Chapter 7

Summary, Conclusion and Policy Implication
Chapter 7

Summary, Conclusion and Policy Implication

Consumer Behavior is the base for business expansion because of the stiff competition prevalent in the banking industry. With the advent of new banks in 1995 “the concept of consumer behavior” has become an important issue in banks. The survival of banking business is dependent on consumer behavior. Money is a widely accepted medium of exchange, a store of value and a unit of account.

Marketing concept starts with the consumer needs and ends in consumer behavior in meeting these needs. Every action of a person is based on needs. The real problem is to learn what a customer takes into consideration when he chooses the products and services of a particular brand. Such a study is concerned with consumer behavior. Thus, identifying customer needs is a prerequisite for successful behavior. If a bank product does not fill a need or is marketed to satisfy a need that customers do not feel, the products and services will not be marketed successfully.

The Electronic Money services have become very important in modern economic era. Without E-money life for urban consumer becomes miserable as it is economical in terms of both time and money. Usages of E-money are almost inevitable in urban areas. The usages of E-money facilities are increasing the efficiency of both different forms of services such as banking, telecommunication and other forms of commercial
transactions. It is cost effective both for service providers and the consumers. In the view of above aspects, following objectives are framed for the present study.

**Objectives of the Study:** - All human acts are based on some objectives. The present study is mainly aimed at examining the impact electronic money services on consumer behavior and role of these facilities in their financial problems and satisfying their needs. Keeping this in view the study mainly focused on the following objectives:-

1- To analyze socioeconomic and psychological profile of different strata of consumers taken in current study.

2- To study the expectation level of electronic money users of the area taken in the study.

3- To analyze the impact of customers motivation and satisfaction on Electronic money vis-à-vis impact of electronic money on customers.

4- To know the positive and negative impacts of random technological changes on customers.

5- To compare the consumer awareness, confidentiality of account and financial transactions, and E-money users in Bundelkhand regions and KAVAL regions.

Seeing the importance of objectives, following hypothesis were framed and tested.

**Hypothesis of the Study:** - The study is carried out mainly to prove/disprove the following hypothesis:-
(A)-Majority of consumers are not using the services of electronic money due to lack of sufficient awareness and knowledge.

(B)- There is no significant association between sex, age, education, occupation, income and E-money users.

(C)-Fear of loosing confidentiality of their accounts and financial transaction stops consumer from using electronic facility.

Chapter 2 is summarized as research design and selection of banks in Bundelkhand region in order to analyze the consumer behavior from bank’s point of view.

**Research Design:** - The present study is descriptive type and the nature of study is qualitative as well as quantitative. The sample information’s were collected from Bundelkhand region and KAVAL region of U.P. KAVAL region stands for Kanpur, Allahabad, Varansi, Agra and Lucknow districts of Uttar Pradesh.

**A. Sample Design:** - This study is based on the following procedures-

1. **Universe:** - All the literate population has considered as the consumer of Electronic Money users as universe in Bundelkhand region, and for comparison, the total literate population as consumers of KAVAL region have selected as universe.

2. **Selection of Sampling Unit:** - In this study, the sampling survey was conducted in the Bundelkhand region of Uttar Pradesh and KAVAL region of Uttar Pradesh for the purpose of comparison. There are seven districts viz. Jhansi, Banda, Jalaun, Hamirpur, Lalitpur, Chitrakut and Mahoba, which comes under the Bundelkhand region and five districts i.e. Kanpur, Allahabad,
Varanasi, Agra, and Lucknow, which comes under the KAVAL region.

3. **Sample Size**: - The overall sample size for the study is over 120 consumers in Bundelkhand region and 120 consumers in KAVAL region. In Bundelkhand region the sample size is 0.25% of the literate population while in KAVAL region 0.10% of the literate population.

4. **Sampling Procedure**: - Non probability sampling methods has been used in this study. Purposive sampling has been used to select the regions while Quota sampling has been used to select the size of sample in the specified regions to collect the primary data.

**B. Selection of Banks in Bundelkhand Region**: - In order to know the consumer behavior from the service provider's point of view, two large public sector banks and two large private sector banks have been considered in the study. State bank of India (SBI) and Punjab National Bank (PNB) are taken into consideration as public sector banks while Industrial Credit and Investment Corporation of India (ICICI) and Housing Development Finance Corporation (HDFC) are taken into consideration as private sector banks in Bundelkhand region. These banks have been chosen because they have a good market share and adopted technology.

**Justification of Present Study**

Chapter 3 discusses 'Indian Consumer and its Behavior'. As a consumer, we will be benefited if we would have greater insight into consumer behavior. The field of consumer behavior holds great interest for us as
consumers, as marketers, and as scholars of human behavior. The study of consumer behavior enables us to become a wiser consumer.

The consumption pattern and the behavior of the consumer have been changing gradually. Since the last two decades we have seen many changes occurring in the attitude, perception, motivation, spending habits, purchase, and post purchase behavior of the consumer.

New innovative marketing techniques, branding the product, suited the Indian style. The Indian consumer is very price conscious, and to suit the consumer changes in the products and services. Changes have been taken place in the Indian consumer due to innovation of new products and services and the marketing mix in liberalization. The behavior of today’s customers is changed due to the economic liberalization and economic crises.

The marketers have adopted a new strategy. They have modified the old strategies, broadened their visions and are aware how they have to provide services. Adjust themselves to the customer and not the customer to them. The marketers are not satisfied with just satisfaction. They are going beyond the expectation of the customer and are delighting the customer and even to make them ecstatic with the product and services offered.

