The Impact of Smart Phone Applications on Improving Marketing Performance of Banking Services in Jordanian Commercial Banks

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ABSTRACT: This study aimed to identify the impact of smart phone applications in its dimensions (ease of use, ease of access to customers, speed of information handling, and response) in improving the marketing performance of banking services in its dimensions (number of customers, number of banking services, and sales volume). The descriptive analytical approach was used, and the study population consisted of (13) commercial banks. Electronically survey set was distributed to the study sample. The SPSS program was used for the purposes of statistical analysis and testing the study hypotheses. The study found that there is a statistically significant impact at the level of significance of ($\alpha \leq 0.05$) for the impact of smart phone applications in its dimensions (ease of use, ease of access to customers, speed of dealing with information, and response) in improving the marketing performance of banking services by its dimensions (number of customers, number of banking services, and sales volume) in Jordanian commercial banks, The study recommended a number of recommendations, and the most is: adoption of smart phone applications is become highly necessarily by the marketing departments in Jordanian commercial banks due to its technical advantages in terms of easy access to customers, speed and providing banking services to customers, customers privacy toward their banking transactions, ease of meeting the customer's needs at any time, and the ease of targeting customers of different groups, which has a significant role in improving the marketing performance of banking services.

KEYWORDS: Smart phone applications, improving marketing performance, Banking services, Jordanian commercial banks.

INTRODUCTION

Business organizations have sought to adopt a number of tools in order to market their services and achieve better interaction with their customers in line with the needs of their aspirations and expectations, and at the same time to maintain their position among competitors. We have recently witnessed the organizations' tendency to use electronic marketing means that will facilitate the customers in the flow of services through those electronic means, which has contributed to attracting customers towards those services that are provided to them electronically, which has become a competitive advantage for organizations in order to gain the satisfaction and loyalty of their customers, and to maximize market shares and improve their marketing performance, which is the end result of the organizations' activities.

The use of smart phone applications has constituted a qualitative change in organizations' marketing of their services, as it has become one of the most powerful marketing means that accompanies the customer at all times and provides him with service on a permanent basis and is not limited to full-time employees, making the services of organizations available in the hands of customers. Therefore, we find these applications from one of the effective channels for marketing services and strengthening the relationship between service providers and customers who benefit from them on a permanent basis (Al-Zubaidi, 2011).

Jordanian commercial banks are among the most prominent service organizations, which prompted them to design their own banking applications via smart phones to market their banking services and distribute them through these applications to work on marketing those services through direct marketing with customers and their smartphones to work to meet all their needs of services Banking at any time without referring to bank branches to obtain these services by traditional methods. The interest of Jordanian commercial banks in using electronic applications via smart phones was the result of their future aspirations aimed at providing their banking services to their customers in non-traditional ways, in order to gain customer confidence and satisfaction, improve their marketing performance, and enhance their competitive capabilities in light of the technological development that has become an imperative for the banking sector to enable them to respond to the challenges.

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Study Problem

The problem of the study lies in determining the impact of smart phone applications because of their advantages, including ease of use, ease of access to customers, speed of access to information, and response in order to improve their marketing performance by increasing the number of customers, diversifying the number of banking services, and increasing the volume of sales for banking services in Jordanian banks. Researchers found the importance of the topic of smart phone applications in improving marketing performance, which called for the importance of studying the impact of smart phone applications in improving the marketing performance of banking services in Jordanian commercial banks, after reviewing the results and recommendations of many relevant studies, including the study (Al-Faydi). , 2021), a study (Al-Sharqawi, 2021), a study (Alghizzawi, et. al 2018, a study (Mamadiyarov, 2021), a study (Janda, et.al, 2021).), and the study (Prince, 2020), the study (Jammeleh & Jamil, 2020), which recommended conducting more studies, which prompted the researchers to study the impact of smart phone applications on the marketing performance of Jordanian commercial banking services, in light of the increased competition In devising the best means by employing technology to improve marketing performance, given its importance and the ability of these applications to market banking services with high quality, which will have a number of positive repercussions on the marketing performance of Jordanian commercial banks.

Study Questions

To achieve the study objective the following questions and questions should be answered by the marketing department employees of Jordanian commercial banks were as:

Main question: Is there an impact of smart phone applications with its dimensions (ease of use, ease of access to customers, speed of access to information, and response) in improving the marketing performance of banking services by removing it (number of customers, number of banking services, and sales volume) in Jordanian commercial banks?

Many questions arise from this question, as follows:

• First sub-question: Is there an impact of smart phone applications with their combined dimensions in improving the marketing performance of banking services in the dimension of the number of customers in Jordanian commercial banks?

