

# BUSINESS REVIEW

## A RELATIONSHIP BETWEEN SERVICE QUALITY AND CUSTOMER SATISFACTION IN E-BANKING SERVICES- A STUDY WITH REFERENCE TO COMMERCIAL BANKS IN CHENNAI CITY

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#### **ABSTRACT**

**Purpose:** This paper's main aim is to validate the service quality dimensions offered by commercial banks in the study area and the relationship between service quality dimensions and customer satisfaction provided by commercial banks.

**Theoretical Framework:** In India, three categories of commercial banks are the public sector, private sector, and foreign banks. These banks have heavy competition among themselves in maximising their customer base.

**Design/Methodology/Approach:** The researcher collected 600 responses through convenience sampling. Applied exploratory factor analysis, confirmatory factor analysis, regression analysis and structural equation model to conclude that service quality of electronic banking service is not a unique phenomenon.

**Findings:** E-Banking depends upon the five essential factors: reliability, safety and security, assurance, technological augmentation, and quickness since the electronic banking services offered by commercial banks are entirely based on the Internet process.

**Research, Practical & Social Implications:** The study identifies the customer requirements and how commercial banks could satisfy such requirements with their banking strategies. Also, the study identifies whether any demographic difference exists among the customers of commercial banks in perceiving the quality of e-banking services.

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### A relationship between service quality and customer satisfaction in e-banking services- a study with reference to commercial banks in Chennai City

### UMA RELAÇÃO ENTRE QUALIDADE DE SERVIÇO E SATISFAÇÃO DO CLIENTE EM SERVIÇOS BANCÁRIOS ELETRÔNICOS - UM ESTUDO COM REFERÊNCIA A BANCOS COMERCIAIS NA CIDADE DE CHENNAI

#### **RESUMO**

**Objetivo:** O objetivo principal deste trabalho é validar as dimensões de qualidade de serviço oferecidas pelos bancos comerciais na área de estudo e a relação entre as dimensões de qualidade de serviço e a satisfação do cliente fornecida pelos bancos comerciais.

**Estrutura teórica:** Na Índia, três categorias de bancos comerciais são o setor público, o setor privado e os bancos estrangeiros. Estes bancos têm forte concorrência entre si na maximização de sua base de clientes.

**Design/Metodologia/Proteção:** O pesquisador coletou 600 respostas através de amostragem de conveniência. Aplicou análise exploratória de fatores, análise fatorial confirmatória, análise de regressão e modelo de equação estrutural para concluir que a qualidade de serviço do serviço bancário eletrônico não é um fenômeno único.

**Conclusões:** O E-Banking depende dos cinco fatores essenciais: confiabilidade, segurança e proteção, garantia, aumento tecnológico e rapidez, uma vez que os serviços bancários eletrônicos oferecidos pelos bancos comerciais são inteiramente baseados no processo da Internet.

**Pesquisa, Implicações Práticas e Sociais:** O estudo identifica os requisitos do cliente e como os bancos comerciais poderiam satisfazer tais requisitos com suas estratégias bancárias. Além disso, o estudo identifica se existe alguma diferença demográfica entre os clientes dos bancos comerciais na percepção da qualidade dos serviços de e-banking.

Palavras-chave: Qualidade do serviço, Satisfação do cliente, Serviços de E-Banking, Bancos comerciais.

### RELACIÓN ENTRE LA CALIDAD DEL SERVICIO Y LA SATISFACCIÓN DEL CLIENTE EN LOS SERVICIOS DE BANCA ELECTRÓNICA - UN ESTUDIO CON REFERENCIA A LOS BANCOS COMERCIALES DE LA CIUDAD DE CHENNAI

#### **RESUMEN**

**Propósito:** El objetivo principal de este trabajo es validar las dimensiones de calidad de servicio ofrecidas por los bancos comerciales en el área de estudio y la relación entre las dimensiones de calidad de servicio y la satisfacción del cliente proporcionada por los bancos comerciales.

**Marco teórico:** En la India, hay tres categorías de bancos comerciales: el sector público, el sector privado y los bancos extranjeros. Estos bancos compiten fuertemente entre sí para maximizar su base de clientes.

