

## Building Customer Loyalty in the Banking Sector in Yemen

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### ABSTRACT

The current study investigates some variables affecting customer loyalty regarding the banking sector in Yemen. Besides, it examines the moderation effect of education factor impact on the perceived value. A self-administered questionnaire was deployed to a set of 579 bank customers by using opportunity sampling in the capital city of Sana'a in Yemen. The collected data was analyzed using the Partial Least Square-Structural Equation Modelling (PLS-SEM) approach to test the hypotheses of this study. The main finding showed a significant positive relationship and the non-significant relationship between some independent variables and customer loyalty in Yemen's banking sector.

Further, the moderating effect of education on perceived value significantly supports the relationship with customer loyalty. Banking managers should build real confidence with customers, enhance the banks' reputation, and develop a variety of electronic banking services. They have to understand the necessity of attention to the education factor as a critical point to building customer loyalty. That requires them to give more attention to the customer who has a good education. This paper's uniqueness comes from its investigation of some important requirements of customer loyalty and examines the influence of education as the moderator on perceived value by customers in the theoretical framework proposed. Also, the study result presents a new contribution to the literature of marketing relationships related to the issue of customer loyalty in the banking sector in Yemen.

**KEYWORD:** Customer loyalty, Trust, Bank image, Electronic service, perceived value, banking sector in Yemen.

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## 1. INTRODUCTION

Customer loyalty gives significant benefits for marketers, academicians, and researchers because it reflects the health of an organization (Bennett & Rundel-Thiele, 2005). Although, the fact that customer loyalty has been a significant research issue amongst marketing researchers for decades, it still receives many interests, mainly due to relationship marketing (Sheth & Parvatiyar, 1995). The cost of obtaining a new customer is much more than the cost of retaining an existing customer (Allen, D. R., & Allen, D. (2004). Besides, the most critical aspect of promoting a specific service is loyal customers who mention it to relatives, friends, and other potential customers or known “word of mouth” (Schultz, 2005).

In relationship marketing, customer loyalty has always gained great interest among scholars and practitioners for more than 70 years (Knox, S., & Walker, D., 2001). Customer loyalty was measured and described in various marketing aspects, like brand loyalty, service loyalty, and product loyalty (Olsen, 2007). Realizing that customer loyalty among current customer may help creates profits and decrease some loss (Dehdashti, Jafarzadeh & Bakhshizadeh, 2012; Matzler, Grabner-Kräuter, & Bidmon, 2008), organizations spend

millions of dollars annually to retain them to obtain higher levels of loyalty by engaging in marketing research (Bennett & Rundel-Thiele, 2005). However, sustaining and gaining customer loyalty is a vital issue in increasingly competitive advantage (Brexendorf, Mühlmeier, Tomczak, & Eisend, 2010), highlighting the need to address and determine the critical factors of customer loyalty through conceptual and empirical investigation.

Within the banking context, Yemen's banking sector is considered one of the most important economic sectors that affect economic development and gross national product. This sector consists of 19 banks working in various banking activities and provides customers with various banking services that contribute to facilitating the movement of investment (central bank of Yemen 2017). According to Akabisi and Lind (2011), the banking sector in Yemen has a decline in efficiency and performance, which is reflected negatively on the level of quality of banking service provided and the level of loyalty of the Yemeni customer towards the banks. Those reasons negatively reflected the bank's performance with the customer, so it necessary to adopt real strategies solutions. Besides, it had become that the banks in Yemen should create an ongoing relationship with the

customer to maintain stable cash flow and achieve the best performance through build loyalty with the customers (Farhan& Altoki (2008).

Obtaining customer loyal toward the banking sector is not an easy job because the philosophy of customer loyalty is an integration insight to both the awareness and practice, so it may differ from the environment to the other and differ from time to time. Customer loyalty contains varied aspects such as services quality, trust, commitment, switching cost, customer involvement. Also, the banks can provide low prices on finance, or the high benefits on deposits, providing exceptional finance purposes by providing the customized services, supporting the customer' sense of belonging to the bank, and interest in the completion and suggestions. Therefore, customer loyalty challenges need more investigation and studying to understand and be aware of the basics and requirements for building and implementing customer loyalty (Anabila &Awunyo, 2012).

According to Al-khateeb (2013), the nature of the confidence that business organizations give to the Yemeni customers has a significant effect on their purchasing decisions;also, the company's reputation and name in the market has a significant effect on enhancement the

relationship with customers.Simultaneously, Al- Al-Ajam and Nor (2015) reported that the importance of online technique services as a vital way to create real value with the customers in Yemen. Many previous studies dealt with building customer loyalty by investigating the variables of customer loyalty independently or sophisticated approach (Rai and Srivastava, 2012). However, this study will highlight some variables related to customer loyalty in the context of the banking industry by focusing on examining the most important of these requirements. So, the variables of Trust, Bank Image, and E-Services will be examined to analyze the relationship with customer loyalty andthe variable of preserved value as main components of loyalty.

On the other hand, Al-Bayati and David (2016) showed the importance of the education factor and the level of education of Arabi consumers in changing its consumer culture and purchasing decisions. Therefore, this study will examine some important requirements of customer loyalty as well as examine the moderating effect of education on the perceived value to understand how the banks' customers see to the banks' services and how that helps the banks'

managers to understand the wants and needs of their customer in the banking sector in Yemen. The paper contains six parts; the model and hypotheses are in part 2. The methods and processes conducted are illustrated in part 3, and the data analysis and requirements procedure are in part 4. The results discussion and conclusion are showed in part 5, and finally, the implementations and further research are provided in the sixth part.