This is the age of modern marketing and the age of taking risks. This is the age to establish the identity through the use of marketing mix, providing services, giving that little extra to the customer that created the required differentiation between one product and the other. This is the age of positioning and the age of providing service. This is age of relationship marketing and the age of studying the further expected changes in the
behavior of the consumer. Communicating with the customer is the core of good customer service. “Coming together is the beginning, keeping together is progress and working together is success.”

In the age of information technology the consumer who can not be seen or meet are the Cyber consumer. The computers are being put to wide use. They are being used for business and domestic purposes, for government work, for buying and selling, for recording and retrieving information, for electronic communication with the greatest of ease, and they are used all over the world.

E-Business Marketing provides information through internet and online services for buying and selling products and exchange of information. It cuts service cost for the marketing and improves the quality of goods and services, and increases the speed of delivery. “E-Business enables business to be transacted at the rate of thought.” Business challenges can be overcome, competition can be met, and strategies can be evolved to meet the competition. E-business enables to be transacted globally with out any significant barrier. Voluminous and repetitive documentation can be eliminated. It enables differentiation for competitive advantage.

Consumers keep making decisions to buy the products of their choice. As we know that the decision making is influenced by the internal determinants which include learning, memory, personality, self concepts, attitude, motivation and involvement. The external determinants consist of cultural and sub-cultural influences, social group influences, family influences, social influences and other influences. External and internal influences thus, together influences the decision making process and most customers follow these steps in a logical manner. E-Business enhances
this process, and saves time of the consumer by providing all relevant information on the internet that is required.

E-Consumer is fully informed consumer and is aware of various products offering by all competitors. His purchase decision can not be influenced easily. He takes rational decision usually decides to go for a product that offers good value for money. He also knows the advantages and disadvantages of when to buy, how to buy, from where to buy, what to buy, and from whom to buy.

After using the product and service consumers can electronically interact with the manufacture or marketer giving valuable feedback. The critical feedback should be given to the company regarding the improving the product. If the consumer is dissatisfied, he may communicate his anger against the company and many of people worldwide instantly. This may affect the reputation and goodwill of the company and tarnish its image. A satisfied customer acts as a best advertising and promotional means of worldwide publicity at no cost.

**Public Policy and Consumer Protection:** - In the earlier decades the consumer was unorganized and was generally taken for a ride. Today, the consumer is aware of his rights and is highly educated and experienced. He was earlier being exploited in many ways. Now consumers are complained and criticized the factors like price, quality, advertising, packing, distribution, after sales service etc. There were many unfair trade practices prevalent in India.

The consumer protection Act, 1986 has provided a legal umbrella to safeguard the interests of consumers and to give them cheap and speedy
justice. In order to know the significance of the consumer protection Act, 1986, a bird’s eye view of the provisions may be made, and then it can be assessed whether the enactment has really given relief to the consumer.

**Development of Electronic Money with Technological Changes**

In chapter 4, ‘Development of Electronic Money with Technological Changes’ has been discussed. When E-commerce began to emerge in 1996, its first wave of applications concerned Business-to-Consumer (B2C) transactions which took off with amazing speed. These early successes trigged an explosion of B2C oriented online suppliers, as more and more firms specializing in consumer goods or services made it their primary concern to create attractive web to enjoy the fruits of co-branding, jointly organized sales-promotion schemes, centralized payment facilities and other advantages from belonging to a large network. Their rapid spread was taken as sign that B2C commerce had the potential of maturing rapidly into a viable alternative to traditional retail trade conducted in brick-and-mortar stores.

To the extent that the future success of the internet as an engine of economic growth depends on its restructuring from an open-access medium of communication into a restricted access supplier of paid services, online money would surely help that transformation along while at the same time also completing the transition to electronic money. In the process debit cards and credit cards replaced by smart cards which can be inserted into the access tools of the internet. Electronic Fund Transfers move beyond wholesale (B2B) transactions to retail (B2C and P2P) transactions and so become the primary mechanism for moving money around. Net-based payments systems, using digital cash, will become part
of sophisticated online shopping protocols which in turn will facilitate the rapid growth of E-commerce. Banking will increasingly move online, as will the trading of securities in the financial markets. The internet might evolve gradually into the primary locus of money creation and credit extension, whereby it pushes its impact on our economy beyond commerce to production and finance. We have arrived at the threshold of a new era in which online money reshapes the modus operandi of our 21st-century economy.

**Changing Scenario in Banking Sector in India:** - In recent years, there has been a sea change in Indian banking strategies with more focus on quality, efficient services and profitability. The first change along this line was brought in by the foreign banks with their emphasis on high quality and efficient service. These were combined with the technological changes like satellite banking and Tele-banking manned by skeletal staff and lesser number of branches. Technology innovation and intense competition among existing banks have made banks to rethink the way they operated their business.

The important sophisticated or high technology for improving customer service, productivity customer service, productivity and operational efficiency of banks is well recognized. This enabled a wide range of banking products and services, being made available to retail and wholesale customers through an electronic distribution channel. As a part of their action plans, banks in India are now continuously focusing on technology upgradation with a customer centric approach. To realize this, the banks have recently tied up with various software companies and with premier technological institutes like IITs, who can offer their best
expertise consultancy services to the banks in applying the right kind of technology in the right place so as to benefit the customers.

Technology in the form of electronic banking has made it possible to find alternate banking practices at lower costs. E-banking has been setup exclusively to serve clients through a network, providing customers with the full range of banking services such as deposits, withdrawals, funds transfer, loans and other forms of transactions. It is worth mentioning the words of Bill Gates ‘We need banking, do we really need banks?’.