**Diseño/Metodología/Enfoque:** El investigador recogió 600 respuestas mediante un muestreo de conveniencia. Aplicó un análisis factorial exploratorio, un análisis factorial confirmatorio, un análisis de regresión y un modelo de ecuaciones estructurales para concluir que la calidad del servicio de banca electrónica no es un fenómeno único. **Resultados:** La banca electrónica depende de cinco factores esenciales: fiabilidad, seguridad, garantía, aumento tecnológico y rapidez, ya que los servicios de banca electrónica ofrecidos por los bancos comerciales se basan totalmente en el proceso de Internet.

**Investigación, implicaciones prácticas y sociales:** El estudio identifica los requisitos de los clientes y cómo los bancos comerciales podrían satisfacer dichos requisitos con sus estrategias bancarias. Asimismo, el estudio identifica si existe alguna diferencia demográfica entre los clientes de los bancos comerciales a la hora de percibir la calidad de los servicios de banca electrónica.

Palabras clave: Calidad del servicio, Satisfacción del cliente, Servicios de banca electronica, Bancos comerciales.

#### INTRODUCTION

Technology has become indispensable for all commercial banks to establish service quality (Maja and Letaba, 2022). Also, it paves the way to offer customer satisfaction, particularly in electronic banking services (Li et al., 2020). In other words, in the Indian banking scenario, many government committees recommended that the technology is able to bring customers and banks very close to each other. These banks have heavy competition among

themselves in maximising their customer base. In this competitive banking scenario, they require electronic banking services' assistance to offer their customers the best satisfaction. At the same time, in the liberalised and globalised Indian economy, bank customers are highly aware of various financial services which can be operated electronically. They need easy-use banking while grievance-free banking transactions through electronic banking services (Abor, 2004).

Indian commercial banks (Zaman et al., 2022) are highly connected with core banking solutions to the powerful medium of the Internet. The customers can reach their branches through electronic banking transactions like telephone banking, mobile and SMS banking. Most of the consumers prefer hi-fi technology on the basis of ATM missions, mobile banking, Internet banking and readily available information through SMS. The computerised applications for banking transactions of customers require safety, security, and grievance handling procedures to increase the customer base. Most consumers do not prefer even to use currencies; instead, they intend to use plastic cards like credit cards and debit cards. Electronic banking services can offer the best services within a short time; that is the speciality of electronic banking services, which provides convenience to the customers and bank staff (Kamdjoug et al., 2021l Zaman et al., 2022).

The electronic banking system also ensures reasonable customer satisfaction and the best customer relationship management. The satisfied customers immediately recommend the banks to friends and colleagues and also pave the way to increase the customer base. The competition among commercial banks makes them apply the research and development wing of the service quality dimensions to provide quick electronic banking services at the cheapest cost. The strategies of commercial banks in improving the service quality of games offer the best satisfaction to their stakeholders (Bedman Narteh, 2013).

#### LITERATURE REVIEWS

Gronroos (1990), argued that relationship marketing between customers and service providers can be consolidated through the best service quality offered by the service provider at the cheapest cost. The customer relationship management must be optimistic enough so that the customers can settle down their grievances with the help of marketers. An organisation becomes successful through customer satisfaction and perceiving that the service provider can provide this service quality to them.

In another study, the author identified that service quality dimensions could be estimated to customers' perception and their main aim of getting excellent service from the

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service providers. This paper adopted economic tools to test the hypothesis that the service quality dimension ultimately leads to customer satisfaction. The study also knew that gratification is a major outcome of e-banking services the service provider offers (Gujarati, 2004).

In the literature, Heskett et al. (1997) bring study empirically proves that the service quality diminishes the service profit of the service provider at the initial stage. However, the service profit rapidly increases after reaching the culmination point with the maximum number of customers. This author also estimated that marketers must be highly strategic in retrenching their expenditures at the initial stage. Still, after some stage, they can earn a profit by getting the confidence of customers by offering the best satisfaction to them. On the hands, Parasuraman et al. (1998). Is pioneers to estimate the scale of service quality, namely SERVQUAL. They used both exploratory factor analysis and confirmatory factor analysis to clean the multiple item scale, ensuring the customer perception of various service quality dimensions. They studied the services industry and identified five crucial dimensions: reliability assurance, empathy responsiveness and customer relationship management. They also proved that SEVIQ is essential in banking arena.