• Second sub-question: Is there an impact of smart phone applications with their combined dimensions in improving the marketing performance of banking services in the dimension of the number of banking services in Jordanian commercial banks?

• Third sub-question: Is there an impact of smart phone applications with their combined dimensions in improving the marketing performance of banking services in the dimension of sales volume in Jordanian commercial banks?

Study Objectives

The current study achieved the following objectives:

• Identified the impact of smart phone applications with their dimensions (ease of use, ease of access to customers, speed of access to information, and response) in improving the marketing performance of banking services by removing it (number of customers, number of banking services, and sales volume) in Jordanian commercial banks.

•Build up a theoretical framework that enhances the topic of using smart phone applications by removing them in improving the marketing performance of banking services in Jordanian commercial banks to be a reference for researchers and those interested in e-marketing and its applications, including smart phone applications.

• Presented a set of practical recommendations in light of the results that the study will reach for the marketing departments of Jordanian commercial banks to help them develop the efficiency of smart phone applications in terms of content and technical aspects with the aim of improving marketing performance with high efficiency towards their banking services.

Study hypotheses

The main hypothesis (H0): There is no statistically significant impact at the significance level ($\alpha \leq 0.05$) of smart phones with its dimensions (ease of use, ease of access to customers, speed of access to information, and response) in improving the marketing performance with its dimensions (number of customers, number of services, and sales volume) in Jordanian commercial banks.

The following sub-hypotheses are derived from it:

The first sub-hypothesis (H01): There is no statistically significant impact at the significance level ($\alpha \leq 0.05$) for smart phone applications with its combined dimensions (ease of use, ease of access to customers, speed of access to information, and response) in improving the marketing performance in term of number of customers in Jordanian commercial banks.

Second sub-hypothesis (H02): There is no statistically significant impact at the level of significance ($\alpha \leq 0.05$) for smart phone applications with its combined dimensions (ease of use, ease of access to customers, speed of access to information, and response) in improving the marketing performance in term of number of services in Jordanian commercial banks

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The third sub-hypothesis (H03): There is no statistically significant impact at the level of significance ($\alpha \leq 0.05$) for smart phone applications with its combined dimensions (ease of use, ease of access to customers, speed of access to information, and response) in improving the marketing performance in term of sales volume in Jordanian commercial banks.

Study Model

The study model shows the relationship of the independent variable (smart phone applications) with its combined dimensions in the dependent variable (improving marketing performance) with its combined dimensions as in Figure (1)*.
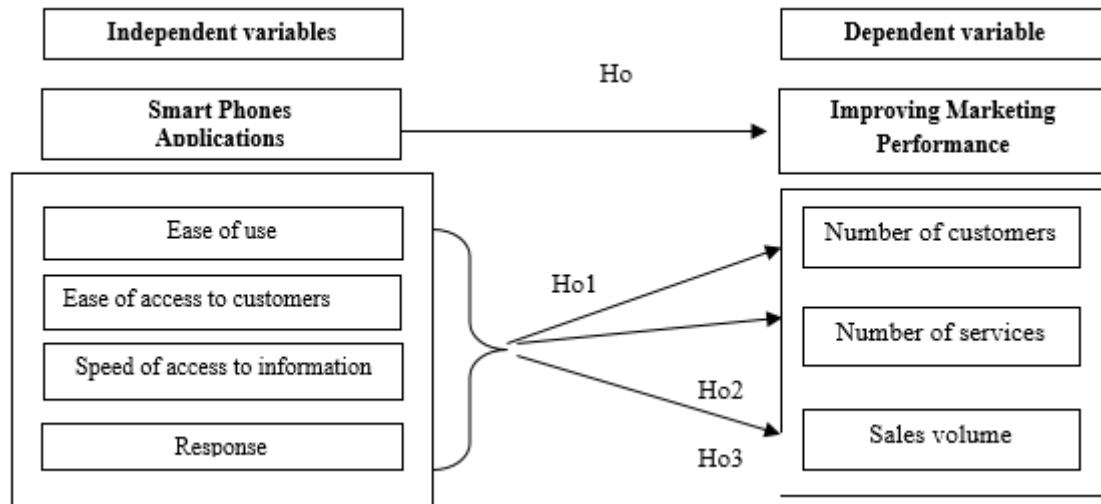
THEORETICAL FRAMEWORK AND PREVIOUS STUDIES

Smartphone Applications

Today, smart phone applications are considered the lifeblood and one of the most important driving forces for the interactions of individuals among themselves and business organizations. Rather, individuals interact with the whole world. They can be used for social communication, shopping, and also for marketing services and products (Khalifa, 2016).Smartphone applications have spread greatly and the reason for this spread is due to the commercial incentives and benefits they have, as they are characterized by a very rapid spread and provide organizations with the opportunity to reach customers at all times (Cheel, et. al, 2015).Companies have come to consider the impact of smart phone applications parallel to websites. If they do not provide more services than websites, they are at least parallel in terms of reaching a larger number of customers and providing them with services, information and news that the customer needs to complete their service operations (Shariteh, 2017).