**Products of Electronic-Banking:** - Technology has always been one of the key thrust areas for the banks. The banks have already marked a significant progress on the technological front. During the past few years the banks have under taken a swing of IT initiatives including branch computerization of all controlling offices. With the introduction of the internet and the opportunities it has provided, new products and services are emerging that are set to change the way we look at money and the monetary system. The few electronic banking products are Automated Teller Machines (ATM), Banker’s Automated Clearing System (BACS), Tele Banking Services, Cash Management Services (CMS), Electronic Funds Transfer (FET), Electronic Data Interchange (EDI), Electronic Cheque System (ECS), Cheques Handling, Cyber Cash, Credit Card, Debit Card and Smart cards.

**Branchless Banking-A New Dimension of Financial Inclusion:**

In many countries, banks and other commercial service providers are finding new ways to make money delivering financial services to unbanked people rather than using bank branches and their own field officers, they offer banking and payment service through postal and retail
outlets, including grocery stores, pharmacies, seed and fertilizer retailers, and gas stations among others. For poor people “Branchless Banking” through retail agents may be for more convenient and efficient than going to bank branch.

Branchless Banking (BB) represents a significantly cheaper alternative to conventional branch-based banking that allows financial institution and other commercial actors to offer financial services outside traditional bank premises by using delivery channels like retail agents, mobile phone etc. BB can be used to substantially increase the financial services outreach to the un-banked communities.

Impact of Electronic Money on Consumer Behavior

Chapter 5 deals with ‘Impact of Electronic Money on Consumer Behavior’. The introduction of Electronic Money marked a milestone in the historical development of the services of e-banking and accommodates its dynamic growth much more effectively. This advantage becomes especially evident when looking at the conditions of its general acceptability.

To serve more and retain customers, banks in India have changed the old concept of accepting deposits and lending money. Use of technology by banks has increased the productivity very fast through automation of banking operations. The electronic technology instruments adopted by Indian banks are ATMs, Telex, Fax, internet, Tele banking, E-banking, Electronic clearing services, on-line banking, mobile banking, wireless banking services, and electronic funds transfer. With the introduction, implementation and adoption of these techniques by the banks have totally
revolutionized the functions, operations, administration, decision-making and management information system. All these techniques or instruments helped the banks in retaining the existing customers, attracting new customers and provide lot of services with the help of these instruments to give them satisfaction.

With the introduction of electronic banking, banks are moving their focus of payment from the physical presence of money to the use of electronic money. Customer can perform banking transactions without having to step into the office or the branch. The bank, which provides value-added services and satisfaction to customers, should be the winner in the market. By way of launching new products, the banks are trying to make the “near” customers to “dear” ones.

Credit card fraud is one of the biggest threats to business establishments today. In order to combat the fraud effectively, it is important to first understand the mechanisms of executing a fraud. Credit card fraudsters employ a large number of modus operandi to commit fraud.

For a low-tech form of fraud, the simplest is to simply steal a customer’s card. In this scenario, the user’s PIN is observed by someone watching as they use the machine; they are then mugged for their card by a second person, who has taken care to stay out of range of the ATM’s surveillance cameras. However, this offers little advantage compared to simply mugging the victim for their money, and carries the same risks to the offender as other violent crimes.

By contrast, a newer high-tech modus operandi involves the installation of a magnetic card reader over the real ATM’s card slot and the use of a
wireless surveillance camera or a modified digital camera to observe the user’s PIN. Card data is then cloned onto a second card and the criminal attempts a standard cash withdrawal. The availability of low-cost commodity wireless cameras and card readers has made it a relatively simple form of fraud, with comparatively low risk to the fraudsters.

E-Banking is beneficial to all sections of the society, but there are certain risks which have to be taken care by the management, these are operational risk, reputation risk, legal risk and security controls.

**Consumer in Banking Sector:** - In order to survive, commercial banks have to seek business by aggressively marketing their products. Product differentiation is often employed as a major technique to service in competitive market. Since product differentiation on the interest front and service charges is ruled out for Indian banks, it appears that banks have to bank their hopes on the improvement of customer services.

In order to mobilize more deposits and attract customers to use the services of a particular bank, a particular bank has to necessarily differentiate its customer services from other banks and to offer better customer service in banks means satisfying the needs of customers, at the right time, and in a right manner. It is necessary that bankers tailor their services to the needs of customers and not vice versa. A large portion of customers’ complaints arises because of the disparity between customer expectation and bank services.

Products offered by banks have been changing over years, particularly in recent years. These products are getting refined and revised in the light of customer need, but not promptly enough or adequately and hence
dissatisfaction arises. There are abnormal delays in receiving payments and customers have to wait indefinitely without anybody attending to them properly at the counter. Even the issue of cheque book takes twenty to thirty minutes because the officer is always busy with cheques, vouchers and registers. Updating of pass book also takes long time. Delivery system for customer services comprise of five elements i.e. speed, timeliness, accuracy, courtesy and concern.

**Core Banking Services of Indian Banks:**

Now a day Banks are more and more zealous for providing Core Banking services in India. From practical point of view there is much to be achieved for implementing international standard as conditions of various Banks are different in nature viz., infra-structure, capital adequacy and human relation norms.

Last year, the aggregate total income of 10 private sector banks increased by 51.7% besides an increase in fee based income by 41.7%, whereas Public Sector Banks could not step to the desired level.

**Analysis and Interpretation**

Chapter 6 is summarized as hypothesis testing, major findings in Bundelkhand region and comparison of it with the findings of KAVAL region.

