A STUDY ON CONSUMER ACCEPTANCE OF SELF-SERVICE TECHNOLOGIES IN THE BANKING SECTOR

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Abstract

The changing scenario of the service sector motivates the customers to use more and more technologies for the betterment and transparency of the process. Now a day's government also motivates banks and other financial institutions to promote Self-Service Technologies for the ease of customers. This e-banking system helps banks and financial institutions to reduce black money and corruption in the market. Now a days a number of bank customers prefer to use a self-service delivery system. This preference is attributed to increased autonomy in executing the transactions. When customers of retail banking avail the services through these Self-Service Technologies (SSTs), they get more benefits in terms of time, cost and energy; the service providers reduce their personnel costs and gain closer access to the customers. The purpose of this study is to assess some of the critical variables that contribute to consumer acceptance of 3 main Self Service Technologies (SSTs) namely ATM, Internet banking and Mobile banking. This study is based on primary data and the area covered in the study is a metro city, State capital and B – Category city.

Keywords: *Self-Service Technology, ATM, Internet Banking, Mobile Banking*

Introduction

The changing landscape of service encounters and the increasing importance of technology in services is reflected in the modification of the *Service Marketing Triangle into the Service Marketing Pyramid.* While the triangle outlined the complexity of services and the interrelationships between three key constituents: *customers, employees and the company,* it was modified into a pyramid where the technology represents the fourth end technology has been implemented successfully in the delivery of many services as an aid to the front-line employee who interacts with the customer (Fisher, 1998). However, encouraging customers to use new technologies in service encounters is generally more challenging than employee use of new technologies. One of the more complicated uses for technology has been as a replacement for the firm's employees in the delivery of services. This use of technology has an extensive appeal to the service provider in that it can standardize service delivery, reduce labour costs and expand the options for delivery. However, it can be a significant drain on resources if not widely accepted by consumers. Thus, it is imperative that we understand how to best design, manage and promote new technologies in order to have the best chance of consumer acceptance. The focus of this research is on technologies that customers independently use without any interaction with, or assistance from, employees. These technologies

have been termed self-service technologies or Self-Service Technologies (SSTs) (Meuter et al., 2000). Examples of Self-Service Technologies(SSTs) are Automatic Teller Machines, bill payment kiosks, internet-based services and phone-based services (both voice and text), automated hotel check-out, automated check-in for flights, automated food ordering systems in restaurants, vending machines, Interactive voice response systems are examples of technology-based service delivery channels. The purpose of this study is to assess some of the critical variables that contribute to consumer acceptance of 3 main Self Service Technologies (SSTs) namely ATM, Internet banking and Mobile banking.

Now a days a number of bank customers prefer to use a self-service delivery system. This preference is attributed to increased autonomy in executing the transactions. When customers of retail banking avail the services through these Self-Service Technologies (SSTs), they get more benefits in terms of time, cost and energy; the service providers reduce their personnel costs and gain closer access to the customer. Thus, bank service automation has become a critical factor in the process of trying to provide superior services for customer satisfaction and to remain competitive in the financial service market. In this regard, customer attitudes are considered to be a critical factor in explaining consumer behaviour through which an individual's strong intentions to perform a certain behaviour are likely to result in its performance.

Against this backdrop, the present study aims at developing an integrated model designed to predict and explain customers' attitudes toward using Self-Service Technologies(SSTs). Customers' decision to accept and readiness to adopt new technology is mainly affected by their attitude towards that particular technology, which is determined by Technology Adoption Model (TAM). The present study investigates various factors which influence customers' intentions to adopt Self-Service Technologies(SSTs) through Technology Acceptance Model (TAM). TAM (Davis 1989) is the most influential model even today to study the measures that affect customers' decisions to accept new technologies. According to this model, Perceived usefulness (PU) and Perceived Ease of Use (PEU) are the measures that influence customers' acceptance of new technology. Previous studies have identified various factors to predict the adoption of behaviour of consumer-related technology. Like Curran et al. (2003) identified attitude as the factor which determines the use of Self-Service Technologies (SSTs); Lin and Hsieh (2006) examined the influence of TR on customers' perceptions and adoption of Self-Service Technologies(SSTs) and also explored the relationships among TR, service quality, satisfaction and BI. Lin et al. (2007) integrated TAM and TR together and framed a model namely TRAM to understand user behaviours. This study goes a step ahead to analyse the Behavioural Intentions of SST users and to explore the relationships among TR, TAM, attitude, overall service quality, attitudinal and behavioural loyalty and behavioural intentions.

Self-Service Technologies (SSTs)

The proliferation of technology used in service delivery has complicated the service encounter that was traditionally being dominated by interpersonal interactions. Consumers are now faced with a myriad of technology-based service delivery options where they do not directly interact with service firm employees (Curran et al., 2003). These new technologies have been labelled as self-service technologies (Self-Service Technologies (SSTs)).

