

IPA Analysis Of Service Quality (SERVQUAL) Case Study: The Largest Mortgage Bank In Indonesia

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Abstract

The banking industry as an industry engaged in services relies on service quality as the main strategy in increasing customer satisfaction and interest in using the products offered. In Indonesia, there are four state-owned enterprises in the bank industry: Bank BRI, Bank BTN, Bank BNI, and Bank Mandiri. Good quality of bank services can increase customer satisfaction and can indirectly have a positive effect on increasing state revenues. This study will analyze the quality of service at a state-owned bank, the largest mortgage bank in Indonesia, using the dimensions of service quality variables, namely tangible, reliability, responsiveness, assurance, and empathy, through the IPA analysis method (importance performance analysis). This study uses survey data from 107 respondents with a total of 15 service quality attributes. IPA analysis in this study uses a Cartesian diagram consisting of 4 quadrants on the Cartesian diagram, namely quadrant A (priority), Quadrant B (maintain service quality), Quadrant C (low priority), and quadrant D (excessive). The results of this study indicate a comparison between the level of interest (expectations) of customers with the level of actual service performance.

Keywords

Service quality, tangible, responsiveness, reliability, assurance, empathy

1. Introduction

The banking industry in Indonesia from year to year continues to change. The state of Indonesia itself has four state-owned banking companies operating for quite a long time. The four state-owned banking companies are BNI, Mandiri, BTN, and BRI. As state-owned enterprises, these four banking companies should provide the best service compared to private companies and become the most chosen bank in Indonesia. It is because state-owned banks, namely BNI, Mandiri, BTN, and BRI, must contribute to the state from the company's performance in terms of taxes and dividends in order to increase the country's GDP. For this reason, analyzing the performance of state-owned banks is vital to improving the Indonesian economy in the banking sector.

Among the four state-owned banking companies, bank X is the bank that has the lowest performance compared to other banks in recent years. It can be seen from the performance data of state-owned banks based on profit, credit, and assets. For example, based on profit data, Bank X is the only state-owned bank with a profit of under 1 trillion, which is 723 billion in 2019. In addition, based on the value of TPF, Bank X is ranked the lowest after Bank Mandiri, BRI, and BNI in 2021 (www.cnnindonesia.com). Even so, Bank X in 2020 seeks to reorganize its business

strategy by focusing on the moderate business target in the housing credit sector. It makes Bank X the largest mortgage bank in Indonesia.

As a company engaged in the service sector, apart from focusing on improving the quality of the products offered, Bank X in improving the company's work performance must also focus on improving the quality of service to customers in order to be chosen as the trusted institution to manage customers' financial need (Al-Qeed et al. 2017; Talib & Rahman 2012). The quality of the services provided can affect customer satisfaction, where banks that have lousy service will gradually be abandoned by their customers, and in comparison banks with good service quality will be sought after by customers (Pakurár et al. 2019). Consumers compare service quality when choosing among the many types of services offered by different private and public banks, such as Bank X. In Jakarta, Indonesia, the branch office of Bank X that has the most customers is the Branch Office of Bank X in Kuningan, South Jakarta. This study will analyze service quality at Bank X's Kuningan branch office, South Jakarta.

Service quality can be interpreted as an action offered or given by one party to another which is essentially intangible and does not result in ownership in any form (Munusamy, 2010). In research by (Kishada & Wahab 2015; Prakoso 2017), service quality is a measure of how well the level of service provided by company employees is adjusted to consumer expectations. Therefore, the quality of service can be analyzed from two things, namely based on consumers' expectations and the performance received. Based on statistical analysis tools, this can be explained through IPA analysis (Importance Performance analysis).

1.1 Objectives

This research aims to analyze the service quality of one of the state-owned enterprise bank companies in Indonesia called Bank X using importance performance analysis (IPA analysis) to evaluate the customer's expectation of service quality in this bank and the actual performance they receive. The result will be drawn using a Cartesian diagram to understand the position of each attribute of service quality based on the several classifications to gain the information on which attribute requires serious attention and which does not.

2. Literature Review

Service quality is the main focus for service companies that involve all existing resources within the company in order to realize consumer expectations and expectations (Giovanis & Athanasopoulou 2014). The form of meeting consumer expectations in the service industry provides appropriate service quality standards such as providing good physical facilities, accurate service processes, and employees with speed and reliability in providing services (Fasocah & Hartono 2013). Good service quality will impact consumer commitment to the company's products and services, which will have an impact on increasing company performance and product market share.

