E-BANKING FUNCTIONALITY AS A MEASURE OF CUSTOMER SATISFACTION IN THE CZECH AND KENYAN BANKING SECTORS

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Abstract

Globally, 1 in 4 people use electronic banking (e-banking) functionality. This shows how the service has become the commonly used channel in the banking sector and has therefore, replaced the traditional channel for most banking services. More customers are embracing this functionality and its use has become more popular in measuring customer satisfaction. Banks have also benefitted from e-banking through creating memorable customer experiences for their clients thus retaining them. The aim of this paper is to investigate the satisfaction of Czech and Kenyan bank customers with emphasis on the use of e-banking. The results from the questionnaires have been analyzed with SPSS 22.0. Respondents from Czech Republic were 323, while 403 were from Kenya. The overall levels of satisfaction are different. Majority of users of e-banking have university education. Both satisfaction and dissatisfaction of e-banking is determined by some demographic factors.

Keywords: customer satisfaction, e-banking, bank customers, Czech Republic, Kenya

1. INTRODUCTION

E-quality is the most important predictor of customer satisfaction and loyalty (Petnji-Yaya, Marimon, and Casadesus, 2013). They further state that antecedents such as online service quality and satisfaction can be used to forecast customer loyalty in e-banking. As a result, many financial institutions have now adapted technological advancements to enhance clients' positive experiences with their services, thereby, ensuring maximum customer satisfaction that led to customer retention. Electronic banking is an example of such technological advancements. According to Liébana-Cabanillas et al., (2013), bank branches (traditional channel) have lost significant terrain to electronic banking and telephone banking and the level of satisfaction with online banking is increasing. They also state that e-banking has become an essential service to secure client loyalty by ensuring greater customer satisfaction and building stronger ties with clients.

Many commercial banks use e-banking as a mechanism for differentiation from competitors while most customers are using this functionality to choose for banks to be clients to (Liébana-Cabanillas et al., 2013). Tsiakis, Kargidis, and Chatzipoulidis (2013) also argue that banks are service embracing e-banking as to reach a wider market increase customer satisfaction and lower operational costs. Nami (2009) defines e-banking as the provision of retail and small value banking products and services through electronic channels. These channels include automated teller machines (ATMs), telephone banking, mobile phone banking, internet banking (online), PC banking (offline) and TV-based banking. Table 1 below shows the features of e-banking.

Tab. 1- Features of e-banking. Source: Nami (2009)

E-banking features for customers	E-banking features for banks
Time saving	More efficient
Cost saving	Reducing costs
Fast	Borderless (Scalable)
Accessible	Dependence on IT
Available	Various services

Zondiros, Konstantopoulos, and Tomaras (2007) define customer satisfaction as a measure of how a firm's product or service performs compared to customer's expectations. According to Hoq and Amin (2010), customer satisfaction is the most important driver in commercial banks since higher customer satisfaction leads to a lower customer intention to switch banks. Apart from customer loyalty, customer satisfaction also leads to customer complaint (Shi and Zhao, 2007). Customer complaints should be solved through various service delivery strategies (Ramachandran and Chidambaram, 2012). They argue that this is done because customer satisfaction not only means satisfying the customers, but also customer retention in case of service failure.

This article investigates the use of e-banking as a measure of customer satisfaction. The countries for investigation are Czech Republic and Kenya. Our results are analyzed according to the social groups of gender, age and education. The rest of the article will be as follows: Part 2 explains the drivers of customer satisfaction in commercial banks and discusses the impact of e-banking to clients and banks. Part 3 discusses the method of data collection and development of hypotheses and scientific assumption. Part 4 gives the results of our research. Part 5 will discuss the results and compare with other results and Part 6 will conclude this article.

2. CUSTOMER SATISFACTION AND E-BANKING IN COMMERCIAL BANKS

2.1.Drivers of customer satisfaction in commercial banks

Satisfaction reflects the psychological case or emotional feeling that may affect the consumer as a result of comparison between performance, good service and expectations (Khartabiel and Saydam, 2014). Munari et al. (2013) state that customer satisfaction is the primary criterion for the assessment of banks' relationships with the market. According to Belás and Homolka (2013), customer satisfaction in banks present an important area of building long-term relationships with clients. Therefore, satisfied bank customers lead to high banks' profits and market shares. In finding competitive advantage, banks may use customer satisfaction as a key indicator of their long-term strategies. De Matos et al. (2009) point out that satisfied customers tend to be more loyal and recommend the bank to other customers. Thus, customer satisfaction is an important antecedent of customer loyalty.