Automated Teller Machine (ATM)

Automated Teller Machines (ATM) is a cash rending teller machine. This helps a bank customer to withdraw money from his account without having to go to the bank. ATM is a user-friendly, computer-driven system, which operates 24 hours a day, 7 days a week. A totally menu-driven system, it displays easy-to-follow, step-by-step instructions for the customers. It can be accessed using an ATM card that gives entry into the ATM room. The Personal Identification Number (PIN), exclusive to each customer, has to be keyed in for carrying out desired transactions. Many banks have opened off-site ATMs at airports, railway stations, petrol pumps, market centres, universities etc. The most common services being provided by ATMs are Cash dispensing, Cash deposits Generating statements of account, Account balance enquiry etc.

The addition of ATM features is listed below as a timeline

1988-1994: Deposit of Cash & Withdrawal of Cash

1995- 1999: Mini statement & Balance enquiry

2000-01: Coupon dispensing

2002-04: Ticket booking- railway and airlines, Requests from customers e.g., Cheque book Account transfer, Touch screen facility

2004-06: Bill payment & Mobile recharge

Future: Cheque deposit with scanning, small function ATMs, ATMs everywhere- typically many per street

Internet Banking

Banks know that the Internet opens up new horizons for them and moves them from local to global frontiers. Internet Banking refers to systems that enable bank customers to get access to their accounts and general information on bank products and services through the use of the bank's website, without the intervention or inconvenience of sending letters, faxes, original signatures and telephone confirmation. It is a type of service through which bank customers can request information and carry out most retail banking services such as balance reporting, inter-account transfers, bill-payment, etc., via telecommunication network without leaving their home/organization. Internet is the cheapest delivery channel for banking products as it allows the entity to reduce their branch networks and downsize the number of service staff. The navigability of the website is a very important part of IB because it can become one of the biggest competitive advantages of a financial entity. Bankers consider 'minimizes inconvenience', 'minimizes the cost of transactions' and 'time-saving' to be important benefits and 'chances of government access', 'chances of fraud' and 'lack of information security' to be vital risks associated with electronic banking. Due to the increase in technology usage the banking sector's performance increases day by day. IB is becoming an indispensable part of modern-day banking services.

A study on the Internet users, conducted by the Internet and Mobile Association of India (IAMAI), found that about 23% of the online users prefer IB as the banking channel in India, second to ATM which is preferred by 53%. Out of the 6, 365 Internet users sampled, 35% use online banking channels in India. This shows that a significant number of online users do not use IB, and hence there is a need to understand the reasons for not using it.

Mobile Banking

Mobile banking is the subset and the newest emerging channel of electronic banking. Tiwari and Buse (2007) referred to mobile banking as the service offered by the banks in providing and making available banking and other financial services to their customers through mobile phones and other similar devices. Services offered include conducting banking and stock market-related transactions, accessing their accounts and using them and also having ready access to a source of information tailored for them. A broader and more general definition of mobile banking is given by Pousttchi and Schurig (2004, pp 1).They defined mobile banking as "That type of execution of financial services in the course of which - within an electronic procedure - the customer uses mobile communication techniques in conjunction with mobile devices."

Due to newer technologies such as GPRS, Enhanced Data for Global Evolution (EDGE) and 3G data transmission services and more and more web-friendly features incorporated in mobile handsets, mobile banking has become lightning-fast and very user-friendly (Riivari, 2005). The challenges which banks face regarding mobile banking are the issues regarding security of mobile banking transactions and how to uniformly provide its mobile banking services over different types of mobile handsets.

Mobile Banking in India

In India, there exists a huge untapped market for extending banking services through mobile phones by commercial banks. The number of wireless customers increased from 506.04 million in November-09 to 525.15 million at the end of December-09 at a monthly growth rate of 3.78%. These figures alone show the vast untapped opportunities for the banks to offer their services through mobile devices. Mobile banking services may also be used by banks to offer their services in rural India due to their higher penetration as compared to internet banking and even the traditional landline phones (Dahotre, 2009). The comfort level of a large number of users in using mobile phones may also lead to their faster adoption of mobile banking services. However, in order to woo customers, the banks have to overcome challenges like the high cost of GPRS-based mobile banking services to the end-user, lack of general mobile handset support and security issues concerning mobile banking transactions (Sapkale and Rodrigues, 2010).

Currently, three forms of mobile banking services are being offered to Indian customers. The first is through the short messaging services, the second is through client application software provided by the banks to the customers and the third is by accessing the internet through mobile phones. ICICI Bank, which offers mobile banking services through the short messaging services, i-mobile client software and operator WAP (Wireless Application Protocol) sites, remains the leading service provider in mobile banking with around 18 million customers followed by HDFC Bank with around 9 million customers, offering mobile banking services through the short messaging service only. State Bank of India(SBI), the

leading public sector bank in India comes at a distant third with about 6 million mobile banking users using SBI Freedom, a java-based client application software.

