

---

## Study on electronic banking towards customer satisfaction

---

MR. RAM BABU CHERUKUR<sup>1</sup>, MS. SANDHYA RUBY<sup>2</sup>

<sup>1</sup>Assistant professor, Saveetha school of Management, Saveetha Institute of Medical and Technical Sciences, Saveetha University, Chennai-77

<sup>2</sup>MBA Student, Saveetha school of management, Saveetha Institute of Medical and Technical Sciences, Saveetha University, Chennai-77

Email ID: cherukur.ssm@gmail.com, rubysandhya1999@gmail.com

---

**Abstract:** Electronic banking is a form of banking in which funds are transferred through an exchange of electronic signals rather than through an exchange of cash, checks, or other types of paper documents. Transfers of funds occur between financial institutions such as banks and credit union. Electronic banking system has progressed in the recent years. The study is to understand the customer satisfaction in electronic banking. The main reason that electronic banking came into existence is to ease customer money transaction in any time, any place without visiting the bank. The study is carried by a survey among the electronic bank users to identify the customer satisfaction. A sample of 205 was used to analyze the research.

**Keywords:** Electronic banking, customer satisfaction

---

### INTRODUCTION

The Internet has reformed the manner in which we live, shop, engage and cooperate and furthermore the manner in which we spare and contribute. Electronic banking showed up in India in the last part of the 1990s. ICICI was the principal bank to advocate its use and acquainted online managing an account with its clients in 1996. With lower web costs and expanded mindfulness about electronic media, online based banking set up itself just in 1999. Different banks followed suit, including HDFC, Citibank, IndusInd and the now excess Times Bank. Electronic banking changed both the financial business just as banks' administrations to its clients. 'Anyplace banking' came to be perceived as an open door additionally for separated and serious administrations. Subordinate online administrations like checking account status, reserve move, requesting request drafts, advance applications, Visa checks, shopping entryways and so forth just as not needing a visit to the branch during available time were seen as high-esteem contributions and progressively began to turn into a need as opposed to an assistance. When banking organizations perceived the low handling cost per exchange through the online, they started seeing online based banking as an augmentation of the bank rather than as an extra assistance. The inspiration to present online based financial now too included new business potential, extra assets from new and existing clients, development in topographical reach, picture as an educated bank particularly if focusing on the young and the danger of clients moving steadfastness in the event that they didn't present it. Nationalized banks at first saw online based banking as uncertain and outlandish what's more, were thusly reluctant. In any case, in the long run, SBI, Canara Bank, Allahabad Bank, Punjab National Bank, Bank of Baroda, Syndicate Bank and others presented it. SBI dispatched web banking in 2001 and experienced great reaction. All in all, online banking saw an exponential ascent in clients. Today, banks urge their clients to utilize online banking. Other than cost and income impacts, this change in outlook is on the grounds that they likewise perceive that discretion exchanges have more prominent potential for consumer loyalty and maintenance. On the online banking has hence come to be among basic financial administrations. The way to deal with receiving internet banking anyway is frequently to simply remain side by side of industry and innovation and internet banking is turning into a different specialty unit driven by innovative prospects. The client frequently has negligible spot in such an approach as proven by non-human driven encounters that twist. Nonetheless, the social and hierarchical move required by Indian banks to bring old clients into this new financial channel just as to draw new clients requires a client driven center. India is still in the beginning phases of E-banking development and improvement. Rivalry and changes in innovation and way of life over the most recent five years have changed the substance of banking. The progressions that have occurred force on banks intense norms of rivalry and consistence. The issue here is – 'Where does India remain in the plan of Ebanking.' E-banking is probably going to bring a large group of chances just as uncommon dangers to the principal idea of banking in India. The effect of E-Banking in India isn't yet obvious. Numerous worldwide think-tanks accept that Ebanking reception in India soon would be moderate contrasted with other significant Asian countries. Indian E-banking is as yet beginning, in spite of the fact that it is quick turning into a vital need for most business banks, as rivalry increments from private banks and non banking budgetary organizations.

