APPLYING SERVQUAL TO BANKING SERVICES: AN EXPLORATORY STUDY IN MOROCCO

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Abstract:
The paper seeks to study service quality perceptions and expectations for the Moroccan banking customers by using SERVQUAL model. The study consists of a sample of 240 respondents out of an initial sample of 300 randomly selected out of the total Moroccan banking customers. This data were subsequently analysed using descriptive statistics, t-test, factor analysis as well as logistic regression. The results indicate that the perceptions of the Moroccan banking customers far exceed their expectations regarding the five dimensions of SERVQUAL model, which is a good indication. At the same time, the findings show that responsiveness, assurance and empathy are the important dimensions considered by the customers while assessing the quality of services rendered by the Moroccan banks. The major contribution of the study is that it extends the usage of SERVQUAL model to another context which is that of Morocco, by testing its applicability and also by providing an adjusted scale of measurement of the dimensions in question. The study is also one of the few that have used SERVQUAL scale to examine service quality perception and expectation in the banking sector.

Keywords: Morocco, SERVQUAL, banking, logistic regression

1. Introduction

In Morocco, the first banks were established by the end of the nineteenth century, these banks were the Berlinz Orient Bank, the Bank Of West Africa and the Comptoir National d'Escompte de Paris, German, English and French respectively. Few years later, more specifically in 1906, the Moroccan central bank was recognized by the green island treaty. Since then, the banking system in the country has gone through several reforms, until it became relatively developed and well regulated.

Currently, the Moroccan banking sector is dominated by eight main banks that are conventional in nature. These are Attijariwafa Bank (AWB), Banque Populaire du Maroc (BPM), Banque Marocaine du Commerce Exterieur (BMCE), Banque Marocaine du Commerce et de l'Industrie (BMCI), Societe Generale Maroc (SGM), Credit Agricole du Maroc (CAM), Credit Du Maroc (CDM), and Credit Immobilier et Hotelier (CIH). Recently, there was an attempt to introduce alternative banking services, which has

effectively succeeded and even amounted to the first bank offering alternative banking services under the name Dar Assafa. Hence, the banking industry is expected to know a more ferocious competition between the two types of banking services in the future.

Thus, it is of great relevance to study the service quality perceptions and expectations of the Moroccan banking customers, as this will be a tool to manage the clientele portfolio and subsequently being more competitive. Moreover, the current study will fill the gap in the literature on service quality in the banking sector since there is no existing study that has focused on the quality of services rendered by the Moroccan banks, and using SERVQUAL model.

Accordingly, the main aim of the current study is to examine the perceptions and expectations of the Moroccan customers about the quality of the banking services, as well as the services' dimensions that are considered important by the customers. Likewise, the study aims at answering the following questions: Is there any difference between the perceptions and expectations of the quality of services rendered by the Moroccan banks? What are the services' dimensions that are considered important by the Moroccan banking customers?

Having said so, the study is based on SERVQUAL model conceived by Parasuraman, Zeithaml and Berry (1985). The model is comprised of five main dimensions that measure both the perceptions and expectations of the customers about quality of service rendered by a given service provider, which is the case of banks in our study. These dimensions are tangibility, reliability, responsiveness, assurance and empathy. In contrast with the other service quality models, SERVQUAL is the most popular and widely used in this area (Chang and Yueh, 2002).

Following this introduction, the next section will briefly shed light on the previous studies on service quality especially those that have used SERVQUAL model. Subsequently, the research methodology, profile analysis, results and conclusions will be discussed in sequence.

2. Literature review

Service quality can be generally defined as the difference between the expected service and the perceived service (Parasuraman, Zeithaml and Berry, 1988; Gronroos, 1982). The conceptualisation of service quality has its roots in the expectancy disconfirmation theory (Collier and Bienstock, 2006), so the evaluation of service quality results from comparing the perception of service received to prior expectations of what that service should provide (Choi, Cho, Lee, Lee and Kim, 2004).

