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The Impact of Internet Banking at Times of Pandemic; Customer Experience, Satisfaction, Trust, Loyalty, E-service Quality and Bank's Financial Performance; An Application on Egyptian Public Banks

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Abstract The purpose of this study is to examine the impact of Internet banking on customer experience, satisfaction, trust, loyalty, E-service quality and financial performance in Egyptian public banks. This study concentrates on public bank's customers in Egypt as a developing nation in the Middle East, which limits the generalizations of the paper findings to other banks globally. However, the fact that all banks faced similar challenges at times of pandemics and typically adopt common standards in bank financial management implies that the findings are potentially robust for global bank management. Structural Equation Modelling was applied to examine the research hypotheses. There was an evidence of a significant relationship between customer experience and loyalty, which is related to financial performance in Egyptian public banks. The study confirmed the importance of studying consumer behaviour, for the purpose of improving customer services in the banking industry which could have valuable implications for internet banking, bank marketing services, and might positively impact bank financial performance.

Keywords: *e-service quality, bank trust, customer experience, customer satisfaction, customer loyalty, and financial performance*

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1. Introduction

Rapid improvement in information technology and new IT innovations are imperative features in the future expansion and development in banking and financial industry in general. The year 2020 specifically is marked by the Covid-19 crisis, which is still changing our everyday life and left its mark. To reduce the spread of the novel COVID-19, governments enacted mitigation strategies involving national quarantines, social distancing and entire shutdown of non-essential businesses. Many banks were forced to temporarily close branches because of the pandemic but were still needed to play the major role in absorbing this shock and continue to serve their customers efficiently, yet remotely and thus online banking even in the less developed markets is currently experiencing great demand. Shannak [1] argues that modernized technology is a way of realizing higher efficiency, control of operation, and most importantly, profitability. It is now inevitable to embrace the trend in new technology to meet the day-to-day increasing demands, to provide satisfying services, retain and increase customer's loyalty especially at times of pandemics. Consumers are shifting from traditional channels to Internet ones and the multichannel model now is the common trend in the banking industry. Financial institutions in general, have been in a rapid state to digitize virtually every aspect of consumer engagement — from account opening to customer care. But many banking providers still lag far behind. And the question remains, especially in developing countries; what is the relation between Internet banking and customer satisfaction, experience, trust, loyalty, E-service quality and bank's performance at times of pandemic?

1.1. Objectives of the Study

This study aims to identify the impact of internet-banking services on customer experience, satisfaction, trust and loyalty and to examine if this is reflected on banks' performance in terms of profitability ratios, noninterest operating expenses and income in Egyptian public banks in times of pandemic.

1.2. Cultural Adoption of E-banking in Egypt

The Egyptian culture as in many other developing countries of the Middle East has an effect on internet banking adoption, in which we argue that people are still generally conservative in the use of e- banking services. In this regard, we agree with Ismail and Alawamaleh [2] that most bank clients would generally prefer traditional paper procedures rather than e-services when it comes to any process related to money, and in line with the general business culture in the Middle East and North Africa (MENA), most serious bank users (as businesses) would generally prefer to have a personal relationship with their bank representatives, even if they can use e-services. This allows them to use personal rapport, networking and amplifies client trust.

The Internet Egyptian Banking Industry at a glance: Egypt is one of the most populated countries in Africa and the Middle East, with a population close to 102 million in 2020. With the Egyptian Government's launch of the Sustainable Development Strategy (SDS): Egypt's Vision 2030, financial inclusion has become a national priority which necessitates the rapid development and extension of Internet platforms to reach the financially excluded and underserved populations. According to the AFI-Egypt report [3], there are 40 banks and more than 2,800 branches across Egypt. Sixteen of these banks offer full service e-banking and mobile financial services. Thirty-two of Egypt's 40 banks offer internet-banking services. This represents 1.4 million registered accounts and EGP 128 million (approximately USD 7 million) in transaction volumes [3]. The National Bank of Egypt, Bank Misr, and Banque Du Caire are the only public-sector banks which control 40 percent of the banking sector. However, all banks in Egypt are subject to supervision by the Central Bank of Egypt.

Internet Banking face several ongoing challenges in Egypt, mainly concerned with consumer protection and Cybersecurity. According to the World Bank report [4], stable mobile and internet connectivity are essential to enable Internet transactions which is still a problem in the developing countries in general, including Egypt. Mobile penetration in the country stands at 109.45 percent, indicating that users have more than one SIM subscription, but only 29.42 percent of these subscriptions have internet access. Internet penetration is relatively low at 37.8 percent and this is a potential barrier to adoption and usage of mobile financial services. According to the same report, 44 million Egyptians are eligible to enter the formal banking and financial services sector. However, there are issues related to fears of high charges/commissions among others, contribute in weakening consumer trust in formal financial institutions. Only 57.3% of Egypt's total population are internet users and 18.4% of those internet users use mobile banking or financial services apps monthly.