Service quality is the primary strategy for success and survival in the competitive banking industry (Yavas et al. 1997). The conceptualization of service quality variables in academic research was first popularized by (Parasuraman et al. 1985) and later known as SERVQUAL (service quality). Service quality is widely discussed in service marketing, including in the banking industry where many previous studies found a positive correlation between service quality and customer satisfaction (Butcher et al. 2001; Kumar & Samtani 2021; Rahman et al. 2012), customer loyalty (Alshurideh et al. 2017; Sasono et al. 2021), behavior intention to use (Shahid Iqbal et al. 2018), and corporate image (Shah 2021; Zameer et al. 2015).

Therefore, maintaining the quality of service is very important to note. According to (Parasuraman et al. 1988) SERVQUAL consists of 5 components, namely tangibles, reliability, responsiveness, assurance, and empathy. Tangible is a component of service quality based on physical facilities provided to consumers, reliability is the ability of employees to provide services following company standards, responsiveness is the speed of employees in providing services and responding to existing problems, assurance is the ability of employees to guarantee in providing exemplary service to customers, and empathy is a form of employee care to give sincere attention to consumers.

3. Methods

This study uses the dimensions of the service quality variable by (Parasuraman et al., 1988) which is adjusted to the attributes given in Bank X as the object of this research. The SERVQUAL dimensions used include tangible, reliability, responsiveness, assurance, and empathy. Data was obtained by distributing an online questionnaire to

customers at Bank X Kuningan branch office, Indonesia, in South Jakarta. The research data were analyzed using the IPA analysis method (importance performance analysis) so that in the research questionnaire each statement item consisted of two parts, namely the importance section (consumer expectations of service quality) and the performance section (performance received by consumers). SERVQUAL variable by (Parasuraman et al. 1985) in this study adopted and adapted to service quality conditions at Bank X Branch Office Kuningan, South Jakarta to obtain 155 statement items. The importance section consists of 5 scales from very important to very unimportant, while the performance section also consists of 5 scales, namely very good to very bad.

The sampling technique uses random sampling to consumers who are permanent users of Bank X at the Kuningan branch office, South Jakarta. The stages of data analysis in this research include validity test, reliability test, importance level test, service performance level test, suitability level test, and finally the importance performance matrix test using a Cartesian diagram.

4. Results and Discussion

This study obtained 107 respondents who answered an online questionnaire regarding service quality seen from the expectations and performance received by consumers. The attributes in this research questionnaire are as follows:

Table 1. Attributes of Service Quality

No	Attribute	Symbol
Tangible		
	The customer service room environment (such as waiting room, transaction room) Bank X Kuningan branch, South Jakarta is elegant and comfortable	T1
	The appearance of the customer service of Bank X Kuningan branch, South Jakarta is excellent	T2
	The service process provided by Bank X Kuningan branch, South Jakarta is straightforward	T3
Reliability		
	Employees of Bank X Kuningan branch, South Jakarta can be relied on in providing services to customers	RY1
	Employees of Bank X Kuningan branch, South Jakarta provide good service	RY2
	Employees of Bank X Kuningan branch, South Jakarta are well acquainted with service support tools such as checking forms filled out by customers.	RY3
Responsiveness		
	Employees of Bank X Kuningan branch, South Jakarta respond appropriately to customer complaints	RS1
	Employees of Bank X Kuningan branch, South Jakarta provide services carefully (no errors or mistakes)	RS2
Assurance		
	Employees of Bank X Kuningan branch, South Jakarta guarantee customers to provide timely service	A1
	Employees of Bank X Kuningan branch, South Jakarta guarantee that service fees are	A2

	following standards known by the Bank and customers	
	The officer guarantees in providing services always follow the instructions and directions for service quality from the Bank	A3
Empathy		
	Employees of Bank X Kuningan branch, South Jakarta prioritize customer interests over personal activities during Bank service work	E1
	Employees of Bank X Kuningan branch, South Jakarta provide amicable service	E2
	Employees of Bank X Kuningan branch, South Jakarta serve without any discriminatory nature between Bank customers	E3
	Employees of Bank X Kuningan branch, South Jakarta appreciate customer talks and complaints	E4

The next step is to test the validity and reliability using statistical software SPSS 22. Based on the validity test results, based on the r-table analysis with a sample size of 107, the r-table of this study is 0.190. The validity test results show that all attributes have an r-table value > 0.190 which indicates that the research data is valid. Furthermore, based on the results of the reliability test, it was obtained that the Cronbach alpha value was $0.929 > 0.6$ so it can be concluded that all the attributes of the statement are reliable and can be used for further research tests.