The previous studies on service quality have used different models, such as CARTER (Shafie, Azmi and Haron, 2004; Abedniya, Zaeim and Hakimi, 2011; Sharif and Mirzaee, 2010), the GAP model (Rajasekhar, Muninarayanappa and Reddy, 2009; Babiarz, Piotrowski and Wawarzynkiewicz, 2003), the KANO model (Lee, Hu, Yen and Tsai, 2009; Shahin, 2004; Wang and Ji, 2010; Shen, Tan and Xie, 2000; Bayraktaroglu and Ozgen, 2008; Hejaili, Assad, Shaheen, Moussa, Karkar, Alrukhaimi, Barhamein, Al Suwida, Alhejaili, Al Harbi, al Homrany, Attar and Al-Sayyari, 2009; Hsu, Bing and Hsu,

2009; Xu, Jiao, Yang and Helander, 2009; Matzler and Hinterhuber, 1998), Gronroo's perceived service quality model (Emari, Iranzadeh and Bakhshayech, 2011; Kang and James, 2004; Nobrega, Barbosa, Leone, Souza and Montenegro, 2009), SERVQUAL (Tahir and Bakar, 2007; Rust, Zahorik and Keiningham, 1995; Sharif and Mirzaee, 2010). However, the latter is considered more popular and comprehensive in studying service quality (Baki, Basririnci, Cilingir and Murat, 2009). Thus the current study uses SERVQUAL as a mean to study service quality perception of the Moroccan customers about the services provided by the Moroccan banks.

The SERVQUAL model is widely used in studying the customers' perception of the services they received from the various services' providers, as well as their expectations in the future use of the service (Carrillat, Jaramillo and Mulki, 2007). The model has been used in the study of several types of services, including hospital outpatient services (Hu, Lee and Yen, 2010; Juwaheer, 2004) public services (Brysland and Curry, 2001) private healthcare (Butt and Cyril de Run, 2010) library services (Ahmed and Shoeb, 2009) b2b services (Gounaris, 2005) information technology (Badri, Abdulla and Al-madani, 2005; Hsiao, Lin, Wang, Lu and Yu, 2010; Iwaarden, Wiele, Ball and Millen, 2003) education services (Sahney, Banwet and Karunes) and logistics services (Baki, Basfirinci, Cilingir and Murat, 2009).

In the case of banking services, few of the previous studies only used SERVQUAL model to examine the quality perception of the customers (Newman, 2001; Tsoukatos and Mastrojianni, 2010; Kumar, Kee and Manshor, 2009; Kumar, Kee and Charles, 2010). Furthermore, none of the previous studies have been done in the context of Morocco. Thus, the current paper is an attempt to fill the gap in the literature by applying SERVQUAL model to study the quality of the banking services rendered by the Moroccan banks.

The SERVQUAL model consists of five main dimensions, namely, tangibility, reliability, responsiveness, assurance and empathy (Parasuraman, Zeithaml and Berry, 1985). These five dimensions are defined by Lim, Tang and Jackson (1999) as follows:
- ➢ Tangibles: physical facilities, equipment, external appearance of store and appearance of personnel.
- ➢ Reliability: company's potential of performing the promised service dependably and accurately.
- ➢ Responsiveness: company's willingness to help customers and provide prompt service.
- ➢ Assurance: employees' knowledge and courtesy levels and their ability to inspire trust and confidence. This dimension also includes competence, courtesy, credibility, and security.
- ➢ Empathy: caring and personalized attention that the firm provides to its customers. This dimension also includes access, communication and understanding the customer.

Based on the SERVQUAL model, the following hypotheses were developed, and will subsequently be examined using different statistical techniques as above mentioned.

$H1_o$: There is no difference between the perceptions and expectations of the Moroccan customers about the banking services.

H2: Tangibility has a significant impact on the Moroccan customers' perception of banking services.

H3: Reliability has a significant impact on the Moroccan customers' perception of banking services.

H4: Responsiveness has a significant impact on the Moroccan customers' perception of banking services.

H5: Assurance has a significant impact on the Moroccan customers' perception of banking services.

H6: Empathy has a significant impact on the Moroccan customers' perception of banking services.

3. Methodology

In order to achieve the intended objective, the current study uses a mixture of statistical techniques. Firstly, the study employs descriptive statistics to analyse the profile of the respondents, which is necessary in analysing the final results. Secondly, the study uses paired sample t-test to examine the gap between the perceptions and expectations. Subsequently, the study uses factor analysis technique as a preliminary stage to logistic regression analysis. SPSS 18 software was used to accomplish all the above mentioned tests.

The target population of the study is the Moroccan banking customers. The study focuses mainly on the banking customers in the city of Casablanca, which is the business centre of the country. In fact, the Moroccan commercial law mandates the Moroccan banks to establish the headquarters as well as the major branches in Casablanca. Furthermore, the nature of the city made the Moroccan citizens to come from their various native cities, in search of jobs in the city. A total of 300 questionnaires were randomly distributed, out of which 240 questionnaires were returned and usable, thereby, making a response rate of 80%.