For Quinn (1996), all knew that the productivity of all services industry is your profitability. The profitability can be realised as the maximum number of the customer base and offering their customers the best satisfaction. These authors also found that service quality is the best productivity for the whole business. From the point of view of Stafford. (1996), the researchers identified the influence of demographic variables of customers in perceiving the notions of study domain, especially in the financial institution. The author determined that gender, Yates, educational background, income, and occupation play a vital role in deciding the depth of service quality offered by the banks.

Tizazu Kassa (2012) estimated the effect of SERVIQ on gratification of respondents is usually in the private sector banks. They identified that the private sector banks concentrate more on technological augmentation, which minimizes the timings of banking interaction and offers this service quality to their customers. On the other hand, Tong, Y.K. (2009) mainly focused on the electronic recruitment technology adopted by many industries to offer customers the best service quality and satisfaction. The author identified that technology is one of the powerful tools to ensure service quality in all the industry.

#### **RESEARCH GAP**

After a thorough investigation of research works of reputed researchers at the world level in the same area, the researcher identified three unaddressed issues still pending in the study domain.

- 1. What service quality dimensions are responsible for improving the electronic banking services in commercial banks?
- 2. What factors influence customer satisfaction with electronic banking services offered by commercial banks?
- 3. Does the customers' demographic background contribute to changing the perception and satisfaction of e-banking services of commercial banks?

Therefore, the present study intends to venture upon the above mentioned three crucial issues that the national and international level researchers do not address.

#### **OBJECTIVES OF THE STUDY**

- 1. To study and validate the service quality dimensions offered by the commercial banks in the study area.
- 2. To find the relationship between service quality dimensions and customer satisfaction offered by commercial banks.
- 3. To measure the influence of the customers' demographic profile on their perception of service quality and customer satisfaction.

#### **HYPOTHESES**

- 1. There is no relationship between service quality dimensions and customer satisfaction offered by commercial banks.
- 2. There is no significant influence of customers' demographic profiles on their perception of service quality and customer satisfaction.

#### **METHODOLOGY**

The study is empirical in nature. It depends upon the primary data alone. The primary data was collected from the customers of commercial banks in all the 15 zones of Chennai city. To manage the responses from their customers of commercial banks, the researchers used a suitable research instrumentwhich is a combination of several stages; namely, the stage 1 deals with the demographic profile of the customers, whereas the second part is able to ascertain the banking habits of the customers who were responding to the questionnaire. The third and fourth

parts aim to verify the service quality dimensions and customer satisfaction offered by the commercial banks. In the third and fourth parts, all the questions were in the form of statements on Likert's five-point scale. The scale ranges from strongly agreed to disagree in the case of service quality dimensions strongly. In contrast, in the case of customer satisfaction, the scale ranges from highly satisfied to idly dissatisfied.

#### **PILOT STUDY**

After framing the questionnaire, the researcher conducted a pilot study for subsequent understanding of the questionnaire and reliable sourcesof the questionnaire. The researcher collected a hundred responses from all the 15 zones of Chennai city and the applied Cronbach alpha method to check the reliability, particularly the understanding of the questionnaire from the customer's side. The reliability coefficient is 0.888, implying that the customers of commercial banks can understand all the statements in the questionnaire at an 88.8% level. Hence the questionnaire is found to be highly reliable.

#### **MAIN STUDY**

After confirming the reliability through the pilot study, the researcher ventured on to the primary research. The researchers circulated 50 questionnaires each in all the 15 zones of Chennai city through the convenience sampling method and got 600 usable questionnaires. These 600 responses are used to prove the model.

#### **DATA ANALYSIS**

As a consequence of data collection from the study area, the researchers systematically tabulated them in the excel sheet and transferred them to the statistical package for social sciences (SPSS). The researcher used exploratory factor analysis, confirmatory factor analysis, linear multiple regression analysis, one-way analysis of variance and the structural equation model to verify all the objectives on to test the hypothesis.

#### **ANALYSIS AND DISCUSSION**

At the point of inception, there is a need to diminish the number of variables of service quality and customer satisfaction through exploratory factor analysis. The service quality dimensions consist of 25 variables, whereas customer satisfaction consists of 15. The application of exploratory factor analysis separately for 25 statements of SERVQ and 15

customer satisfaction variables brought the following results. Table 1 presents the normality for -service quality.

