE certificate holders; 27 respondents representing 26.2% were holders of HND/BSC certificates; 31 respondents representing 30.1% were MSC certificate holders; and only 9 respondents representing 8.7% of the population were PHD holders.

**Table 7: years of service Distribution**

Status	No. of Respondents	% of Respondents
1-5 years	26	25.2
6-10 years	49	47.6
11-15 years	12	11.6
16 years and above	17	16.5
<b>Total</b>	<b>103</b>	<b>100</b>

Source: Field survey 2023

Table 7 above shows that 26 respondents representing 25.2% of the sample had worked for 1–5 years; 49 respondents representing 47.6% of the sample had also worked for 6–10 years; only 12 respondents representing 11.6% of the sample were within the service year of 11–15 years; as well as only 17 respondents representing 16.5% had worked for 11–15

years.

### Research Question one

What is the level of usage of Fintech firm lending by service base companies in Jordan? In order to answer the research question, descriptive analysis was performed on the data collected.

**Table 8:** Descriptive analysis of the level of usage of Fintech firm lending by service base companies

Variable	N	Arithmetic mean	Expected mean	R	Remarks
<b>Fintech lending firms</b>		22.56	12.50		
	100			0.94*	*strong to perfect Relationship
<b>The Level of Usage</b>		12.61	5.00		

Source: Field Survey

Table 8 presents the result of the descriptive analysis of the level of usage of Fintech firm lending by service base companies. The two variables were observed to have a strong to perfect relationship at 82%. The arithmetic means for the Fintech firm lending (22.56) was also observed to be higher than the expected mean score of 12.50. In addition to that, the arithmetic means for the level of usage (12.61) was observed to be higher than the expected mean score of 5.00. As a result, the level of usage of Fintech firm lending has a significant impact on the expansion of Service base companies in Jordan.

### Research Question Two

What is the impact of Fintech firm lending on business savings and loan ratio? In order to answer the research question, descriptive analysis was performed on the data collected.

**Table 9:** Descriptive analysis of the impact of Fintech firm lending on business savings and loan ratio

Variable	N	Arithmetic mean	Expected mean	R	Remarks
<b>Fintech lending firms</b>		22.56	12.50		
	100			0.83*	*strong to perfect Relationship
<b>Business savings and loan ratio</b>		15.43	5.00		

Source: Field Survey

Table 9 presents the result of the descriptive analysis of the impact of Fintech firm lending on business savings and loan ratio. The two variables were observed to have a strong to perfect relationship at 82%. The arithmetic means for Fintech lending firm (22.56) was also observed to be higher than the expected mean score of 12.50. In addition to that, the arithmetic means for business savings and loan ratio (15.43) was observed to be higher than the expected mean score of 5.00. The result, therefore, means that Fintech firm lending has a significant impact on business savings and loan ratio.

### Research Question Three

What is the impact of Fintech firm lending on the growth of Service base companies? In order to answer the research question, descriptive analysis was performed on the data collected (see table 10).

**Table 10:** Descriptive analysis of the impact of Fintech firm lending on the growth of Service base companies

Variable	N	Arithmetic mean	Expected mean	R	Remarks
<b>Fintech lending firms</b>		22.56	12.50		
	100			0.91*	*strong to perfect Relationship
<b>Growth of Service base companies</b>		15.58	5.00		

Source: Field Survey



Table 10 presents the result of the descriptive analysis of the impact of Fintech firm lending on the growth of Service base companies. The two variables were observed to have a strong to perfect relationship at 82%. The arithmetic mean for the Fintech firm lending (22.56) was also observed to be higher than the expected mean score of 12.50. In addition to that, the arithmetic mean for the growth of Service base companies (15.58) was observed to be higher than the expected mean score of 5.00. As a result, Fintech firm lending has a significant impact on the growth of Service base companies.

### Hypotheses Testing

#### Hypothesis One

There is no significant level of usage of Fintech firm lending by service base companies in Jordan. In order to test the hypothesis, Pearson Product Moment Correlation analysis was then used to analyze the data in order to determine the relationship between the two variables (see table 11).