The questionnaire is based on SERVQUAL model established by Parasuraman et al. (1988). The model contains five main dimensions that represent the service quality perception and expectation of customers. These dimensions are tangibility, reliability, responsiveness, assurance and empathy. Thus, the first part of

the questionnaire is measuring the perceptions and expectations of the customers regarding these five dimensions, while the second part is meant for collecting demographic variables of the respondents. Hence, the questionnaire used was a five points' likert scale and was originally made in English and subsequently translated to French to be distributed to the majority speaking French Moroccan customers.

The profile analysis of the respondents indicates that majority of the respondents are males with a portion slightly exceeding 55 per cent. Furthermore, it is also shown that the main employment status of the respondents is working with private companies with around 35 per cent while the second category goes to students with nearly 28 per cent. The results also indicate that majority of the respondents are aged between 21 to 40 years old amounting to nearly 60 per cent.

4. Results

Expectation, perception and gap
In accordance with Parasuraman et al. (1988), the first step of the service quality analysis is to examine the mean estimation of both perceptions and expectations, in order to calculate the gap between the two from the perspective of the customers.

The results in Table 1 indicate that the gap is positive for all the items. This shows that the Moroccan banks could meet and satisfy the expectations of their customers, which is greater than their expectations in all the aspects of service quality.

In order to examine the significance of these gaps, a two sample t-test was employed. The results in Table 1 indicate that with the exception of empathy, the gap is significant for all the other dimensions. This means that the perception of the customers highly exceeds their expectations, however, for empathy these is no difference between customers' perceptions and expectation, since both of them are at the same level. Thus, with the exception of empathy, hypothesis 1 is rejected for all the other dimensions. These results contradict with those of Sahney et al. (2004) as well as Kumar et al. (2010). This difference may be generally due to the nature of the banking sector in Morocco that is very competitive.

Table 1: Paired sample t-test

Pairs	Items	Gap	Sig. (2-tailed)
Pair 1	Tangp1 - Tane1	+1.08	.000
Pair 2	Tanp2 - Tane2	+1.13	.000
Pair 3	Tanp3 - Tane3	+0.82	.000
Pair 4	Tanp4 - Tane4	+0.72	.000
Pair 5	Relp1 - Rele1	+1.66	.000
Pair 6	Relp2 - Rele2	+1.06	.000
Pair 7	Relp3 - Rele3	+1.72	.000

Pair 8	Relp4 - Rele4	+1.4	.000
Pair 9	Relp5 - Rele5	+1.52	.000
Pair 10	Resp1 - Rese1	+1.57	.000
Pair 11	Resp2 - Rese2	+1.81	.000
Pair 12	Resp3 - Rese3	+1.83	.000
Pair 13	Resp4 - Rese4	+1.52	.000
Pair 14	Asp1 - Ase1	+1.43	.000
Pair 15	Asp2 - Ase2	+1.59	.000
Pair 16	Asp3 - Ase3	+1.16	.000
Pair 17	Asp4 - Ase4	+1.81	.000
Pair 18	Emp1 - Eme1	+1.07	.000
Pair 19	Emp2 - Eme2	+0.98	.000
Pair 20	Emp3 - Eme3	+0.82	.000
Pair 21	Emp4 - Eme4	+1.11	.000
Pair 22	Emp5 - Eme5	+0.93	.000
Pair 23	Emp6 - Eme6	+1.09	.000
Pair 24	TanP - TanE	+0.8	.000
Pair 25	RelP - RelE	+1.41	.000
Pair 26	EmpP - EmpE	+0.03	.101
Pair 27	AsP - AsE	+1.05	.000
Pair 28	ResP - ResE	+1.14	.000
Pair 29	P_Overal - E_Overal	+1.11	.000

After identifying the gaps in the five dimensions of SERVQUAL model as the service quality constructs, the next step is to employ factor analysis to identify the items that load on these constructs and represent them the most. This is a preliminary step to logistic regression analysis which will help in measuring the SERVQUAL's five dimensions.

Factors analysis

The factor analysis output shows that the forty six items initially included in the analysis load on the ten dimensions of perception and expectation of SERVQUAL model. The first and second factors correspond to the perception and expectation about the empathy of the Moroccan banks; they are represented by six items each. Followed by the perceptions and expectations of the reliability of the services offered by the bank, these are measured by five items each. Then the expectations and perceptions of the tangibility of the services offered by the bank, with four factor

loadings each. The remaining are the perception and expectation of the assurance and responsiveness represented by 4 items each.