The rest of the paper consists of a literature review (Section 2); Conceptual Framework and Hypotheses Development (Section 3); Research methodology (Section 4); Discussion and conclusions (Section 5); Managerial Implications Limitations, and suggestions for future research.

2. Conceptual Framework and Hypotheses Development

With the worldwide spread of COVID-19, customer behaviour changed with increasing focus of the people from visiting bank branches to online access of bank services. The covid-19 pandemic has brought an increase in digital usage across the globe. Almost all business organizations were forced to adopt technology, banks reacted like every other business, by focusing on adoption of technology to maintain business continuity [5].

Banks noticed consumer's shift towards e-banking during the pandemic times [6]. The rumours about the spread of virus was an additional motive to shift from cash notes and physical transactions to internet banking [7]. In normal times, customer experience in banking is about customers' satisfaction with the services offered and with how employees delivered this service. In the context of COVID-19, superior customer experience means focus more on digital tools with which many customers are still unfamiliar.

Different authors have given different definitions of Internet Banking or e-banking mainly being an automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels. It is argued that electronic banking definitions vary partially because electronic banking refers to several types of services. Kolodinsky *et al* [8] mentioned that electronic banking could be defined in several different platforms as: Telephone Banking, Internet banking or online banking, PC Banking, TV – Based banking and Mobile Phone banking. DinV *et al.* [9] view internet banking as a service of electronic banking (E-banking) which enables bank customers to access accounts and general information on bank products and services through the Internet and allows customers to monitor own finances. Internet banking offers the main advantage of allowing depositors to manage more aspects of their accounts over the internet, rather than visiting a physical branch. Onay and Ozsoz [10] highlighted that internet banking services could be viewed as a distribution channel for any bank so that customers can easily do their transactions locally and internationally and make payments completely online at any time and at a lower cost compared to visiting a traditional bank branch. This study is employing the definitions presented in Bani, and Alawamleh [11] and Chukwu *et al.* [12] that internet banking includes the systems that enable customers, to access accounts, conduct a range of transactions and/or obtain information on financial products and services.

Internet banking has totally changed the way of providing services as recent evidence suggests that an Internet-based consumer banking strategy may be effective, with reports of more profitable, loyal and committed customers compared to traditional banking customers [13]. Nowadays, all banks are recognizing the importance of internet banking as a mean of enhancing banking service quality, increasing customers' satisfaction and ultimately performance measured in terms of reducing operating expenses and enhancing banks' profits [9,14].

Since banking is a customer-oriented service industry, service quality has a major impact on a bank's performance and showed to have considerable relationship with costs, financial performance, and customer satisfaction [15,16,17]. However, the concentration was quite limited on the effect of customer experience on financial performance although it is seen as a main purpose for service organizations including banks [18]. Klaus and Maklan [19] defined customer experience as the customer's cognitive and affective assessment of all direct and indirect encounters with the company. They agreed with [18] that customer experience includes a set of interactions (rational, emotional, sensorial, physical, and spiritual) between a customer, a service and a company. [20] added that improved customer experience could offer value to both companies and customers, in the form of increasing customer satisfaction and loyalty, which can improve profitability.

Philipp and Stan, [21] presented a multiple-item scale for measuring customers' service experience (EXQ), in which the service experience is reflected in four dimensions: product experience, outcome focus, moments-of-truth and peace-of-mind to reflect service experience perceptions. Their findings confirmed the conclusion that the service experience has a significant impact on customer satisfaction and loyalty. According to the study, the product experience is focused on the importance of customers' perception of having choices and their ability to compare offerings. Outcome focus is related to reducing customers' transaction cost, so that customers will use the same service despite the availability of other offers and qualified service providers. Moments-of-truth to represent how organizations deal with customers once complications arise. Finally, Peace-of-mind describes the customer's evaluation of all the interactions with the service provider before, during and after using the service.

Klaus and Maklan, [21] agree with [18] that Customer Service Experience (EXQ) as a measure offers a base to improve service marketing, especially service quality and experience.

