Chapter: 8
Finding and Suggestions
# Outline of the Chapter

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Chapter-8
FINDINGS AND SUGGESTION

8.1 Introduction:-

The banking sector is the lifeline of any economy. It is one of the important financial pillars of the financial system, which plays a vital role in the success or failure of an economy. Banks are one of the oldest financial intermediaries in the financial system. Internet is the ideal medium for carrying out banking activities in modern era, its saving cost and potential speed of information transmission. Internet banking has become popular because of convenience, flexibility and virtuality. The Internet is playing a major role for the world of business including the banking industry. Banks have been using the Internet as one of their distribution channels because Internet Banking services benefit both the banks and their customers. It has become the most profitable distribution channel of the banks because it can help banks to save costs.

The banking sector in India has introduced innovative banking in a phased manner. Private sector banks are the pioneers in Innovative banking, private sector banks introduced it in a big way and public sector banks are in the process of transformation from traditional banking to innovative banking. Innovative banking impinges on operations of banking in a number of different ways. It has enabled the banks to handle the payments electronically and inter-bank settlement faster and in large volumes. There is increase in customer service level, trust, usefulness and satisfaction level, reduction in cost of banking operations, increased productivity and profitability of banking sector. Indian banks to enlarge their innovative banking services which could enhance their competitiveness.
There is a degree of variation in the services provided by the banks with the emergence of innovative banking services. So, it becomes necessary to study the innovative banking services and their impact on various demographic variable and parameters like, service level, trust, usefulness, satisfaction and behaviour of the bank employee. So, the present study is a modest attempt to ascertain the changes taking place after Innovative banking, to evaluate the banks performance, and to know about customers’ perceptions regarding Innovative banking.

8.2 Banking in India-

Major findings of the chapter – Banking in India – An introduction are as below.

1. The first bank ‘Bank of Hindustan’ was established in 1770 in India. “Banking means the accepting, for the purpose of lending or investment, of deposits of money from the public, repayable on demand or otherwise and withdrawal by cheque, draft, order or otherwise”. The first Joint Stock Bank founded by M/s. Alexander and Company. This bank failed in 1832. The Bengal Bank and the Central Bank of India were established in 1785. The Bank of Bengal was established in Calcutta in 1806 under the name of Bank of Calcutta. The Bank of Bombay and the Bank of Madras were established in 1840 and 1843 respectively. All banks were also powered to issue notes.

2. The paper currency Act, 1862, was issued by the Government of India. A new bank of the same name was constituted under the Indian company Act, 1866. The Presidency Banks Act of 1876 placed certain restrictions on the functioning of these banks, which were forbidden from negotiating foreign bills. They were also forbidden from giving advances for a period exceeding six months.
3. In the 19th Century, most of Indian Banks were established under the regulation of The Royal Commission and The Industrial Commission in 1914 and 1918 respectively. In 1919, Sir B. N. Sharma had moved a revolution in the Imperial Legislative Council asking the Government for appointing a banking committee.

4. The word “Bank” is derived from the Italian word “Banco”, it means “Desk/ Bench” used during the Renaissance by Florentine bankers, who used to make their transaction above a desk covered by a green tablecloth. However, there are traces of banking activity even in ancient items. In fact, the word traces its origin back to the ancient Roman Empire, where money lenders would set-up their status in the middle of enclosed country yards called “Macella” on a long bench called a “Bancu” from which the words “Banco” and “Bank” word derived.

5. The banking regulation act passed in 1948 provided legal framework for the regulation of the banking systems by the RBI. The Act prohibited his use of word ‘Bank’ by financial companies. The RBI was a greater power of controlled over the bank. There were 620 banking companies, including big or small, scheduled or non-scheduled operating mostly in State capital urban states. The number of branches was 4263, total deposits and advances were Rs. 997cr. and Rs.518 cr., and investments were Rs. 376 crore. Imperial Bank of India was the biggest bank in those days with 433 branches.

6. Banking sector reforms overall all sectors because of broad direction of Narsimham committee-I and Narsimham committee-II. Narsimham committee suggested monetary policy framework for competition with global economy.
7. The RBI made progress in modifying the policy framework for reforms. After reforms, it is indicated that reforms make a positive effect on Indian economy.
   - SLR, which was 37.4% in March 1992, came down to 25% in 2001.
   - CRR, which was 15% in January 1992, was brought down to 5.5% in December 2001.
   - The bank rate was reduced from 12% in October 1991 to 6.5% in October 2001.