**HYPOTHESIS TESTING**

A set of hypothesis was formulated at the planning stage of the study. These hypotheses have been presented in chapter I. These are now explained in the following paragraphs. On the basis of different hypothesis a brief summary is presented in the following sections.
First hypothesis was that majority of Consumers is not using the services of Electronic money due to lack of sufficient awareness and knowledge against the alternative hypothesis that Consumers are using the services of Electronic money and fully aware about the services of it.

The level of awareness of consumers and electronic money users have been shown in the following table No 7.1

<table>
<thead>
<tr>
<th>Level of Awareness ↓</th>
<th>E-money users (B)</th>
<th>Non users of E-money (B)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aware about E-money (A)</td>
<td>97 (93.56)</td>
<td>12 (15.44)</td>
<td>109</td>
</tr>
<tr>
<td>Not aware about E-money (A)</td>
<td>6 (9.44)</td>
<td>5 (1.56)</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>103</td>
<td>17</td>
<td>120</td>
</tr>
</tbody>
</table>

Sources: -Primary Data. Figures given in brackets represent expected frequency.

Here, the calculated value of $\chi^2$ for 1 degree of freedom at 5% level of significance is 9.735 and the table value of $\chi^2$ for 1 degree of freedom at 5% level of significance is 3.841. The calculated value is more than the table value and hence it rejects the null hypothesis. Thus we may conclude that, Consumers are using the services of Electronic money and fully aware about the services of it. In other words, the consumers are aware about the services of E-money are enjoying the benefits of it.

Second hypothesis was that there is no significant association between sex, age, education, occupation, income and E-money users. This hypothesis was divided into five parts and has been shown through the following five tables 7.2.1, 7.2.2, 7.2.3, 7.2.4, and 7.2.5.
Chapter 7

Table 7.2.1 Sex and E-money users.

“There is no significant association between sex and E-money users.”

<table>
<thead>
<tr>
<th>Sex</th>
<th>E-money users</th>
<th>Non users of E-money</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>92 (87.55)</td>
<td>10 (14.45)</td>
<td>102</td>
</tr>
<tr>
<td>Female</td>
<td>11 (15.45)</td>
<td>7 (2.55)</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>103</td>
<td>17</td>
<td>120</td>
</tr>
</tbody>
</table>

Sources: -Primary Data.
Figures given in brackets represent expected frequency.

Calculated $\chi^2$ value = 10.642. Table Value=3.841. D.F. =1.

The calculated value of $\chi^2$ is more than the table value at 5% level of significance. Hence the hypothesis is rejected. It is therefore concluded that there is significant association between sex and E-money users.

Table 7.2.2 Age and E-money users.

“There is no significant association between age and E-money users.”

<table>
<thead>
<tr>
<th>Age</th>
<th>E-money users</th>
<th>Non users of E-money</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 35</td>
<td>52 (52.35)</td>
<td>9 (8.65)</td>
<td>61</td>
</tr>
<tr>
<td>More than 35</td>
<td>51 (50.65)</td>
<td>8 (8.35)</td>
<td>59</td>
</tr>
<tr>
<td>Total</td>
<td>103</td>
<td>17</td>
<td>120</td>
</tr>
</tbody>
</table>

Sources: -Primary Data.
Figures given in brackets represent expected frequency.

Calculated $\chi^2$ value = 0.032. Table Value=3.841. D.F. =1.

The calculated value of $\chi^2$ is less than the table value at 5% level of significance. Hence the hypothesis is accepted. It is therefore concluded that there is no significant association between age and E-money users.

Table 7.2.3 Education and E-money users.

“There is no significant association between Education and E-money users.”

<table>
<thead>
<tr>
<th>Education</th>
<th>E-money users</th>
<th>Non users of E-money</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate</td>
<td>12 (14.60)</td>
<td>5 (2.40)</td>
<td>17</td>
</tr>
<tr>
<td>Graduate</td>
<td>39 (38.63)</td>
<td>6 (6.37)</td>
<td>45</td>
</tr>
<tr>
<td>Post Graduate</td>
<td>52 (49.77)</td>
<td>6 (8.23)</td>
<td>58</td>
</tr>
<tr>
<td>Total</td>
<td>103</td>
<td>17</td>
<td>120</td>
</tr>
</tbody>
</table>
Summary, Conclusion and Policy Implication

Sources: -Primary Data.
Figures given in brackets represent expected frequency.
Calculated $\chi^2$ value =4.005. Table Value=5.99. D.F. =2.
The calculated value of $\chi^2$ is less than the table value at 5% level of significance. Hence the hypothesis is accepted. It is therefore concluded that there is no significant association between Education and E-money users.

Table 7.2.4 Occupation and E-money users.
"There is no significant association between Occupation and E-money users."

<table>
<thead>
<tr>
<th>Occupation</th>
<th>E-money users</th>
<th>Non users of E-money</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Govt/ Semigovt.</td>
<td>47 (46.35)</td>
<td>7 (7.65)</td>
<td>54</td>
</tr>
<tr>
<td>Business</td>
<td>51 (23.18)</td>
<td>5 (3.82)</td>
<td>27</td>
</tr>
<tr>
<td>Profession and</td>
<td>34 (33.47)</td>
<td>5 (5.53)</td>
<td>39</td>
</tr>
<tr>
<td>Farmers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>103</td>
<td>17</td>
<td>120</td>
</tr>
</tbody>
</table>

Sources: -Primary Data.
Figures given in brackets represent expected frequency.
Calculated $\chi^2$ value =0.478. Table Value= 5.99. D.F. =2.
The calculated value of $\chi^2$ is less than the table value at 5% level of significance. Hence the hypothesis is accepted. It is therefore concluded that there is no significant association between Occupation and E-money users.