The KMO value is 0.736, which is an acceptable value, based on the threshold of 0.5 suggested by Hair et al. (2010). The bartlett's test of sphericity was significant, showing the sufficient correlation level in order to proceed with the analysis.

The next step, as suggested by Parasuraman et al. (1988) is to measure the reliability of the identified factors. The results indicate that all the factors have acceptable reliability level, which should be above 0.6 as suggested by Nunnally (1967). Furthermore, the communalities indicate that the items fit in the factors where they are loaded. The communalities for both perceptions and expectations are between 0.522 and 0.888 which is a high indicator.

Logistic regression results

At this stage, the statistical significance of individual regression coefficients is tested using Wald Chi square statistic, shown in Table 2 below. According to the Table, empathy, assurance as well as responsiveness are significant predictors of service quality perception of the banking services. Furthermore, the test of the intercept (constant) suggests that the intercept should not be included in the model. Hence the hypotheses 4, 5 and 6 are supported while hypotheses 2 and 3 were rejected. This contradicts with the findings of Iwaarden *et al.* (2003) which have found that all the all the five dimensions are highly important in the customers' perception of service quality. The above results contradict also with those of Kumar *et al.* (2010) who have found that the classical SERVQUAL dimensions abovementioned are not of importance for the customers in evaluating service quality. The results were also different from those of Juwaheer (2004) who have found that only reliability is a significant predictor of service quality satisfaction. This difference again may be generally due to the nature of the banking sector in Morocco that is very competitive.

Table 2: Coefficients estimation

Variables	B	S.E.	Wald	df	Sig.	Exp(B)
EmpP	1.255	.247	25.777	1	.000	3.509
RelP	.189	.175	1.166	1	.280	.827
TanP	.356	.280	1.618	1	.203	1.427
AsP	.744	.213	12.200	1	.000	.475
ResP	.629	.199	9.984	1	.002	.533
Constant	.863	1.056	.669	1	.413	.422

The above model has shown a valid Hosmer-Lemeshow test, suggesting that it is well fit to the data. Moreover, the model was able to explain almost 30 per cent of the variation in the dependent variable i.e. service quality perception of the banking services.

5. Discussions and conclusions

As it was initially mentioned, the objective of the paper was first to find out whether there is any difference between the service quality perception and expectation of the Moroccan banking customers with regards to the banking services rendered by the banks. And secondly, to find the quality dimensions that are considered important for the customers while assessing the services rendered by the banks. In fact, the results indicate that with the exception of empathy, the difference was significant for all the other dimensions and their sub-items. On the other hand, the findings also indicate that the dimensions that are considered important from the customers' point of view are empathy, assurance and responsiveness.

The above results suggest that the customers' satisfaction is a function of three main dimensions. These are assurance, responsiveness and empathy. This implies that the banks that are willing to win the competitively challenge will need to focus and provide the best quality on these dimensions.

On the other hand, the results indicate that the customers are generally satisfied of the quality of the service provided by the Moroccan banks. This shows that the existing banks are following a good quality assurance strategy that should be an example for the banks to penetrate the Moroccan banking market.

These results have significant implications for practitioners, policy makers as well as implications to the body of knowledge. The banks should consider the above dimensions to win the competition challenge, which is becoming more ferocious with the introduction of alternative services, and penetration of full fledge banks offering these services. Similarly, the policy makers should take these findings into account while formulating policies related to the banking industry. Finally, these findings provide great implication to the theory, since they extend the SERVQUAL model to another area and particularly another setting i.e. that of Morocco, which has never been studied earlier using this model.

Though the findings of the current study can provide great insights for the Moroccan banking sector in general, and particularly the new banks entering the Moroccan banking market, the study still has a number of limitations that will still not minimize its contribution. The main limitation is the sample studied which is taken from one city i.e. Casablanca, which means that the findings cannot be generalized to the whole country as well as to the banking sector in other countries. The second limitation is the fact that the study was mainly based on SERVQUAL model and did not try to fill the gap by comparing these findings with different models, such as SERVPERF, KANO or CARTER. Hence, the future studies are recommended to make a comparative study between the different service quality models to come out with stronger findings. At the same time, the future studies are recommended to select a more comprehensive sample so that the findings can be more authentic and can subsequently be generalized to other contexts.

6. References

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