(Khalifa, 2020) defined smart phone applications as programs that are downloaded from electronic stores, free or paid, and depend on activating their services with the user's phone number and internet connection.

Smartphone applications have several characteristics, the most important of which are: Inject all the information that describes the service they provide and translate into instructions that provide users with applications, provides easy navigation between the options offered on smart phone applications, as some applications allocate a search box that increases the application's ability to meet the needs of users, which provides an additional advantage to the application, and existence of a security system that protects the data and information of users of smart phone applications, which makes it flexible and vital in the use of applications ((Gupta & Brooks, 2013).

Ease of Use

With the increase in smart phone applications, it has become necessary to design applications among the advantages of their ease of use, and the ease of use of any system lies in the absence of technical obstacles and the ability of the user to deal easily and smoothly to achieve his requirements (Shaheen, et. al, 2016) and for (Rasool, et. al, 2017) the degree to which the user believes that using This system will be effortless. (Hassan, 2019) using the application without facing any difficulties is to be an attractive factor for the user, saving the most time and effort.

Ease of Accesses Customers

All business organizations seek to facilitate services to their customers by the easiest available means to make things easier for customers, and to attract new customers. Facilitating the purchase process in order to retain consumers and attract them towards services and products who have limited experience towards the Internet (Salam, et.al 2020). Customer accesses to the

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process of services around the clock to customers with high quality is a major reason for the success of services and marketing that is safe (Chemtai, 2016).

Speed of Accesses to Information's

(Odunlade DR, 2017) defined the speed of dealing with information as the availability of information from several sources and the ability to access it easily. According to (Alzayyat, et. al, 2016), the process of presenting the information that the customer needs improves the quality of the application. When the customer is provided with all the information about the service he deals with, he reduces the percentage of errors that may occur.

Responses

Response was defined by (Shachaf & Ottman, 2007) as the company's ability to provide services to customers on a permanent basis and at the time the customer needs. It means the extent and willingness of service providers to provide immediate service to customers through quick response, assistance, and others (Hammroush & Saleh, 2020). According to (Mohammad & Alhamadani, 2011) that it is the tendency and desire of companies to provide services and answer customers' questions at any time. Response is a main basis for forming customer opinions about electronic services and a reason to promote the service through it. Customers' opinion of the response of the website is enough to give feedback on the effective design and improve the service provided (Hussain, 2011).

Improving Marketing Performance

Improving marketing performance as the efficiency of the quality of the marketing function in the organization to achieve its marketing objectives through the exploitation of all available resources (Ismail & Yahyaoui, 2019). (Maalla, 2021) sees marketing performance as the critical review of general marketing objectives and testing the effectiveness of the methods of their application in order to achieve these objectives. While (Leeuwen, et. al, 2015) defined that marketing performance is the company's ability to adapt to external shocks, that is, the external environment, and with permanent changes, and to maintain the best level of the company. (porter, 2008) that marketing performance is the organization's ability to practice its marketing activities in a way that makes it difficult for competitors to keep pace with it in the competitive situation and achieve its goals effectively. Also, defined as a set of strategic practices carried out by organizations that affect their market shares and therefore competitive positions (Al-Abadi & Suwaidan ,2011).

Number of Customers

Number of customers is one of the criteria for marketing performance as the basis of the investment process, and that the profits of business organizations are based primarily on attracting and retaining new customers (Al-Bakri & Al-Tai, 2014). Therefore, all business organizations realized the importance of this part, so they devoted a set of activities in order to meet the needs of customers and attract them to the organization with the aim of preserving them and increasing their number (Awad & Raslan , 2017).

Number of Services

The remarkable development in banking operations that the world is witnessing today, and the trend towards electronic banking services, was significantly reflected in the increase in banking operations carried out by customers, as well as those provided by financial or investment companies, and in turn affected the level of competitiveness among those companies (Mualla, 2021). (Jammeleh & Jamil, 2020) that the sum of the benefits and benefits offered by the bank to satisfy the material needs of individuals represents the optimal banking service. According to (Abdullah, 2020), it is a platform for interaction between customers and the bank itself, to achieve customers' desires and give them value according to their perceptions.

