Mediating Effect of Trust between usage of Self-Servicing Technology and Actual Satisfaction

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Abstract

Self-Service Technology is an improved technology that enables the customers to make easy payment of electricity bills via various means namely net banking, G-pay, Phonepe, Paytm, and so on. This method of payment increases dependency among users. The content of users remains intact. Self-Service Technology (SST) causes more comfort as it renounces users from paying electricity bills in offline mode. In this research article, the researchers' analyses the mediating effect of trust between actual usage of SST and user Satisfaction of SST through collecting primary data from 300 users in Chennai city. Findings, suggestions are made based on data analysis by using SPSS and AMOS.

Keywords: Actual Usage, ATM, Trust, Self-Service Technology User Satisfaction

1. Introduction

Services are pivotal as they are highly demanded by a large number of people. Customized services are welcomed and become possible due to the rolling out of Self Service Technology. This Self Service Technology increases reliability amongst users. This, directly and indirectly, provides valuable assistance to users at another end. People who use SST spread word of mouth appreciation thereby others who don't adopt them have started using SST due to overwhelming response among the customers. Nowadays, Self Service Technologies have got familiar and most common and in the years to come SST will gradually replace traditional services. Organizations that use SST design customized services that are otherwise impossible once upon a time. This technology satisfies the customers in every aspect and supports users to access SST forever.

1.1 Concept of Service-service Technology

Self-service technologies require customer face-to-face interaction and communication. Customers will be given alert messages and they become aware of payment on time. Therefore, the settlement is made in due course of time without fail. Consequences of default in payment also are updated. SST increases the Trust of its users in terms of redressal of feedback, immediate response, and improved Service Quality. This technology introduces many unique services which are never seen in the olden days.

2. Objectives of Research Study

➢ To identify the determinants of user satisfaction on accessing Self Service Technology (SST).
➢ To analyse the mediating effect of trust between actual usage of self-servicing technology and user satisfaction.

2.1 Statement of the Problem

SST (Self Service Technology) is accessed by most people and it is more convenient than anything else. It has multiple benefits when it is accessed effectively by the users for online payment of electricity bills. Despite several benefits of self-servicing technology, still people do not want to make payments with the assistance of self-servicing technology. There are credential issues like the requisite amount to be paid for electricity consumption will not be paid in the middle of the processing transaction. This happens due to low network bandwidth. Similarly, some people are not technologically savvy and depend on the people processing payment of electricity bill over the counter. Hence there exists lacks of trust among some people towards using SST. Poor internet connection hampers stakeholders from switching over to self-servicing technology.

2.2 Scope and Importance of Research Study

As far as the current research work is concerned, Trust is taken as a mediator, usage of self-service technology is taken as a predictor and user satisfaction is perceived as a criterion. This study helps to understand how far people trust self-servicing technology over the offline mode of payment. Due to convenience and ease of access, people choose self-servicing technology, and payment is immediately done at once. Safety about online payment of electricity bills has been improved by way of internet-

enabled services. Nobody else can hack payment of electricity bills with the help of self-servicing technology. Self-servicing technology is available round the clock and customer satisfaction is improved better by enhancing the software in self-servicing technology. Hence immediate feedback is collected and redressed thereof.

3. Determinants of Self Service Technology (SST)

Kelley (1989) outlines the contribution of SST in the service sector. The main aim of the article thrusts on cost elimination, removal of uncertainties, and frequency of interaction increases the reliability, etc. This technology ensures whether customers get satisfied and it continues to offer services until customers get whole satisfied. Dabholkar&Bagozzi (2002), in their research paper, enunciated usage of SST is going to be more common and people will become technologically sound at a subsequent point of time. This technology saves timing and reduces technical snarls. SST is also used in public sector undertakings, Lodges for checking in and checking out and even automated teller machines come under this category (Klier et al., 2016; Nijssen et al., 2016).