The first stage in the IPA analysis is to add up the results of the questionnaire assessment based on the research scale. From 107 research data obtained, the results of the service quality attribute assessment at PT. Bank X Indonesia Branch Office South Jakarta, Indonesia are as follows:

Table 2. Results of the Interest Level Questionnaire Assessment (Y)

	VNI	NI	N	I	VI	Y
	{1}	{2}	{3}	{4}	{5}	
T1	0	0	9	64	34	453
T2	1	0	8	56	42	459
T3	0	1	9	42	55	472
RY1	0	0	4	49	54	478
RY2	0	0	5	50	52	475
RY3	0	1	5	48	53	474
RS1	0	1	13	52	41	454
RS2	0	2	14	48	43	453
A1	0	1	13	54	39	452
A2	0	1	4	52	50	472
A3	0	2	12	43	50	462
E1	0	0	11	49	47	464
E2	0	1	9	49	50	475
E3	0	0	12	44	51	467

E4	0	0	10	48	49	467
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Note: (VNI) = very not important, (NI) = not important, (N) = neutral, (I) = important, (VI) = very important
 $Y = (VNI * 1) + (NI * 2) + (N * 3) + (I * 4) + (VI * 5)$

Based on the results of the questionnaire assessment above, the final total level of interest or consumer expectations for the service quality of PT. Bank X Indonesia South Jakarta Branch Office is obtained. In table 2, the yellow column, namely attribute A1 shows the service quality attribute that is considered the lowest so that it requires improvement or more attention by the company. The attribute A1 is a guarantee that employees provide timely service, and this shows that the quality assurance of timely service by Bank X South Jakarta Branch Office employees is highly expected by consumers. While the blue column or attribute RY1 has the highest score, which means consumers want the reliability of PT. Bank X employees to take care of consumer needs.

Table 3. Results of Performance Level Questionnaire Assessment

	VNG	NG	N	G	VG	X
	{1}	{2}	{3}	{4}	{5}	
T1	0	2	40	32	33	417
T2	0	18	29	10	50	413
T3	0	11	21	31	44	429
RY1	0	12	24	25	46	426
RY2	0	24	24	36	23	379
RY3	0	18	15	46	28	405
RS1	0	24	19	24	40	401
RS2	0	2	19	58	28	433
A1	0	1	18	64	24	432
A2	0	0	12	45	50	466
A3	0	1	14	61	31	443
E1	0	0	19	38	50	459
E2	0	0	16	60	31	443
E3	0	15	24	28	40	414
E4	0	2	19	65	21	426

Note: (VNG) = very not good, (NG) = not good, (N) = neutral, (G) = good, (VG) = very good
 $X = (VNG * 1) + (NG * 2) + (N * 3) + (G * 4) + (VG * 5)$

Based on table 3 above, the assessment results of 107 respondents regarding the performance of service quality attributes at PT. Bank X South Jakarta Branch Office Indonesia were obtained. The table shows the assessment of service quality received and felt by consumers while using the services of Bank X. The yellow column which is RY2, shows the lowest value of service quality performance received by consumers. The column shows the reliability of employees in providing services, and this shows that the reliability of employees in providing services according to respondents is very lacking. In contrast, the attribute with the highest value is A2, which is a guarantee of service costs in accordance with company standards. It means that consumers have always felt that the guarantee of service costs has been in line with expectations. Next is to calculate the level of conformity between expectations (importance) and reality (performance). The results of these calculations are shown in the following table:

Table 4. Results of Calculation of Conformity Level

	Y	X	Conformity Level	%
T1	453	417	0.92	92%
T2	459	413	0.90	90%
T3	472	429	0.91	91%
RY1	478	426	0.89	89%
RY2	475	379	0.80	80%
RY3	474	405	0.85	85%
RS1	454	401	0.88	88%
RS2	453	433	0.96	96%
A1	452	432	0.96	96%
A2	472	466	0.99	99%
A3	462	443	0.96	96%
E1	464	459	0.99	99%
E2	475	443	0.93	93%
E3	467	414	0.89	89%
E4	467	426	0.91	91%
Total Average			0.92	92%

Table 4 above shows the level of conformity of the respondents' assessment results. The level of conformity is calculated based on the final value of the level of performance (ΣX) divided by the final value of the level of importance (ΣY) and the result is multiplied by 100%. The lowest level of conformity is RY2, which is 80%, which shows that the reliability of employees in providing services is deemed not satisfactory to consumers thus the skills and knowledge of employees towards services need to be re-evaluated by the company. While the service attributes with the highest level of conformity are A2 and E1. It shows that according to respondents, the guarantee of service costs is considered to be in accordance with company standards and high employee empathy in serving consumers.

Cartesian Diagram

Evaluation of service quality attributes in this study is presented in the form of a Cartesian diagram. The first step in making a Cartesian diagram is to calculate the average value of each part of the IPA analysis, which is to calculate the average value of the level of importance and level of performance. The results of these calculations are as follows:

Table 5. Average calculation results

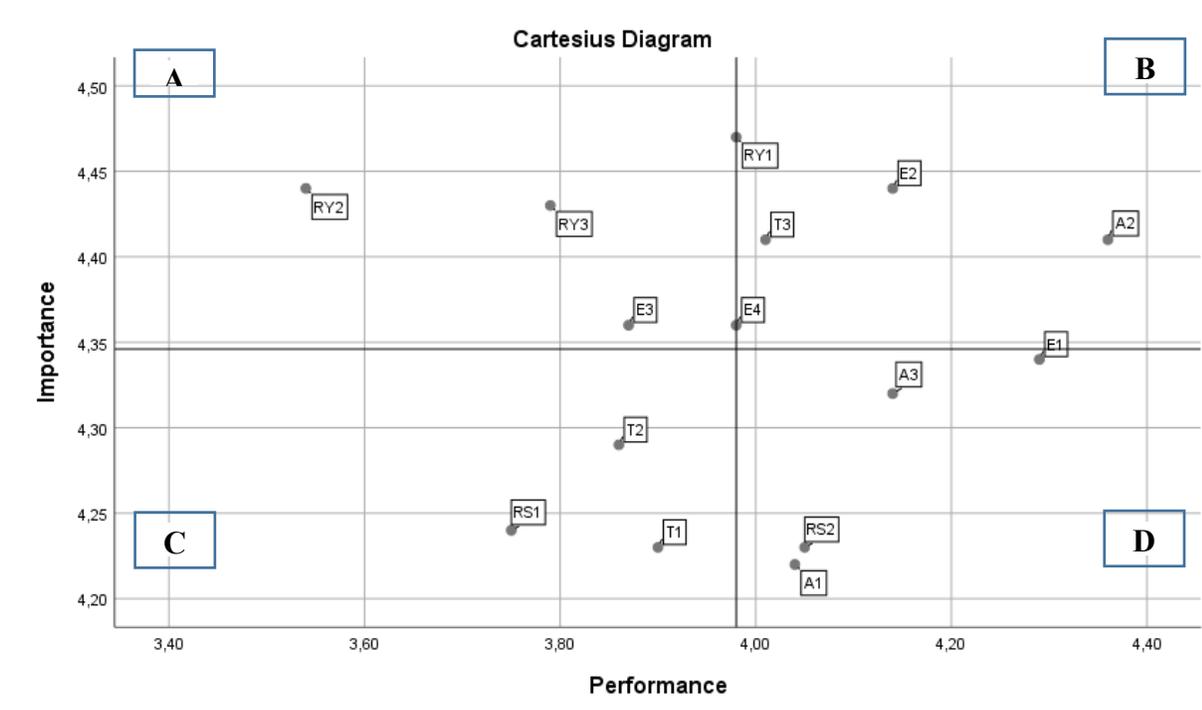
	Y	Y average	X	Average X
T1	453	4.23	417	3.90
T2	459	4.29	413	3.86
T3	472	4.41	429	4.01
RY1	478	4.47	426	3.98
RY2	475	4.44	379	3.54
RY3	474	4.43	405	3.79
RS1	454	4.24	401	3.75