## 2. The model and hypotheses

This part surveys some previous literature regarding customer loyalty in the context of the banking industry, trust, banking image, electronic services, perceived value, and the moderating effect of education on perceived value. The study's hypotheses are evolved in this review.

### 2.1 Customer Loyalty- Service Loyalty

Rai and Srivastava (2012) defined service loyalty as "a psychological character formed by the customer's sustained satisfaction coupled with emotional attachment formed with the service provider that leads to a state of willingly and consistently being in the relationship with preference, patronage, and premium." The degree at which consumers show the behavior of repeat purchasing from the same service provider, have the positive attitude regarding that specific

service provider, and have the ponder to have the services of the same service provider again in the future is the service loyalty. In the service industry, it is obvious re-patronage for a specific service for a long time by the customer falls within *behavioral loyalty*. Also, whenever customers desire to broadcast positive recommendations and take the personal defense of the service provider (positive word of mouth) because of vulnerability to some positive attitudes falls within attitudinal loyalty for both offline and online activities (Gremler & Brown, 1998; Ladhari, Souiden & Ladhari, 2011).

### 2.2 Trust

Trust believes or expectations a positive exchange of partner's trustworthiness due to partner's experience or reliability. Also, trust has been regarded as a behavioral intention that reflects a reliance on a specific service provider (Moorman, Deshpande, & Zaltman 1993). Rai and Srivastava (2012) indicated that service providers' main component of trust is *integrity*, *credibility*, and degree of *assurance* in the performance of transactions granted by the organization to its customers. According to Kassim and Abdullah (2010), Pan, Minarti and Segoro, (2014), and Marakanon and Panjakajornsak (2017), that variable of trust has a positive relationship with

customer loyalty in several environments. Consequently, the subsequent hypothesis is posited:

**H1:** Trust given by banks to its customers has a positive relationship with customer loyalty in Yemen's banking sector.

### 2.3 Bank Image

Bank image reflects its reputation and name in the market, and it's a position against other competitors. Bank image is an overall impression of a company into the business environment's minds (Barich & Kotler, 1991). Line (2005), Giovanis, Zondiros, and Tomaras, (2014), and Chang and Yeh (2017) found that the corporate image plays an important role in the customer's think and. It directly impacts customer loyalty and is considered one of the most important motives of customer loyalty in the service sector industry. Consequent upon all these studies, the next hypothesis is framed:

**H2:** Bank Image has a positive relationship with customer loyalty in the banking sector in Yemen.

### 2.4 Electronic service

Electronic service refers to any service provided by electronic means like the Internet/website and mobile devices. It has become necessary for the service provider to give the services by various electronic

media (Rowley, 2006). Leventhal, Pitta, Franzak, and Fowler (2006); Abdulfattah (2012) and Pereira, Salgueiro, and Rita (2016) referred to the importance of some requirements to provide efficient electronic services such as accessibility, adequacy of information, personal security, and the attractiveness of e-activities. They found that the relationship between electronic service and customer loyalty is significant. Thus, the following hypothesis is formulated:

**H3:** Electronic services have a positive relationship with customer loyalty in the banking sector in Yemen.

### 2.5 Perceived value

The perceived value reflects the benefit that the customer receives from the service after excluding the service costs. Many studies have indicated that there is a positive relationship between a customer's feeling of the real value of using a particular service and an increase in his or her long-term loyalty (Li & Green, 2011; Yusuf, 2012; El-Adly & Eid, 2016; Cossio-Silva et al., 2016). On the other hand, motivations, opportunities, utilitarian benefits, and hedonic benefits have been identified as the most important elements needed to achieve actual value in order to obtain customer loyalty (Gruen et al. 2011; Frank et al. 2014; Xu et al. 2015;

Purwanto et al. 2015). Thus, the following hypothesis is formulated:

**H4:** Perceived value has a positive relationship with customer loyalty in the banking sector in Yemen.

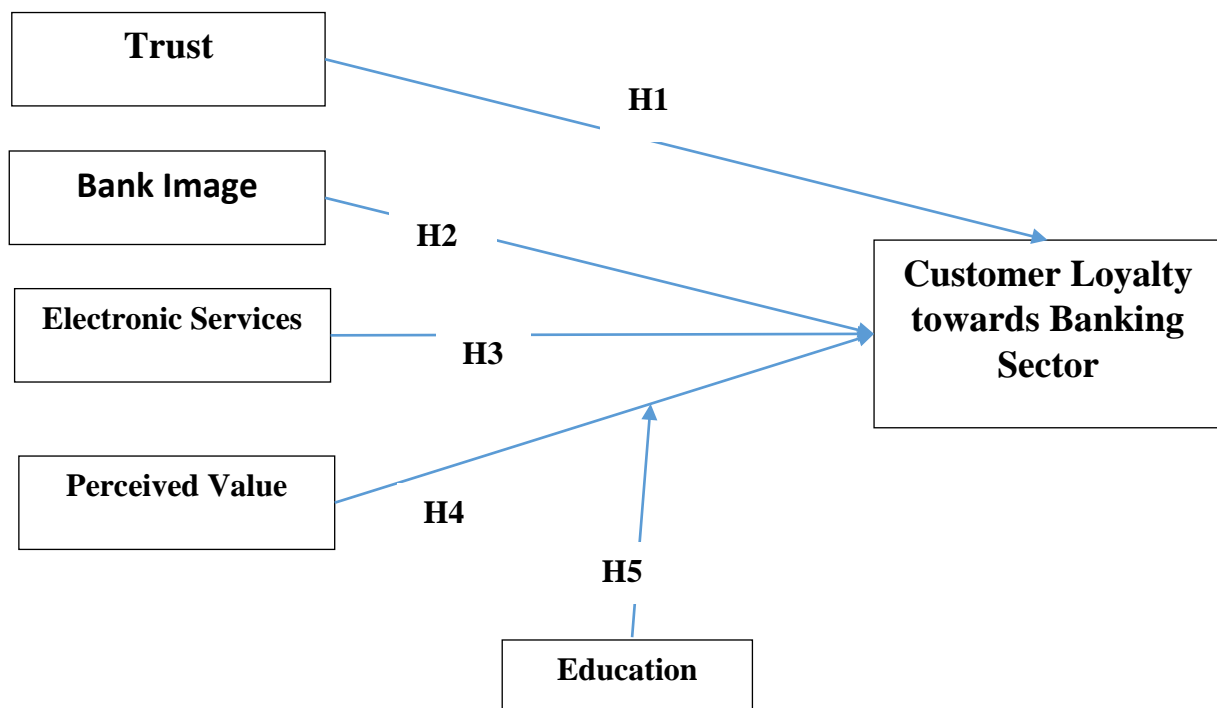
## 2.6 The moderating effect of education on perceived value

Many studies showed a significant effect between the demographic factor of education and customer loyalty; the nature of this relationship may be direct or indirect by influencing customer loyalty variables in particular service providers (Hoang-Tung, Kojima, and Kubota (2014); Melnyk (2014); Gracia, Ariño & Blasco (2015) and Nyadzayo and Khajehzadeh (2016). Al-Shibly &

Alkhawaldeh (2017) mentioned the education factor moderates the relationship between perceived value and satisfaction. Also, Al-Bayati (2016) indicated the positive effect between the education factor and how Arabic consumers perceive the value of consumption culture. Consequent to these studies, the next hypothesis is framed:

**H5:** Education moderates the positive relationship between perceived value and customer loyalty in Yemen's banking sector.

Depend on the literature review, the suggested theoretical framework and the hypotheses formulated are illustrated in Fig. 1.



**Fig. 1. Proposed theoretical framework.**

### 3. Methods

#### 3.1 Participants and procedure

The self-administered questionnaire was given to 576 bank customers using the opportunity sampling technique in the capital city Sana'a of Yemen over six months from December 2018 to June 2019. According to Cavana, Delahaye, and Sekeran (2001), Comrey and Lee (1992), and Krejcie and Morgan (1970), for the population of more than 1000000 persons, the minimum sample size of 384 is enough for the representation. However, the sample size was increased by 50% to minimize any potential low response rate from bank customers who may not cooperate (Salkind, 2011). In this case, 400 acceptable respondents were subjected to a test giving a response rate of 86%, which is an acceptable standard (Rogers, Plante, Wong, & Evans 1991; Bland & Altman 2007). The sample elements were individuals who have to use the services banking of the banking sector in Yemen. The majority of banks' customers have a high education level of bachelor graduate and above (85.5% percent; N=342), whereas the rest of the respondents with less education level (Up to 12th standard).

#### 3.2 Development of the questionnaire

The respondents' questionnaire was designed based on the previous studies

related to the subject of the current study to examine some requirements of customer loyalty or key variables of customer loyalty (trust, corporate image, electronic services, perceived value). Majority of items were adapted from previous studies (Zamite, 2000; Lian, 2005; Rai & Srivastava, 2012; Ladhari & Leclerc, 2013). The study had started with measuring the variables of building customer loyalty. Four customer loyalty sections scale was incorporated into the study questionnaire to measure the requirements of customer loyalty. Furthermore, based on some previous studies, the researcher adopted and used some items to fit this study's subject and objectives (Abdulfattah, 2012; Osman & Sentosa, 2013; Nagengast, Evanschitzky, Blut, and Rudolph; 2014). And to examine the dependent variable (customer loyalty), this study used the known scale of customer loyalty testing (Smith, 2003; Allen, 2004; Lin, 2005). The last section of the questionnaire was demographic questions, six questions covering Gender, Age, Education Background, Occupation, Month income. Appendix 1 contains the items of measurement used to examine the independent and dependent variables of this study. The items' responses were measured on a five-point Likert scale by the banks' customers, ranging from 1 for



“Strongly Agree” to 5 for “Strongly Disagree,” and the questionnaire consists of 40 items for measuring some requirements of customer loyalty. Banks’ customers were asked to indicate the degree of their agreement or disagreement on each question using the scale. The five-point Likert scale was also used by previous studies (Mabkhot, 2014; Rai & Srivastava 2012; Smith, 2003).

### 3.3 Statistical techniques

To examine the study model, smart PLS 3.2 was executed in which the PLS-SEM approach was used. (Hair et al., 2014). PLS-SEM was used in the present study because Chin (1998) pointed out that PLS is the tool that is very effective in order to assess the interaction among the variables. Moreover, it also reduces the type II error as well. Along with that, it is very effective to handle formative as well as reflective dimensions.