Muhammad Shahid Iqbal et.al (2018) concluded that a significant relationship exists between SSTs service quality, loyalty, and behavioral Intentions which directly and indirectly influence customer satisfaction. The study findings show that there is a presence of partial mediation of technology trust between SSTs service quality and behavioral intention and loyalty. Figure 1 displays the conceptual model framed by the researchers. The authors' have adopted Technology Acceptance Model (David, et.al , 1986) and Declone and McLean (2003) Information System Success model for measuring the user satisfaction on accessing Self Service Technology (SST) among the users with the mediating effect of Trust.
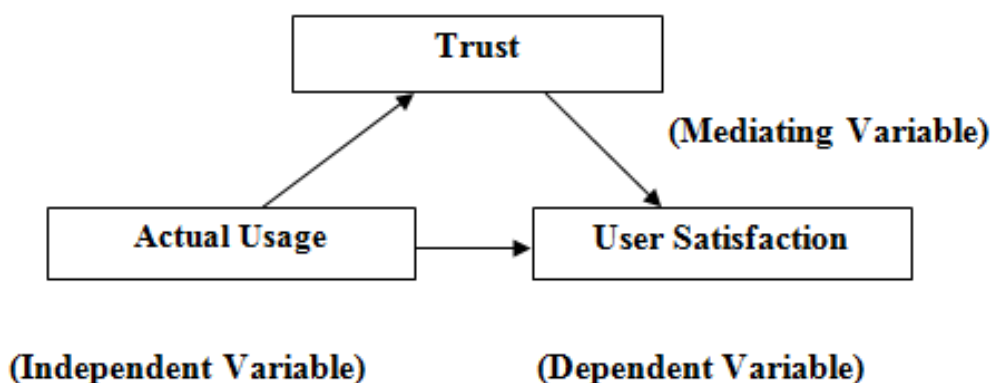

Figure 1: Mediating Effect of Trust between usage of Self-Servicing Technology and Actual Satisfaction

Source: Authors' Model

5. Research Methodology

This research article mainly focuses on how trust as a mediator helps to find the relationship between the Actual Usage of Self-servicing Technology and User's Satisfaction. Research is carried out in Chennai City. The target audience is the user of self-servicing technology for making online payment of electricity bills. Descriptive Analytical Research Design has been used by the researcher for the entirety of the research. The sample population is 300 who is a regular user of SST. The questionnaire is prepared in the google form and sent to the respective mail id of SST users. Mail IDs of SST users are collected by way of DBMS which is maintained by respective branches of the Electricity Department. The sample area is Chennai City which consists of North, East, South, and West Chennai. The convenient Sampling Method is adopted as it is more appropriate than everything else.

5. Data Analysis

SPSS (Statistical Package for Social Sciences) has been adopted to examine the descriptive statistics of the SST users. AMOS 21 has been adopted by the researchers for analysing the relationship between the study variables. Table 1 displays the demographic profile of the SST users. Out of 300 respondents 160 are male and 140 are female respondents. 114 respondents belong to the age group of 26 to 35 years of age, 135 respondents are professionals, and 119 respondents have 3 – 5 years experiences in accessing SST.

Table 1: Demographic Profile of SST Users

Gender	Frequency	Percent
Male	160	53.3
Female	140	46.7
Age		
18 - 26	64	21.3
26 - 35	114	38.0
36 - 45	75	25.0
56 and above	47	15.7
Occupation		
Student	86	28.7
Professionals	138	46.0
Own Business	59	19.7
Employed In Pvt / Public/MNC Company	17	5.7
Education		
Below SSLC	66	22.0
Higher Secondary	79	26.3
Under Graduate	84	28.0
Professional	71	23.7
Experience in accessing SST		
< 3 years	74	24.7
3 - 5 years	119	39.7
6 - 7 Years	85	28.3
Above 8 Years	22	7.3
Total	300	100.0

5.1 Hypothesis Framed for the Research Study

H_1: There is a significant relationship between Actual Usage and User Satisfaction

H_2: There is a significant relationship between Actual Usage and Trust

H_3: There is a significant relationship between Trust and User Satisfaction
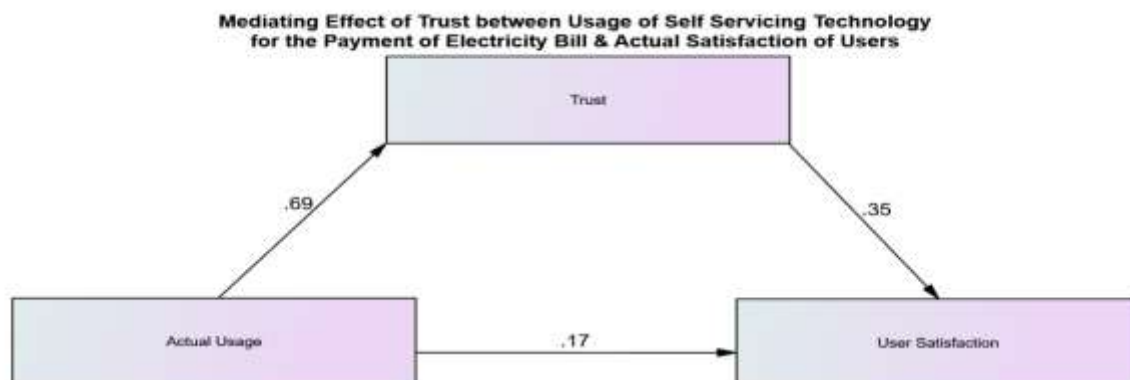
5.2 Testing of Hypothesis