RS2	453	4.23	433	4.05
A1	452	4.22	432	4.04
A2	472	4.41	466	4.36
A3	462	4.32	443	4.14
E1	464	4.34	459	4.29
E2	475	4.44	443	4.14
E3	467	4.36	414	3.87
E4	467	4.36	426	3.98
Total Average		4.35		3.98

Table 5 above shows the average value of 107 respondents who are consumers of PT. Bank X Kuningan Branch South Jakarta on the importance level attribute (Y) and the performance level attribute (X). The total average is measured by adding up the average of each attribute X and Y and divided by the total number of attributes, namely 15 attributes. The total mean value is used as the delimiter of the intersecting lines in the four parts of the Cartesian diagram. The Cartesian diagram in this study was made with the help of SPSS 22 software. This study divides the Cartesian diagram based on four parts, namely:

1. Quadrant A (Top Priority)
2. Quadrant B (Maintain Service Quality)
3. Quadrant C (Low Priority)
4. Quadrant D (Excessive)

The pictures of the Cartesian diagram in this study are as follows:



Explanations :

Quadrant A (Top Priority)

1. Employees of Bank X Kuningan Branch Office, South Jakarta provide good service (RY2)
2. Employees of Bank X Kuningan Branch Office, South Jakarta are well acquainted with customer service support tools (RY3)
3. Employees of Bank X Kuningan Branch Office, South Jakarta serve without any discriminatory nature between Bank customers (E3)

Quadrant B (Maintain Service Quality)

1. Employees of Bank X Kuningan branch, South Jakarta provide fast service to customers (RY1)
2. Employees of Bank X Kuningan branch, South Jakarta provide very friendly service (E2)
3. Employees of Bank X Kuningan branch, South Jakarta appreciate customer talks and complaints (E4)
4. The service process provided by Bank X Kuningan branch, South Jakarta is very easy (T3)
5. Employees of Bank X Kuningan branch, South Jakarta guarantee that service fees are in accordance with standards known by the Bank and customers (A2)

Quadrant C (Low Priority)

1. Employees of Bank X Kuningan branch office, South Jakarta respond quickly to consumer complaints (RS1)
2. The customer service room environment (such as waiting room and transaction room) at Bank X Kuningan branch office, South Jakarta is very neat and comfortable (T1)
3. The appearance of the customer service employees of Bank X in the Kuningan branch office, South Jakarta is very good (T2)

Quadrant D (Excessive)

1. Employees of Bank X Kuningan branch office, South Jakarta guarantee consumers to provide timely service (A1)
2. Employees of Bank X Kuningan branch office, South Jakarta provide services carefully (no errors or mistakes) (RS2)
3. Employees guarantee that the services provided are in accordance with the instructions and directions for service quality from the Bank (A3)
4. Employees of Bank X Kuningan branch office, South Jakarta prioritize the interests of consumers over personal matters during Bank service working hours (E1)

6. Conclusion

Based on the explanation of the research results above, several conclusions were obtained, namely as follows:

1. Based on the results of data processing using the IPA (importance performance analysis) method, it was found that the average level of conformity of employee performance with consumer expectations is 92%, so it is considered that 15 service quality attributes of Bank X Kuningan branch office, South Jakarta have been quite satisfactory to consumers.
2. Each of the quadrants above shows the location of the Bank's service quality attributes in terms of the level of performance and level of importance. In quadrant A there are three attributes, namely RY2, RY3, and E3 where quadrant A shows a high level of importance but very low performance. Quadrant A is a top priority for the Bank to improve employee performance so that they are able to meet high consumer expectations for the three service quality attributes.
3. Quadrant B shows the service quality attributes that are already very good with a high level of importance and high performance. Quadrant B consists of five attributes, namely RY1, E2, E4, T3, and A2 so that the Bank must be able to maintain service quality on these five attributes.
4. Next is quadrant C. Quadrant C has a low priority because it is an attribute that is not too important for consumers and low employee performance. Quadrant C consists of three attributes, namely RS1, T1, and T2.