With respect to Service Quality, Parasuraman *et al.* [22] defined service quality as "conformance to customer specifications". Many studies confirmed the relationship between service quality dimensions and customer satisfaction [23,24]. Buttle [25] recognized service quality as a driver of corporate marketing and financial performance. Klaus and Maklan, [21] agreed with [26] that service quality is a key determinant of customer satisfaction, which is an antecedent of repurchasing behaviour and subsequent financial performance. Later studies, and with the increasing importance of the internet and models to measure E-Service quality, [27] developed the basic of the E-S-QUAL, a 22-item scale comprising four dimensions: efficiency, fulfilment, system availability, and privacy.

Mayer *et al.*, [28] viewed brand trust as the expectation that consumers have about a brand and that it will consistently deliver its promise. Chaudhuri and Holbrook, [29], added that the trustee is valued by its ability to keep promises, and to perform its stated function.

Saha and Zhoa [30] defined consumer satisfaction as the "result of perception, assessment and mental responses to the utilization experience with a product or service". Kotler and Keller [31] added that customer satisfaction is "a person's feeling of pleasure or disappointment which resulted from comparing a product's perceived performance against expectations". Eid [32] summarized customer satisfaction as a general emotional response towards the customer's experience after the purchase and consumption of a product/service. Kundu and Datta [33] in their study of e-service quality, documented a significant relationship between customer satisfaction, e-service quality, and trust.

Caruana *et al.*, [34] argues that service loyalty is based on positive attitude and behaviour toward a service or a product. Baumann *et al.* [35] added that customer loyalty has two dimensions: attitudinal loyalty and behavioural loyalty. The attitudinal perception as viewed by Tabrani *et al.* [36] is the emotional and psychological desire of the customer to repurchase; the behavioural perspective, on the other hand, view loyalty as the customer's inclination to pursue continued service from the business or to endorse the business to others [37].

Throughout the literature, many researchers recognized the importance of customer satisfaction and service quality perceptions as predictors of customer loyalty [38,39]. [40] found that satisfaction is not the only immediate antecedent of loyalty, other key drivers of loyalty include service quality and customer expectations. In banks, Deschamps and Nayak, [41] in their study asserted that as service quality improves, bank's customer satisfaction increases, which in turn affects customer loyalty, and ultimately profitability. Bloemer *et al.* [42] explained that banks' customer loyalty refers to bank customers holding favourable attitudes towards their bank of choice. Bani, and Alawamleh [11] agree with [43] and Duncan and Elliot [44] that Customer loyalty is a key to bank's profitability, bank's success and sustainability. Boonlertvanich [45] believes it is crucial to detect the antecedents of customer loyalty to improve organizations' financial performance by retaining customers while attracting new ones.

With respect to online context, Sahi *et al.*, [46] and Swoboda *et al.*, [47] recognized brand trust as an antecedent of loyalty. However, trust is considered more difficult, as consumers perceive higher risk when using online services [48]. Trust and loyalty holds excessive importance in electronic environments [49].

Many Studies cited in literature tried to explore barriers to internet banking adoption and its relation to customer satisfaction, loyalty, trust and ultimately bank profitability. Nazari *et al.* [50] argued that barriers could be classified into operating and psychological; the former includes the application, credit and risk obstacles and the later include traditional and mental image obstacles. Rotchanakitumnuai and Speece [51] view e-banking as a cost reduction and improved competitiveness tool which can retain current customers by offering more convenient services and develop banks' current market by attracting new customer base from existing internet users.