The significance of the effect of innovation and data security can't be questioned. Mechanical advancements have been one of the key drivers of the worldwide economy and speak to an instrument that whenever abused well can support the productivity and competitiveness of the financial area. Nonetheless, the quick development of the Internet has presented a totally new degree of security related issues. The issue here is that since the Internet is anything but a directed innovation and it is promptly available to a huge number of individuals, there will consistently be individuals who need to utilize it to make unlawful additions. The security issue can be tended to at three levels. The first is the security of client data as it is sent from the client's PC to the Web worker. The second is the security of the climate where the Internet banking worker and client data information base dwell. Third, safety efforts must be set up to keep unapproved clients from endeavouring to long into the internet banking part of the site. From a lawful viewpoint, security methodology embraced by banks for confirming clients should be perceived by law as a substitute for signature. In India, the Information Technology Act, 2000, in segment 3(2) accommodates a specific innovation (viz., the topsyturvy crypto framework and hash work) as a method for verifying electronic record. Some other strategy utilized by banks for verification ought to be perceived as a wellspring of legitimate danger. With respect to administrative and administrative issues, just such banks which are authorized and regulated and have a physical presence in India will be allowed to offer E-banking items to occupants of India. With establishments turning out to be increasingly worldwide and complex, the idea of dangers in the global monetary framework has changed. The Regulators themselves who will presently be giving significantly more consideration to the subjective parts of danger the board have perceived this. The objectives are to examine the level of customer understanding towards electronic banking , to measure the satisfaction level of the customers towards electronic banking and to analysis the utilisation of electronic banking and how does it reduce the time for customers .

### LITERATURE REVIEW

(Ameme and Wireko, 2016) Researcher asserted in her examination that in the present serious reality where innovation assumes a significant job and on the off chance that we talk about financial division or industry there is a positive connection among innovation and consumer loyalty. Likewise study examines there is a critical connection between mechanical development and cost. As the advancement increment the expense is additionally increment.

(Rahi, 2015) Research discoveries show clients are more steadfast towards those banks who are encouraging web banking administrations. Likewise great brand picture fabricate connection among banks and client and improve the client dedication toward banks. He additionally proposed that if the brand picture likewise assumes a critical function between unwaveringness of the clients and web banking.

(Zeinalizadeh *et al.*, 2015) Researcher believed that out of the nine consumer loyalty factors expenses and credit, brief assistance and appearance are the central point which have more huge effect on consumer loyalty followed by loan cost and openness of bank and accessibility of administration which have less effect on the fulfilment on the financial clients

(Kundu and Kumar, 2015) Researcher discovered with respect to e-administration quality, consumer loyalty and trust they found that there is a huge relationship among eadministration quality, trust and consumer loyalty. They additionally investigated that if there should arise an occurrence of web banking protection and satisfaction is the principle variables of administration quality which have impact on trust.

(Kaur and Kiran, 2015) Established in their examination which was on open, private and unfamiliar shows that client are more happy with the administrations nature of the unfamiliar banks then the private and public banks.

(Machogu and Okiko, 2015) Research uncovered that with e-banking complexities on consumer loyalty. Results shows that there are factors which prompts consumer loyalty especially in e-banking, which is one of the significant and quickly developing method of doing banking.

(Vyas and Raitani, 2014) Believed that there are numerous drivers of exchanging conduct in the banks. Especially they discovered nine basic variables which contribute in exchanging the banks. One exceptionally fascinating driver is consumer loyalty in all the drivers which contribute in the exchanging conduct of clients.

(Pareek, 2014) Research believed with a comment that out of a few elements scarcely any causal principal factors like item ascribes, representative attributes, client comfort, bank effects, cost of exchanges and client correspondence contributes in consumer loyalty in Indian banks.

(Gupta and Dev, 2012) Believed fulfillment of client is reliant on factor then autonomous variable. These needy factors generally rely upon administration quality, mood, association, availability and money related components of the bank. As indicated by the discoveries of the exploration. The effect of closeness of bank and monetary variables on consumer loyalty isn't sufficient.

(Singh and Kaur, 2011) Recommended that consumer loyalty is the result of seven determinants in particular social duty, worker responsiveness, appearance of effects, ability, and unwavering quality. administrations advancement, positive informal. As per their investigation consumer loyalty whenever impacted by social duty, positive informal, and dependability. they likewise established that relationship showcasing is the significant apparatus which can altogether expand the consumer loyalty.

(Ganguli and Kumar, 2011) Examination believed that in quick determined innovation world banks ought to embrace the innovation which can prompt consumer loyalty and dedication. Results expresses that there is huge connection between client assistance, innovation utilization effortlessness and dependability and consumer loyalty. Then again, they found the positive connection between innovation comfort and consumer loyalty.