5. Finally, Quadrant D is a low level of importance and a high level of performance. Quadrant D is considered an excessive quadrant because the performance provided exceeds the expectations or expectations of consumers. Quadrant D consists of four attributes, namely A1, RS2, A3, and E1.

References

- Al-Qeed, MA, ALSadi, BY, & Al-Azzam, ZF (2017). The Impact of Customer Relationship Management on Achieving Service Quality of Banking Sector of Jordan. *International Journal of Business and Management*.
<https://doi.org/10.5539/ijbm.v12n3p180>
- Alshurideh, DMT, Al-Hawary, SIS, Mohammad, AME, Al-Hawary, AA, & Al Kurdi, BH (2017). The Impact of Islamic Banks' Service Quality Perception on Jordanian Customers Loyalty. *Journal of Management Research*.
<https://doi.org/10.5296/jmr.v9i2.10664>
- Butcher, K., Sparks, B., & O'Callaghan, F. (2001). Evaluative and relational influences on service loyalty. *International Journal of Service Industry Management*. <https://doi.org/10.1108/09564230110405253>
- Giovanis, AN, & Athanasopoulou, P. (2014). Gaining customer loyalty in the e-tailing marketplace: the role of e-service quality, e-satisfaction and e-trust. *International Journal of Technology Marketing*.
<https://doi.org/10.1504/ijtmkt.2014.063857>
- Kumar, S., & Samtani, J. (2021). The Influence of Customer Service Quality towards Customer Satisfaction and its implication on Loyalty: A Survey on MICE Customers in Hotels. *FIRM Journal of Management Studies*.
<https://doi.org/10.33021/firm.v6i2.1542>
- Munusamy, J., Chelliah, S., & Mun, H. (2010). Service quality delivery and its impact on customer satisfaction in the banking sector in Malaysia. *International Journal of Innovation*
- Pakurár, M., Haddad, H., Nagy, J., Popp, J., & Oláh, J. (2019). The service quality dimensions that affect customer satisfaction in the Jordanian banking sector. *Sustainability (Switzerland)*. <https://doi.org/10.3390/su11041113>
- Parasuraman, A., Berry, LL, & Zeithaml, VA (1988). SERVQUAL: a multiple-item scale for measuring customer perceptions of service quality and its implications for future. *Journal of Retailing*.
- Parasuraman, A., Zeithaml, VA, & Berry, LL (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing*. <https://doi.org/10.1177/002224298504900403>
- Rahman, MS, Khan, AH, & Mahmudul Haque, M. (2012). A conceptual study on the relationship between service quality towards customer satisfaction: Servqual and Gronroos's service quality model perspective. *Asian Social Sciences*.
<https://doi.org/10.5539/ass.v8n13p201>
- Sasono, I., Jubaedi, AD, Novitasari, D., Wiyono, N., Riyanto, R., Oktabrianto, O., Waruwu, H. (2021). The Impact of E-Service Quality and Satisfaction on Customer Loyalty: Empirical Evidence from Internet Banking Users in Indonesia. *Journal of Asian Finance, Economics and Business*. <https://doi.org/10.13106/jafeb.2021.vol8.no4.0465>
- Shah, TR (2021). Service quality dimensions of ride-sourcing services in Indian context. *Benchmarking*.
<https://doi.org/10.1108/BIJ-03-2020-0106>
- Shahid Iqbal, M., Ul Hassan, M., & Habibah, U. (2018). Impact of self-service technology (SST) service quality on customer loyalty and behavioral intention: The mediating role of customer satisfaction. *Cogent Business and Management*. <https://doi.org/10.1080/23311975.2018.1423770>
- Talib, F., & Rahman, Z. (2012). Impact of Total Quality Management and Service Quality in the Banking Sector. *Journal of Telecommunications Systems & Management*. <https://doi.org/10.4172/2167-0919.1000102>
- Yavas, U., Bilgin, Z., & Shemwell, DJ (1997). Service quality in the banking sector in an emerging economy: A consumer survey. *International Journal of Bank Marketing*. <https://doi.org/10.1108/02652329710184442>
- Zameer, H., Tara, A., Kausar, U., & Mohsin, A. (2015). Impact of service quality, corporate image and customer satisfaction towards customers' perceived value in the banking sector in Pakistan. *International Journal of Bank Marketing*. <https://doi.org/10.1108/IJBM-01-2014-0015>

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