Sales Volume

Sales is the first element of the promotion that forms the elements of the marketing mix (product, pricing, promotion, and distribution), and it is the responsibility of the marketing departments to develop plans that contribute to activating and increasing the volume of sales (Al-Haddad, et.al,2012) saw that the volume of sales appears by knowing the difference between the products or services expected to be sold and those that have already been sold, so analyzing the environment in which the product is located is an indicator of an increase or decrease in the volume of sales based on the demand or reluctance of customers.

Previous Studies

(Al-Faydi, 2021) study results shows that Shifa application is an effective main channel of communication between health care providers and beneficiaries. (Janda, et.al, 2021) study results showed that the use of smart phone applications has resulted in a decrease in the rate of customer complaints due to the speed of response to their comments and complaints against companies, and that the rates of response to customer complaints are related to the levels of customer satisfaction. (Mamadiyarov, 2021)

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study results showed that there is an opportunity to develop digital banking services due to the ease of customer interaction with electronic banking applications. (Abu Alwafa and Megdadi, 2020) study results shows that there is a significant impact of mobile banking applications of all dimensions (personal account management, e-payment, e-transfer, credit card services-services)on Achieving competitive advantage of all dimensions(speed, confidentiality and security, diversity). Al-Nahar (2016), study showed that there is an impact of smart phone applications on the positive word transferred and repeat purchase and fulfillment of desire as it showed that Secret factors Response and ease of dealing with banking applications affect average customer satisfaction. The study recommended that the banks studied should pay more attention to smart phone applications than they are currently and continue to develop these applications.

(Suardika & Dewi, 2021) study results showed that the brand, product quality and price have a significant impact on the volume of sales, as the higher the reputation of the brand and the quality of the product, as well as the reasonable prices within the reach of customers. (Jameelha & Jamil, 2020) study results showed that there is a statistically significant effect of marketing banking services on customer satisfaction, as well as the presence of statistically significant differences in the impact of marketing banking services on customer satisfaction due to the factor of the way the bank is dealt with.

Study Methodology
Study adopted the descriptive analytical method to explain phenomena and events by monitoring data to reach the characteristics of the studied phenomenon and the relationships of events and factors affecting it(Sekaran & Bougie,2010).

Study Population and Sampling
Study population consisted of (13) employees of marketing departments in Jordanian commercial banks. The number of employees in these banks within the following job titles (manager, department head, and employee) is (409).

Study Tool
Researchers developed the questionnaire tool (the questionnaire) as a main tool for data collection, because the nature of the study (the descriptive-analytical approach) is most appropriate to achieve the objectives of the study and answer its questions. The questionnaire consisted of two parts: demographic variables: (gender, age group, and educational level , job level, number of years of experience in Jordanian commercial banks), study variables and dimensions: smart phone applications (ease of use, ease of access to customers, speed of data handling, response), improving marketing performance (number of customers, number of banking services, and sales volume) The dimensions of the study variables included (42) items divided into: (24) items to measure the dimensions of smart phone applications, and (18) items to measure the dimensions of improving marketing performance.

Study Tool Validity
The validity of the tool was confirmed, the internal consistency of Cronbach's Alpha was calculated, and the results were as shown in Table (1).

Table No. (1): Cronbach's internal consistency coefficient Alpha

Variables	Internal Consistency
Ease of Use	0.91
Ease of Accesses to Customers	0.92
Speed of Dealing with Information	0.90
Response	0.72
Smart Phones Applications	0.91
Number of Customers	0.90
Number of Financial Services	0.90
Sales Volume	0.93
Marketing Performance	0.95

Table (1) shows that the values of the internal consistency coefficient Cronbach's alpha for all dimensions of the study tool paragraphs (resolution) ranged between (0.76-0.95), where the stability is considered weak if the coefficient values are less than (0.60) and it was assumed (Sekaran & Bougie, 2010), that the minimum stability coefficient is (0.70), and stability is considered good whenever the coefficient values are (0.80) or more, so the values mentioned in the previous table are an indication of the stability of the study tool, consistency between its paragraphs, reliability and reliability for conducting statistical analysis.

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Descriptive Analysis

Independent Variable (Smartphone Applications): Described to determine the degrees of approval of the sample members, by calculating the arithmetic mean and standard deviation of the responses of the sample members, as shown in Table No. (2).

