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A proposed model of e-service quality and e-trust for e-banking

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Abstract
Banking system is the part of our daily economics and affects us in one or the other way. After the revolutionary work in the field of World Wide Web development and growth of Internet, banking system also got benefited of it and today we see a new and comparatively young banking system mostly driven by the Internet called e-Banking. Different studies showed that e-banking adoption decision is influenced by e-Trust and e-Service Quality. This paper investigates the relation among e-Trust, e-Service Quality and customer decision for the adoption of e-banking. A total of 266 responses and 260 valid responses were used to analyze the outcomes using SPSS-26 and Smart PLS3 Software. And as this study has taken into account those technologically educated respondents so their left scope to include other banking customers to be studied for the further study.

Keywords: e-Banking, E-Service Quality, E-Trust, Adoption Decision

1. Introduction
e-Banking is an e-Service provided by the banks through private and the personal channel over internet facility to their registered customers for the ease of transaction, transfer of money, bill payment and various other services that were all available through a local branch Banking earlier. This was adopted by the various banks to provide ease of banking and 24hrs hassle-free services.

There are various types of e-banking facilities which include internet banking, mobile banking, tele-banking, services over e-lounges, Debit & Credit card services, payments bank services etc. Now most of the banks in India are providing e-banking and getting registered with them is no hassle.

In today's era it is even more important to have such a system where one's dependence on the others for their day to day work should be addressed and tried to be reduced it with self-service. Over the past few years strengthening of banking system in our country have catered this need to a great extant. Changing banking scenarios over the world, technological advancement and various events like unprecedented demonetization, growth of the Fintech industry in the country and recently Covid-19 pandemic have pushed the bank consumers to move ahead of those traditional ways of banking and payments.

With their e-services, banks are enabling their consumers to access easy tracking of funds, investments and various other banking status, multilayered password secured channel and personalized banking.

Not only from the consumer benefit perspective but also from the perspective of the banks and the whole economy e-banking has played and will be playing a huge role in strengthening the banking system & economy of the country. With increased use of e-banking, burdens of the banks, finding it tough to meet the increasing demands of banking services will be catered to a great extant, there will be less dependence on physical currency so no need to print and maintain the currency at hefty charges, there will be no physical accumulation of black money and hence complete transparency in the system and this will also let people expanse more easily and hence up to most of their capabilities thereby will keep revolving the wheels of the economy.

This banking system is also playing vital role in improving the social economic status of the country. Government of India is trying to connect the lower class of the society to the Banking system with its 'Jan-Dhan Yojana' program (2016), a program aimed to connect the

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lower class of the society to the banking system so that direct benefit of the government schemes can be transferred to them through their bank accounts and no corruption in between can take place. This way government brought such class of the society to the main stream banking system. E-Banking paves path for this to be successfully implemented. Similarly, Kissan Credit Card Scheme to empower the farmers of the country and to ensure credit facility to them is another such government scheme that has find its way in light of e-Banking services. That is why government itself is promoting e-Banking. Indian government launched Unified Payment Interface (UPI) for easy, secure and quick transaction direct from bank accounts with the support of the banks. Government's BHIM App is one such app promoting the mobile banking. These are clearly the evidences that the social development schemes are also backed and improved in their implementation using the e-Banking services.

Scotland Bank first launched the Internet Banking in 1989. ICICI Bank in India first launched internet banking services for its customers during the end of the 20th Century. Since then more and more number of banks are connecting their customers to Internet Banking and now in total 13 Banks in India offer Internet Banking.

A long list of data can be produced as evidences to prove how much we have grown and what is still there to be achieved. This all is achieved with the help of development of the infrastructure of the IT industry, basic computer education, proper awareness programs and strengthening banking industry. These are all the external factors but there must be some internal factors also which must be affecting customer's decision for the adoption of e-banking services. These internal factors include consumer e-Trust, e-Service Quality, sense of security, internal comfort of consumers etc. In this report we are discussing the two important factors 'e-Trust' & 'e-Service Quality' which we have taken in our proposed model to investigate that in presence of clear Intent and Awareness for the e-banking how these factors (e-Trust and e-Service Quality) affects customers' decision for adoption of e-banking services and the relevance of indicators of these factors.

The prime objective of this study is to determine the validity of the of the proposed model in context to Indian banking system. The second objective is to determine the strength of relationship between e-Service Quality & e-Trust and customer's adoption decision for the e-Banking. Third objective of this study is to find the mediating effect of e-Trust on relation between e-Service Quality and customer's adoption decision for the e-Banking.