Conceptual Background

Technology Acceptance Model

The Technology Acceptance Model (TAM) introduced by Davis (1986) was especially meant to explain computer usage behaviour. TAM is well established as a robust, powerful and parsimonious model for predicting acceptance in the information technology domain (Venkatesh and Davis, 2000; Davis, 1982; Davis et al., 1989). It was developed to explain and predict particularly IT usage behaviour.

TAM differs from other multi-attribute models such as Theory of Reasoned Action and Theory of Planned Behavior (TPB) in the sense that it is a more context-specific theory, which attempts to understand the adoption behaviour from information technology (IT) perspective and suggests specific components of attitudes related to IT usage. Indeed, it has been found that TAM's ability to explain attitude towards using an information system is better than any other multi-attribute model (e.g., TRA and TPB) (Mathies on et al., 2001). In fact, TAM assumes that beliefs about ease of use and usefulness serve as the basis for attitude towards using a specific system, which in turn determines the intention to use a particular system that generates the actual usage behaviour.

Thus, to analyse the adoption of Self-Service Technologies (SSTs), the technology acceptance model (Davis, 1989) is used to explain individual adoption using two constructs, Perceived ease of use and Perceived usefulness. Both constructs have been used to study many cases of the adoption of innovation (Lucas et al., 2007). Perceived usefulness in TAM is defined as "the degree to which a person believes that using a particular system would embrace his or her job performance" (Davis, 1989). The importance of perceived usefulness as a determinant of user behaviour has been indicated by several diverse lines of research. The impact of perceived usefulness on system utilisation is significant (Robey, 1979) whereas perceived ease of use refers to "the degree to which a person believes that using a particular system would be free of effort." It is claimed that an application which is perceived to be easier to use than another is more likely to be accepted by users.

TAM provides a practical utility for service developers. As ease of use and usefulness are the factors over which a system designer has some degree of control, TAM differs from other adoption theories by providing directions for service development efforts (Taylor and Todd, 1995). Many studies have augmented TAM by either integrating the antecedents of belief components or including additional components to the model (Eriksson et al., 2005; Guriting and Ndubisi, 2006; Pikkarainen et al., 2004; Wang et al., 2003 etc.).
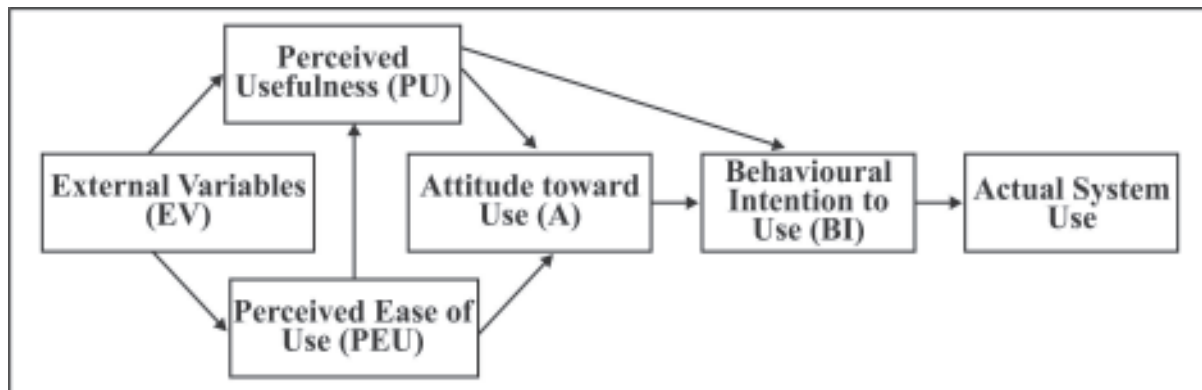
Figure 1: Technology Acceptance Model

Hence, extant literature reveals that a large number of studies have examined customers' satisfaction with Self-Service Technologies (SSTs). Moutinho and Brownlie (1989) evaluated the banking services, ATM services and customers' loyalty and identified the importance of ATMs in conditioning perceptions of the services offered by the bank. Chan (1993) explored the attitude and behaviour of Hong Kong college students towards ATMs and credit cards. Curan and Meuter (2005) examined the factors that influence customers' attitudes toward the adoption of three Self Service Technologies (SSTs), viz., ATM, phone and online banking. Chen et al. (2008) produced an integrated model to synthesize the essence of TR, TAM, and TBP to explain customers continued use of SST. Finally, Elliot and Meng (2009) explored Chinese customers' attitude and behaviour towards the use of new technology only with the help of TRI and were not able to measure the likelihood of customers using new technology.