Rank	Item No.	Smart Phones Dimensions	Mean	S.D	Sig. Degree
1	2	Ease of Accesses to Customers	4.52	0.546	High
2	1	Ease of Use	4.49	0.459	High
3	3	Speed of Dealing with Information	4.46	0.565	High
4	4	Response	4.02	0.468	High
		Overall Mean	**4.49**		**High**

Table (11) shows that the dimension of ease of access to customers ranked first, with a mean of (4.52) and a standard deviation of (0.546), with a high degree of importance. While the response ranked last, with a mean (4.02) and a standard deviation (0.468), with a high degree of importance.

Dependent Variable (improvement of marketing performance): Described to determine the degrees of approval of the sample members, by calculating the arithmetic mean and standard deviation of the responses of the sample members as shown in Table (3).

Rank	Item No.	Smart Phones Dimensions	Mean	S.D	Sig. Degree
3	2	Number of Financial Services	4.59	0.494	High
2	3	Sales Volume	4.58	0.481	High
3	1	Number of Customers	4.57	0.499	High
		Overall Mean	**4.58**		**High**

Table (3) shows that the dimension of the number of financial services ranked first, with a mean of (4.59), and with a high degree of importance. While the number of customers ranked last, with a mean (4.57) and a standard deviation (0.499), with a high relative importance.

Study Hypotheses Test

The main hypothesis and sub-hypothesis were tested using multiple linear regression analysis. The main hypothesis (H0): There is no statistically significant role at the level of significance ($\alpha \leq 0.05$) Smartphone applications with their dimensions (ease of use, ease of access to customers, speed of access to information, and response) in improving the marketing performance of banking services in its dimensions (number of customers, number of financial services, and sales volume) of Jordanian commercial banks. To verify the validity of the first hypothesis, a multiple linear regression analysis of the impact of smart phone applications with its dimensions in improving the marketing performance of banking services was used, and the results were as shown in table(4):

Indep. Variables	Beta	t.Value	Sig. t	R	R2	f.Value	Sig. f
Ease of Use	0.003	0.075	0.930				
Ease of Accesses to Customers	0.203	3.912	0.000	0.711	0.505	103.157	0.000
Speed to Accesses to Information	0.339	7.121	0.000				
Response	0.128	2.763	0.006				

Table (4) showed that there is a statistically significant impact at the significance level ($\alpha \leq 0.05$) for smart phone applications with its dimensions in improving the marketing performance of banking services by its dimensions at the Jordanian commercial banks, where the correlation coefficient R was (0.711), while the coefficient of determination of the explained variance R2 reached (0.505). That is, smartphone applications with their dimensions explained 50.5% of the variance occurring in improving the marketing performance of banking services in its dimensions with Jordanian commercial banks, and the value of "f" was (103.157) and with a statistical significance (0.000), which indicates the rejection of the null hypothesis and acceptance of the alternative hypothesis that states that There is a statistically significant impact at the level of significance ($\alpha \leq 0.05$) for smart phone applications with its dimensions (ease of use, ease of access to customers, speed of dealing with information, and response) in improving the marketing performance of banking services in its dimensions (number of customers, number of financial services, and volume of Sales) at Jordanian commercial banks.

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The first sub-hypothesis (H0-1): There is no statistically significant impact at the significance level (α≤0.05) for smart phone applications with their combined dimensions in number of customers in Jordanian commercial banks. To verify the validity of the first sub-hypothesis, simple linear regression was used for the impact of smart phone applications on the dimension of the number of customers at Jordanian commercial banks, and the results as showed in table(5):

Dep.Sub.Variable	Beta	t value	t	R	R2	f . Value	Sig. f
Number of Customers	0.422	10.577	0.000	0.464	0.216	111.879	0.000

Table(5) showed a statistically significant impact at the significance level (α≤0.05) for the impact of smart phone applications by its dimensions in the dimension of the number of customers in Jordanian commercial banks, where the correlation coefficient R = 0.464, while the coefficient of determination of the interpreted variance R2 reached (0.216), meaning that smart phone applications explained what 21.6% of the variance occurred in the number of customers, and the value of "f" was (111,879) and with statistical significance (000), which indicates the rejection of the null hypothesis and acceptance of the alternative hypothesis which states that "there is a statistically significant impact at the level of significance (α≤0.05).), for smart phone applications with their combined dimensions in number of customers at Jordanian commercial banks.