(Munusamy *et al.*, 2010) Guaranteed of their examination shows that administration quality is a significant element of consumer loyalty in banking industry. They express that elusiveness intension is exceptionally hard to gauge then substance especially in the event of administration quality. Client needs, needs, inclinations change any purpose of time without giving a few clues to industry.

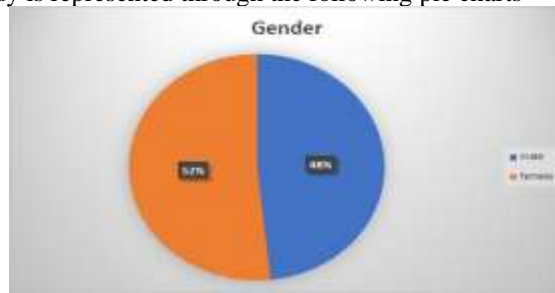
(Rod *et al.*, 2009) Research discoveries recommends that web-based banking decidedly impacts client observation. This investigation was additionally discovered to be huge that online data framework quality is significant indicator of generally speaking financial help quality.

(Mishra, 2009) Expressed that consumer loyalty significantly relies upon the arrangement of a methodology for the supervisor so higher consumer loyalty for the future could be gotten by the bank. Likewise, in his examination he utilized the demographical attributes of the clients to think about the fulfilment level of the clients.

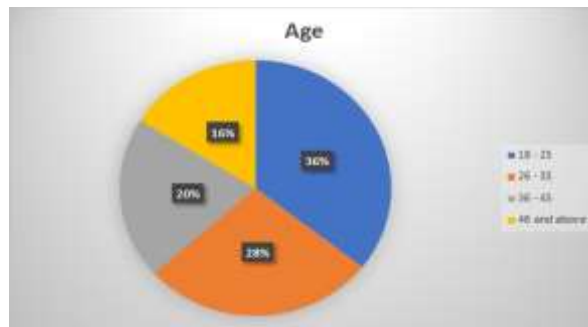
(Aaltonen, 2004) Brings a familiarity with the significance of the effects of segment factors and of innovation on fulfilment of clients and dependability in the monetary help industry. In past examinations they have checked that very fulfilled clients are, in fact, more faithful clients.

(Mols, 2000) Expressed web saving money with the assistance of client input that is quickly encourages banks to build and keep secure associations with their clients and decrease working and fixed costs makes it is simple for them to use electronic reserve move and unfamiliar trade exchanges.

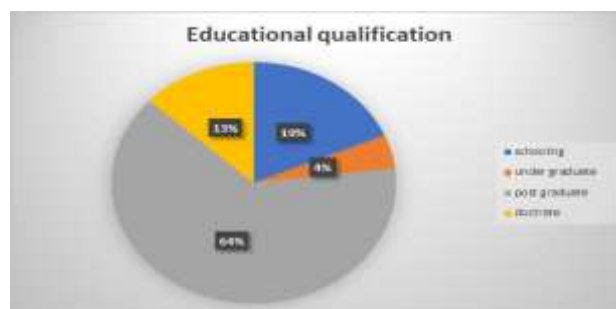
The sample profile of the study is represented through the following pie charts



**Fig.1: It is analysed that majority of the respondents are male (48.3%) and female respondents were few compared to male (51.7%).**



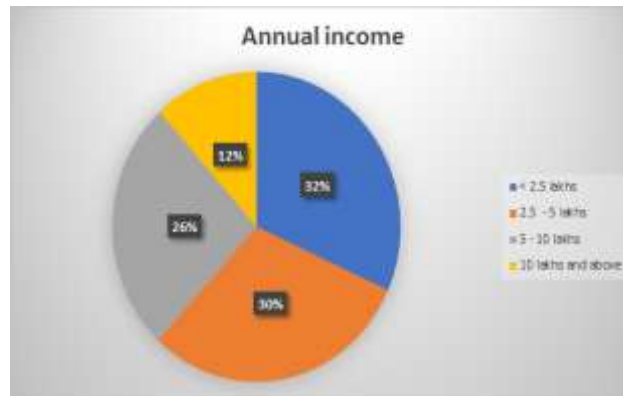
**Fig.2: The majority of the respondents are those age group lies between 18-25 (35.6%) followed by the age lies between 26-35(27.8%) followed by age group 36-45 (20.5%) followed by age group 46 and above (16.1%).**



**Fig.3: The majority of the respondents are post Graduates (45.4%), followed by under Graduates (32.2%), followed by schooling (13.2%), followed by doctorate (9.3%).**



**Fig.4 :** The majority of the respondents are unmarried (54.6%) and followed by the married respondents were few compared to unmarried (45.4%).