Literature Review

Changes in service delivery are supposedly made to benefit the customer, but they often require increased work or involvement on the part of the customer. These and other factors may preclude the customer from trying or using the technology. Service providers must be aware that when changes in service are instituted, a potentially significant portion of the customer base that the change is alleged to benefit, will opt not to participate in the new service format (Langeard et al., 1981). Unlike the service provider, the service customer may have no real compelling reasons to change to a technology-delivered service. In fact, the very existence of the technology-based service delivery option may be a cause of anxiety and stress for some customers who are not comfortable with the technologies and their use (Mick and Fournier, 1998). Some consumers may see the introduction of an SST to the service encounter as something of a threat. They may also be unsure of how problems in dealing with the technology will be resolved (Meuter and Bitner, 1998). Furthermore, some consumers view the service encounter as a social experience and prefer to deal with people (Zeithaml and Gilly, 1987), while others do not see a significant benefit to the technology and will continue to do things as they have always done them.

Certain customers will consider the costs of learning the new technology, and switching to using it, to be too great to be worthwhile (Gatignon and Robertson, 1991). On the other hand, there are also several perceived benefits that may attract customers to a technology-based option of service delivery. Some customers may find the technology-based options attractive for various reasons, such as, that they are easy to use or more convenient than the alternatives (Meuter et al., 2000). Other factors include time and cost savings, greater control over the service delivery, reduced waiting time, a higher perceived level of customization (Meuter and Bitner, 1998), the convenience of location (Kauffman and Lally, 1994) and fun or enjoyment from using the technology (Dabholkar, 1994, 1996). One goal of many service providers implementing a technology-based customer interface is to attract a large enough group of customers to justify the costs of implementation. In order to accomplish this, the service provider must have a full understanding of the important influences that may affect a customer's decision to use the available technology. The technologies used must benefit the customer and the strategies used to attract customers to use these technologies must address the proper concerns and perceived benefits in the customer's minds. A variety of researchers have explored these areas and this work is intended to extend and expand this research area. Hebert and Benbasat (1994) combined concepts from the theory of reasoned action (Fishbein and Ajzen, 1975) and diffusion of innovation (Rogers, 1995) to develop a model for the adoption of information technology and found support for a relationship between attitude and behavioural intention. The technology acceptance model (TAM) (Adams et al., 1992; Davis, 1989; Davis et al., 1989) extends the attitude toward behaviour – behavioural intention relationship, established in the theory of reasoned action, to the adoption of computers in the workplace.

These studies developed the idea that ease of use and perceived usefulness of the machinery were critical constructs influencing an individual's attitude toward using the machine. What was not considered in the TAM studies were the situational variables aside from the machinery, such as perceived risk or need for interaction, which could have also been found salient. This work was important as it revealed that attitudes toward technology are important in influencing behavioural intentions. Although research on the implementation and adoption of Self-Service Technologies (SSTs) is relatively new, some important work has been done on this topic. For example, a critical incident study described the key factors that lead to satisfaction or dissatisfaction related to customer use of Self-Service Technologies (SSTs) and found that usefulness, ease of use, availability, and convenience play a significant role in customer satisfaction with Self-Service Technologies (SSTs) (Meuter et al., 2000). In other research, Parasuraman (2000) explored contributors and inhibitors of "technology readiness", Dabholkar (1994, 1996) identified control, performance, ease of use, need for human interaction, reliability, and speed as critical variables in the usage of Self-Service Technologies (SSTs), and Meuter and Bitner (1998) found support, accuracy, performance, and recovery from error as important variables in the usage of technologies under certain circumstances. The complexity of these factors precluded the inclusion of all of them in this study, but their relevance to the topic of technology adoption is undeniable.

Literature on banking technology has developed particularly in the late 1980s and the early 1990s, with the emergence of new technologies that simplified remote access to banks. Innovations such as telephone banking, ATMs, the growing use of debit cards, internet banking and mobile banking have aroused the interest of both scholars and practitioners. This literature focused particularly on three areas: new retail bank services, banks and bankers' perception of new banking technologies and the clients' perception of adopting them (Akinci et al., 2004).

Mobile Banking

Mobile banking channels are the newest form of service offerings by commercial banks to their customers. Previous research done in the context of mobile banking has mainly focused on the consumer perceptions towards mobile banking and the adoption possibilities of this new technology by the consumers. Suoranta and Mattila (2004) studied the diffusion pattern and adoption process of customers of a Finnish bank. Most of the studies conducted in the field of adoption of new technology assume automatically that all innovations are improvements over the existing products, services and processes. The study by Laukkanen, Sinkkonen, Kivijarvi and Laukkanen (2007) takes a slightly different view. The authors investigate the resistance to the innovation of mature consumers and how they differ from that of younger consumers in the context of mobile banking. Another recent study by Yang (2009) also investigated the factors relating to the adoption of and resistance toward mobile banking technology in university students in Taiwan. The study found those factors such as speed of transactions and reduction in the transaction fees favoured the adoption process of mobile banking whereas factors such as system configuration safety and system base fees led to the resistance against adopting mobile banking services.