2. Literature

Carlos Flavián Miguel Guinalíu Eduardo Torres (2006) [50], in their research revealed Customer e-Trust as the one among the most important factors for e-banking adoption. Same year, John Benamati, Mark A. Serva, Mark A. Fuller (2006) [12], in their research paper came to a conclusion that the relationship between the customer and the service provider is strengthened if customer is well satisfied with the e-Service Quality, thus making e-Service Quality an important factor for customers' decision for adopting e-Banking services. There were other research papers conforming these two (e-Trust and e-Service Quality) as

being the factors for the decision for adopting e-Banking services. Other research papers we came across during our study, which confirmed this were:

- Sonja Grabner-Kräuter, Rita Faullant (2006), in their investigation found that the effect of internet e-Trust on Internet Banking adoption decision was significant.
- Kun Chang Lee, Inwon Kang, and D. Harrison McKnight (2007) [55], in their research paper came to a conclusion that the e-Trust in the offline banking may be a key factor of online banking success and banks can leverage customer e-Trust in their brick-and-mortar business to provide a similar customer-satisfying product line on the Internet.
- Tsung-Chi Liu, Li-Wei Wu (2007) [23], in their research paper came to a conclusion that e-Trust is well accepted as necessary for consumers to simply accept and use the online to interact with their bank.
- Nicole Koenig-Lewis, Adrian Palmer, Alexander Moll (2009) [17], in their research paper came to a conclusion that the e-Service Quality and e-Trust are the key determinants influencing satisfaction and intention to use and in turn influence the actual usage of the mobile banking
- Beh Yin Yee and T.M. Faziharudean (2010) [33], in their research paper came to conclusion that e-Service Quality alone does not guarantee customer retention.
- Kenneth B. Yap, David H. Wong, Claire Loh and Randall Bak (2010), in their paper reach to a conclusion that services provided become more salient if a customer lacks the level of knowledge or e-Trust required to adopt e-banking thus making it clear that they balance for one another but only in the presence of both the factors.
- Seyed Reza Seyed Javadein, Amir Khanlari, Mehrdad Estiri (2008), in their research paper came to a conclusion that the relationship between e-Service Quality and e-Trust is stronger.
- Firend A. Rasheed, Masoumeh F. Abadi (2014) [44], in their research paper came to a conclusion that the key to customer creation and retention appears to be the fostering of a favorable relative attitude and a favorable relative attitude are often created by improved e-Service Quality.

2.1 E-Trust

What we understand of word e-Trust is 'Belief' which is merely an aspect of e-Trust. Various knowledge personalities have defined it as per their own understanding of e-Trust. Anthony Giddens' explanation of e-Trust says "the vesting of confidence in persons or abstract systems, made on the basis of a 'leap of faith' which brackets ignorance of lack of information". To him e-Trust is the derivative of faith. As per him "prime condition of requirements for e-Trust is not lack of power but lack of full information". This in context of e-banking means, a e-Trust is ones extended confidence on the system even though one doesn't know or understand it in its core.

Further adding to it Mayer et al. (1995) tried explaining e-Trust saying that it is the willingness of a subject to put his faith in the actions of another subject based on the expectations that the other subject will perform certain actions fulfilling e-Trustor's expectations without him being

able to control or monitor the e-Trustee. So, another word associated with the e-Trust is "expectations", expectations to perform up to the standards. Oxford Dictionary's explanation of e-Trust says " A firm belief in the reliability, truth or ability of someone or something" and "Acceptance of the truth of a statement without evidence or investigation".

2.2 E-service quality

Talking about another important factor which we have adopted in our model to investigate how it affects banking users' decision for adoption of e-banking, is e-Service Quality which we measure in terms of satisfaction level of the users. Different media sources and personalities have defined e-Service Quality in their words and with their own perception and understanding. Lewis & Booms (1983) in their research (The marketing aspects of e-Service Quality) commented, "e-Service Quality is the comparison of the perceived expectation of a service to perceived performance". Adding to it Oliver, Balakrishnan & Barry (1994) in other research (Outcome Satisfaction in Negotiation: A Test of Expectancy Disconfirmation) commented, that concept of e-Service Quality has its roots in the expectancy- disconfirmation paradigm. Oxford Dictionary in its explanation of e-Service Quality says that customer's perceived & actual impression of the quality & standards of an organization's service to the public is its e-Service Quality".

Our proposed model also investigates the relationship between the two factors (e-Trust and e-Service Quality) as in earlier researches there was an identified, significant relationship among the two. The research papers that talked about the mediating effect of e-Trust, and E-Service Quality being antecedent to e-Trust were:

- S.G. Hazra & K.B.L. Srivastava (2009) [6], in their research revealed that E-Service Quality Perception has a positive correlation with the Customer e-Trust.
- Soheila Ghane (2010), investigated that e-loyalty is influenced by e-Trust and e-Service Quality. It was revealed that although e-Service Quality and e-Trust have strong direct effect on e-loyalty, impacts of indirect effects (with e-Trust playing mediating roles) are more significant.
- Soheila, Fathian and Gholamian (2011) [38], in their research paper revealed that quality of e-service has a direct as well as indirect effect on e-Trust.
- Soheila Ghane, M. Fathian, M.R. Gholamian (2011) [41], in their research paper came to a conclusion that e-Service Quality as an antecedent of e-Trust. Also, it concluded that loyalty of e-banking customers is directly affected by the e-Trust in an online bank, which in turn are determined by e-Service Quality.
- Lee, Chu, & Chao (2012) [1], in his study they revealed that E-Service Quality has a strong positive effect on Customer e-Trust.
- Sukanya Kundu, Saroj Kumar Datta (2015), in his research he investigated that the role of e-Trust as a mediating variable between e-Service Quality and customer satisfaction in internet banking. E-Service Quality was found to be strongly correlated with customer satisfaction. The results confirm e-Trust as a mediating variable between e-Service Quality and

customer satisfaction.
- N. Chung & S.J. Kwon (2009) [2], in their research revealed that without e-Trust e-Service Quality has no significant role in molding the customer decision while with even a pinch of e-Trust e-Service Quality plays important role to influence customer decision.