8. Virtual E-banking and any ware and any time banking are the order of the day. The financial sector operates in a more competitive environment than before and intermediates huge volume of international financial flows in the wake greater financial deregulation and global financial integration. Indian banks face several challenges in this regards.

9. The human resources management in banks will have to change in tune with the fast changing banking environment at home and abroad. While it is difficult to bring about radical changes in the staff structure in the near future, public sector banks can effect improvements in the existing practices of recruitment, training and redeployment. Information technology is an area where HRD is now critical. There is also the urgent need for training for up gradation of different types of skills, for redeployment, for changing the mindset and attitudes.

10. Corporate governance is assuming greater importance in the banking sector today, as a result of certain unhealthy developments in recent years. Corporate governance underlines the belief that the public goods
should be placed above the private goods and that corporate resources cannot be used for personal benefit.

11. The objective of the KYC guidelines is to prevent banks from being used, intentionally or unintentionally, by criminal elements for money laundering activities. The revised KYC policy of the bank incorporates the following five elements.

   i. Customer Acceptance Policy (CAP).
   ii. Customer Identification Procedures (CIP).
   iii. Monitoring of Transactions.
   iv. Risk Management.
   v. Customer education.

12. Basel is a framework for calculating capital to risk weighted ratio (CRAR) through an amendment in 1996, market risk was incorporated in the weighting scheme of Basel-I along with credit risk. Basel is considered as one size fits all frameworks, which needed to be upgraded as each bank has its own way in measuring, managing and mitigating risk. The Basel-II is of risk management which not only includes credit risk but the market and operational risk as well. Banks are capable of applying risk sensitive methodologies through Basel-II norms.

13. The Hilton young commission recommended that of central bank in country is necessary, the Government has passed RBI act, 1934 and established RBI. Reserve bank of India mainly looks after the Important banking functions.

14. Every bank has to perform certain functions, through borrowing and lending money. Function of bank may be broadly classified into four categories like, primary function, demand deposit, time deposits and accepting of deposits.
Suggestions:-

On the basis of above findings, following suggestions can be recommended

1. **Spread bank branch at rural level**- Rural sector continues to play an important role in terms of contribution to GDP and employment generation in India, as about 70 percent of India’s population still lives in rural areas. So bank should spread branches at rural level.

2. **Technological up gradation**

   Technology up gradation necessary for bank as well industries, so bank should provide TUFS (technology up gradation fund scheme).

3. **Innovation in bank services**

   It is necessary to stay ahead, constantly upgrade the products and create new markets. So bank should develop innovative methods to reduce cost, provide cheaper service, quality of products and services at reasonable prices.

4. **Low cost deposit mobilization**

   The mobilization of low cost deposits, like current account and savings bank deposit is the urgent need for the bank.

5. **Reduce unnecessary cost**

   Banks have important way to save money and expand profit so bank should reduce direct and indirect expenses.

6. **Maintain capital expenditure**

   Capital Expenditure other than those for Technological Up gradation should be subject to a stringent scrutiny and allowed only if absolutely essential. Even in respect of capital expenditure for Technology Up gradation, the cost vis-à-vis the benefit thereof, the sustenance of the technology for a reasonably long period and the provisions available for further up gradation should be thoroughly
analyzed. Unutilized/under-utilized premises and other assets should be sold or rented out to augment income.

7. Human resource management

Human resource management basically deals with finding the right people, placing them in the right job, training and developing them for better performance, providing career path with sustaining motivation through proper and timely rewards. To reap benefits of the human resource, the policy on HRM should be positive, motivating and transparent and which should make every employee feel that they are part of the organisation and they are part of the decision making process.

8. Managing competition

The state owned banks have lost their market monopolies and face stringent competition. Success for weak banks will depend primarily on their organizational effectiveness and imaginative corporate planning at local level parable loss.

9. Customers’ loyalty

Customers’ loyalty is one of the important ingredients for the process restructuring. Satisfied customer carry out more and more customers at banks doorstep. In other words, the services sector is a standing testimony to the adage "Customer is the King". Banks should woo customers with a plethora of value added services, as now the race is to be better than the best.

10. Customers’ expectations

Banks need to focus more on quality of services does not focus quantity of services, so banks should tune with the expectations of the customers at large.
11. Customers’ requirements
Banks should identify and anticipate customer requirements and develop the capability of servicing those needs.