A study in Finland by Laukkanen (2007) focused on how consumer preference differs between the different characteristics of the internet and mobile banking channels. The study also showed that in the case of internet users the screen size, location and response time are the most important channel attributes whereas in the case of mobile phone users location followed by the size of the screen and the service response time are the most important channel attributes. Thus, the study showed that the needs of both user groups are different.

A study by Laukkanen and Pasanen (2008) examined how the innovators and early adopters of mobile banking usage differ from customers of online banking services. Mallat, Rossi and Tqunainen (2004) discuss in their paper the new trends in mobile financial applications and how these services can be delivered through the mobile networks to the end-user. The author concludes by saying that mobile devices present the service providers with greater opportunities for offering more personalized services to their customers.

The Technology Acceptance Model (TAM) (Davis, 1989) has been used for past research in mobile banking. The works by Wang, Lin and Luarn (2006) and Lee, Lee and Kim (2007) have extended the original TAM model and have incorporated factors like perceived risk, trust, perceived credibility, self-efficacy and perceived financial resources to better explain the intentions of the consumers to use mobile banking services.

Through a review of the existing literature on mobile banking, it is seen that there exists a need for a study to be conducted on the perception of mobile banking usage in the Indian context. Most of the studies have focused on the developed nations and it will be interesting to see whether the same difficulties are being faced by the customers of such a culturally diverse country such as India.

Internet Banking

The potential of online or Internet Banking was well recognised a decade ago (Booz & Allen Hamilton,

1997; Deloitte Consulting, 1998) when key institutions began to align the product delivery mix with new technology and explore and exploit new approaches to their business.

As such, many banking executives perceived technology as the key solution for controlling costs (Dannenberg & Kellner, 1998; Giannakoudi, 1999; Kalakota & Whinston, 1997). Internet Banking is defined as "the delivery of banking services through the open-access computer network (the Internet) directly to customers' home or private address" (Lau, 1997) and offers a wider range of potential benefits to financial institutions (Howcroft & Durkin, 2000; KPMG, 1998; Mols, 1998) due to more accessible and user-friendly use of the technology, as the Internet does not restrict banks to physical locations or historical-geographical areas. There is strong consensus among scholars about the increasing importance of the internet in today's competitive and increasingly global banking environment (e.g., Bauer and Colgan, 2001; Hughes, 2001; Li, 2001; Mols, 1999; Thornton and White, 2001, 2000).

As such, many customer services can be delivered online at reduced cost and customised or personalised, using principles of information and knowledge management resulting in enhanced efficiency and effectiveness (Humphreys, 2000). Several research projects have focused on the factors that impact the adoption of information technology or the Internet (Chan & Lu, 2004; Farhoom and, Tuunainen, & Yee, 2000; Lichtenstein & Williamson, 2006; Ndubisi & Sinti, 2006; Sachan & Ali, 2006; Walker & Johnson, 2005; Wan, Luk, & Chow, 2005) Factors affecting consumer acceptance and adoption of internet banking (IB) have been at the centre of academic interest for some time (e.g. Sathye, 1999; Howcroft, Hamilton and Hewer, 2002; Rotchanakitumnuai and Speece, 2003). As the adoption rate of the internet is continuously escalating and as increasingly more people use the internet for their banking actions, it has become increasingly important to pay attention to examining the behaviour of more experienced customers gaining expertise with IB. But there is limited empirical work which captures the nature and essence of Internet adoption in the banking sector in India, nor analyse of success factors to help form a strategic agenda.

ATMs

After the introduction of ATMs, many researchers tackled the problem of customer resistance to self-service technologies (Murdock et al. 1983; Stevens et al., 1986, 1989; Zeithaml et al., 1987). These studies lead to the proposition that research questions may need to be inclined beyond the prompt horizon of demographic and psychographic profiles, and investigate how adopters and non-adopters view these novelties. Leblanc (1990) analyzed the points of view of users and non-users of service automation; he was able to conclude that the main intention behind usage was convenience. At the same time, reliability and friendliness are also attributed to consider when evaluating technology-based inferences. From the banking institutions' point of view, automated self-service users are no more looked at as customers only, but rather employees as they are more involved in the service (Honebein & Cammarano, 2005). Another perception of automation in the banking service is its competitive advantage and its use as a weapon of cost-effectiveness as presented by Davies et al. (1996). In the same context, (Hernando & Nieto, 2007) inferred that bank could cut costs pertaining to the preservation of bank branches and employee remunerations when adopting self-service technologies. The two major factors affecting self-service selection are convenience and ease of transaction, which indicated that customers were mostly interested in "How the service is delivered" (McKennie, 1992).

Objective of the Study

The purpose of this study is to assess the relative importance of TAM with respect to determining customers' intentions to use Self-Service Technologies (SSTs) and investigate various factors, which influence customers' attitudes to adopt self-service technologies and develop an integrated model to test these relationships.