The indicators for the factors adopted in our model were also adopted from the previously work done in this field. Mukherjee & P. Nath (2003) [4], in their study revealed that Shared value (Perceived privacy and Security) has significant positive relationship with e-Trust and is the most important determinants of e-Trust. Other researches which confirmed this were, S. Yousafzai, J. G. Pallister, & G. R. Foxall (2003) [5], they revealed that Perceived Security and Perceived Privacy are the most significant set of e-Trust antecedents, and Aries Susanto, Hwansoo Lee, Hangjung Zo (2015), who investigated the role of constructs of e-Trust (perceived security, and perceived privacy) to reveal the impact that each of these distinct factors has on initial e-Trust formation and found them being significant.

2.1.a Perceived privacy

Perceived privacy, as defined by Goodwin (1991) is the consumer's ability to control (a) the presence of other people in the environment during a transaction and (b) the dissemination of provided information. This present study defines perceived privacy as a customers' perception regarding their ability to transact freely without the interference of outsiders and without any suspicion of outsiders snooping the access the codes and other critical data. Consumers in online ecosystem have a little control over information privacy and this has a pessimistic influence on their willingness to get into a e-Trusting relationship with web marketers. Financial service customers are more reluctant to use online services out of fear that their financial life will become an open book to the Internet universe (Bestavros, 2000). Thus, there is always a risk of a loss of privacy, which is a core factor in developing e-Trust. The literature has described the willingness to assume the risk of disclosure as a dimension of e-Trust (Nowak & Phelps, 1997). This suggests that the customers having a high perception of online privacy will need less acclimatization to e-Trust and patronize Internet banking services.

2.1.b Perceived security

Daniel (1999) proposed security as an indicator for influencing customer decision for acceptance in the UK. In e-commerce Security is explained as a threat which creates event with the potential to cause economic piracy of data or network resources in the form of disclosure, modification of data, destruction of data, fraud, and abuse' (Kalakota & Whinston, 1997). In this research paper perceived security is defined as the degree to which a customer feels himself protected to all kinds of harms or threats after taking service. Various literature explains how security can be insured with digital signatures, adequate encryption, and firewalls (Bhimani, 1996), although consumers' perceived security is a different phenomenon. Even if degree of threat can be measured a secured for every single transaction it can't be predicted that consumer will be sufficiently

satisfied. Ratnasingham (1998) proposed that when customer makes positive attitude and optimistic perception of the security then e-Trust and confidence will also increase and will upheld substantive, open and influential exchange of information.

2.1.c Structural assurance

Tao Zhou (2011), in his research paper mentioned one another important determinant for e-Trust i.e., structural assurance commenting on which he considered it being one among main factors affecting initial e-Trust.

Tao Zhou (2011) in his research, explained that Structural assurance is the existence of technological and legal structures to make sure that the transaction will be is made securely. Users of mobile banking are more vulnerable to cyber-attacks because they operate on mobile networks as compared to online banking which is protected by the firewall. Trojan and Viruses may also be a threat in mobile terminals. These problems will make users' concerned about their account and payment security. Structural assurance as institution-based e-Trust instrument has been found to impact users' initial e-Trust. Especially, due to inexperience, users may rely more on these structural assurances to make their decision for and build e-Trust in mobile banking. Structural assurance and e-Trust propensity are believed to affect initial e-Trust, which in response affects perceived usefulness and usage intention.

2.2.a Responsiveness

Parasuraman *et al*. (1988), devised a 22-item e-Service Quality measurement instrument based on the five e-Service Quality dimensions (tangibles, reliability, responsiveness, assurance and empathy), Responsiveness is one among them which we have adopted in our model. M. Loonam & Deirdre O'Loughlin (2008) [3] too studied the dimensions critical to e-banking e-Service Quality. Responsiveness, here again came out to be one among important indicator of e-Service Quality. Vijay M. Kumbhar (2011), also in his research mentioned Responsiveness as most important factor for customer's satisfaction in e-banking.

Ahmad J. Afshari (2013) commenting on responsiveness defined it saying that it is the ability of e-retailers to respond back within the expected time period to answer the query, request or complaint from customer. White and Nteli (2004) explained it saying that security is the most important attribute among the users, followed by responsiveness of service delivery, ease of use, credibility of the bank, and product variety.

2.2.b Relative advantage

Khalil Md Nor, J Michael Pearson (2008), in their study revealed that e-Trust significantly affect attitude toward Internet banking acceptance along with Relative Advantage. Rogers (1995) has explained Relative advantage as, "the degree to which a technology is perceived as being better than the idea it has moved ahead of." Also, relative advantage requires the adopter to compare and analyze the costs and benefits of using a technology, which can be expressed socially, economically, or in other ways. In his research, he made an assumption that relative advantage motivates an individual for using Internet banking and consequently his motivation positively affects the intention

to use the technology. Relative advantage significantly motivated the individual and changed the attitude of the individual for the internet banking. These findings suggested that an Individual can develop positive attitude for Internet banking if he feels Internet banking is useful. Thus, if banks can highlight the benefits of Internet banking it may see hike in number of users shifting towards Internet banking.