Table 7.2.5 Monthly Income and E-money users.
"There is no significant association between Monthly Income and E-money users."

<table>
<thead>
<tr>
<th>Monthly Income</th>
<th>E-money users</th>
<th>Non users of E-money</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 10,000.</td>
<td>33 (33.47)</td>
<td>6 (5.53)</td>
<td>39</td>
</tr>
<tr>
<td>10,000-20,000.</td>
<td>41 (39.48)</td>
<td>5 (6.52)</td>
<td>46</td>
</tr>
<tr>
<td>&gt; 20,000.</td>
<td>29 (30.05)</td>
<td>6 (4.95)</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>103</td>
<td>17</td>
<td>120</td>
</tr>
</tbody>
</table>

Sources: -Primary Data.
Figures given in brackets represent expected frequency.
Calculated $\chi^2$ value = 0.713. Table Value = 5.99. D.F. = 2.
The calculated value of $\chi^2$ is less than the table value at 5% level of significance. Hence the hypothesis is accepted. It is therefore concluded that there is no significant association between Monthly Income and E-money users.

Third hypothesis was that Fear of losing confidentiality of their accounts and financial transaction stops consumer from using Electronic money against the alternative hypothesis was that Confidentiality of account and financial transaction motivates the consumer to using the services of E-money.

The confidentiality of account and financial transaction towards E-money users has been shown in the following table No 7.3.1.

Table 7.3.1 Confidentiality of account and financial transaction towards E-money users.

<table>
<thead>
<tr>
<th>Confidentiality of A/c and financial transaction</th>
<th>E-money users</th>
<th>Non users of E-money</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>21 (22.32)</td>
<td>5 (3.68)</td>
<td>26</td>
</tr>
<tr>
<td>Very Good</td>
<td>53 (49.78)</td>
<td>5 (8.22)</td>
<td>58</td>
</tr>
<tr>
<td>Average</td>
<td>29 (30.9)</td>
<td>7 (5.1)</td>
<td>36</td>
</tr>
<tr>
<td>Total</td>
<td>103</td>
<td>17</td>
<td>120</td>
</tr>
</tbody>
</table>

Sources: -Primary Data.
Figures given in brackets represent expected frequency.
Calculated $\chi^2$ value = 2.843. Table Value = 5.99. D.F. = 2.
The calculated value of $\chi^2$ is less than the table value at 5% level of significance. Hence the hypothesis is accepted. It is therefore concluded
that fear of losing confidentiality of their accounts and financial transaction stops consumer from using Electronic money.

Comparison of Consumer Awareness towards E-Money Services between Bundelkhand Region and KAVAL Region:

The consumer awareness about E-Money services in Bundelkhand Region and KAVAL Region are given in the following table No7.4

<table>
<thead>
<tr>
<th>Regions</th>
<th>Total Respondents</th>
<th>No. of Respondents Aware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bundelkhand Region</td>
<td>120</td>
<td>109</td>
</tr>
<tr>
<td>KAVAL Region</td>
<td>120</td>
<td>110</td>
</tr>
<tr>
<td>Total</td>
<td>240</td>
<td>219</td>
</tr>
</tbody>
</table>

Sources: -Primary Data.

Here the null hypothesis was set up that the proportion of consumer awareness about the E-money in Bundelkhand Region and KAVAL Region are the equal.

By using the Z-test the absolute value of $Z=0.277$

Since the calculated value of $Z < 1.96$ (the critical value of $Z$ at 5% level of significance), so the null hypothesis is accepted. Thus we can conclude that the proportion of consumer awareness about the E-money in Bundelkhand Region and KAVAL Region are the equal.

By using the proportion the percentage of awareness about E-money services in Bundelkhand region=54.88%.

Thus in Bundelkhand region, 54.88% people are aware about E-money services.

Comparison of Confidentiality of their Account and Financial Transactions towards E-Money Services between Bundelkhand Region and KAVAL Region:-
The Confidentiality of their Account and Financial Transactions about E-Money services in Bundelkhand Region and KAVAL Region are given in the following table No 7.5

<table>
<thead>
<tr>
<th>Regions</th>
<th>Total Respondents</th>
<th>No. of Respondents more than average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bundelkhand Region</td>
<td>120</td>
<td>84</td>
</tr>
<tr>
<td>KAVAL Region</td>
<td>120</td>
<td>89</td>
</tr>
<tr>
<td>Total</td>
<td>240</td>
<td>173</td>
</tr>
</tbody>
</table>

Sources: -Primary Data.

Here the null hypothesis was that the proportion of confidentiality of account and financial transactions about the E-money in Bundelkhand Region and KAVAL Region are the same.

By using the Z-test we have calculated absolute value of $Z=0.701$, which is less than 1.96 (the critical value of $Z$ at 5% level of significance), so the null hypothesis is accepted. Thus we can conclude that the proportion of confidentiality of account and financial transactions about the E-money in Bundelkhand Region and KAVAL Region are the same.

**Confidentiality of their Account and Financial Transactions towards E-Money Services in Bundelkhand Region:**

Total population of Bundelkhand region=82,32,100.

Literate population=49, 65, 182.

By using the proportion the percentage of consumers who are confident of their account and do financial transaction towards E-money services=42.22%.

Thus in Bundelkhand region, 42.22% people are confident of their account and do financial transaction towards E-money services.
Comparison of E-Money users between Bundelkhand Region and KAVAL Region:

The comparison of E-Money users between Bundelkhand Region and KAVAL Region are given in the following table No 7.6

<table>
<thead>
<tr>
<th>Regions</th>
<th>Total Respondents</th>
<th>E-Money users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bundelkhand Region</td>
<td>120</td>
<td>103</td>
</tr>
<tr>
<td>KAVAL Region</td>
<td>120</td>
<td>108</td>
</tr>
<tr>
<td>Total</td>
<td>240</td>
<td>211</td>
</tr>
</tbody>
</table>

Sources: -Primary Data.