Internet banking customers gain more benefits than traditional banking customers as they can access 24-hours services in everywhere. It is, however, revealed that Internet banking services have been underused by potential customers in spite of their availability. This demands the need for research to identify the key factors that determine success and move the intention of Internet banking users toward their actual behaviour. To find out the antecedents to the behavioural intentions of Indian customers using Mobile banking and to determine the nature and impact of these antecedents' relationship with behavioural intentions.

A lot of research has been done on each of these Self-Service Technologies (SSTs) individually or any two Self-Service Technologies (SSTs) together but not much work has been done on all three of the Self-Service Technologies (SSTs) together. So, the purpose of this study is to provide a holistic approach to the research to identify factors the factors that influence consumer attitudes toward, and adoption of, Self-Service Technologies focusing on Lucknow city.

Customers availing of banking services through Self-Service Technologies (SSTs) get more benefits in terms of time, cost and energy. Despite these benefits, the customer trial, adoption and repeat usage of Self-Service Technologies (SSTs) vary among banking customers. The utilization level varies due to various factors. The objective of this research is to identify the priority for the different SST channels in a retail banking environment.

Proposed Model:

The proposed model for my study is as follows which will be tested in due of this research
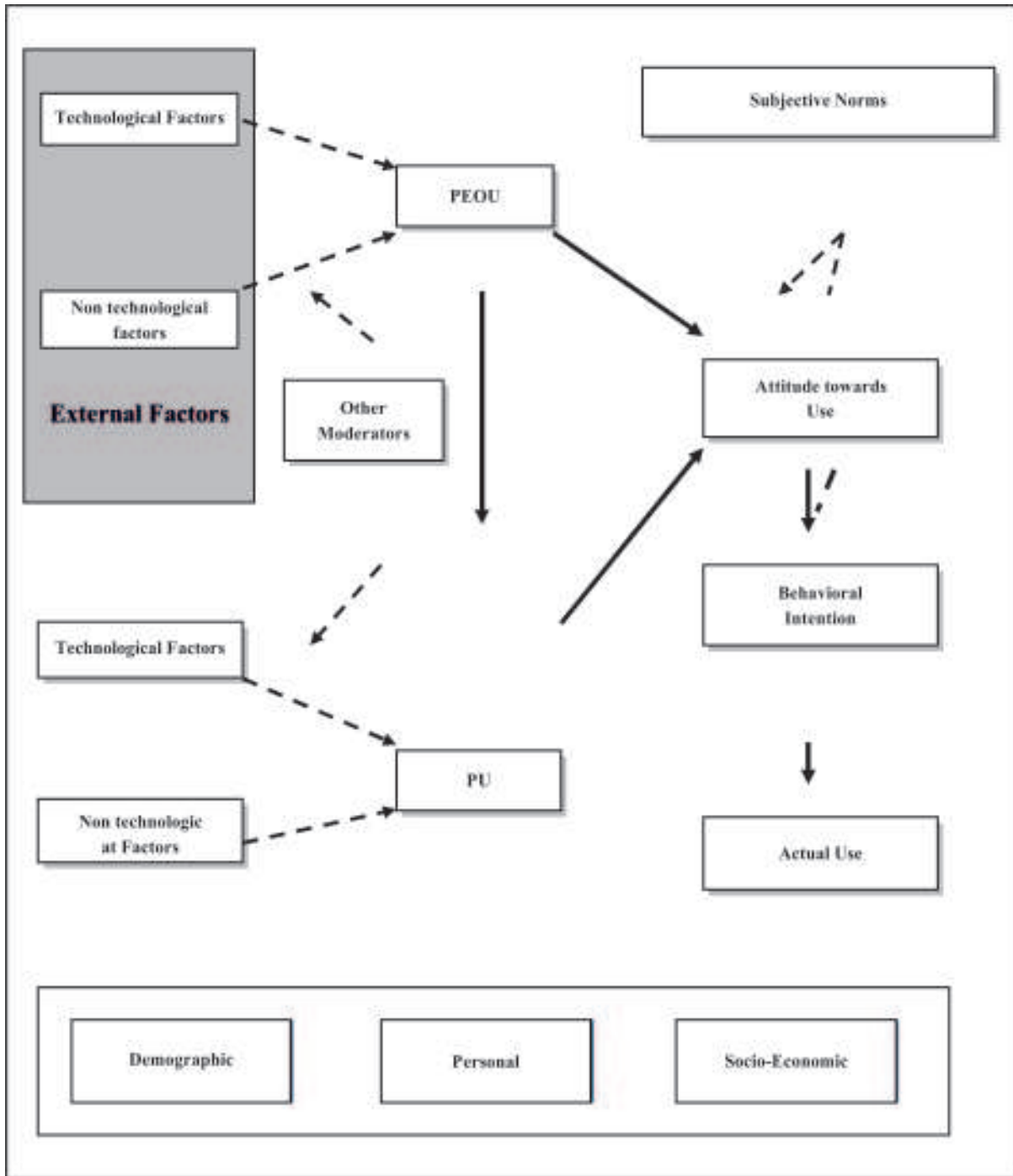
Figure 2: Proposed model