A research by Singh and Kaur (2011), shows that customer satisfaction in banks is influenced by seven factors: employee responsiveness, appearance of tangibles, social responsibility, service innovation, positive word-of-mouth, competence and reliability. Recent developments show that social responsibility has become relevant given the rising importance of global sustainable development and that is why bank customers are likely to observe banks' socially responsible behavior. Lee et al. (2012) argue that Corporate Social Responsibility (CSR) is associated with the trust which influences customer satisfaction and loyalty (retention). Therefore, customers usually derive higher level of satisfaction from products or services that come from companies that are socially responsible. Employee responsiveness as the first factor reflects relationship between employee and customer satisfaction known as satisfaction mirror effect. Khartabiel and Saydam (2014) point out that employee satisfaction significantly reflects their behavior towards customers and strengthens the hypothesis that a satisfied employee is a productive employee. Furthermore, it was found out that when bank acts to improve job satisfaction, it leads to raising customer satisfaction and loyalty. Motivation of employees can make significant difference in service quality and customer satisfaction because most services are provided by people (Mandhachitara and Poolthong, 2011). Satisfaction of bank customers is strongly focused on service quality and service innovation. Grigouridis et al. (2013) argue that commercial banks have been forced to operate with emphasis on customer services due to strong competition and long-term achievement since it is linked to bank's ability to adapt to changes of customers' preferences and needs.

E-banking as a self-service activity is a factor of satisfaction which is not derived from people. It significantly supports satisfaction with service quality and service innovation. According to Ernst & Young (2014) survey, customers are satisfied with the convenience of traditional banking but expectations are constantly rising as new technologies and consumer behaviors develop. To stay competitive, financial institutions need to continue building out channel capabilities to provide 24/7 real-time access. Zhu and Chen (2012) claim that, in an online context, where human interactions are replaced by graphic user interfaces, the important role in customer satisfaction is fairness. Trust is identified as the key mediator of fairness to customer satisfaction (Zhu and Chen, 2012). Liébana-Cabanillas et al. (2013) state that electronic banking has become an essential service to secure clients' loyalty by ensuring greater customer satisfaction and building stronger relationships with customers. The integration of electronic banking into the multichannel strategy of financial institutions will provide higher quality service and achieve greater satisfaction among clients.

2.2.Benefits of e-banking

The banking sector has gone beyond what customers perceived it to be in the current world. Presumably, the easy access of information and flexibility within the spheres of electronic banking has its pros and cons in the 21st century. A study conducted by Santouridis and Kyritsi (2014), revealed that there are vital influences associated with the use of internet in the banking industry. They further found out that the use of internet creates some suppleness for customers in general and hence they can assess their balance and do transactions electronically at their own convenience. This has eradicated the traditional way of walking to banking hall for further transactions and to seek clarifications.

Nami (2009) mentions better branding and better responsiveness to the market as a benefit of internet banking to banks. This is because banks that offer this service are perceived as leaders in technology implementation and so they enjoy better branding image. They further state that the main benefit of e-banking to customers is the ability to save time. Table 2 below shows other benefits of e-banking to customers.

Tab. 2 – Benefits of e-banking to corporate customers. Source: Nami (2009)

1.	Quick and very fast
2.	Continuous access to information
3.	Increased comfort
4.	Reduced cost
5.	Better cash management

Conversely, the influx of e-banking with its efficiency, mode of operation and the benefits attached to it enhance customer satisfaction and loyalty (Ariff et al., 2013).

6. MATERIALS AND METHODS

Data for our research has been gathered through the use of questionnaires. Munari, Ielasi, and Bajetta (2013) point out that customer satisfaction surveys are the main source of information to set strategies aimed at meeting needs or understanding of customer perceptions, most importantly showing relationships and possible areas of improvement for customers. The questionnaires were conducted in 2012 in Czech Republic and in 2014 in Kenya. In the Czech Republic, the questionnaires were administered to bank clients of banks such as Česká spořitelna, a.s., Komerční banka, GE Money Bank and UniCredit Bank. In Kenya, clients of banks such as Co-operative Bank, K-Rep Bank, Kenya Commercial Bank and Equity Bank were approached.

A total of 323 respondents were valid from Czech Republic while 403 from Kenya were also valid. Czech respondents consisted of 37% women and 63% men. In Kenya, 43% were men and 57% were women. The age structure is as follows from Czech Republic: 32% were under 30 years, 50% were 30 to 50 years and 18% were above 50 years. For Kenya, 81% were under 30 years old, 18% were 30 to 50 years and 1% were above 50 years. For the level of education, 0.93% had primary education, 62% secondary education and 37% university education in the Czech Republic. For Kenya, 1% had primary education, 10% secondary education and 89% university education.

The following hypotheses and scientific assumption have been formulated for this research.

SA1: The overall levels of customers' satisfaction for Czech and Kenyan bank customers are different. However, both are supported by more than 50% of the respondents.

H1: E-banking is mostly used by people with university education.