## 4. Data analysis

The researcher chooses PLS-SEM to analyze the present study under the light of suggestions by (Hair et al. (2017)). Many criteria suggested by Hair et al. (2017) must be conducted to successful use this smart technique.

### 4.1. Measurement model

All the items used to investigate the variable of the study is identified as a measurement model of PLS (Hair et al., 2014); this study tried to abide by criteria of PLS through examining the reliability of the internal consistency, convergent validity, and divergent or discriminant validity of the measures of the construct which successfully was conducted. **The reliability** of the constructs being used in this study was assessed by using composite reliability and Cronbach’s Alpha. The values of Cronbach’s Alpha are mentioned in table 1 as 0.877 and 0.944, respectively. On the other hand, composite reliability values are also shown in the same table as 0.922 and 0.951. All of these values are above the standard mentioned by Hair et al. (2014). These values show strong reliability between variables as well.

To assess the present research’s **Convergent validity**, Average variance extracted AVE, composite reliability, and factor loading was assessed. As the values of convergent validity as factor loadings items were  $> 0.60$ , the value of CR is more than 0.70, and the value of AVE is more than 0.50 of all the used items (Hair et al., 2014).

For the present study, **Discriminant validity** was calculated through Heterotrait-Monotrait (HTMT) ratio.



According to Fornell Larker's criteria, the threshold level of HTMT is 0.9 (Henseler Ringle & Sarstedt 2015). According to the values of table 4, the values associated with items among factors were not more than 0.90. moreover, the values of VIF were less than the criterion value of 5.

These values range between 2.386 to 3,799 showing no multicollinearity issue among the constructs (Hair et al.,2017). Therefore, both values showing evidence regarding the acceptable range of discriminant validity.

**Table 1;** Reliability and validity analysis.

Factors	Items	Outer loading	CA	CR	AVE
Bank Image BI	BI1	0.761	0.927	0.939	0.632
	BI2	0.837			
	BI3	0.807			
	BI4	0.757			
	BI5	0.776			
	BI6	0.715			
	BI7	0.83			
	BI8	0.828			
	BI9	0.833			
Electronic service ES	ES1	0.82	0.93	0.943	0.704
	ES2	0.865			
	ES3	0.817			
	ES4	0.874			
	ES5	0.858			
	ES6	0.805			
	ES7	0.834			
Customer loyalty CL	L1	0.786	0.897	0.922	0.666
	L2	0.866			
	L3	0.652			
	L4	0.891			
	L5	0.865			
	L6	0.814			
Perceived value PV	PV1	0.806	0.944	0.951	0.621
	PV10	0.842			
	PV11	0.744			
	PV12	0.741			
	PV2	0.831			
	PV3	0.75			
	PV4	0.756			
	PV5	0.754			
	PV6	0.818			
	PV7	0.81			

	PV8	0.747			
	PV9	0.841			
Trust T	T1	0.853	0.89	0.916	0.647
	T2	0.835			
	T3	0.721			
	T7	0.749			
	T8	0.834			
	T9	0.826			

Notes: CA= Cronbach's alpha; CR= Composite reliability; AVE= Average variance extracted.

**Table 2:** Discriminant validity (HTMT criterion) and variance inflation factor.

	BI	CL	ES	PV	T	VIF
BI						3.799
CL	0.657					2.386
ES	0.702	0.565				3.216
PV	0.804	0.684	0.798			3.121
T	0.893	0.599	0.673	0.748		

Notes:BI= BankImage; CL=Customer loyalty; ES= Electronic service; PV= Perceived value; T= Trust.

#### 4.2 Structural model

To test the structural model, steps mentioned by Hair et al. (2017) were followed in the present study. In the first step, based on the path coefficient, the significance of relationships was assessed (hypothesis testing). The results of the study are: (1) the first hypothesis (H1), which examines the relationship between bank image and customer loyalty of the bank, is supported ( $\beta=0.255$ ,  $p$ -value=0.000). (II) The fourth hypothesis (H4), which examines the relationship between perceived value and customer loyalty, is supported in the banking sector ( $\beta=0.375$ ,  $p$ -value= 0.000). On the other

hand, the hypothesis which examined the relationship between trust and loyalty is not supported ( $\beta=0.44$ ,  $p$ -value=0.236); whereas, the hypothesis which examines the relationship among electronic services and customer loyalty within the banking sector is not supported ( $\beta=0.42$ ,  $p$ -value=0.223).

Table 2 reflects the coefficient of determination R square value assessment upon the dependent variable. As Chin (1998) mentioned, a value greater than 0.67 is substantial; a value ranging between 0.44 and 0.67 is moderate, whereas a value between 0.33 and 0.19 is perceived as a weak. Additionally, (Rasoolimanesh et al.

(2017) pointed out that R square's value in the study of consumer behavior is regarded as high. Therefore, the values of this study showing R square is showing high explanation among the independent variable. The next assessment is measuring effect size, f square, and relationships among constructs mentioned in table 3. Cohen (1988) pointed out that if the F square values are between 0.02 and 0.25, it will be considered small; the value between 0.15 and 0.35 is perceived as medium, whereas it is high if it is more than 0.35. Therefore, all the independent variables are affecting the dependent variable. Later, to omit the distance of 7, the blindfolding process was adopted, a predictive relevance is well-secured as a cross-validated redundancy the dependent variable result was more than 0 ( $Q^2 = 0.276$ ) (Chin, 1998). Therefore, the result of  $R^2$ ,  $F^2$ , and  $Q^2$  shows that the model of this study has a good capacity to explain the relationships between constructs of the variables and the capability of predictive.