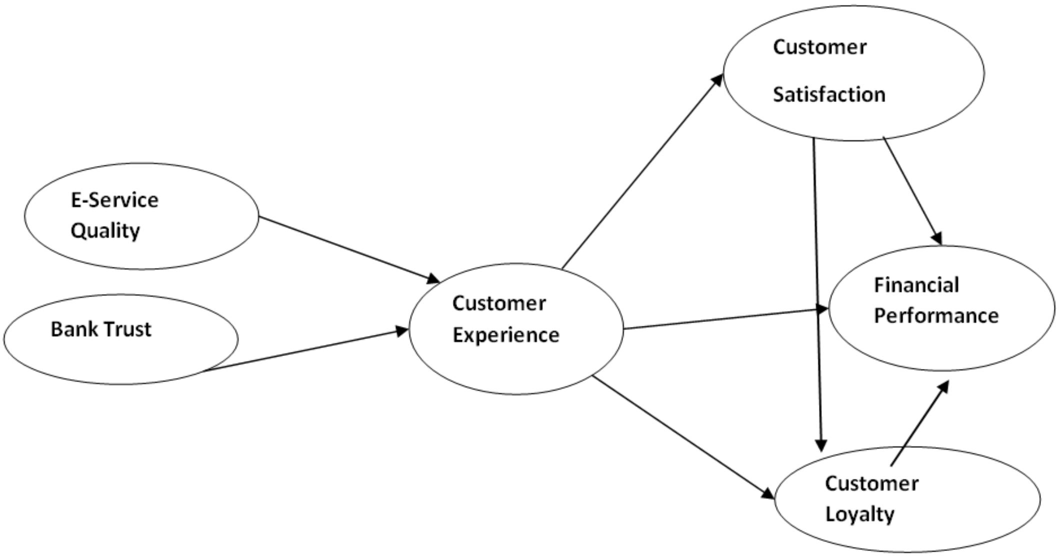

Figure 1. Illustrates the research conceptual framework

On the other hand, some studies showed no consensus on the impact of internet banking on bank's income. Al-Smadi and Al-Wabel [52] view that internet banking has a significant negative impact on Jordanian banks' performance. Malhotra and Singh [53] and Khrawish and Al-Sa'di [54] agreed the Internet delivery channel have negatively affected banks' profitability due to the higher operating expenses. Additionally, Deyong and Duffy [55] propose that Internet banking may lower banks' marginal profit and argue that providing Internet banking satisfies only big customers who need to do their banking online. Alternatively, other studies argue that this channel increases noninterest income for banks. Siddik, *et al.* [56], Dinh, Le, and Le [9] and DeYoung et al. [57] evaluated the impact of internet banking and showed an increase in income from service activities. Yang *et al.* [58] investigated the performance and adoption of internet banking on profitability and cost efficiency, using indicators as return on assets, return on equity, operating margin, net interest margin and efficiency ratio and documented evidence of positive performance. Furst *et al.* [59] and DeYoung *et al.* [57] provided evidence that the return on equity (ROE) tends to be higher for banks with Internet banking. However, the latter study shows that there is a time lag on the positive impact of Internet banking on performance, since the effect is gradual and turns to be significant two to three years after the adoption and attributed this to the high initial investment cost for the new system.

Based on the above literature, there is no consensus on the relation between e-service quality, bank trust, loyalty, customer satisfaction and bank's performance. We agree with Ismail and Alawamaleh [2], specifically in developing markets that issues related to trust, security and familiarization remain a main concern to clients. Technological limitations along with the expense of internet services and lack of adequate knowledge of using e-services among many people based on their educational level, all represent barriers to spreading internet-banking services. Accordingly, we can construct the below hypothesis;

H1. There is a significant positive relationship between Customer Experience and Satisfaction.

H2. There is a significant positive relationship between Customer Experience and loyalty.

H3. There is significant positive relationship between E-Service quality and customer experience.

H4. There is a significant positive relationship between Bank Trust and Customer Experience.

H5. There is a significant positive relationship between Customer Satisfaction and Loyalty.

H6. There is a significant positive relationship between Customer Experience and Financial performance.

H8. There is a significant positive relationship between Customer Satisfaction and Financial performance.

H9. There is a significant positive relationship between Customer Loyalty and Financial Performance.

3. Research Methodology

3.1. Sample and Data Collection

The research population was identified as all consumers who are using Internet banking services of the three Egyptian Public banks. After an extensive literature review, expert opinions were taken to operationalize the constructs and build the questionnaire. Their feedback was used in amending the questionnaire. Then, a structured Questionnaire was developed and uploaded on Google forms. A total of 465 respondents completed the online questionnaire only 374 were usable. The sample consists of 53.8% males and 46.2% females. The age classification of the sample is shown in Table 1.

Table 1. Age classification

Age		
	Frequency	**Percent**
21-25 years	23	6.2
26- 30 years	46	12.3
31- 35 years	44	11.8
36 -40 years	122	32.6
41-45 years	79	21
45 and above	60	16
Total	374	100

3.2. Measurement Scales

To measure the proposed concepts of the research, multi-item scales were used. All questions were measured on a 5-point Likert scale. The questionnaire includes 6 sections; E-service quality, bank trust, customer experience, customer satisfaction, customer loyalty and demographic characteristics. Four dimensions were used to measure E-service quality; The final scale thus comprised 19 items measuring: efficiency (six items), system availability (four items), fulfilment (five items), and privacy (four items). The items were adopted from Parasuraman, *et al.* [27] and Gosh [60] after modification to be suitable for the study. Bank Trust was measured using six items in which two items where adopted from Chaudhuri and Holbrook [29], and four items were adopted from Li, *et al.* [61]. Customer experience included twelve items adopted from Klaus and Maklan, [21]. The items were modified in the context of the study. Customer satisfaction was measured using three items adopted from Kant and Jaiswal, [62] and two items adopted from Hoq and Amin [63]. Loyalty was measured using eight items adopted in which four items were adopted from Amin *et al.* [16], Zeithaml *et al.* [64] and four items were adopted from Ehigie [65]. Finally, the Demographic characteristics measures includes gender and age. All financial data for all the sampled banks are extracted from the banks' annual reports, the research extracted 2 year financial ratios for the years 2020 and 2019. For financial ratios, the research followed the work of Mabama [66] in which ROE, NIM, and Cost to Income ratios were used.