H2: Satisfaction and dissatisfaction of e-banking is significantly determined by gender, age and educational level.

The hypotheses will be tested by use of Pearson's chi-square test as shown below. The significance level in this research is 5%

$$\chi^2 = \sum \sum \frac{(O_{ij} - E_{ij})^2}{E_{ij}}$$

7. RESULTS

The results of the overall levels of customer satisfaction for Czech Republic and Kenya are shown in tables 3 and 4 respectively.

Tab.3-Overall level of customer satisfaction in Czech Republic. Source: Belás, Burianová, Cipovová, & Červenka (2013)

Are you satisfied		Gender		Age		Education level		
with banking products and services provided?	In total	Men	Women	Under 30 years	30 - 50 years	Over 50 years	University	Primary and secondary
Yes in %	62,23	55,37	66,34	64,71	59,51	65,52	66,12	59,90
No in %	26,32	31,40	23,27	24,51	28,83	22,41	27,27	25,74
Don't know in %	11,46	13,22	10,40	10,78	11,66	12,07	6,61	14,36
Critical values of χ2		5,990		9,488		5,990		
Calculated values of	- χ2	3,894		1,315		4,499		

Note: Secondary education has been used to also refer to respondents of primary education due to minimum number of responses.

Czech bank customers (62%) are satisfied with their banks, 26% of them are dissatisfied while 11% of them do not know. More women than men are satisfied with their banks and this is also the same with those who are over 50 years old and those people with university education.

Tab.4-Overall level of customer satisfaction in Kenya. Source: own source

Are you satisfied		Gender		Age		Education level			
with banking products and services provided?		Men	Women	Under 30 years	30 - 50 years	Over 50 years	University	Primary and secondary	
Yes in %	63,80	58,70	67,50	64,40	63,90	20,00	63,70	64,10	
No in %	32,80	39,00	28,10	31,90	33,30	80,00	32,70	35,90	
Don't know in %	3,50	2,30	4,30	3,70	2,80	0,00	3,60	0,00	
Critical values of χ2		5,990		9,488		5,990			
Calculated values o	f χ2	5,860		5,325			4,988		

Note: Secondary education has been used to also refer to respondents of primary education due to minimum number of responses.

Kenyan bank customers (64%) are satisfied with their banks, 33% are dissatisfied and 4% of them do not know. More women (68%) are satisfied than men (59%) while people under the age group of under 30 years old (64%) are more satisfied than other members in the social group of age. People with primary and secondary education are slightly satisfied more than people with university education.

Based on the analysis, it has been found out that the overall levels of satisfaction are different between the two countries. Other significant difference can be seen. Kenyan banks customers (33%) are more dissatisfied than Czech bank customers (26%). Tables 3 and 4 have confirmed our scientific assumption No. 1.

Tab.5-Satisfaction by e-banking in Czech Republic and Kenya. Source: Belás, Burianová, Cipovová, & Červenka (2013), own source

			Gender		Age		Education level		
				χ2=3,84000*		χ2=5,99000*			χ2=3,84000*
Satisfaction by of in commercial bar		In total	Men	Women	Under 30 years	30 - 50 years	Over 50 years	University	Primary and secondary
E-banking in	%	74,61	67,77	78,71	89,22	74,23	50,00	83,47	69,30
Czech Republic	χ2		4,785		30,044			8,015	
E-banking in	%	45,41	48,84	42,86	43,87	55,56	0,00	46,64	35,56
Kenya	χ2		1,424		7,465			1,980	

Note: * critical values of χ 2.

In Czech Republic, 75% of the respondents are satisfied with e-banking. Statistically, significant differences are visible. More women (79%) use e-banking than men (68%). Respondents under 30 years old (89%) and people with university education (83%) are satisfied with this channel. People with university education (83%) use e-banking more than people with primary and secondary education (69%). Based on the table above, we conclude that e-banking is dependent on gender, age and education in Czech Republic. In Kenya, 45% of the respondents are satisfied with e-banking. More men (49%) use e-banking than women (42%). Statistically, more people in the age group of 30-50 years use e-banking than the other age groups. More people with university education (47%) use e-banking services in Kenya. As per the results, we conclude that e-banking in Kenya is not dependent on gender and educational level but rather age.

Based on the above calculations, more people in Czech Republic are satisfied with e-banking than in Kenya. Besides, hypothesis No. 1 has been confirmed.

Tab.6-Dissatisfaction by e-banking in Czech Republic and Kenya. Source: Belás, Burianová, Cipovová, & Červenka (2013), own source

			Gender		Age		Education level		
				χ2=3,84000*		*00	χ2=3,84000*		
	by e- mmercial	In total	Men	Women	Under 30 years	30 - 50 years	Over 50 years	University	Primary and secondary
Poor quality of e- banking in Czech	%	1,86	3,31	0,99	2,94	0,00	5,17	2,48	1,49
Republic	0		2,226		7,238			0,410	
Poor quality of e-	%	34,00	31,98	35,50	32,82	37,50	60,00	32,12	48,89
banking in Kenya	χ2		0,545		2,101			5,008	

Note: * critical values of χ 2.