2.2.c Complexity

Cheung *et al*. (2000) defined complexity as the measure to which a technology is considered comparatively difficult to understand and operate and influence users in a negative sense for the adoption of the technology. Complexity is also considered synonym to ease of use, which is considered to motivate and influence the adoption of technology (Lederer *et al*., 2000). Cooper and Zmud (1990) put forward that a technology that requires less skills and operational efforts is more likely to be adopted. Complexity also has significant relationship with intention to adopt internet banking.

2.2.d Service portfolio

Service portfolio is another indicator for the e-Service Quality we have adopted in our research. It is being adapted in for the Indian Banking ecosystem as number of Banking customers in India is huge as its population and if not for one service there will be long cue for other services in the physical bank branch unless Internet banking portfolio contains all or most of the services being rendered through the physical branch of the bank.

Thus, relying on the literature we have adopted a model and adapted it in context to Indian Banking ecosystem which we expect to affect the decision of banking customers for the adoption of e-banking services.

3. Research methodology

The study is particularly about the customer decision about adopting e-banking service offered by their registered banks. Research is not bounded to any geographical boundary other than the physical boundary of India as a nation, as the study is in context to Indian banking customers. Research is a PAN India research and have collected responses from all age groups, genders and from possibly all type of customers from most part of the country so that results/outcomes can be more generalized. Sample size of the collected responses is 266 out which 260 were fairly well answered to be analyzed using the software used (SPSS version 26 and Smart PLS 3). Data collection process was self-handled and responses were collected over a period of two weeks. The questionnaire consists items regarding demographic variables, gender, age group, employment status, salary group, usage & usage frequency status and the nine Indicators: Awareness, Intent Relative Advantage, Structural Assurance, Service Portfolio, Perceived Security, Perceived Privacy, Responsiveness and Complexity. The items on indicators uses a seven-point Likert scale ranging from 1 "Completely Disagree", through 4 "Can't Say About", to 7 "Completely agree". The items for the seven constructs were adapted in context to Indian banking customers. Responses here used are collected over the Internet which confirms technological soundness of the respondents which is expected to be a key requirement for adoption of a service over technology.

Demographic data of the respondents		Total: 260	
		Count	% value
Gender	Male (1)	170	65.38%
	Female (2)	90	34.62%
Age Group	15-24 Years (Gen Z) (1)	123	47.31%
	25-39 Years (Gen Y) (2)	91	35.00%
	39-56 Years (Gen X) (3)	32	12.31%
	57 Years and Above (Baby Boomers) (4)	14	5.38%
Employment Status.	Employed (1)	168	64.62%
	Retired After Services (2)	11	4.23%
	Unemployed (3)	81	31.15%
Pay Group	No Income (0)	56	21.54%
	<=2.5 Lakh Per Annum (1)	74	28.46%
	>2.5 Lakh but <=5 Lakh Per Annum (2)	65	25.00%
	>5 Lakh but <=10 Lakh Per Annum (3)	46	17.69%
	>10 Lakh Per Annum (4)	19	7.31%
User Status of e-Banking	User (1)	251	96.54%
	Non-User (2)	9	3.46%
Usage Frequency	Frequently (1)	52	20.00%
	On Weekly Basis (2)	77	29.62%
	On Monthly Basis (3)	114	43.85%
	Very often (4)	17	6.54%

4. Results and the analysis

On our responses gathered first we ran the Measurement model using CFA (Confirmatory Factor Analysis) on SPSS version 26 to test the validity and the reliability of the model we have adopted in our research then we performed the Structural model to test the validity of our objectives and model fitness on Smart PLS3. Also, MS-Excel was used for the data cleaning purpose.

There are two types of validity, 1) Convergent Validity, and (2) Determinant Validity. Convergent Validity measures if the items measure the same factor statistically, they claim to measure and Determinant Validity measures the strength of correlation among the items of different determinants as there should not be strong correlation statistically in between two different indicators.

KMO value confirms the Sampling Adequacy as it is well above 60%. Significance level is also showing the significance is below 0.05 which affirms sufficient correlation among items. This is also confirmed in Anti Image correlation where correlation among all the items is well above 50%. Communalities for all the items too is well above 0.5 which is required.