#### 4.3 Moderating effect of education on perceived value

Two conditions should be accomplished to prove the moderating effect of education on the perceived value of the positive relationship between banks customers' perceived value and customer loyalty. Firstly, the relationship between independent and dependent variables should be significant. Secondly, the moderator should assist the intention of either positive effect or negative effect depending on the study's purpose and the characteristic of moderation variable. As illustrated in the table (2), the moderator effect of education on perceived value is significant ( $PV = 0.034$ ), and the direction of the moderation effect is positive ( $\beta_5 = 0.77$ ). So, due to this study, it intends to examine the positive moderation effect of education on perceived value and because of the positive characteristic of education effect, the conditions explained above are conformed. Therefore, (V) the hypothesis (H5) that establishes the education moderates the positive relationship between perceived value and customer loyalty in the banking sector in Yemen is supported.

**Table 5:** Requirements of customer loyalty in the banking sector.

Hypothesis	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values	R Square	$f^2$	$Q^2$
BI -> CL	0.255	0.257	0.069	3.689	0	0.44	0.028	0.276
ES -> CL	0.042	0.043	0.055	0.762	0.223		0.002	
PV -> CL	0.375	0.374	0.067	5.579	0		0.08	
PV*ED -> CL	0.077	0.086	0.042	1.829	0.034		0.001	

T -> CL	0.044	0.042	0.061	0.72	0.236
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Notes: Original sample= Standardized beta coefficient ( $\beta$ );  $f^2$ = Effect size;  $Q^2$ = predictive relevance of independent variable, CL= Customer loyalty, BI= bank image, ES= Electronic services, PV= Perceived value, ED= Education, T= Trust.

## 5. DISCUSSION AND CONCLUSION

This study examined some requirements that have a positive relationship with customer loyalty regarding the banking sector in Yemen and inspected the moderating effect of education influence on the relationship between perceived value and customer loyalty. Empirical results via a PLS-SEM approach revealed some important facts. Firstly: the variable of bank image significantly related to customer loyalty in respect of the banking sector. The results infer that increasing the banks' reputation; the more likely customer loyalty will be more. This result revealed that banks' customers are interested in the banks' reputation, and they give this factor great attention. These results confirm those mentioned in the previous studies (e.g., Line, 2005; Giovanis, Zondiros & Tomaras 2014; Cho, Rha & Burt, 2015; Chang & Yeh, 2017). Secondly: The relationship between perceived value by customers and customer loyalty in the banking sector is existent and significant. The results determine that banks' customers feel good about the benefits and utilitarianism that banks give according to their perception. This result

agrees with previous studies' results (e.g., Lien Li & Green, 2011; Yusuf, 2012; Al-Adly & Eid, 2016). Thirdly: regarding the influence of education as a moderation effect, the results revealed a significant effect. The discoveries indicate that obtaining a strong positive relationship between perceived value and customer loyalty may obtain through education in the banking sector. This finding reflects that the level of education of banks' customers has a positive effect on how those customers see and feel with banks' services.

By contrast, fourthly: the results showed no relationship between the trust factor that banks provide to their customers and customer loyalty in the banking sector. This result is not consistent with previous studies' assertions about the strong positive relationship and the strong effect between these variables (e.g., Kassim & Abdullah, 2010; Pan, Sheng & Xie, 2012; Minarti, Ningsih & Segoro, 2014; Marakanon & Panjakajornsak, 2017). This finding reflects that bank customers may not feel confident in dealing with banks, which is considered a negative indication of the continuation of the long-term relationship

between the banks and their customers. Fifthly besides, an investigation of whether electronic services have a positive relationship with customer loyalty regarding the banking sector was examined. The PLS-SEM approach revealed unanticipated results that the relationship between electronic services and customer loyalty is not significant. These results do not authenticate previous literature review discoveries in this area of science (e.g., Srinivasan, Anderson, & Ponnaveolu, 2002; Safa & Ismail, 2013; Ladhari & Leclerc, 2013; Silva & Goncalves, 2016). The explanation for this may be due to the problematic conditions that Yemen suffers from the lack of infrastructure for communication and information technology due to economic and political problems (Alkibsi & Lind, 2011). Those circumstances have negatively affected the ability of banks to provide e-banking services appropriately, which made bank customers not give this variable any importance in assessing their loyalty to the bank. However, on the contrary, they generate negative judgment when they make an assessment for their loyalty and what banks offer from electronic service forms.

It is evident from the above that customer loyalty in the banking sector in Yemen may be achieved through the bank's image

in the banking sector and from the high level of perception of the customer's value towards the services provided by banks. That may be due to the nature of Arab society in general and Yemeni in particular, which is very interested in the issue of trademarks and brands and companies' reputation in the markets (Alkhateeb, 2013).