Here the null hypothesis was that the proportion of E-money users in Bundelkhand Region and KAVAL Region are the same.

By using the Z-test we have calculated absolute value of $Z=0.952$, which is less than 1.96 (the critical value of $Z$ at 5% level of significance), so the null hypothesis is accepted. Thus we can conclude that the proportion of E-money users in Bundelkhand Region and KAVAL Region are the same.

**E-Money users in Bundelkhand Region:**

Total population of Bundelkhand region=82,32,100.

Literate population=49, 65, 182.

By using the proportion the percentage of E-money users in Bundelkhand region=51.87%.

Thus in Bundelkhand region, 51.87% people are using the services of E-money.

**Analysis from the banks point of view**

**Customer awareness about the E-banking services:** - Public and private both the sectors are providing the services of E-banking.
Chapter 7

- In public sector banks, there are 47.5% customers who are aware about the services of E-banking while 52.5% customers are not aware about the services of E-banking. The customers who are not aware about E-banking services due to lack of sufficient knowledge.

- In private sector banks, only 25% customers are aware about E-banking services while 75% customers are not aware about E-banking services. The customers who are not aware about E-banking services due to illiteracy, lack of advertisement, and lack of sufficient knowledge.

Thus though there are various types of E-banking services provided by the both public as well as private sectors banks yet more than 50% banks customers are not aware about E-banking services.

**Customer Satisfaction with the confidentiality of their bank account and Financial Transactions:** - In both the sector, all the bank customers are not satisfied with the confidentiality of their bank account but most of them are satisfied therefore they do financial transactions.

- In public sector banks, 91.25% of the customers are satisfied with the confidentiality of their bank account while only 8.75% are not satisfied regarding the confidentiality of their bank account due to lack of sufficient knowledge.

- In private sector banks, 92.5% of the customers are satisfied with the confidentiality of their bank account while 7.5% of the customers are not satisfied with the confidentiality of their bank account because they believe more in nationalize bank services.
Thus both the sector of banks are providing E-banking services and more than 90% of their customers are satisfied. More satisfaction level shows their interest to do financial transactions by using their bank account in order to take the advantages of E-banking services.

**E-Banking Services Users**: -There are various E-banking services available in Bundelkhand region by public sector banks as well as private sector banks but all the E-banking services are not used by the bank customers.

- Among the various E-banking services offered by public sector banks, only 73% E-banking services are using by the customers while 27% E-banking services are not used due to lack of sufficient knowledge.
- In private sector banks, out of various E-banking services, only 65% are using by the customers while 35% E-banking services are not used due to lack of interest and lack of sufficient knowledge.

Thus not only in public sectors but also in private sector more than 65% of the E-banking services are used by the bank customers.

**Willingness about E-Banking Services**: -Banks offer various types of services related to E-banking to their customers and they wanted that more and more customers take the advantages of these services.

- In public sector banks, only 48% customers are willing to take the E-banking services while 52% customers are not willing to take E-banking services due to lack of awareness and lack of sufficient knowledge.
- In private sector banks, only 40% customers are willing to take the knowledge of E-banking service while 60% are not interested to
know about E-banking services due to lack of sufficient knowledge and they are interested but they unable to do this. Thus we may concluded that willingness about new E-banking services are very low and not more than but less than 50% in both the sectors.

**Customer Satisfaction with E-Banking Services:** Though both the sectors of banks offer various types of E-banking services but all the bank customers are not fully satisfied with E-banking services.

- Customer satisfactions about E-banking services in public sector banks are 63% while 37% customers are not fully satisfied with E-banking services.
- Customer satisfactions about E-banking services in private sector banks are 70% while 30% customers are not fully satisfied with E-banking services.

Thus the satisfaction levels of the private sector customers about E-banking services are more than public sectors customers. In both sector banks the customers who are not fully satisfied due to following reasons-

1. Due to technical problems.
2. Limited numbers of ATMs.
3. Lack of civic sense, and
4. Lack of computer literacy.

**Reasons for Using the Services of E-Banking:** There are various types of customers in the market who have their different motives to use the services of E-money through E-banking. According to banks point of view the main reasons for using the services of E-banking are following-

1. Due to fast services.
2. Easy and safe to use.
3. For saving the time, and
4. No time bar in banking transactions.

In general, the findings in this study indicate that majority of the consumers may have positive attitudes towards E-money while rest may have misconceptions and negative attitudes towards E-money. Thus the impacts of E-money on customers are more positive in comparison to negative. Hence these findings should be useful in helping the service providers of E-money to improve the quality of services and motivate the customers to take the benefit of it.

In Bundelkhand region very few banks are providing the level of attention to ongoing E-money services. Although many banks have a customer service department that customers can call to get account information and to resolve problems but employees may not be trained to handle the Unsatisfied customers with the appropriate degree of diplomacy.

Though E-money is getting popular and spreading very fast in Indian economy but in Bundelkhand region most of the people do not know about it and people who know about it, are reluctant to use it due to some misconception like password hacking, privacy, security etc. This phenomenon is pervasive even in literate people residing in urban area then what to say about rural or remote areas of Bundelkhand region.

On the basis of the study following suggestions can be made for improving the consumer behavior and electronic money services.