Figure 1: Mediating Effect of Trust between Actual Usage and User Satisfaction of Self Service Technology

Table 2: Mediating Effect of Trust between Actual Usage of Self Servicing Technology and User Satisfaction based on Unstandardized Weights

Independent Variable		Dependent Variable	Estimate	S.E.	C.R.	P value	Label
Trust	<---	Actual Usage	.703	.035	19.908	0.000	H_2 is Accepted
US	<---	Actual Usage	.189	.064	2.971	0.003	H_1 is Accepted
US	<---	Trust	.380	.062	6.103	0.000	H_3 is Accepted

Concerning the mediating effect of trust between actual usage of self-servicing technology and user satisfaction based on standardized weights. From Table 2, it is inferred that the possibility of having a critical ratio is 19.908 and the p value is lesser than 0.001. Hence the hypothesis "There is a significant relationship between the variables Actual Usage and Trust (H_2) is accepted". The regression score for Actual Usage in the prediction of User Satisfaction (US) is significantly different from zero at the 0.001 level (two-tailed). The chance of CR comes to 2.971 which is below .003. Therefore the hypothesis "There is a significant relationship between Actual Usage and User Satisfaction (H_2) is accepted. The regression value for Trust in the prediction of User Satisfaction is significantly different from zero at the 1% extent. The probable value of CR is large like 6.103 which is below 0.001. Hence the hypothesis "There is a significant relationship between Trust and User Satisfaction is accepted (H_3) is accepted.

5.3 Model Fit Assessment

Table 3 displays the model fit assessment of the theoretical framework constructed by the researchers. It is found that the p value is more than 0.05 and it confirms the model fit of the conceptual framework constructed by the researchers and values of GFI, AGFI. CFI and NFI are greater than 0.9 and the value of RMSEA is lesser than 0.08 and it confirms the model is completely fit model (Hair et al., 1998).

Table 3: Model Fit Assessment

Goodness of Fit Statistics	Value
Chi Square Value (CMIN)	94.867
P Value	0.07
Chi Square / Df (CMIN/Df)	3.892
Goodness of Fit Index (GFI)	0.947
Root Mean Square Error of Approximation (RMSEA)	0.06
Adjusted Good of Fit Index (AGFI)	0.957
Comparative Fit Index (CFI)	0.988
Normed Fit Index (NFI)	0.914

6. Findings and Discussion

From the finding of the research study is to found that Out of 300 respondents 160 are male and 140 are female respondents. 114 respondents belong to the age group of 26 to 35 years of age, 135 respondents are professionals, and 119 respondents have 3 – 5 years experiences in accessing SST. From the mediation analysis using structural equation modelling (SEM) it is found that there exists a positive relationship between the study variables. Dabholkar&Bagozzi (2002), in their research paper, enunciated usage of SST is going to be more common and people will become technologically sound at a subsequent point of time. This technology saves timing and reduces technical snarls. SST is also used in public sector undertakings, Lodges for checking in and checking out and even automated teller machines come under this category (Klier et al., 2016; Nijssen et al., 2016). Though there are a lot of benefits of using SST, still there are some pitfalls while the use of SST which are perceived by the users. The Electricity Department has to improve the software then and there after sorting out the feedback of SST users. Similarly, high-speed internet bandwidth should be ensured by department officials to enhance the trust of users. Electricity department has to tie up with other agencies so as to increase the payment options via SST. Even private bill collecting agencies also can be roped in by electricity department to main the status quo amongst users.

7. Conclusion

The present study is of very useful and gains momentum as it has future scope for research. Self-service technology is to be executed even in villages in a phased manner. Therefore, proper awareness should be created among the officials; software should be developed to attract those who don't use SST. In case, if they do not use SST, those users should be given proper training of how to use SST. From organisational point of view, execution of SST is more economical, and increases the credibility of users.

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