Table 1: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.948
Bartlett's Test of Sphericity	Approx. Chi-Square	7934.305
	df	666
	Sig.	.000
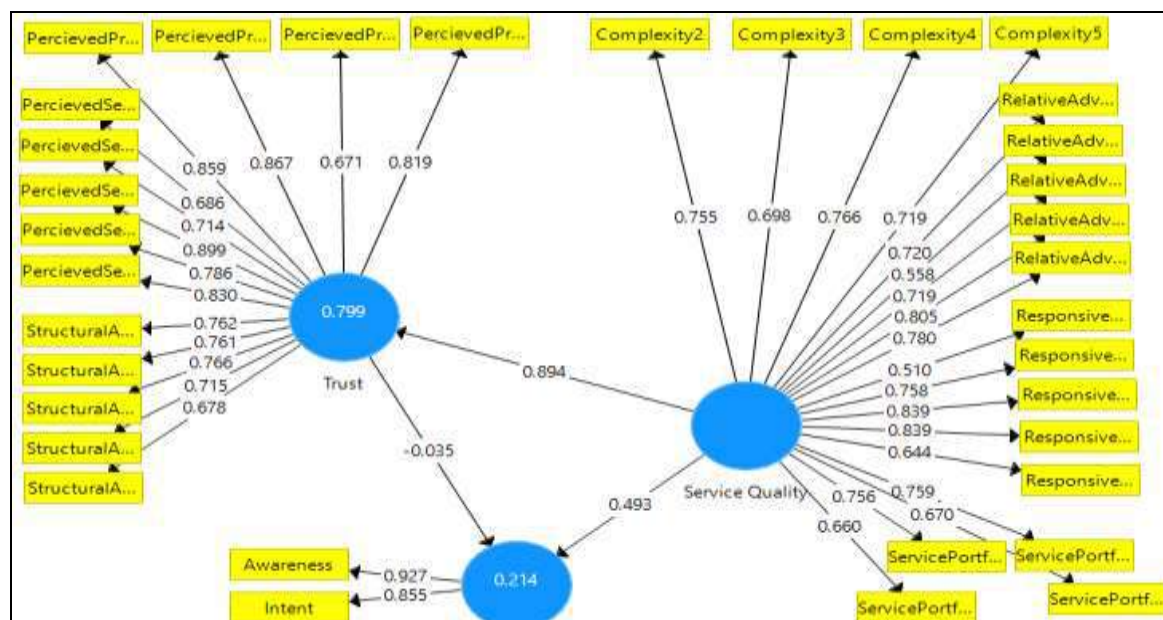
Objective 1: Adoption Decision

Table 2: Path Coefficients

	Adoption Decision	E-Service Quality	E-Trust
Adoption Decision			
E-Service Quality	0.493		0.894
E-Trust	-0.035		

Table 3: Outer Loadings

	Adoption Decision	E-Service Quality	E-Trust
Awareness	0.927		
Complexity2		0.755	
Complexity3		0.698	
Complexity4		0.766	
Complexity5		0.719	
Intent	0.855		
PercievedPrivacy2			0.819
PercievedPrivacy3			0.671
PercievedPrivacy4			0.867
PercievedPrivacy5			0.859
PercievedSecurity1			0.686
PercievedSecurity2			0.714
PercievedSecurity3			0.899
PercievedSecurity4			0.786
PercievedSecurity5			0.830
RelativeAdvantage1		0.720	
RelativeAdvantage2		0.558	
RelativeAdvantage3		0.719	
RelativeAdvantage4		0.805	
RelativeAdvantage5		0.780	
Responsiveness1		0.510	
Responsiveness2		0.758	
Responsiveness3		0.839	
Responsiveness4		0.839	
Responsiveness5		0.644	
ServicePortfolio1		0.759	
ServicePortfolio2		0.756	
ServicePortfolio3		0.670	
ServicePortfolio5		0.660	
StructuralAssurance1			0.762
StructuralAssurance2			0.761
StructuralAssurance3			0.766
StructuralAssurance4			0.715
StructuralAssurance5			0.678

Table 4: Latent Variable Correlations

	Adoption Decision	E-Service Quality	E-Trust
Adoption Decision	1.000	0.463	0.407
E-Service Quality	0.463	1.000	0.894
E-Trust	0.407	0.894	1.000

Table 5: Quality Criteria

	R Square	R Square Adjusted
Adoption Decision	0.214	0.208
E-Trust	0.799	0.798

Table 6: f Square

	Adoption Decision	E-Service Quality	E-Trust
Adoption Decision			
E-Service Quality	0.062		3.970
E-Trust	0.000		

Table 7: Construct Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Adoption Decision	0.884	0.888	0.886	0.795
E-Service Quality	0.952	0.955	0.952	0.525
E-Trust	0.955	0.957	0.954	0.601

Table 8: Discriminant Validity Fornell-Larcker Criterion

	Adoption Decision	E-Service Quality	E-Trust
Adoption Decision	0.892		
E-Service Quality	0.463	0.725	
E-Trust	0.407	0.894	0.776

Table 9: Heterotrait-Monotrait Ratio (HTMT)

	Adoption Decision	E-Service Quality	E-Trust
Adoption Decision			
E-Service Quality	0.456		
E-Trust	0.402	0.891	

Table 10: Model_Fit Fit Summary

	Saturated Model	Estimated Model
SRMR	0.063	0.063
d_ULS	2.352	2.352
d_G	1.468	1.468
Chi-Square	1918.800	1918.800
NFI	0.755	0.755