To be established ············▶

Established ⟶

Design/ Methodology

The proposed research hypotheses that will be tested are as follows:

H1: Does consumer attitude varies significantly across males / females towards Self Service Technology

H2: Does consumer behaviour varies across demographic variables like income, occupation, qualification, location etc. towards Self Service Technology

H3: Do people prefer ATM services or Internet Banking or Mobile Banking more

The questionnaire was sent to 300 SST users of the bank who will preferably be the premium customers using all the three Self-Service Technologies (SSTs) namely ATM, Internet banking and Mobile Banking. Data will be collected both from primary and secondary sources. The research will be descriptive and exploratory. The researcher has taken 300 respondents for this research. Initially, a personal interview of 100 was taken in the metro city (Delhi) so as to ascertain the attributes people feel are important for the adoption and rejection of service technology. Then a questionnaire was distributed in state capita (Lucknow) and 100 respondents were sent their responses. In the final stage, researcher collected data from B Category cities (Allahabad, Faizabad, Barabanki, Kanpur). The questionnaire contains items regarding perceived usefulness, perceived ease of use, attitudinal and behavioural loyalty and items pertaining to attitude towards Self-Service Technologies (SSTs).

**Figure 3: Research Methodology**
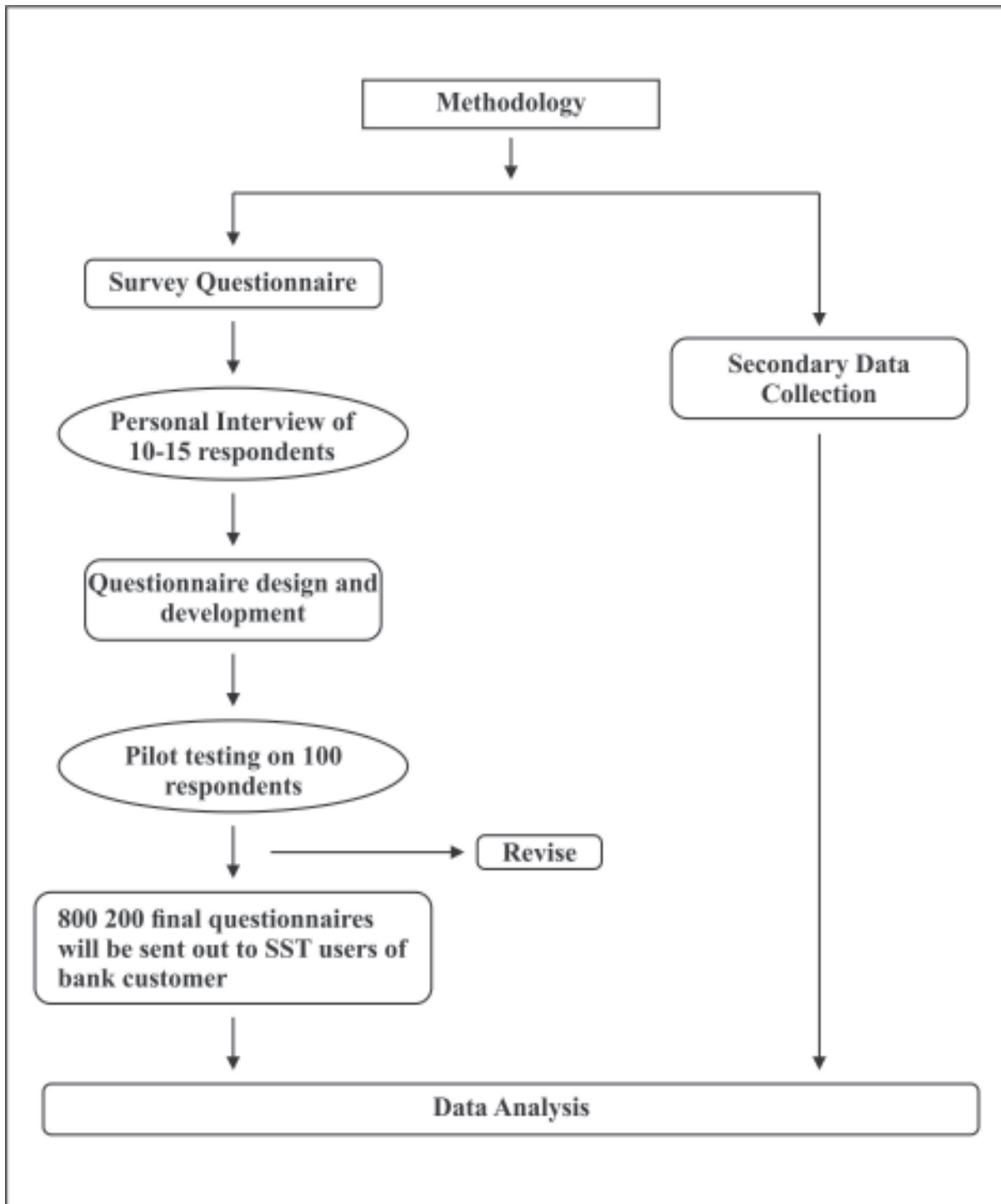
The Likert scale will be used to make the data quantitative in nature so that it could be analysed using statistical software such as SPSS. The main methods with which the data will be analysed will include analysis of variance or ANOVA, regression, correlation, T-test, simple statistical independent test and the chi-square test. Frequency tables will also be constructed to demonstrate a breakdown of customers according to their responses.