**Fig.5:** The majority of the respondents are from less than 2.5 lakhs (31.7%) followed by 2.5-5 lakhs (30.2%) followed by 5-10 lakhs (26.3%) followed by Above 10 lakhs (11.7%).



**Fig.6:** The majority of the respondents are employee (29.8%), followed by professionals (24.4%), followed by business (23.9%), followed by others (16.1%), and followed by home maker (5.9%).

**Table 1: Mean Analysis**

S.NO	CUSTOMER SATISFACTION TOWARDS ELECTRONIC BANKING	MEAN	RANK
1	Do your bank make it easy to handle your issues	3.90	12
2	Internet is very important for electronic banking	4.28	2
3	Private electronic banking are more efficient than government electronic banking	3.99	8
4	Electronic banking offers easy to access secure transactions 24/7	4.13	4
5	Give your over all rating for electronic banking service	4.12	5
6	Do you think electronic banking is useful for all occupation	3.98	9
7	Aware of security threats and frauds in electronic banking	4.05	7
8	Do you think electronic banking saves your time	4.27	3
9	Education plays a important role in electronic banking	4.05	6
10	Do you think electronic banking is secure	3.97	10
11	Do your bank charges unnecessarily for electronic transactions	3.91	11
12	Do you think electronic banking is useful	4.31	1

13	Do you think electronic banking is convenient for all age groups	3.87	13
----	--	------	----

Table 1 shows the most influencing factors of customer satisfaction. This analysis displays the mean value of 13 variables such as use, importance, time savings, easy access, rating, educational role, security threats, efficiency, occupational use, security, charges, issue handling, convenience. It is evident from the analysis that the most influencing factors on customer satisfaction are use and importance of electronic banking .

**Table 2: Anova Analysis**

S.NO	FACTORS	F-VALUE	SIGNIFICANCE
1	Customer satisfaction vs gender	1.584	0.210
2	Convenience and efficiency vs gender	0.025	0.874
3	Customer satisfaction vs age	3.026	0.031
4	Convenience and efficiency vs age	2.869	0.038

Table 2 shows the one-way ANOVA analysis of gender vs customer satisfaction and convenience & efficiency and one-way ANOVA analysis of age vs customer satisfaction and convenience & efficiency From the analysis it is clear that both the ‘p’ values of customer satisfaction (0.210) and convenience & efficiency (0.874) are greater than 0.05. It is interpreted that there is no significant difference among gender with respect to customer satisfaction and convenience and efficiency. So gender doesn’t influence the customer satisfaction and convenience & efficiency and also it is clear that both the ‘p’ values of customer satisfaction (0.031) and convenience & efficiency (0.038) are lesser than 0.05. It is interpreted that there is a significant difference among age with respect to customer satisfaction and convenience & efficiency. So, age of respondents influence the customer satisfaction and convenience & efficiency.

**REGRESSION ANALYSIS**

**Table 3: Model Summary**

MODEL	R	R SQUARE	ADJUSTED R SQUARE	SIGNIFICANCE
1	0.854 <sup>a</sup>	0.729	0.728	0.00

The above tables 3 provides the R and R<sup>2</sup> values. The R value represents the simple correlation and is 0.854<sup>a</sup> (“R” column), which indicates the degree of correlation. The R<sup>2</sup> value (the “R square” column) indicates how much of the total variation in the dependent variable can be explained by the independent variable. The adjusted R square value 0.728 which indicates 72.8% of the variance in dependent variable has been explained by independent variables.

**Table 4: Anova Test**

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	61.556	1	61.556	547.134	0.00 <sup>a</sup>
	Residual	22.839	203	0.113		
	Total	84.395	204			

The above table 4 indicates that the regression model predicts the dependent variable significantly well. Here the ‘p’ value (0.00) which is lesser than 0.05. (i.e., it is a good fit for the data).

**Table 5: Regression Analysis**

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.583	0.150		3.896	.000
	Purchase source	0.853	0.036	0.854	23.391	.000

The above table 5 indicates regression analysis with B & Beta value for the independent and dependent variable which are assumed. As a rule of thumb, we say that a b coefficient is statistically significant if its p-value is lesser than 0.05. From the analysis it is found that convenience and efficiency (0.854) having positive linear relationship with the customer satisfaction.