To a great extant outer loading for the items, listed in the table are greater than the value of 0.7 which evidences that all loadings are significant at 0.000. AVEs also exceed mark of 0.5 and all CRs exceed mark of 0.7 thus, it suggests that the scale has a good convergent validity. Alpha values are larger than 0.7, suggesting good reliability. But there is issue with the Discriminant validity result for Latent Variable E-Trust and E-Service Quality which suggests that the strength of correlation between the two latent variables is higher than the expected which is undesired. The values of F-Square also has the issues suggesting that there is no impact of E-Trust on Adoption Decision but for the relation of E-Service Quality and Adoption Decision it suggests moderate impact and similarly for the relation of E-Trust and E-Service Quality it suggests strong impact. For the model fit SRMR is less than 0.08 which is required is less than 0.9 which is not desired.
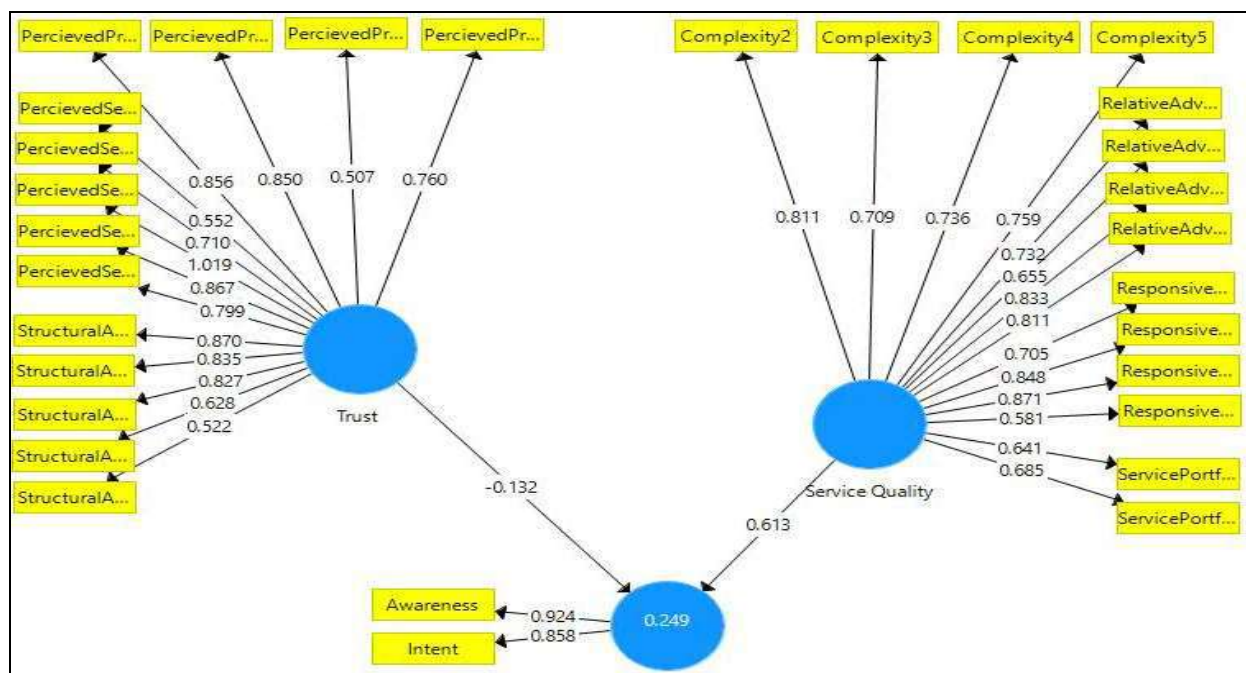

Objective 2: Adoption decision

Table 11: Path Coefficients

	Adoption Decision	E-Service Quality	E-Trust
Adoption Decision			
E-Service Quality	0.613		
E-Trust	-0.132		

Table 12: Outer Loadings

	Adoption Decision	E-Service Quality	E-Trust
Awareness	0.924		
Complexity2		0.811	
Complexity3		0.709	
Complexity4		0.736	
Complexity5		0.759	
Intent	0.858		
PercievedPrivacy2			0.760
PercievedPrivacy3			0.507
PercievedPrivacy4			0.850
PercievedPrivacy5			0.856
PercievedSecurity1			0.552
PercievedSecurity2			0.710
PercievedSecurity3			1.019
PercievedSecurity4			0.867
PercievedSecurity5			0.799
RelativeAdvantage1		0.732	
RelativeAdvantage3		0.655	
RelativeAdvantage4		0.833	
RelativeAdvantage5		0.811	
Responsiveness2		0.705	
Responsiveness3		0.848	
Responsiveness4		0.871	
Responsiveness5		0.581	
ServicePortfolio1		0.641	
ServicePortfolio2		0.685	
StructuralAssurance1			0.870
StructuralAssurance2			0.835
StructuralAssurance3			0.827
StructuralAssurance4			0.628
StructuralAssurance5			0.522

Table 13: Latent Variable Correlations

	Adoption Decision	E-Service Quality	E-Trust
Adoption Decision	1.000	0.496	0.412
E-Service Quality	0.496	1.000	0.888
E-Trust	0.412	0.888	1.000

Table 14: Quality Criteria, R Square

	R Square	R Square Adjusted
Adoption Decision	0.249	0.243

Table 15: f Square

	Adoption Decision	E-Service Quality	E-Trust
Adoption Decision			
E-Service Quality	0.106		
E-Trust	0.005		