Lower number of Czech bank customers are dissatisfied with e-banking (2%) than Kenyan bank customers (34%). Statistically, more people with primary education and secondary education (49%) are dissatisfied with e-banking than people with university education (32%) in Kenya. For Czech Republic, statistically, people over 50 years (5%) are dissatisfied with e-banking more than the other age groups. According to the results, gender and education are not dependent on e-banking in Czech Republic while age is dependent. In Kenya, gender and age are not dependent on e-banking while educational level is dependent on e-banking. Tables 5 and 6 have partially confirmed our hypothesis No. 2.

8. DISCUSSION

Fonseca (2014) on his research on e-banking culture for 27 EU countries states that e-banking has made it possible for bank customers to conduct transactions anywhere and no longer need to go physically to branches. He further states gender, age and education level as key demographic factors in analyzing usage of e-banking. Our research has also made use of these demographic factors.

According to KPMG (2013), 70% of Kenyans are satisfied with their banks. Based on our research, 64% of Kenyans are satisfied with their banks. Deloitte (2012) mentions that 50% or more of Czechs are satisfied with the services of their banks. In comparison to our research, 62% of people in Czech Republic are satisfied with their banks. As per the research results, the overall levels of satisfaction are different between Kenya and Czech Republic.

Ernst & Young (2014) on their global survey on customer satisfaction and behavior point out that e-banking is the most important reason for customer satisfaction in Czech Republic. They further state that 46% of Czechs are satisfied with this service. For our research, 75% of bank customers are satisfied with e-banking. In Kenya, 50% of the people are satisfied with e-banking contrary to our research whereby 45% were satisfied with the channel. Gikandi and Bloor (2010) argue that cost reduction and customer related factors are the main drivers of e-banking adoption

in Kenya. They also state that e-banking sector will continue to evolve as banks continue to venture into rapidly changing and emerging technologies to enable them expand their customer horizon through differentiated products, increased customer awareness and choices, and enhanced security.

A research by Meyer et al., (2006) for Deutsche Bank on online banking found out that individuals with higher formal education are more likely to use the internet and do financial transactions online. Furthermore, better educated people are typical early adopters and have fewer reservations against any technology. Fonseca (2014) also states that people with high level of education are likely the users of e-banking. Our research also has the same conclusion since more people with university education use e-banking. Fonseca (2014) also mentions gender and age apart from education level as other determinants of the usage of e-banking. For our research, these three attributes were partially confirmed.

The findings of this article are important to commercial banks since e-banking is the commonly used channel and therefore there is need for banks to adapt to such technological advancements to create a lasting relationship with customers. As pointed out, e-banking has a quite number of positive impacts but most importantly leads to reduced operational cuts and increased market share. These impacts are also achieved if there is maximum satisfaction of customers by the service. The results also show managers or decision makers of commercial banks in Czech Republic and Kenya need to come up with other ways of improving use of e-banking to ensure maximum customer satisfaction between different social groups.

9. CONCLUSION

This study has looked at e-banking as a measure of customer satisfaction in commercial banks in Czech Republic and Kenya. Literature on drivers of customer satisfaction and benefits of e-banking in commercial banking has been taken into account. Questionnaires were used as a method of data collection and the results were analyzed according to gender, age and educational level.

Based on the findings, the overall level of satisfaction in Czech Republic is 62% while 64% in Kenya. This confirmed our scientific assumption No. 1.

The usage of e-banking is determined by the level of education. People with university education use e-banking more than other social groups of education. This is because of their easy adaptability to usage of this channel. This confirmed our hypothesis No. 1.

Satisfaction of bank customers by e-banking in Czech Republic is 75% while 45% in Kenya. It was found out that satisfaction by e-banking in Czech Republic is dependent on gender, age and education contrary to Kenya, whereby it is only dependent on age. Dissatisfaction of Czechs (2%) with e-banking is less than for Kenyans (34%). Age determines dissatisfaction in Czech Republic while educational level determines dissatisfaction in Kenya. These results partially confirmed our hypothesis No. 2.

As a managerial recommendation for commercial banks in Kenya, there is need for them to try and match the use of e-banking services as in Czech Republic. Therefore, we recommend the development of advertising campaigns aimed at each social group in accordance with gender, age and education level. There is also need for informing and educating customers in Kenya on the benefits of usage of e-banking. Future research should focus on the possible reasons behind the usage of e-banking for the different age groups.

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