**Suggestions for Credit Card Fraud Protection:** - The universal acceptance of credit cards as a means of payment has created a new type of criminal who fraudulently obtains good and services by using other
people's credit cards. The credit card frauds can be checked by exercising proper safeguards both at the level of card holders and merchants. The following suggestions should be exercised by the cardholders, merchants and the banks.

(A)-Cardholders: -

1. Never leave the credit card unattended.
2. Destroy expired cards after cutting it into several pieces.
3. Put signature on the specified strip immediately on receipt of the card.
4. Report lost or stolen card immediately to the issuer bank.
5. Do not hand over the credit card to anyone other than the merchant when making a payment.
6. Memorize PIN number and destroy the PIN slip sent by the issuer bank.
7. Be careful while giving personal and credit card information to an unknown person.
8. Destroy all financial information (i.e. account number, bank statement, ATM and sales receipt etc.) before throwing it away.
9. Verify details of the transaction on the credit card statement with the receipts of cash withdrawal and purchases made.
10. Collect the card immediately after a transaction is complete.
11. Ensure that the merchant processes the transaction in your presence. Keep an eye on the card during all transactions.
12. Keep a record of card account number, expiry date and the toll free call number.
13. Do not sign a blank credit card slip and always verify its details.
14. Do not give credit card to someone to use.
15. Do not ask for assistance from stranger while withdrawing cash at ATM.

(B) Merchants: - Merchants should be extra cautious so that fraud should not eat up their profit. They should watch suspicious behavior as fraudulent transactions have certain characteristics in common. Although these characteristics could never be conclusive proof of a fraudulent transaction, the following will help in identifying suspicious behavior.

1. Takes out his card from his pocket instead of a wallet.
2. Purchases an unusual amount of expensive items.
3. Makes several small purchases to stay under the floor limit, or enquires about the floor limit.
4. Signs the sale slip slowly.
5. Charges expensive items on a newly valid credit card.
6. Cannot provide photo identification.
7. Hurries at the closing time of the merchant establishment.
8. Purchases large items, and insists on taking it immediately, even if delivery is included in the price.

Be extra careful when a credit card: -

- Seems to be counterfeited or it seems as though the information (i.e. expiry date, hologram, number, embossed name etc.) there on is altered.
- The signature on the card and sales slips differs.
- The validation date expired.
- The security features have been tampered with. (Take a look at the security features of common credit cards).
(C)- Banks: -

1. Proper verification of credit cardholder's identity, income proof, address proof etc. before issuing credit cards.
2. Credit cards with photos be given preference and encouraged.
3. Such kind of arrangement is made so that only one person can enter at a time at ATM centre.
4. While issuing duplicate credit cards, proper verification should be again made. Lost reported cards may be deactivated immediately to safeguard cardholder’s interest.
5. Frequent change of address is discouraged and if required, proper physical verification be made.
6. Bank may consider issue of chip-based smart cards with EMV complaint (Microchip based Technology) instead of magnetic strip based credit cards.

Suggestions for ATM Card Fraud Protection: -For customers common sense is the best guide to using an ATM safety. While using an Automated Teller Machine (ATM) the customer must know the following:-

(A)- Related to PIN and Card: -

1. Protect the secrecy of our Personal Identification Number (PIN). Protect our ATM card as we protect hard cash.
2. Do not keep our Bank ATM card and Personal Identification Number (PIN) together. Do not write PIN on the card or at a place where it can be discovered.
3. Do not give information regarding our ATM card or PIN over the telephone to any one even one claiming to be from our bank. Criminals who fraudulently used cards for telephone and online transactions do not have to give a Personal Identification Number (PIN) or signature to the merchant on the phone or online. The
Summary, Conclusion and Policy Implication

Charges are simply debited directly to our account. We would not come to know until we get our next bank statement.

4. Neither lend our ATM card to anyone or nor reveal PIN to another person. Doing this may tempt that person to conduct transactions using the card or Pin.

5. Before disposing old cards, cut them up though the account number.

6. Sign our new cards as soon as we receive them.

7. Keep a record of our card numbers, their expiration dates, and the phone number and address of each bank in a secure place.

8. For protection of ATM and Debit cards that involve a PIN, keep our PIN a secret. Do not use our birth date, phone number, and house number as the PIN.

9. Do memorize the PIN.

10. Change our ATM PIN at least once in every 2 months.

11. The best protections against card fraud are to know where our cards are at all times and to keep them secure.

(B)-Related to Withdrawals:

1. Remember not to leave our card at the ATM.

2. Never allow yourself to be distracted while carrying out our transaction.

3. Do not accept assistance from anyone we do not know when using an ATM.

4. Do not display our cash, pocket it as soon as the ATM transaction is completed and count the cash later when we are in the safety of our own car, home, or other secure surrounding.
(C)-Related to ATM:

1. If we are using an ATM that requires and to open the door, do not permit an unknown person to enter with us. Once inside the vestibule, make sure the door is completely closed or not.

2. Choose an ATM that is well lighted and monitored by a surveillance camera or a security guard.

3. Minimize our time at the ATM. Have our card ready. If we are making a deposit, fill up paying in slip (deposit slip) at home; seal the envelope before we reach the ATM.

4. Use our free hand to cover the ATM keyboard while type the PIN. Prevent others from seeing while enter our PIN by using body to shield their view.

5. Do not re-enter our PIN if the ATM swallows our card. Card the bank immediately.

6. Use an ATM only where and when we feel completely comfortable. Pay attention to the machine before using it. If something appears unusual or unfamiliar, use another ATM.

7. Never use an ATM, which looks suspicious.

8. Never use ATMs that have messages or sings fixed to them indicating that the screen directions have been changed, especially if the message is posted over the card reader.