**FINDINGS**

- The frequency and percentage analysis of gender of respondents shows that majority of the respondents are male (48.3%) and female respondents were few compared to male (51.7%).

- The frequency and percentage analysis of age of respondents shows that the majority of the respondents are those age group lies between 18-25 (35.6%) followed by the age lies between 26-35(27.8%) followed by age group 36-45 (20.5%) followed by age group 46 and above (16.1%).
- The frequency and percentage analysis of educational qualification of the respondents shows that the majority of the respondents are post Graduates (45.4%), followed by under Graduates (32.2%), followed by schooling (13.2%), followed by doctorate (9.3%).
- The frequency and percentage analysis of marital status of respondents shows that majority of the respondents are unmarried (54.6%) and followed by the married respondents were few compared to unmarried (45.4%).
- The frequency and percentage analysis of annual income of respondents shows that the majority of the respondents are from less than 2.5 lakhs (31.7%) followed by 2.5-5 lakhs (30.2%) followed by 5-10 lakhs (26.3%) followed by Above 10 lakhs (11.7%).
- The frequency and percentage analysis of occupation of the respondents shows that the majority of the respondents are employee (29.8%), followed by professionals (24.4%), followed by business (23.9%), followed by others (16.1%), and followed by home maker (5.9%).
- It is evident from the analysis that the mean value of variables such as use, importance, time savings, easy access, rating, educational role, security threats, efficiency, occupational use, security, charges, issue handling, convenience are the factors that influence. So it is evident from the analysis that the most influencing factors on customer satisfaction are use and importance of electronic banking.
- From the one-way ANOVA analysis of gender vs customer satisfaction and convenience & efficiency it is clear that both the 'p' values of customer satisfaction (0.210) and convenience & efficiency (0.874) are greater than 0.05. So, gender doesn't influence the customer satisfaction and convenience & efficiency.
- From the one-way ANOVA analysis of age vs customer satisfaction and convenience & efficiency it is clear that both the 'p' values of customer satisfaction (0.031) and convenience & efficiency (0.038) are lesser than 0.05. So, age of respondents influences the customer satisfaction and convenience & efficiency
- The R value represents the simple correlation and is 0.854a ("R" column), which indicates the degree of correlation. The R2 value (the "Rsquare" column) indicates how much of the total variation in the dependent variable can be explained by the independent variable. The adjusted R square value 0.728 which indicates 72.8% of the variance in dependent variable has been explained by independent variables.
- The regression model predicts the dependent variable significantly well. Here the 'p' value (0.00) which is lesser than 0.05. (i.e., it is a good fit for the data).
- From the Regression analysis it is found that the convenience & efficiency (0.854) having positive linear relationship with the customer satisfaction. It is found that the convenience & efficiency factor helps to satisfy the customer satisfaction. As the convenience & efficiency factor increases the customer satisfaction also increases due to their positive linear relationship.

## CONCLUSION

Customer's knowledge about electronic payment is increasing, so the customer's perception is very important in using electronic banking. Basically electronic banking is for customer's convenience and ease. Electronic banking service providers are innovating new technology from the customer's point of view. So that people can adopt and use the services effectively. The study focuses on the customer satisfaction towards electronic banking. Based on the results of analysis the majority of current electronic banking users are youth between the ages of 18 to 35. Gender wise the males and females are both dominant users, occupationally employees, professional, business people are the majority users and homemakers are not active participant in using electronic bank services. There is a relationship between demographic characteristics and customer satisfaction. Electronic banking service has highly reduced the visit of direct bank, waiting time for the service. The study also examines the level of understanding towards the electronic banking. Electronic banking has improved the customer satisfaction than ordinal banking, Enabled the customers to control their account better than ordinal banking. There is high opportunity in expanding the service and to make the customers know about the expansion and importance of electronic banking. Customers knowledge about electronic banking availability of the service 24/7 and improvement of customer in controlling their account are the important things which determine customer satisfaction in electronic banking. To put in a nut shell electronic banking has an impact on reducing the customers time for the bank services, impact on improving customer satisfaction, knowing the customer understandings and utilisation towards electronic banking,