Table 16: Construct Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Adoption Decision	0.884	0.888	0.885	0.795
E-Service Quality	0.946	0.949	0.945	0.556
E-Trust	0.955	0.962	0.952	0.595

Table 17: Discriminant Validity Fornell-Larcker Criterion

	Adoption Decision	E-Service Quality	E-Trust
Adoption Decision	0.891		
E-Service Quality	0.496	0.746	
E-Trust	0.412	0.888	0.771

Table 18: Heterotrait-Monotrait Ratio (HTMT)

	Adoption Decision	E-Service Quality	E-Trust
Adoption Decision			
E-Service Quality	0.493		
E-Trust	0.402	0.890	

Table 19: Model_Fit and Fit Summary

	Saturated Model	Estimated Model
SRMR	0.092	0.092
d_ULS	3.920	3.920
d_G	3.317	3.317
Chi-Square	28521.377	28521.377
NFI	-3.122	-3.122

To a great extent outer loading for the items, listed in the table are greater than the value of 0.7 which evidences that all loadings are significant at 0.000. AVEs also exceed mark of 0.5 and all CRs exceed mark of 0.7, thus, it suggests that the scale has a good convergent validity. Alpha values are greater than 0.7, suggesting good reliability. But there is issue with the Discriminant validity result for Latent Variable E-Trust and E-Service Quality which suggests that the strength of correlation between the two latent variables is higher than the expected which is undesired. The values of F-Square here has no issue but there is insignificantly small impact of E-Trust on Adoption Decision but for the relation of E-Service Quality and Adoption Decision it suggests moderately high impact. For the model fit SRMR is not less than 0.08 which is undesired and similarly for NFI which is less than 0.9 which is also not desired.
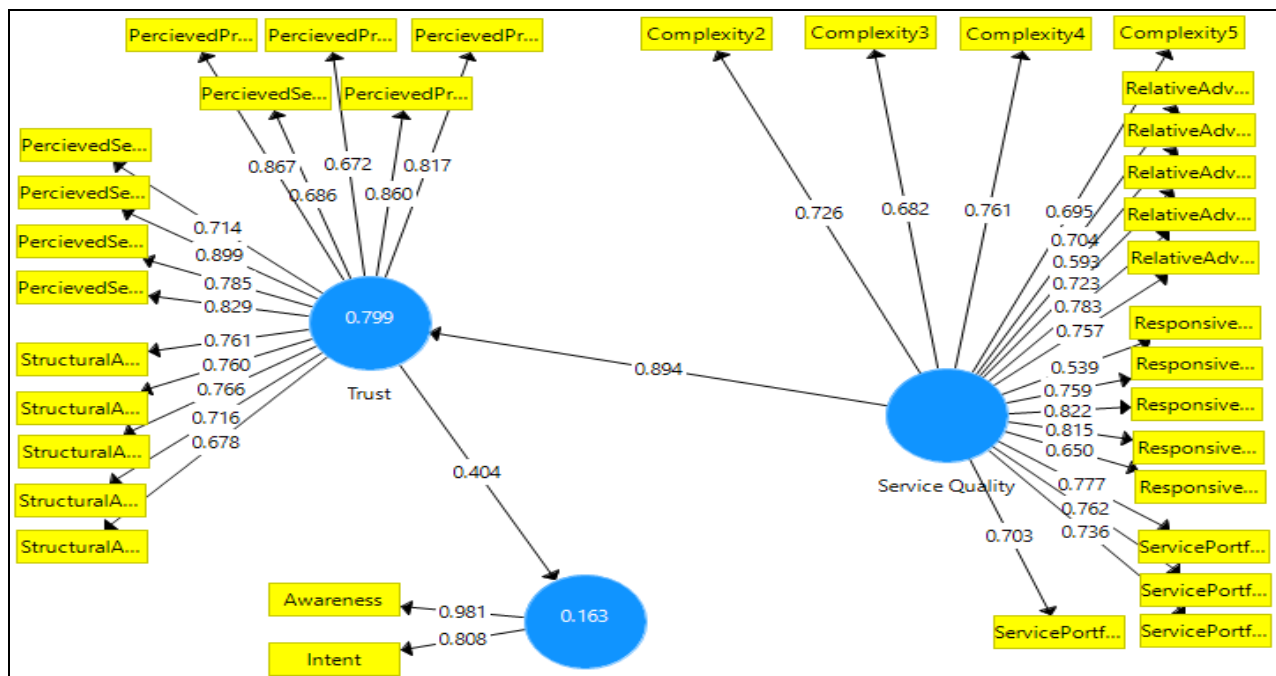
Objective 3: Adoption decision

Table 20: Path Coefficients

	Adoption Decision	E-Service Quality	E-Trust
Adoption Decision			
E-Service Quality			0.894
E-Trust	0.404		