9. Do not insert our ATM card into an obscurely placed ATM machine, or one with a card slot protruding from the face of the machine.

(D)-Related to Loss/theft of the Card:

1. Report the loss, theft or unauthorized use of card or PIN to Bank without any loss of time.
2. A stolen ATM/Debit card can be taken to any merchant and used to charge purchases to our "account". All that is needed is a forged signature. This can drain our account.

3. Once we discover the theft, we must report it to the police, close our account, open a new one and get new bank cards.

4. If we find electronic banking transaction is incorrectly reported on a receipt or statement, promptly notify the bank. Failure or delay to promptly notify Bank of the loss, theft, or unauthorized use of card or PIN will keep you exposed to risks.

5. If we notice transactions we did not make, or if our balance has dropped suddenly without activity by us, immediately report the problem to our bank. Someone may have co-opted our account information to commit fraud. Use the special telephone number that many card issuers list on their billing statements. Do not forget to follow up our phone call with a letter.

Policy Implications for Banks: On the basis of the study the following suggestions can be made for improving the services of electronic money to the service providers:

1- The customers want from the staff of E-money services providers to be ready and willing to take care of their needs. They expect prompt and accurate resolution of any errors that might occur.

2- Customers expect bank staff to be courteous and competent. They expect to be reassured through bank employees' actions that staff members not only nice and treat them with respect but also are able and willing to help. They want to hear expressions of courtesy, such as "Please" and "Thank You". They expect bank staff to be
considerable of their feelings and sensitive to the privacy of their financial transactions.

3- Consumers want that the service providers of E-money show a genuine interest in their financial needs and wants in one way to gain their confidence. The E-money services providers should be apologized for an inconvenience, frustrations should be acknowledged, and fast solutions should be done.

4- The E-money services provider must always work to maintain their credibility and dependability. That means completing tasks and requests right the first time. Customers appreciate staffs who call when they promise to call, follow up after sending information to see that it arrived, and inform them when they will not be able to carry out a request.

5- The bank staff can be failed to satisfy customer if the bank appears disorganized, dirty, or unprofessional. Automated Teller Machines (ATMs) must be clean and well lit; brochure racks must be well stocked and tidy. The attention to detail makes a clear and positive impression on customers.

6- Due to limited number of ATMs, the customers especially in urban areas dislike waiting in long lines. On the basis of these findings the bank should be increase the ATMs at a reputed public places and also in main markets.

7- Consumer wants and needs are not static, but constantly changing. An increase in consumers’ personal disposable income and
changes in values have brought about a change in their lifestyles. This has affected the services of E-money. Thus the banks must monitor changes in the consumer behavior in order to improve their products and services and their distribution accordingly. By doing so, the customers will be highly satisfied. Highly satisfied customers tend to repeat purchasers, and it will much more expensive to generate a new customer than to provide additional service to an existing one. Satisfied customers are more loyal, thus less likely to stray to competitors and less price-sensitive than are customers who are not highly satisfied.

8- Technological advances not only will enhance the delivery of services to bank customers, but also will enable banks to do a better job of performance monitoring and evaluation. Bank executives should be turning their attention from short-term earnings concern to longer term marketing concern especially through service quality, sales effectiveness, and targeted marketing.

9- The effectiveness of E-money depends on effectiveness in consumer satisfaction, as it is the main objective of the service providers. The service provider must adopt appropriate techniques to collect information on consumers’ satisfaction to adopt appropriate marketing strategies to keep abreast of the competition. Therefore the service providers of E-money must go for a regular consumer satisfaction survey to adopt an appropriate marketing strategy at the right time to enhance their effectiveness in satisfying the consumers.
10- To accomplish the organic growth, the banks should effectively manage and their influence customers by their regular and disciplined services. To grow organically, banks must capture the opportunities and concentrate on improving advocacy and growth potential. Measures such as cross sell, retention and acquisition of new customers, etc., help in achieving the agenda of E-money service providers. Banks must also focus on the changing customer’s attitude.

11- The service provider of E-money should focus on its customers. Reputation of the service provider of E-money is important because of intangibility of the products it providers to its customers. The feeling of satisfaction of employees through satisfied customers enables them to contribute more. The service providers should maintain customer satisfaction level through service recovery.

12- Delivery channels should be increased so that the customers can transact their business with the bank at their convenience anywhere and at anytime of the day or night. Thus, the customers will have choice of transacting business through ATM, Internet Banking, Tele banking, Mobile banking or through plastic cards such as Credit Card, Debit Card, Smart Card etc., choice of his convenient time ATMs, Tele banking, Internet Banking and mobile banking are round the clock available and choice of his place. These can be accessed at multiple locations, including overseas locations.
13- As we know that rural population of India which more than 65% has a negligible penetration of internet banking for some reason or the other. Unless there is a political will to increase the base of the internet services among rural masses, this massive project remains a dream. However, the public sector banks with government banks have a large base among the rural masses and the public sector banks have a major role to play in spreading the internet usage among rural masses of India. This increase in the rural internet usage may help the government on the other fronts also like increase in literacy rate among rural areas which is a priority of the Government. This priority may be automatically touched with the spread of the internet usage in the rural areas.

14- The continuous encouragement to banks and customers is showing good progress in all the areas of electronic banking services. Now the banking industry needs catalysts to revolutionize the movement towards paperless electronic payment settlement system by

- Customer education.
- Training employees.
- Providing incentives for using EFT systems.
- Discouraging/penalizing use of paper-based fund transfer systems.
- Providing appropriate technology security.
- Providing insurance for genuine loss incurred by customers etc.