Table-1-normality for -service quality

KAMAOL-ADE	.800	
	Chi-Square	3586.672
BATS	FREE	300
	Sig.	.000

From the above table of KMO and Bartlett's test, it is found that chi-square values are statistically significant to designate that all the 25 variables of service quality dimensions are normally distributed and more suitable for the debt reduction process. The following table gives the reduced number of factors with underlying variables. Table 2 bring the number of factors of service quality.

Table-2-Number of factors of service quality.

VAR		INEI		SEG	MENTATION LO	ADS
	SUM	VARIANCE	TSUM	SUM	VARIANCE	TSUM
1	5.425	21.700	21.700	3.041	12.163	12.163
2	2.477	9.908	31.609	2.991	11.962	24.125
3	1.775	7.101	38.710	2.754	11.016	35.141
4	1.556	6.225	44.935	2.228	8.911	44.052
5	1.269	5.076	50.010	1.489	5.958	50.010
6	1.169	4.676	54.686			
7	1.064	4.255	58.941			
8	.959	3.834	62.776			
9	.905	3.620	66.395			
10	.874	3.494	69.889			
11	.814	3.256	73.145			
12	.764	3.057	76.202			
13	.693	2.772	78.974			
14	.629	2.517	81.491			
15	.561	2.246	83.737			
16	.548	2.191	85.928			
17	.516	2.064	87.992			
18	.471	1.885	89.878			
19	.449	1.795	91.673			
20	.408	1.631	93.304			
21	.404	1.616	94.920			
22	.357	1.428	96.348			
23	.344	1.377	97.725			
24	.297	1.187	98.912			
25	.272	1.088	100.000			

From the above table of the total variance, the researcher identified that 25 variables are reduced into 25 predominant factors: reliability, safety and security, assurance, technological augmentation, and quickness. These are all the five factors responsible for this service quality of electronic banking services in commercial banks concerning customer's perception. Table 2 presents normality for consumer satisfaction.

Table-3-- normality for customer satisfaction

KAMAOL-ADE	.775			
	Chi-Square	1997.797		
BATS	FREE	105		
	Sig.	.000		

The above table shows that KAMAOL-ADEQUACY TEST and chi-square values are statistically significant at a 5 per cent level. The variables of customer satisfaction are normally distributed and can be reduced into several factors, as shown in the Table 4.

Table-4-Number of aspects of customer satisfaction

VAR		INEI		SEGN	MENTATION LOA	ADS
	SUM	VARIANCE	TSUM	SUM	VARIANCE	TSUM
1	4.027	26.844	26.844	2.722	18.146	18.146
2	2.087	13.913	40.757	2.630	17.536	35.682
3	1.405	9.364	50.122	2.166	14.439	50.122
4	1.040	6.934	57.056			
5	.914	6.091	63.147			
6	.889	5.926	69.074			
7	.764	5.092	74.166			
8	.713	4.756	78.922			
9	.641	4.274	83.197			
10	.513	3.422	86.618			
11	.481	3.210	89.828			
12	.452	3.014	92.842			
13	.422	2.816	95.658			
14	.339	2.263	97.921			
15	.312	2.079	100.000			

Similarly, the 15 variables of customer satisfaction are reduced into three predominant factors: grievance-free services, conveniences and customer relationship management. These are the three essential factors responsible for offering customers the best satisfaction.

After confirming the five factors of service quality dimensions and the three factors of customer satisfaction regarding electronic services of commercial banks, the researcher intended to find the relationship between the five factors of service quality dimensions and the

three factors of customer satisfaction. This intention of the researcher is fulfilled through the multivariate statistical test, namely linear multiple regression analysis, and the results are clearly presented in Table 5.

Table-5-Correlates-service quality and customer satisfaction

Stage-1	SQRCOR	CORELN	ACORELN	STAERES
1	.451ª	.303	.195	.47280

From the table, it is found that R-square values are more significant than .3 and adjusted R square values as well as the standard error of the estimate or statistically significant at the 5% level. This shows that the factors encountered in the research are well defined and related (see Table 6).

Table-6-ANOVA-service quality and customer satisfaction

STA	GE-2	SQMSUM	DFRE	AVGVAL	F	Sig.
	Regression	28.211	5	5.642	25.240	.000b
1	Residual	110.430	494	.224		
	Total	138.640	499			

From the above table, it indicates that the F values are also statistically significant at a 5% level to ensure the existence of a relationship between the e-banking services and gratification of respondents. Table 7 bring the coefficient service quality and customer satisfaction.