**Table 11:** Pearson Product Moment Correlation Analysis of the level of usage of Fintech firm lending by service base companies in Jordan

Variable	$\sum x$	$\sum x^2$	$\sum xy$	r
	$\sum y$	$\sum y^2$		
Fintech lending firms (x)	9011	270655		
The level of usage (y)			134663	0.94*
	9113	58989		

\*Significant at 0.025 level; df=101; N=103; critical r-value = 0.086

Table 11 presents the obtained r-value as (0.94). This value was tested for significance by comparing it with the critical r-value (0.086) at 0.025 levels with 103 degrees of freedom. The obtained r-value (0.94) was greater than the critical r-value (0.086). Hence, the result was significant. As a result, Fintech firms lending has a significant impact on the level of usage by service base companies in Jordan.

#### Hypothesis Two

There is no significant impact of Fintech firm lending on business savings and loan ratio. In order to test the hypothesis, Pearson Product Moment Correlation analysis was then used to analyze the data in order to determine the relationship between the two variables (see table 12).

**Table 12:** Pearson Product Moment Correlation Analysis of the impact of Fintech firm lending on business savings and loan ratio

Variable	$\sum x$	$\sum x^2$	$\sum xy$	r
	$\sum y$	$\sum y^2$		
Fintech lending firm (x)	9011	270655		
Business savings and loan ratio (y)			140162	0.83*
	9113	58989		

\*Significant at 0.025 level; df=101; N=103; critical r-value = 0.086

Table 12 presents the obtained r-value as (0.83). This value was tested for significance by comparing it with the critical r-value (0.086) at 0.025 levels with 101 degrees of freedom. The obtained r-value (0.82) was greater than the critical r-value (0.086). Hence, the result was significant. The result, therefore, means that there is a significant impact of Fintech firm lending on business savings and loan ratio.

#### Hypothesis Three

There is no significant impact of Fintech firm lending on the growth of Service base companies. In order to test the hypothesis, Pearson Product Moment Correlation analysis was then used to analyze the data in order to determine the relationship between the two variables (see table 13).

**Table 13:** Pearson Product Moment Correlation Analysis of the impact of Fintech firm lending on growth of Service base companies

Variable	$\sum x$	$\sum x^2$	$\sum xy$	$r$
	$\sum y$	$\sum y^2$		
Fintech lending firms (x)	9011	270655	141752	0.91*
Growth on Service base companies (y)		9113	58989	

\*Significant at 0.025 level; df =101; N =103; critical r-value = 0.086

Table 13 presents the obtained r-value as (0.91). This value was tested for significance by comparing it with the critical r-value (0.086) at 0.025 levels with 101 degrees of freedom. The obtained r-value (0.91) was greater than the critical r-value (0.086). Hence, the result was significant. The result, therefore, means that there is a significant impact of Fintech firm lending on the growth of Service base companies.

## Conclusions

The study concluded that FinTech had a significant positive impact on the expansion of Service base companies in Jordan. Finally, the study concluded that increased use of mobile money and digital lending has a positive impact on the expansion of small and medium-sized enterprises in Jordan considering expansion of Service base companies from a single operated company to several employees, increase sales volume and revenue is an exhibition of expansion of Service base companies.

## Recommendations

The study's authors recommend that the mobile service provider actively promote their offerings so that as many company owners as possible may benefit from the convenience of the mobile money product. One way to do this is via advertising that highlights the usefulness of mobile money services and provides a corresponding list for easy reference. In addition, the research suggests that merchants that operate under a Service-based business model could use mobile money services as a tool for expanding their operations. Evidence suggests that there are several benefits to using mobile money services, including reducing the risk of fraud among merchants who carry large amounts of cash. Taking elementary measures to evaluate the growth of service-based businesses is still an important area that needs plenty of focus. Companies based on providing a service are less likely to embrace the same financial objectives as bigger corporations. Last but not least, Fintech service providers will need to come up with creative, effective solutions to the delay that may arise from an incorrect mobile money transfer. This would lead to a rise in the number of company owners that see the potential in using Fintech to expand their operations.

## Future findings

The research only covered a few variables to examine the impact of fintech firms' lending and expansion of service-based companies in Jordan, a comparative study ought to be carried out to examine other variables that are not covered by this study. The research only covered a few service base companies, whereas there are other service base companies that need to be covered. A comparative study ought to be carried out to examine other variables that are not covered by this study.

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## Conflict of interest

The authors declare that there is no conflict regarding the publication of this paper.

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