Second sub-hypothesis (H0-2): There is no statistically significant effect at the significance level (α≤0.05) for smart phone applications with their combined dimensions in number of financial services in Jordanian commercial banks. To verify the validity of the second sub-hypothesis, simple linear regression was used for the impact of smart phone applications in the dimension of the number of financial services at Jordanian commercial banks, and the results as showed in table(6):

Dep.Sub.Variable	Beta	t value	t	R	R2	f . Value	Sig. f
number of financial services	0.460	12.020	0.000	0.512	0.262	144.487	0.000

Table (6) showed a statistically significant impact at the significance level (α≤0.05) of smart phone applications with its combined dimensions in the dimension of the number of banking services in Jordanian commercial banks, where the correlation coefficient R (0.512), while the coefficient of determination of the interpreted variance R2 reached (0.262), meaning that smart phone applications Its dimensions explained a rate of 26.2% of the discrepancy in the number of financial services at Jordanian commercial banks, and the value of "f" was (144.487) and with a statistical significance (0.000), which indicates the rejection of the null hypothesis and acceptance of the alternative hypothesis which states that "there is a statistically significant impact when significance level (α≤0.05) for smart phone applications with their combined dimensions in number of financial services at Jordanian commercial banks.

Third sub-hypothesis (H0-3): There is no statistically significant effect at the significance level (α≤0.05) for smart phone applications with their combined dimensions in sales volume at Jordanian commercial banks. To verify the validity of the third sub-hypothesis, simple linear regression was used for the impact of smart phone applications on the dimension of sales volume at Jordanian commercial banks, and the results showed in table (7):

Dep.Sub.Variable	Beta	t value	t	R	R2	f . Value	Sig. f
Sales Volume	0.443	11.820	0.000	0.506	0.256	139.707	0.000

Table (7) showed a statistically significant impact at the significance level (α≤0.05) for smart phone applications with its combined dimensions in the volume of sales at Jordanian commercial banks, where the correlation coefficient R was (0.506), while the coefficient of determination of the interpreted variance R2 was (0.256), meaning that mobile applications The smart dimension, with its dimensions, explained 25.6% of the variance in improving the working methods of telecommunications companies in Jordan, and the value of "f" was (139.707) and with a statistical significance (0.000), which indicates the rejection

of the null hypothesis and the acceptance of the alternative hypothesis which states that "there is an impact of Statistical significance at the level of significance ($\alpha \leq 0.05$) for smart phone applications in sales volume at Jordanian commercial banks.

Findings

Researchers found the following findings:

1. Statistical analyzes by using the arithmetic averages method showed that the values of the arithmetic averages for all dimensions of the independent variable represented by (ease of use, ease of access to customers, speed of dealing with information, and response), all of which were high, as the dimension of ease of use obtained the highest degree (4.49), because employees are sure Ease of use is the most important characteristic of smart phone applications, and the response dimension got the lowest score (4.02), due to the lack of technical support cadres, and the lack of complete training efficiencies in order to provide appropriate services to customers electronically.

2. Statistical analyzes by using the arithmetic averages method, showed that the values of the arithmetic averages for all dimensions of the dependent variable represented by (the number of customers, the number of banking services, and the volume of sales), which were all high, which showed that the dimension of the number of banking services was in the first order with an arithmetic average of (4.59) This indicates the keenness of Jordanian commercial banks to diversify their banking services by offering new services because of their profitable financial returns in favor of the banks. While the number of customers and their last rank were measured with a mean of (4.57), and this is due to the customers' lack of awareness of the bank's application due to the failure of banks to provide educational campaigns to customers using special applications.

3. The main hypothesis test showed that there is a statistically significant impact at the level of significance($\alpha \leq 0.05$) of the impact of smart phone applications with its dimensions (ease of use, ease of access to customers, speed of dealing with information, and response) in improving the marketing performance of banking services in its dimensions (number of customers, number of financial services, and sales volume) in Jordanian commercial banks, and this indicates rejection of the null hypothesis and acceptance of the alternative hypothesis, which states that there is a statistically significant impact at the level of significance ($\alpha \leq 0.05$) for the impact of smart phone applications with its dimensions (ease of use, ease of access to customers, speed of dealing with information, and response) in improving the marketing performance of banking services in its dimensions (number of customers, number of financial services, and sales volume) at Jordanian commercial banks. This result is in agreement with the results of the studies of both Al-Faydi (2021), and the study of Al-Sharqawi (2021), (Alghizzawi, 2018),(Mamadiyarov, 2021), and (Janda, et.al, 2021).

Managerial Implications

In light of the foregoing results, the study recommends the following:

1. The necessity of adopting smart phone applications by the marketing departments of Jordanian commercial banks due to its technical advantages in terms of ease of access to customers, the speed of providing banking services to customers, its concern for the privacy of customers' banking transactions, the ease of meeting customers' needs at any time, and the ease of targeting them For different categories of customers, which has a significant role in improving the marketing performance of banking services.