Table-7-Coefficient- service quality and customer satisfaction

STA	GE-3	UNSTACOE		STDCOE	t	Sig.
		В	STDER	Beta		
	(Constant)	2.089	.183		11.414	.000
	Reliability	.092	.033	.125	2.757	.006
١,	Safety	.152	.042	.174	3.608	.000
1	Assurance	.076	.036	.092	2.080	.038
	Technology	.177	.038	.219	4.646	.000
	Quickness	.017	.037	3.021	3.465	.002

a. Dependent Variable: customer satisfaction

From the above table, the significant t-values and beta values consolidate the nature of relationship among the entities of the research. Hence the linear multiple regression analysis

found the relationship between nature of e-banking services and customer satisfaction which rejects hypothesis one.

After finding the relationship between service quality dimensions and customer satisfaction with electronic banking services offered by commercial banks, the researcher intended to construct an independent model using the structural equation model. This model consists of both confirmatory factor analysis to confirm the factors of the research. It is followed by linear multiple regression analysis to prove the relationship between service quality dimensions and customer satisfaction. This implies that the structural equation model combines confirmatory factor analysis and linear multiple regression analysis. The best fit of the model is identified through the following fit indices, and there are benchmark values (see Table 8).

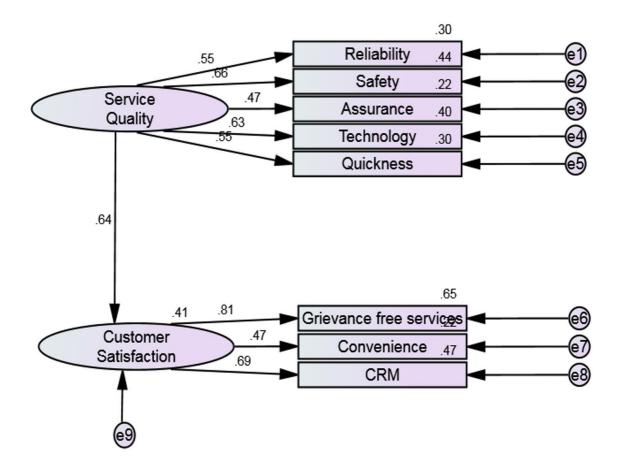
Table-8-MODEL FIT INDICES AND BENCHMARKS.

S.NO	Fit indices	Values	Benchmark values
1	Chi-square	8.124	-
2	P-value	0.678	>.05
3	GODFT(GFI)	0.989	>.9
4	COMFT(CFI)	0.987	>.9
5	NORMFT(NFI)	0.985	>.9
6	(RMSEA)	0.07	<=0.08

From the about table and diagram, it is found that all the 6 fit indices exactly satisfy the required benchmark; therefore, the model constructed by the researcher is fully validated. After validating the five factors of service quality dimensions and the three factors of customer satisfaction, the researcher intended to find the influence of demographic variables of customers on their perception of best e-banking services and customers are fully gratified. Therefore, the researcher used a one-way analysis of variance to find the influence of demographic variables on the service quality dimensions and customer satisfaction. Table 9 presents the demographic influence on service quality. Figure 1 presents the relationship between service quality and satisfaction.

Table-9-Demographic influence on service quality

VARIABLE	FACTOR	F-VALUE	SIG
GENDER	RELIABILITY	4.521	.000
AGE	TECHNOLOGY	5.236	.000
EDUCATION	QUICKNESS	3.874	.000
INCOME	GRIEVANCES	6.374	.000
OCCUPATION	SATISFACTION	7.124	.000



From the about Table 9, it is found that the demographic variables gender, age, educational qualification, income and occupation play a significantly vital role in perceiving the service quality of electronic banking services offered by the commercial banks and their level of satisfaction. Hence, the hypothesis use was also rejected and concluded that demographic variables significantly influence customers' perception of service quality and customer satisfaction offered by the commercial banks.

#### FINDINGS AND CONCLUSIONS

The rigorous statistical analysis found that service quality of electronic banking service is not a unique phenomenon, whereas it is in depending upon five important factors, namely reliability, safety and security, assurance, technological augmentation, and quickness. Since the electronic banking services offered by commercial banks are completely based on the Internet process, the customer expects high reliability in all their banking transactions. They expect high safety and security for their financial services and banking interactions through the electronic banking system. They also expect 100% assurance from the banks that all their banking transactions are replete with complete safety. They perceived that the technological

augmentation is able to offer quick and basic banking services conveniently from their houses and private places.