On the other hand, it became clear that bank customers do not consider trust in banks or their E-services as a requirement of customer loyalty towards Yemen's banking sector. This may be due to the nature of banking work that an old traditional nature, where banking services in Yemen are still traditional and suffer lack the elements of modern marketing practices that rely on technology, confidentiality, and privacy in banking transactions (Algabiree, 2018). All those results highlight the type of customer loyalty that customers' banks have towards the banking sector, Rai and Srivastava, (2012) reported that spurious loyalty when the customer does not have a positive attitude towards the service provider but at the same time consistently replicates the service request from the same service provider.

## **6. Study implementations and further research**

From the theoretical point of view, the existing knowledge is advanced by proposing this theoretical framework as the better empirical understanding of important predictors of customer loyalty in terms of the banking sector in Yemeni and the moderating role of education in the present framework of knowledge. This examined idea may support further research work by focusing on education and other demographic factors in examining the widespread issue for customer loyalty in several contexts.

Regarding the study's implications for practitioners like the managers of banks, the results give empirical proof that notifies managers about the relative importance of customer loyalty variables, some variables like trust can work in the Yemeni situation. However, the same variable may not work on the other environments. Also, the significant moderating effect of education affecting perceived value towards the banking sector's service in

Yemen. That may help the managers support the business with the educated customer and organize customer loyalty programs' activities. Besides, those results help build insight into the importance of education in constructing the long-term relationship with banks' customers and the necessity to support the infrastructure of education in Yemen by the banking sector as an effort of social responsibility corporate (SRC).

There is a necessity to develop the current study beyond the banking sector in Yemen to cover other services sectors, and simultaneously, to include the probability sample techniques that represent the population. As banks' customers have various demographics situations, further research work may be looking to examine the moderation effects of gender and other characteristics. The type of customer loyalty also needs to investigate through further research.

#### Appendix 1. The items of measurements

Items of measurements	Short name
<b>Bank Image</b>	BI
The bank is reliable in the banking business.	BI 1
The bank offers distinct financial services.	BI 2
My bank offers innovative services.	BI 3
There are attractive in the services that provided by my bank.	BI 4
I'm familiar with my bank.	BI 5
Working with my bank helps me to support my social status.	BI 6
The bank has a good reputation in the market.	BI 7
I see that the bank is stable and stability in the financial market.	BI 8
The situation of my bank in the market adds real value to me.	BI 9

<b>Trust</b>	T
My bank is trustworthy.	T1
The bank is always honest and truthful to its customers.	T2
The bank has confidence in dealing with the Potential financial risks.	T3
The bank provides an acceptable level of personal security.	T4
The bank gives me an acceptable confirmation of the expected financial transactions.	T5
My interests and complaints are taken into consideration by the bank.	T6
My financial transactions are done in a fair manner.	T7
I see that my bank has integrity in the performance of transactions and meets customer needs.	T8
Overall, my bank can be trusted to meet my financial needs.	T9
<b>Electronic Services</b>	ES
The bank offers electronic financial services.	ES1
Electronic services are offered attractively.	ES2
The electronic services provide sufficient information to the customer.	ES3
Electronic services are easily accessible.	ES4
Electronic services are easily accessible.	ES5
The bank is concerned about the security and privacy of the customer when offering electronic services.	ES6
I am very familiar with the design of my bank's electronic services.	ES7
<b>Customer Loyalty</b>	CL
I consider my bank's services as a first choice to repeat patronage during the coming period.	CL1
I will repeat patronage from my bank in the next few years.	CL2
I will ask for more business from my bank in the future.	CL3
I would say positive things about my bank to other people.	CL4
I would recommend my bank's services to someone who seeks financial services.	CL5
I see myself as a loyal customer and advocate for the bank I am dealing with.	CL6
The level of your loyalty toward your bank is	CL7
<b>Perceived Value</b>	PV
I feel comfortable when I go to get financial services from my bank.	PV1
I feel excited about getting my financial needs from my bank.	PV2
For me, getting my bank's financial needs is a way to do something different from my daily routine.	PV3
Dealing with my bank supports my social position.	PV4
I like to go to my bank to learn interesting ways about some new financial services.	PV5
Obtaining my bank's services gives me pleasure.	PV6
My bank's services enable me to do it more quickly.	PV7
I prefer getting the financial needs in my bank because it works continuously without breaks.	PV8
I value the ease of obtaining my bank's services.	PV9
I value the convenience of obtaining my bank's services.	PV10
I appreciate the appropriate content of the internal environment in my bank.	PV11
By comparing the cost of services with the return on them, I get the value consistent with my expectations.	PV12

## REFERENCES

- Oliver, R. L. (1999). Whence consumer loyalty?. *Journal of Marketing*, 63(4\_suppl1), 33-44.
- Bennett, R., & Rundel-Thiele, S. (2005). The brand loyalty life cycle: Implications for marketers. *Journal of Brand Management*, 12(4), 250-263.
- Sheth, J. N., & Parvatiyar, A. (1995). The evolution of relationship marketing. *International business review*, 4(4), 397-418.
- Allen, D. R., & Allen, D. (2004). *Customer satisfaction research management: A comprehensive guide to integrating customer loyalty and satisfaction metrics in the management of complex organizations*. ASQ Quality Press.