2. The necessity of establishing a unit specialized in electronic technical support at Jordanian commercial banks to be based on logistical technical support for customers using smart phone applications to facilitate the smooth flow of banking services without complications or problems that prevent customers from dealing with these applications in order to obtain banking services around the clock.

3. The necessity of providing educational programs to customers on how to use smart phone applications to encourage customers to use these applications to obtain banking services easily and quickly to meet their needs of banking services.

4. The necessity of finding means in banking phone applications that help people with special needs to complete all their banking transactions.

5. The necessity for Jordanian commercial banks to benefit from previous research and studies and the experiences of other companies and banks that have developed their smart banking applications to ensure their effectiveness, success and continuity.

Future implication

The researchers recommending more of conducting studies that clarify the impact of smart phone applications in improving the marketing performance by another variables and business organization environments.
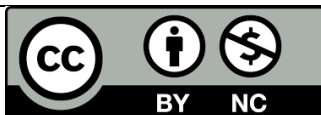
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REFERENCES

1) Abdullah, N. (2020). *The impact of the quality of banking services on customer satisfaction: A field study: commercial banks in Al-Darb Governorate - Saudi Arabia*. The Arab Journal for Scientific Publishing, 15. P. 247.

2) Abu Alwafa, S. & Megdadi, Y.(2020). *The Impact of Using E-Services Application by Mobile Phones in Achieving Competitive Advantage in the Jordanian Commercial Banks.* International Journal of Research in Business and Management (IJRBM), Published, Vol. 2 No. 1, Jan., 2020. Indexed Journal (ISSN 2455-6114), pp. 20-28.

3) Al-Abadi, S. & Suwaidan, N. (2011). *Business Marketing*, ed. 1. Amman, Jordan: Al-Hamid Library for Publishing and Distribution. p. 394.

4) Al-Bakri, Th. & Al-Tai, A.. (2014). *the impact of customer relationship management on marketing performance: an analytical study on a sample of Jordanian commercial banks.* Journal of the College of Administration and Economics for Economic, Administrative and Financial Studies. 2014, p. 13, pp. p. 1-35.

5) Al-Haddad, W. Shukairy M., Mahmoud, N. and Al-Zarqaan, S. (2012). *Electronic Banking,* ed.1.Dar Al-Masirah for Publishing and Distribution, Amman: Jordan.

6) Al-Fayed, A. (2021), *The Impact of Smart Applications on Care, Scientific Journal for Scientific Publishing*. Vol.32(2), pp.420-449.

7) Al-Sharqawi, A. (2021). *The role of electronic customer relationship management on the marketing performance of companies by applying to Egyptian tourism companies from the customer's point of view*. The Scientific Journal of Business and Environmental Studies. Vol.12(2), pp.369-419.

8) Alghizzawi, M., Ghani, M. A., Som, A. P. M., Ahmad, M. F., Amin, A., Bakar, N. A., & Habes, M. (2018). *The impact of smartphone adoption on marketing therapeutic tourist sites in Jordan*. International Journal of Engineering & Technology, Vol..7(4), pp. 91-96.

9) Al Nahar, A. (2016). *The Impact of Smartphone Applications on Customer Satisfaction in Jordanian Commercial Banks*. Unpublished Master Thesis, Amman Arab University, Amman, Jordan.

10) Altaweel, A. & Al-Abadi, A. (2013). *Managing the supply chain and the dimensions of operations strategy and marketing performance*, ed.1. Iraq, Mosul: Al-Hamid Publishing. p. 119.

11) Al-Zubaidi, H. (2011). *Financial analysis for the purposes of performance appraisal and failure prediction*, ed. 2. Dar Al Warraq, Amman. Jordan.

12) Al-zayyat, M., Almanasra, A. & Alnsour, H.(2016). *The impact of marketing using social media on purchasing intention in Jordan.*Journal of Business Administration, Jordan University. Vol. 12(3). Pp.519-530.

13) Awad A. & Raslan M. (2017), *The Importance of Using Modern Banking Tools and Techniques in Enhancing the General Performance of Palestinian National Banks*, The Jordanian Journal of Business Administration (Jordan), Vol.13,No.3.

14) Cheel, D. , Colley, Sh. , Erasmus, T.. & Whitehouse, O. (2015). *The Mobile Application Hacker's Handbook*. Canada: John wiley & Sons, Inc. P.5.

15) Chemtai, E.(2016), *The Effects of Mobile-banking on the Bank's Competitive Advantage: A Case of Selected Commercial Banks in Eldoret Town, Kenya*. Journal of Business and Management, Vol. 18, Issue 11. Ver. II, PP 26-31.