The study also revealed that customer satisfaction with electronic banking services offered by the commercial banks depends upon the bank authorities of the commercial banks' interest in solving the grievances of customers and their strategies to create convenience for their customers. The customer always expects good satisfaction from that service provider through optimistic customer relationship management. Commercial banks concentrate on service quality and create more strategies to offer customer satisfaction. Best service is a point of inception for realizing satisfaction of respondents. Actually, best services are enjoyed by their customers. Gender-wise difference exists among the customers of commercial banks in perceiving the quality of e banking services. The quality of services offered by them is tremendous. There is a significant difference between younger customers and older customers when using electronic banking services. It is concluded from the research that service quality of electronic banking services is very important for all customers to offer the best satisfaction to their customers and increase their customer base.

#### **REFERENCES**

Abor, J. (2004). Technological innovation and banking in Ghana: An evaluation of Customers perception, American Academy of Financial Management.

Balachandher, K.G, Santha V.Norazlin, I. and Prasad, R. (2001). Electronic banking in Malaysia: a note on the evolution of services and consumer reactions. Journal of Internet Banking and Commence. Vol 5, no.15.

Banting Peter M., Androw, E.gross Business marketing (1998). Bedman Narteh, (2013) "Service quality in automated teller machines: an empirical investigation", Managing Service Quality: An International Journal, Vol. 23 Iss: 1, pp.62 - 89

Gronroos, C. (1990). Relationship Approach to Marketing in Services Context; the Marketing and Organisation Research Interface. Journal of Business Research. Volume 20, pp 3-11. 15. Gujarati, N. (2004). Basic Econometrics: McGraw-Hill Book Company, Singapore

Heskett, J.L., et al., (1997). The Service Profit Chain, New York: Free Press. 17. IR. Gilbant A. Ehurenill Basic marketing Research (2001)

Kamdjoug, J. R. K., Wamba-Taguimdje, S. L., Wamba, S. F., Kake, I. B. (2021). Determining factors and impacts of the intention to adopt mobile banking app in Cameroon: Case of SARA by afriland First Bank. Journal of Retailing and Consumer Services, 61, 102509.

#### Shanmugam, RM., Chandran, M. (2022)

A relationship between service quality and customer satisfaction in e-banking services- a study with reference to commercial banks in Chennai City

Li, F., Lu, H., Hou, M., Cui, K., Darbandi, M. (2020). Customer satisfaction with bank services: The role of cloud services, security, e-learning and service quality. Technology in Society, 64, 101487.

Maja, M. M., Letaba, P. (2022). Towards a data-driven technology roadmap for the bank of the future: Exploring big data analytics to support technology roadmapping, Social Sciences & Humanities Open, 6(1), 100270.

Parasuraman, A., Berry, L. L. and Zeithaml, V. A. (1988): SERVQUAL: A multiple-item scale form ensuring consumer perceptions of service quality. Journal of Retailing. 64(1), 12 25.

Parasuraman, A., Zeithaml, V. A. and Berry, L. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. Journal of Retailing, 64, spring, pp.12-40. 26.

Quinn, B (1996), "The productivity paradox is false: Information technology improves service performance," Advances in Services Marketing & Management, vol, pp. 16-21. 27.

Stafford, M.R. (1996): Demographic discriminators of service quality in the banking industry. 28. Surjadjaja, H., Ghosh, S., & Antony, J. (2003). Determining and assessing the determinants of service operations. Managing Service Quality, 13(1), 39-53. 29.

Tizazu Kassa (2012). The Effect of Customer Service Quality on Customer Satisfaction in Selected Private Banks; Addis Ababa University; Addis Ababa, Ethiopia 30.

Tong, Y.K. (2009). A study of e-recruitment technology adoption in Malaysia. Industrial Management & Data Systems, 109(2), 281-300. 31.

Zaman, M. S., Valiyattoor, V., Bhandari, A. K. (2022). Dynamics of total factor productivity growth: An empirical analysis of Indian commercial banks. The Journal of Economic Asymmetries, 26, e00268.