- Schultz, D. E. (2005). The loyalty paradox: What is brand loyalty after all?. *Marketing management*, 14(5), 10-11.
- Knox, S., & Walker, D. (2001). Measuring and managing brand loyalty. *Journal of strategic marketing*, 9(2), 111-128.
- Olsen, S. O. (2007). Repurchase loyalty: The role of involvement and satisfaction. *Psychology & Marketing*, 24(4), 315-341.
- DEHDASHTI, Z., JAFARZADEH, K. M., & BAKHSHIZADEH, A. (2012). Investigating Brand Social Identity Perspective and Its Influence on Brand Loyalty Development the Case of Koleh Dairy Company.
- Matzler, K., Grabner-Kräuter, S., & Bidmon, S. (2008). Risk aversion and brand loyalty: the mediating role of brand trust and brand affect. *Journal of product & brand management*.
- Bennett, R., & Rundel-Thiele, S. (2005). The brand loyalty life cycle: Implications for marketers. *Journal of Brand Management*, 12(4), 250-263.
- Brexendorf, T. O., Mühlmeier, S., Tomczak, T., & Eisend, M. (2010). The impact of sales encounters on brand loyalty. *Journal of Business Research*, 63(11), 1148-1155.
- Annual report of the central bank of Yemen, (2017), Sana'a-Yemen
- Alkibsi, S., & Lind, M. (2011, May). Customer perceptions of technology-based banking service quality provided by banks operating in Yemen. In *European, Mediterranean & Middle Eastern Conference on Information Systems* (pp. 30-31).
- Farhan, Hassan & Altoki, Ali, (2008). The reality of the banking economy and the investment opportunities available in Yemen. *The Journal of Social Studies*, 27 (4), 31-34.
- Anabila, P., & Awunyo-Vitor, D. (2013). Customer relationship management: A key to organizational survival and customer loyalty in Ghana's banking Industry.
- Alkateeb, Yaseer, (2013). The reality of modern marketing in the organization in Yemen. *Journal of Administrative Sciences*, 51(18), 23-40.
- Al-Ajam, A. S., & Nor, K. M. (2015). Challenges of adoption of internet banking service in Yemen. *International journal of bank marketing*.
- Rai, A. K., & Srivastava, M. (2012). Customer loyalty attributes A perspective. *NMIMS management review*, 22(3), 49-76.
- Al-Bayati, A. F., & David, F. M. (2016). Population growth and Arab consumption culture. *Iraqi Journal of Market and Consumer Research*, 8(4), 12-34.
- Gremler, D. D., & Brown, S. W. (1998). Service loyalty: Antecedents, components, and outcomes. In *American Marketing Association. Conference Proceedings* (Vol. 9, p. 165). American Marketing Association.
- Ladhari, R., Souiden, N., & Ladhari, I. (2011). Determinants of loyalty and recommendation: The role of perceived service quality, emotional satisfaction, and image. *Journal of Financial Services Marketing*, 16(2), 111-124.
- Moorman, C., Deshpande, R., & Zaltman, G. (1993). Factors affecting trust in market research relationships. *Journal of Marketing*, 57(1), 81-101.
- Kassim, N., & Abdullah, N. A. (2010). The effect of perceived service quality dimensions on customer satisfaction, trust, and loyalty in e-commerce settings. *Asia pacific journal of marketing and logistics*.
- Minarti, S. N., & Segoro, W. (2014). The influence of customer satisfaction, switching cost and trusts in a brand on customer loyalty—The survey on the student as IM3 users in Depok, Indonesia. *Procedia-Social and Behavioral Sciences*, 143, 1015-1019.
- Marakanon, L., & Panjakajornsak, V. (2017). Perceived quality, perceived risk and customer trust affecting customer loyalty to environmentally friendly electronics products. *Kasetsart Journal of Social Sciences*, 38(1), 24-30.
- Barich, H., & Kotler, P. (1991). A framework for marketing image management. *MIT Sloan Management Review*, 32(2), 94.
- Lin, C. C. (2005). *Evaluating effects of customer satisfaction, customer loyalty and store image on customer retention: an examination in a retail setting* (Doctoral dissertation, University of Manchester: University of Manchester).
- Giovanis, A. N., Zondiros, D., & Tomaras, P. (2014). The antecedents of customer loyalty for broadband services: The role of service quality, emotional satisfaction and corporate image. *Procedia-Social and Behavioral Sciences*, 148, 236-244.
- Chang, Y. H., & Yeh, C. H. (2017). Corporate social responsibility and customer loyalty in intercity bus services. *Transport policy*, 59, 38-45.