16) Hassan, F. (2019). *Persuasion technology in the design of electronic newspaper websites*, ed.. 1. Cairo, Egypt: Al Araby for Publishing and Distribution. p. 148.

17) Hammroush, W.. & Saleh, B. (2020). *The effect of electronic payment methods on improving the quality of services - Algeria Post* . (Unpublished Doctoral dissertation, Abdelhafid boussouf university center mila). Unpublished Master's Thesis, University Center Abdelhafid Bouasouf, Mila, Algeria.

18) Hussein, I. (2011). *Measuring the quality of electronic services using the gaps entrance - an applied study on the Jordanian telecom sector*. Unpublished Master's thesis, University of the Middle East, Jordan.

19) Haheen , S. , Cohen, A. , Zohdy , I. & Kock , B. (2016). *Smartphone Applications to Influence Travel Choices.* US: Fedral Highway Administration. P. 11.

20) Shachaf, P. & Ottman, M. (2007). *E-Quality and E-service Equity*, 40th Annual Hawaii International Conference on System Science, Jan,p247.

21) Shreiteh, R.. (2017). *Electronic Advertising: Contemporary Concepts and Strategies*. ed. 1. Amman, Jordan: House of Modern Education. p. 475.

22) Gupta, R.. & Brooks, H. (2013). *Using Social Media for Global Security*. Canada: Johan Wiley& Sons, Inc. P. 331.

23) Khalifa, Ihab. (2016). *Social Media Wars*, ed.2. Cairo, Egypt: Dar Al Arabi for Publishing and Distribution. p. 42.

The Impact of Smart Phone Applications on Improving Marketing Performance of Banking Services in Jordanian Commercial Banks

24) Khalifa, Ihab. (2020). *Post-Information Society: The Impact of the Industrial Revolution on National Security*, ed.1.United Arab Emirates: The Future for Advanced Research and Studies. p. 93.

25) Mamadiyarov, Z. (2021). *Analysis of Factors Affecting Remote Banking Services in the Process of Bank Transformation in Uzbekistan*. Financial and credit activity: problems of theory and practice.Vol.1(36), pp.14-26.

26) Mohammad , A. & Alhamadani , Sh. (2011). *Service Quality Perspectives and Customer Satisfaction in Commercial Banks Working in Jordan*. Middle Eastern Finance and Economics Journal, Issue 14. Pp.60-72.

27) Muala, N. (2021). *Marketing management is an integrated strategic approach*, ed. Dar Al-Yazuri. 1Amman, Jordan . p. 321.

28) Janda, S., Polthier, A., & Kuester, S. (2021*). Do they see the signs? Organizational response behavior to customer complaint messages*. Journal of Business Research, 137, 116-127.

29) Leeuwen, B. , Spek, R. & Zenden, J. (2015*). History of Market Performance*. London & New York: Routledge. P. 3.

30) Jammeleh, H. & Jamil, O. (2020). *The effect of marketing banking services on customer satisfaction In Sudanese banks: a case study of the Bank of Khartoum, Wad Madani branch*.(Unpublished Doctoral dissertation, University of Gezira).

31) Rasool, A., Gupta, V., Slathia, B. and Mahajan, G. (2017). *Online Shopping Adoption and Influencing Factors: A Study in Karnataka*. Apeejay-Journal of Management Sciences and Technology, Vol.4(2). Pp. 29-40.

32) Odunlade, O. (2017). *Availability and Accessibility of Information Resources as Predictors of Lecturer's Teaching Effectiveness*. Private, B.U (2014).*Marketing Principles*. Yogyakarta ,Indonesia: Liberty.P40.

33) Salam, K., Wulansari, R., & Harsono, P. (2021). *Promotion Costs Analysis To Increased Volume Sales In The Convection Companies*. International Journal of Science, Technology & Management, Vol.2 (5), pp.1542-1551.

34) Sekaran, U., & Bougie, R. (2010). *Research Methods for Business*: A Skill Building Approach (5th ed.). West Sussex, UK: John Wiley & Sons Ltd.

35) Suardika, I. & Dewi, M. (2021). *The Influence of Brand, Product Quality and Price on Sales Volume of Samana Mart Stores*. International Journal of Social Science and Business, 5(2).

36) Porter, M. E. (2008). *The five competitive forces that shape strategy*. Harvard Business Review, 86(1), pp.78-93.

37) Yahyaoui, E. & Ismail, N. (2019). The impact of organizational culture on the marketing performance of the industrial establishment (a case study of the Battana gas bottles unit). Journal of Islamic Sciences 12(2), (185-37).