Result:

After details study the research has reached certain conclusions. These conclusions are given below in tabular as well as chart form.
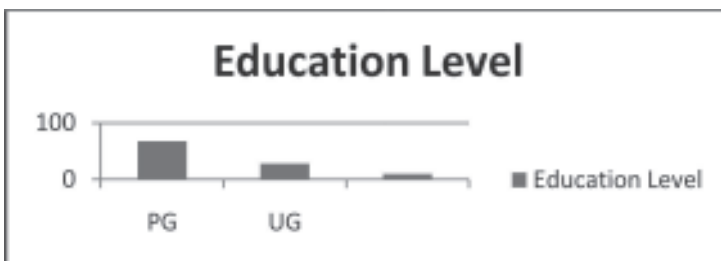
1.   65% of males are feeling more comfortable with self-service technology.
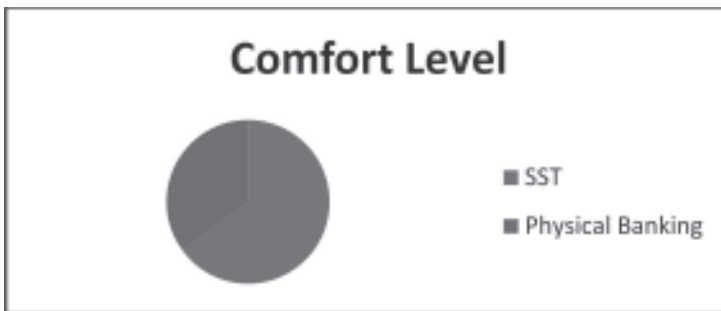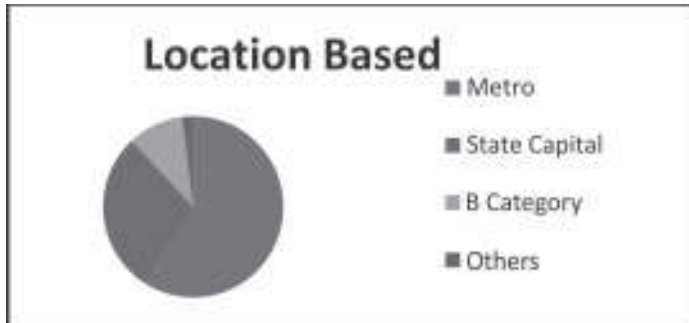

2.   67% of higher income group people are feeling more comfortable with self-service technology.

3.   78% of higher education people are more comfortable with SST.

4. 69% of people from metros and state capital are more comfortable with SST.

5. People prefer ATMs more than Internet Banking and Mobile Banking.
   a. 62% are feeling comfortable with ATM transactions and 23% are comfortable on Internet banking, rest are using mobile banking.

Limitations:

First of all, this study is confined to few city of India (Metro city -1, state capital -1B Category city – 3) only. Secondly although three different technologies were used, they were all based in the banking industry. This limits the generalizability of our findings to other industries. Additional studies using multiple technologies across a variety of industries should be pursued to provide additional support for our findings.

Conclusion:

In the fast-changing world where new technologies are continuously being introduced their acceptance by the customers is an important question and at the same time, the current technologies have to be updated as per customer requirements. So, this study will help to know the new technology penetration and acceptance by the customers. Owing to the growth of Self-Service Technologies (SSTs) in the banking sector, it is essential for researchers to understand customer usage and perceptions of Self-Service Technologies (SSTs).

Technology is dramatically and profoundly changing the nature of services, which is resulting in the tremendous potential for new service offerings. It is also changing how services are delivered and enabling both customers and employees to get and provide better, more efficient and more customized services. It is also based on government policies and their inclination towards customers. It facilitates the global reach of services that historically were tied to their home locations. These changes have significant implications for managing service operations and predicting and managing customer behaviour.

Encouraging customers to use new technologies in service encounters is generally very challenging. But after this demonetization researcher has identified that people are more attracted to self-service technologies like Internet banking and mobile banking. In this context, the present study provides a real picture of customers' behavioural intentions toward self-service technologies.

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