12. Employee empower
The policy should be redefined to making the employees committed to the organisation and to the changes that are taking place and to face the future challenges as a cohesive team.

13. Bundling of products
The customers in general had expressed a desire to pay only for the product they use, would prefer plain vanilla products and are distinctly unhappy paying for an entire bundle products.

8.3 Innovative banking
Major findings of the chapter – Innovative banking are as below
1. Innovative banking means the broader application of new methods and techniques, new scheme in the field of deposit mobilization, deployment of credit and bank management, for the example bank have introduced various types of schemes like retirement scheme, Akshaynidhi scheme, pension plan, money lending scheme such as education loans, car finance, home loans, household goods finance etc.

2. Computerization in banks solved many problems in banking sector and accelerator of the banking activities, so ‘computerization of banks’ has been termed as Innovative Banking. Computerization and technological upgradation in the field of communication enhanced banking activities. With this, banks should innovate various services to satisfy their customers.

3. The period after 1964 clearly described as the phase of ‘Innovative banking’. It is the Period (1964-67) where there was an increasing concern about the problem of concentration of economic power in few hands. Several official reports investigated into these problems.
4. The bank nationalization in 1969, it is a story of numerous diversifications and innovations introduced in the Indian banks with a view to improve their performance in accordance with the changing needs of the economy.

5. Consortium approach introduced by RBI in 1974. According to this approach, more than one bank would finance a single borrower requiring larger credit limits. The commercial banks are introducing computerization and many new techniques in their operating with the objective of improving the customer service. The facets of new technology consist of Shared payment network system (SPNS), Electronic funds transfer system (EFTS), Electronic clearing system (ECS), Electronic cash and E-credit

6. Merchant banking was formally started, when Grindlays bank received the license from Reserve Bank of India in 1967. At the end of 1991 eight commercial banks have started merchant banking facilities.

7. The Indian banks have entered the phase of consolidation, sophistication and greater productivity. Consolidations with moderate and selective expansions are the keywords in banking operations. A part from social functions the bank would now pay greater attention to their customer Improvement in financial Strength, selective computerization, better consumer services, better managerial culture, Maintain Profit Adequacya Healthy organizational structure etc.

8. Venture capital fund (VCF) is a new type of financial intermediary which has emerged in India in late 1980’s. Venture capital funds (VCFs) are mutual funds or institutional investors which provide risk capital, management and marketing expertise to highly risky and new private business, particularly in technology oriented or knowledge intensive industries.
9. Banking Ombudsmen scheme was announced in June 1995 to provide quick and inexpensive facility to resolve customers’ grievances. Eleven Ombudsmen are now functioning in the country.

10. The precursor for the modern home online banking services were the distance banking services over electronic media from the early 80s. The term online became popular in the late 80s and referred the use of a terminal keyboard and TV or monitor to access the banking system using a phone line. “Home-Banking” can also refer to the use of a numeric keypad to send tones down a phone line with instruction to the bank. History of Innovative banking has been classified under five broad head namely, videotax, alex, telesp, CEPT and other broadcasting services.

11. ICICI bank in the year 2000, 94% of the transaction happened at the branches, just 2% over the net. In fiscal 2006, transactions at the branch were down to 22% of the total while net banking transactions rise to 18%. ICICI Demat services boasts of an ever growing customer base of 16.2 lacs as on 30 September 2009. ICICI Bank offers various innovative products in their endeavour to offer world class services to its customers.

12. HDFC bank transaction that accounted for 43% of all transaction in fiscal 2001, came down 23.5% in fiscal 2006. In the same period, internet transactions rise from about 3% to 16%, about 40 of the transaction on the net take place during non-banking hours. i.e. 6 p.m. to 8. a.m.

13. Reserve Bank of India has set up a Working Group on Internet Banking to examine different aspects of Internet Banking which focused on three major areas such as technology and security issue, legal issues the regulatory and supervisory issues.
14. The Electronics Corporation of India Ltd. was set up under the Department of Atomic Energy on 11th, 1967 with the objective of research and development in the fields of Electronic communication, control, instrumentation and automation of information technology. CMC Ltd (Computer Maintenance Corporation Of India Ltd.) was established in 1976, to look after maintenance operation of main frame computers installed in several organizations in India. TCS (Tata Consultancy Services) which started functioning from 1968. In the 1980 an IIT Delhi pioneered the effort to start a major education centre in India to impart training in information technology and their efforts resulted in the setting up of NIIT in 1981. Aptech computer education was established in 1986 following the experiment of NIIT.