## REFERENCES

1. Aaltonen, P.G. (2004), *Customer Relationship Marketing and Effects of Demographics and Technology on Customer Satisfaction and Loyalty in Financial Services*, Old Dominion University, available at: <https://doi.org/10.25777/6ca8-k248>.
2. Ameme, B. and Wireko, J. (2016), "Impact of technological innovations on customers in the banking industry in developing countries", *The Business & Management Review*, Centre for Business & Economic Research, Vol. 7 No. 3, p. 388.
3. Ganguli, S. and Kumar, R.S. (2011), "Generic technology-based service quality dimensions in banking: Impact on customer satisfaction and loyalty", *International Journal of Bank Marketing*, Emerald Group Publishing Limited, Vol. 29 No. 2, pp. 168–189.
4. Gupta, A. and Dev, S. (2012), "Client satisfaction in Indian banks: an empirical study", *Management Research Review*, Emerald Group Publishing Limited, Vol. 35 No. 7, pp. 617–636.
5. Kaur, N. and Kiran, R. (2015), "E-banking service quality and customer loyalty: Changing dynamics of public, private and foreign bank consumers in India", *Global Business and Management Research*, Mehran Nejadi, Vol. 7 No. 1, p. 74.
6. Kundu, S. and Kumar, D.S. (2015), "Impact of trust on the relationship of e-service quality and customer satisfaction", *EuroMed Journal of Business*, Emerald Group Publishing Limited, Vol. 10 No. 1, pp. 21–46.
7. Machogu, A.M. and Okiko, L. (2015), "E-banking complexities and the perpetual effect on Customer Satisfaction in Rwandan commercial banking industry: Gender as a moderating factor", *The Journal of Internet Banking and Commerce*, Research and Reviews, Vol. 20 No. 3, available at: <https://www.icommercecentral.com/open-access/ebanking-complexities-and-the-perpetual-effect-on-customer-satisfaction-in-rwandan-commercial-banking-industry-gender-as-a-moderating-factor.php?aid=60223> (accessed 23 January 2021).
8. Mishra, A.A. (2009), "A Study on Customer Satisfaction in Indian Retail Banking", *IUP Journal of Management Research*, search.ebscohost.com, Vol. 8 No. 11, available at: <http://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=09725342&AN=45083552&h=09MZkOFGxECui%2FQBRgr8uIqa57bR5UGxFUc1titlD2Qbz2Kna4Fb40SRHj1XHFVZqQ2xmc5r8ktxnC9%2Bg3960g%3D%3D&crl=c>.
9. Mols, N.P. (2000), "The Internet and services marketing--the case of Danish retail banking", *Internet Research*, MCB UP Ltd, available at: <https://www.emerald.com/insight/content/doi/10.1108/10662240010312093/full/html>.
10. Munusamy, J., Chelliah, S. and Mun, H.W. (2010), "Service quality delivery and its impact on customer satisfaction in the banking sector in Malaysia", *International Journal of Innovation and Technology Management*, IACSIT Press, Vol. 1 No. 4, p. 398.
11. Pareek, V. (2014), "An Empirical Investigation of the Causal Determinants of Customer Satisfaction: A Study of Indian Banks", *Hyderabad*, search.proquest.com, Vol. 13 No. 2, pp. 55–73.
12. Rahi, S. (2015), "Moderating role of brand image with relation to internet banking and customer loyalty: A case of branchless banking", *The Journal of Internet Banking and Commerce*, OMICS Publishing Group, Vol. 20 No. 3, available at: <https://doi.org/10.4172/1204-5357.1000131>.
13. Rod, M., Ashill, N.J., Shao, J. and Carruthers, J. (2009), "An examination of the relationship between service quality dimensions, overall internet banking service quality and customer satisfaction: A New Zealand study", *Marketing Intelligence & Planning*, Emerald Group Publishing Limited, Vol. 27 No. 1, pp. 103–126.
14. Singh, J. and Kaur, G. (2011), "Customer satisfaction and universal banks: an empirical study", *International Journal of Commerce and Management*, Emerald Group Publishing Limited, Vol. 21 No. 4, pp. 327–348.
15. Vyas, V. and Raitani, S. (2014), "Drivers of customers' switching behaviour in Indian banking industry", *International Journal of Bank Marketing*.
16. Zeinalizadeh, N., Abbas, S.A. and Shariatmadari, M. (2015), "Modeling and analysis of bank customer satisfaction using neural networks approach", *International Journal of Bank Marketing*, Emerald Group Publishing Limited, Vol. 33 No. 6, pp. 717–732.