3.3. Data Analysis

Alpha-Cronbach was used to indicate the internal consistency coefficient which reflects the reliability of a scale. Cronbach's alpha takes values between 0 and 1. The nearer the Cronbach's alpha to 1, the better the stability of the questionnaire is. More precise we say that the questionnaire is stable if Cronbach's alpha is greater than 0.5. [67]

Structural equation modelling (SEM) was used to assess hierarchy relationship between variables, and testing for a mediating effect in the model, using the "path analysis" tool. As any model, it must be checked for efficiency and this is done using the goodness of fit measures [68].

For profitability ratios, this research followed the work of Mabama [15] in which three ratios were calculated; ROA, net interest margin, and cost to income for the two consecutive years 2019 and 2020 for the 3 public banks in Egypt. These banks are National bank of Egypt, Misr Bank, and Cairo bank. For each bank the average of 2 years for each ratio is calculated, then the profitability ratio was constructed as the average of the average of the 3 ratios. Six indicators are created in this research; these indicators represent the research variables. Each indicator is created by averaging the questions which measure this question.

3.4. Analysis of Constructs Validity and Reliability

Table 2 shows that the questionnaire is reliable as the Cronbach's alpha and average inter-item correlation coefficient for all items are greater than 0.7.

Table 2. Reliability of questionnaire in each category by using Cronbach's Alpha coefficient

	Cronbach's Alpha	Average item correlation
E-service quality	0.899	0.718
Bank trust	0.907	0.719
Customer Experience	0.883	0.787
Customer Satisfaction	0.924	0.871
Customer loyalty	0.867	0.750

3.5. Descriptive Statistics of Variables of the Study

Table 3 shows the descriptive statistics of the variables. The mean values of all variables are between 3 and 4 meaning that respondents tend to neutrally agree and agree to most of the statements that measure these variables. The variable with highest agreement is the E-service quality, and brand trust while the variable with least agreement is the customer satisfaction and customer loyalty. Also, the homogeneous variable (the variable with least variation) is E-service quality with coefficient of variation = 18.5%, while the variable with highest variability is customer satisfaction with coefficient of variation = 30.9%.

Table 3. Descriptive statistics of study variables

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	C.V
E-service quality	374	1.0	5.0	3.6	0.7	18.5%
BT	374	1.0	5.0	3.6	1.0	27.8%
Customer experience	374	1.0	4.6	3.3	0.8	24.7%
CS	374	1.0	5.0	3.4	1.1	30.9%
CL	374	1.0	5.0	3.3	0.9	28.3%

The Profitability ratios are concluded in the following table which shows that:

Table 4. Descriptive Statistics continued

Bank		ROA	Net interest	Cost income	profitability
Bank Misr	Mean	.94	2.00	34.47	12.47
	N	275.00	275.00	275.00	275.00
	Std. Deviation	.46	.55	2.46	.54

Bank		ROA	Net interest	Cost income	profitability
Al Ahly bank	Mean	.99	3.79	33.26	12.68
	N	195.00	195.00	195.00	195.00
	Std. Deviation	.28	1.00	3.41	.71
Cairo Bank	Mean	1.60	5.45	39.91	15.66
	N	96.00	96.00	96.00	96.00
	Std. Deviation	.20	.35	.81	.45
Total	Mean	1.08	3.15	35.16	13.13
	N	374.00	374.00	374.00	374.00
	Std. Deviation	.45	1.51	3.48	1.35

Table 5 shows the correlations among variables at 95% level of confidence.

Table 5. Correlations among variables

	E-service quality	BT	customer experience	CS	CL	profitability
E-service quality	1					
BT	.719**	1				
customer experience	.594**	.721**	1			
CS	.511**	.587**	.816**	1		
CL	.531**	.617**	.773**	.811**	1	
profitability	.165**	.199**	.181**	.051	.118**	1

**. Correlation is significant at the 0.05 level (2-tailed).

To examine the above hypotheses, the following path model is estimated in Figure 2.