- Rowley, J. (2006). An analysis of the e-service literature: towards a research agenda. *Internet research*.
- Leventhal, R. C., Pitta, D., Franzak, F., & Fowler, D. (2006). A strategic approach to building online customer loyalty: integrating customer profitability tiers. *Journal of consumer marketing*.
- Abdulfattah, F. (2012). *The effect of electronic customer relationship on customer satisfaction a study in web banking in Saudi Arabia* (Doctoral dissertation, University of Huddersfield).
- Pereira, H. G., de Fátima Salgueiro, M., & Rita, P. (2016). Online purchase determinants of loyalty: The mediating effect of satisfaction in tourism. *Journal of Retailing and Consumer Services*, 30, 279-291.
- Li, M. L., & Green, R. D. (2011). A mediating influence on customer loyalty: The role of perceived value. *Journal of Management and Marketing research*, 7, 1.
- Yusuf, E. (2012). Analysis of market-based approach on the customer value and customer satisfaction and its implication on customer loyalty of organic products in Indonesia. *Procedia-Social and Behavioral Sciences*, 40, 86-93.
- El-Adly, M. I., & Eid, R. (2016). An empirical study of the relationship between shopping environment, customer perceived value, satisfaction, and loyalty in the UAE malls context. *Journal of Retailing and Consumer Services*, 31, 217-227.
- Cossío-Silva, F. J., Revilla-Camacho, M. Á., Vega-Vázquez, M., & Palacios-Florencio, B. (2016). Value co-creation and customer loyalty. *Journal of Business Research*, 69(5), 1621-1625.
- Hoang-Tung, N., Kojima, A., & Kubota, H. (2014). Recognizing customers' patterns of bus service patronage using a loyalty framework. *IATSS Research*, 37(2), 148-156.
- Melnyk, V. (2014). Resisting temptation: gender differences in customer loyalty in the presence of a more attractive alternative. *Australasian Marketing Journal (AMJ)*, 22(4), 335-341.
- Gracia, D. B., Ariño, L. V. C., & Blasco, M. G. (2015). The effect of culture in forming e-loyalty intentions: A cross-cultural analysis between Argentina and Spain. *BRQ Business Research Quarterly*, 18(4), 275-292.
- Nyadzayo, M. W., & Khajehzadeh, S. (2016). The antecedents of customer loyalty: A moderated mediation model of customer relationship management quality and brand image. *Journal of Retailing and Consumer Services*, 30, 262-270.
- Al-Shibly, M. S., & hamdan Alkhawaldeh, K. (2017). The Impact of Marketing by Relationships to Achieve Competitive Advantage A Case Study" Cellular Telecommunication Companies in Jordan. *Journal of Marketing Management*, 5(2), 31-43.
- Cavana, R., Delahaye, B., & Sekeran, U. (2001). *Applied business research: Qualitative and quantitative methods*. John Wiley & Sons.
- Comrey, A. L., & Lee, H. B. (1992). Interpretation and application of factor analytic results. *Comrey AL, Lee HB. The first course in factor analysis*, 2, 1992.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610.
- Salkind, N. J. (2011). *One hundred questions (and answers) about research methods*. Sage.
- Bland, J. M., & Altman, D. G. (2007). Agreement between methods of measurement with multiple observations per individual. *Journal of biopharmaceutical statistics*, 17(4), 571-582.
- Zammit, J. A. (2000). *Antecedents to Service Loyalty: A Theoretical and Empirical Investigation* (Doctoral dissertation, University of Surrey).
- Ladhari, R., & Leclerc, A. (2013). Building loyalty with online financial services customers: Is there a gender difference? *Journal of Retailing and Consumer Services*, 20(6), 560-569.
- Mabkhot, H. A. N. (2016). *The direct and indirect influence of a brand image, brand experience, and brand personality on brand loyalty* (Doctoral dissertation, University Utara Malaysia).
- Smith, R. M. (2003). *Profiling loyal customer in the financial services sector* (Doctoral dissertation, Leeds Metropolitan University).
- Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM). *European business review*.
- Hair Jr, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2017). *Advanced issues in partial least squares structural equation modeling*. sage publications.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity

in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43(1), 115-135.

Rasoolimanesh, S. M., Jaafar, M., & Barghi, R. (2017). Effects of motivation, knowledge and perceived power on residents' perceptions: Application of Weber's theory in World Heritage Site destinations. *International Journal of Tourism Research*, 19(1), 68-79.

Cohen, J. (1988). Statistical power analysis for the behavioral schemes.

Giovanis, A. N., Zondiros, D., & Tomaras, P. (2014). The antecedents of customer loyalty for broadband services: The role of service quality, emotional satisfaction and corporate image. *Procedia-Social and Behavioral Sciences*, 148, 236-244.

Cho, Y. S., Rha, H. S., & Burt, S. (2015). The impact of customer awareness of manufacturer name disclosure on retail brand attitudes and loyalty in Korea. *Journal of Retailing and Consumer Services*, 22, 128-137.

Pan, Y., Sheng, S., & Xie, F. T. (2012). Antecedents of customer loyalty: An empirical synthesis and reexamination. *Journal of retailing and consumer services*, 19(1), 150-158.

Srinivasan, S. S., Anderson, R., & Ponnnavolu, K. (2002). Customer loyalty in e-commerce: an exploration of its antecedents and consequences. *Journal of retailing*, 78(1), 41-50.

Safa, N. S., & Ismail, M. A. (2013). A customer loyalty formation model in electronic commerce. *Economic Modelling*, 35, 559-564.

Silva, G. M., & Goncalves, H. M. (2016). Causal recipes for customer loyalty to travel agencies: Differences between online and offline customers. *Journal of Business Research*, 69(11), 5512-5518.

Algabiree, K. M. (2018). Quality evaluation of banking operations in Yemeni banks - a comparative study. *Al-Jazirah University Journal*, 1(1), 225-245.

Osman, Z., & Sentosa, I. (2013). Mediating effect of customer satisfaction on service quality and customer loyalty relationship in Malaysian rural tourism. *International Journal of Economics Business and Management Studies*, 2(1), 25-37.

Nagengast, L., Evanschitzky, H., Blut, M., & Rudolph, T. (2014). New insights in the moderating

effect of switching costs on the satisfaction–repurchase behavior link. *Journal of retailing*, 90(3), 408-427.