Table 21: Outer Loadings

	Adoption Decision	E-Service Quality	E-Trust
Awareness	0.981		
Complexity2		0.726	
Complexity3		0.682	
Complexity4		0.761	
Complexity5		0.695	
Intent	0.808		
PercievedPrivacy2			0.817
PercievedPrivacy3			0.672
PercievedPrivacy4			0.867
PercievedPrivacy5			0.860
PercievedSecurity1			0.686
PercievedSecurity2			0.714
PercievedSecurity3			0.899
PercievedSecurity4			0.785
PercievedSecurity5			0.829
RelativeAdvantage1		0.704	
RelativeAdvantage2		0.593	
RelativeAdvantage3		0.723	
RelativeAdvantage4		0.783	
RelativeAdvantage5		0.757	
Responsiveness1		0.539	
Responsiveness2		0.759	
Responsiveness3		0.822	
Responsiveness4		0.815	
Responsiveness5		0.650	
ServicePortfolio1		0.777	
ServicePortfolio2		0.762	
ServicePortfolio3		0.736	
ServicePortfolio5		0.703	
StructuralAssurance1			0.761
StructuralAssurance2			0.760
StructuralAssurance3			0.766
StructuralAssurance4			0.716
StructuralAssurance5			0.678

Table 22: Latent Variable Correlations

	Adoption Decision	E-Service Quality	E-Trust
Adoption Decision	1.000	0.455	0.404
E-Service Quality	0.455	1.000	0.894
E-Trust	0.404	0.894	1.000

Table 23: Quality Criteria and R Square

	R Square	R Square Adjusted
Adoption Decision	0.163	0.160
E-Trust	0.799	0.799

Table 24: f Square

	Adoption Decision	E-Service Quality	E-Trust
Adoption Decision			
E-Service Quality			3.987
E-Trust	0.195		

Table 25: Construct Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Adoption Decision	0.884	0.908	0.893	0.807
E-Service Quality	0.952	0.954	0.952	0.525
E-Trust	0.955	0.957	0.954	0.601

Table 26: Discriminant Validity and Fornell-Larcker Criterion

	Adoption Decision	E-Service Quality	E-Trust
Adoption Decision	0.899		
E-Service Quality	0.455	0.725	
E-Trust	0.404	0.894	0.776

Table 27: Heterotrait-Monotrait Ratio (HTMT)

	Adoption Decision	E-Service Quality	E-Trust
Adoption Decision			
E-Service Quality	0.456		
E-Trust	0.402	0.891	

Table 28: Model_Fit and Fit Summary

	Saturated Model	Estimated Model
SRMR	0.061	0.063
d_ULS	2.235	2.370
d_G	1.470	1.475
Chi-Square	1912.814	1917.869
NFI	0.756	0.756

To a great extant outer loading for the items, listed in the table are greater than the value of 0.7 which evidences that all loadings are significant at 0. 0.000. All AVEs exceed 0.5 and all CRs exceed 0.7 thus, it suggests that the scale has a good convergent validity. Alpha values are greater than the value of 0.7, suggesting good reliability. But there is issue with the Discriminant validity result between Latent Variable E-Trust and E-Service Quality which suggests that the strength of correlation between the two latent variables is higher than the expected which is undesired. The values of F-Square here has no issue. There is significantly high impact of E-Trust on Adoption Decision and also for the relation of E-Service Quality and Adoption Decision it suggests significantly high impact. For the model fit SRMR is less than 0.08 which is desired but for NFI it is less than 0.9 which is not desired.

5. Discussion
From the results of this research we have come to know that the model adopted here in this research is relevant as it passed the reliability and validity test thus convergent validity is there but there were issues with the discriminant validity. This suggests there could be a few reasons for this like non serious response from the candidates, lack of understanding on the items asked on the questionnaire or relevance of the candidates picked to participate in the survey. All this makes sense because respondents couldn't make difference in different indicators based on which items were put that is why their correlation for these constructs was very strong. There could possibly be other model related issues also but chances of it looks not much upholding.

6. Practical and managerial implications
Based on the results of one of the objective of this research, 'to investigate the mediating effect of e-Trust in the relationship of E-Service Quality and Adoption Decision', we find that E-Service Quality as antecedent of E-Trust strengthens the relationship of E-Trust with Adoption Decision while based on first objective's results we can see that the strength of relation of E-Service Quality lowers down with Adoption Decision, thus showing moderating

behavior of e-Trust in between them. Thus, conclusion can be made for now that only based on E-Trust customers were not adopting the e-Banking but with the E-Service Quality included it changed and they decided to adopt e-Banking. But on the other hand, E-Service Quality alone was enough to make users adopt e-Baking. So, banks should pay more attention towards improving the E-Service Quality for e-Banking rather than trying to just build the E-Trust alone in context to Indian e-Banking ecosystem.

7. Further scope of study
This study conducted on customer's decision for adoption of e-Banking services in context to India has not achieved all its goals so their lefts a lot scope for the further study. The data was collected over the internet because of covid-19 pandemic, so there is a much scope that respondents didn't understand the items of the questionnaire and filled the form in a hurry. So, for the further study on the topic researcher must choose their respondents with utmost care and should help them with their responses without influencing their responses. Also, those banking customers who are not tech savvy can also be made part of the survey this will provide a more generalized view in the responses. For this survey will be required to be collected on paper so more time will be required to spent on it.

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