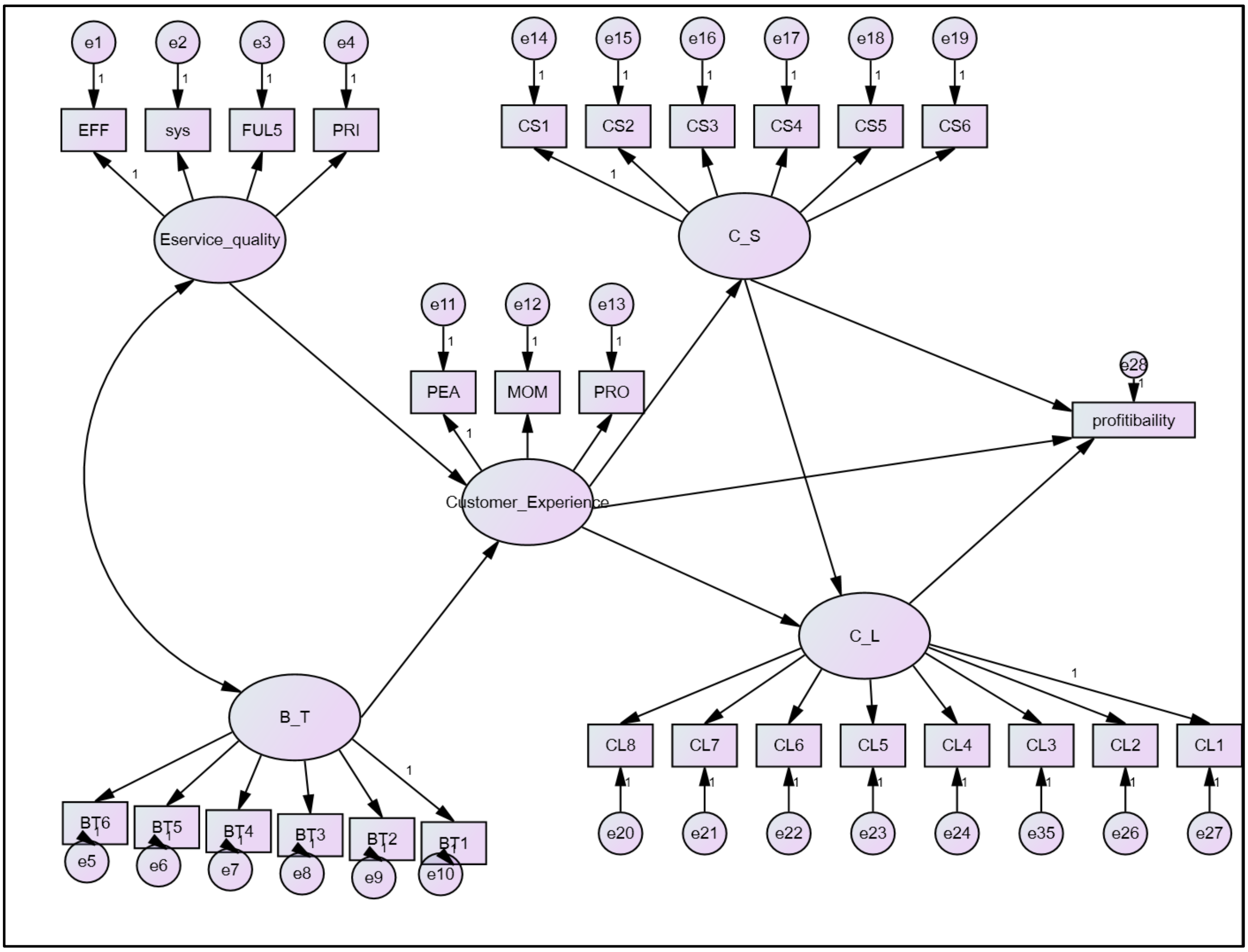

Figure 2. Path model

From Table 6 and the path model in Figure 3 it is concluded that; the E-service quality has direct significant positive impact on customer experience (0.189). Bank trust has direct positive impact on customer experience (0.503) and customer experience has direct positive impact on customer satisfaction (1.0630). Customer experience has direct positive impact on customer loyalty (0.503). Customer satisfaction has direct positive impact on customer loyalty (0.481). All those values were significant at 5% level of significance. On the other hand, customer satisfaction has insignificant impact on profitability, while customer loyalty has direct positive impact on profitability (0.298). Customer experience has direct positive impact on profitability (0.081) significant at 5% level of significance.

E-service quality has indirect positive impact on profitability through customer experience d this indirect effect = 0.2014 (0.19*1.06). Bank trust has indirect positive impact on profitability through customer experience and this indirect effect = 0.53 (0.5*1.06). Customer experience has indirect positive impact on profitability through customer loyalty and this indirect effect = 0.39 (0.39*0.3). Customer satisfaction has indirect positive impact on profitability through customer loyalty and this indirect effect = 0.144 (0.48*0.3).

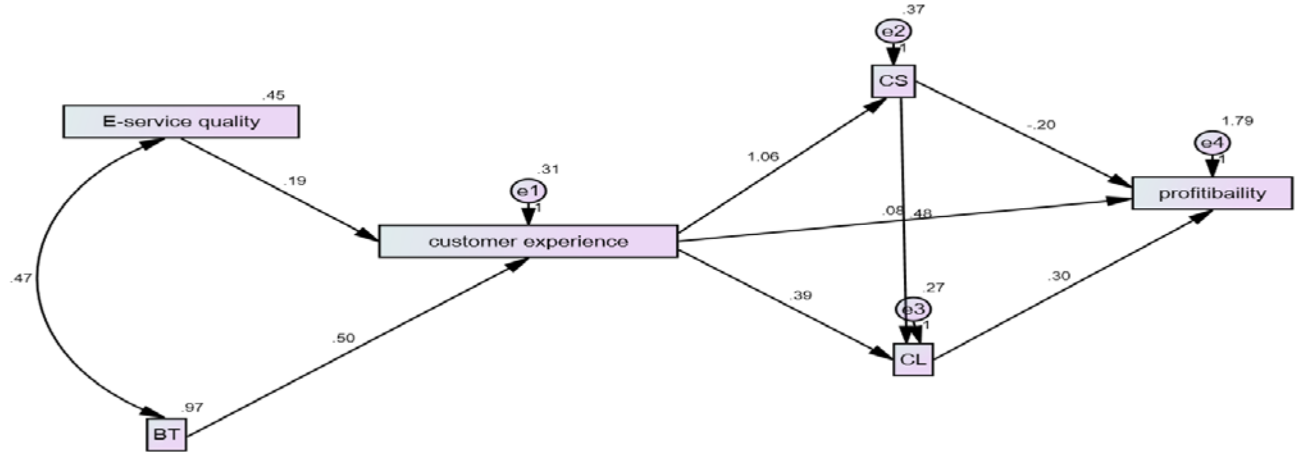

Figure 3. The structural model

Table 6. Test of research hypotheses

			Estimate	S.E.	C.R.	P
Customer experience	<---	E-service quality	.189	.076	2.481	.013
Customer experience	<---	BT	.503	.052	9.733	***
CS	<---	Customer experience	1.060	.048	22.244	***
CL	<---	Customer experience	.386	.070	5.474	***
CL	<---	CS	.481	.054	8.867	***
profitability	<---	CS	-.202	.160	-1.265	.206
profitability	<---	CL	.298	.106	2.832	.007
profitability	<---	Customer experience	.081	.033	2.426	.011

Table 7. The goodness of fit Indices for the estimated SEM from phase one

Chi-square	4.12
Degree of freedom	6
Level of significance	0.007
RMESA	0.0189
NFI	0.981
RFI	0.953
IFI	0.988
TLI	0.969
CFI	0.987

Table 7 shows that all the goodness of fit measures of the model are at acceptable limits, especially NFI, RFI, IFI, TLI, and CFI is close to one. Also the value of RMSEA is less than 0.05. The results indicated that all fit indices either reached, or exceeded the benchmarks suggested in previous studies [74].

4. Discussion and Conclusion

Structural Equation Modelling (SEM) was used to estimate the series of interrelated relationships among the research variables simultaneously. SEM results indicate the goodness of fit of the proposed model. Moreover, all the research hypotheses were statistically supported, except for the relationship between customer satisfaction and financial performance.

This study was conducted not only to investigate the impact of Internet banking on customer experience, bank trust, satisfaction, loyalty, E-service quality and financial performance but also to check the customers' behaviour during the pandemic times.

The findings of this study are important on both a theoretical and applied context. From the theoretical context, the findings add to the current knowledge of the importance of monitoring customers' behaviour as well as

E-service quality which simultaneously would influence customer investment decisions in financial institutions. On the other hand, from the applied context, the results provide information specifically to managers in public banks in Egypt on the importance of enhancing customer experience regarding the use of internet banking which might positively affect their financial performance in times of pandemic. Our findings agree with Shannak [1] that advanced technology could be a way of improving financial performance. This study highlights also the effectiveness of increasing customer loyalty in the competitive marketplace where banks struggle to maintain their competitive positions against new entrants.

The research results confirm the positive association between e-service quality and customer satisfaction as well as between customer experience and financial performance. The results imply the importance of ensuring the quality of internet banking and enhancing the customer experience, which ultimately would have a positive impact over the profitability of banks. This conclusion is consistent with [21,26] who postulates service quality as a key determinant of customer satisfaction. On the other hand, our results contradict [21] in not showing evidence that customer satisfaction has a significant impact on financial performance. This could be explained as shown earlier in Figure 3 by the indirect effect of customer loyalty in explaining the relation between customer satisfaction and financial performance. This indicates that customer satisfaction in banks should lead to loyalty to affect the financial performance. Hence, Public banks should focus on loyalty programs to increase financial performance.

Our results reveal positive association between customer satisfaction and customer loyalty. It means that the more customers are satisfied, the more loyal they are to their banks. This result is in line with [65,69,70] who showed that customer satisfaction is a leading factor in determining loyalty and the key to success in service delivery.

In addition, the results of the study indicated a positive relationship between loyalty and financial performance as well as between e-service quality and customer satisfaction. That result is in consonance with several authors [11,15,38,43,44,71] who showed that increased customer loyalty is the single most significant driver of long-term financial performance of banks and that service quality and customer satisfaction are essential to securing customer loyalty. This implies that public banks can improve financial performance through offering positive customer experience, which develops loyalty. Loyal bank customers recommend the service to friends, and require less marketing efforts to retain. Important to note that the results were consistent with Kundu and Datta [33] who found a significant relationship among e-service quality, trust and customer satisfaction.

An evidence of a significant relationship between customer experience, satisfaction and loyalty, which is related to financial performance in Egyptian public banks is presented which is consistent with Reichheld *et al.*, [20]. Furthermore, the result between customer satisfaction and loyalty is consistent with Jun and Palacios's (2016) finding on mobile banking study in the USA, and Amin (2016) and Raza *et al.*'s (2015) studies of internet banking in Saudi Arabia and Pakistan, hence showing similarity of customers across countries in terms of customer satisfaction and loyalty.

With respect to trust, this study provides evidence that trust affects customer experience and loyalty in public banks. This result is in line with [15] indicating that with trust and quality of internet banking, banks can retain customers and improve profitability. Furthermore, [29,72] (Brakus et al., 2009), recalled brand trust as an important predictor of consumer satisfaction and loyalty.

Finally, our study proves that e-service quality significantly affects customer experience which is in line with [15,18,21]. All these findings offer new vision into internet banking and marketing experience theories.

Previous studies showed that the impact of Internet banking has a time lag of at least two years (Hernando and Nieto [73] and Onay *et al.* [10]). It is important to note that due to the relatively weak technology conditions in Egypt as a developing country, Egyptian banks might need a longer period to test and develop the Internet banking. The challenge for Egyptian banks is to have internet banking in such a way that could affect Consumers' experience positively. Therefore, this allows bank managers to direct their efforts and resources most effectively and efficiently to increase the banks' profits in the long run and encourage new customers to adopt internet banking and to retain the existing ones.

5. Limitations, Implications and Areas of Future Research

As with any study, this research has some limitations. While it seems rational to suggest that these findings will extend to similar service settings, this needs to be researched. The research did not investigate the barriers for internet adoption in public banks which might draw further insights into the area of internet banking. In addition, the effect of customer demographic variables was not analysed in our research.

Considering that a significant budget is allocated to developing online banking systems, it is important that public banks develop strategies to ensure that that customers use these services. This could be achieved by understanding the factors that lead to customer satisfaction and loyalty in the internet environment. More and more awareness and promotional activities regarding the internet banking will help to increase the e-transactions. Through using advanced technology in internet banking, public banks can create value-added services, differentiate themselves, and increase their financial performance especially in times of pandemics.

In conclusion, Egyptian public banks are advised to guide customers and create awareness regarding internet banking services and to provide friendly customer service staff, which will gain customers' trust and increase their satisfaction and loyalty especially in times of pandemics.

Further research can be done comparing between public and private banks regarding the effect of internet banking usage and e-service quality on banks 'financial performance. The research needs to be extended to other countries, Further research is needed to investigate the availability of other factors that could affect bank's customer experience and financial performance.

To make recommendations based on customer characteristics, it would be worthy to investigate the moderation effect of customer demographics and customer personality types on this model. Since the model is validated in this study, further studies can be conducted with a different data set designed to include different customer types or segments.

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