15. Banks and financial institutions had taken a decision to adopt SWIFT (Society for Worldwide Interbank Financial Telecommunication) like message formats for putting all their funds based applications on the Internet. This initiative would not only help standardization in banks but would as well help across border Straight through Processing so as to ultimately integrate our financial system with other cross border financial systems. Here the researcher has tried to focus major highlights of various committee appointed by RBI on IT issue, which is Rangarajan committee (1983), Rangarajan committee (1988), W.S. Saraf committee (1994), Shere committee (1995), Narsimham committee (1998) and Vasudevan committee (1999)

16. Core banking applications (CBS) in Banks provide the complete front-end and backend automation of banks. Core banking applications provide anywhere, anytime 24 by 7 non-stop services, which is not possible with traditional localized branch automation systems. These applications also provide automation across multiple delivery channels.
Core banking is a centralized system that provides accounting, customer information management and transaction processing functions.

17. Computerization is a necessary of all banks. Almost all the activities in a bank can be performed more effectively and efficiently with the help of computers broadly. Computer application is divides in two types are 1). Intra bank application and 2). Interbank application.

18. Innovative banking practices offer a number of benefits to customer. But in the present scenario, we are obvious various cyber crimes, due to lack of awareness of customers. Hence if the customer is unaware about security requirement for use of e-banking facilities, limitation of innovative banking and may occur and may create small to large risks.

Suggestions:-

On the basis of above findings, following suggestions can be recommended

1. Banks should provide customers
   - Minimum courtesy and behavioral standards
   - Transparency on account transactions
   - Non-discriminatory policy
   - Deliver what is promised to the customers
   - Allowing seamless ‘switching’ of products without excessive penalty.
   - Appropriateness of ‘sell’ and
   - Firm and polite stand against unreasonable customer demands.

2. Minimum Balance
   The banks should inform the customer immediately on the balance in the account breaching minimum balance and the applicable penalty charges for not maintaining the balance by SMS, e-mail and letter.
3. **Basic Savings bank account**

   Government had made various types of scheme like MGNREGS, it is a mandatory for benefactors opened an account. Bank should provide account with restrictions like non-availability of a cheque book and ATM card under ‘No frill Account’ are acting as impediments.

4. **Uniform account opening forms**

   Bank should obey common format for opening an account. So that it becomes an avoidable inconvenience to the customer

5. **Customer education**

   Banks should make use of Print media, Television, All India Radio for this purpose. Short training programmes at the branch level can also be arranged for customers. Banks should involve customer associations in revisiting / evolving strategy for imparting customer education. IBA should consider a toll free Common Call Centre number (like Dial 100) for all banks. A customer would ring that number and thereafter get diverted to the bank concerned.

6. **Customers information**

   Bank should indicate the name, address, customers ID. MICR code, IFSC code, helpline number and banking ombudsman contact detail etc. Bank should provide digitally signed e-mail statement to the customers. Bank should maintain passbook printing quality. Bank should indicates the name of the payee as well as instrument number in case of debit entries and the name of payee bank / drawer of instrument as well as instrument number in case of credit entries. Banks should provide TDS coupons before tax return filling.

7. **Inoperative accounts**

   Customers always face difficulties due to accounts being frozen by banks. Before marking the account as inoperative, banks must intimate
the account holder by SMS and send a mail. For confirmed account being frozen by banks.

8. **Uniform Know Your Customer (KYC) Norms**
   The customers complained that KYC norms were not similar across all banks. Bank should accept uniform KYC documents when customers opening fresh accounts or having accounts with banks.

8.4 **Innovative banking services**

   **Major findings of the chapter – Innovative banking services are as below.**

1. ATM is a computerized tele-communications device that provides the clients of a financial institution with access to financial transaction in a public space without the need for a cashier, human clerk or bank teller.

2. Biometric means using the body as a password. Biometric ATM is classified on the basis of three types of Characteristics of an individual. The Biometric ATM solution consists of central server which holds a repository of customer finger prints and verification of accounts.
   
   ➢ Biometric ATM technique divides into various parts namely:
      
      ❖ **Physiological technique.**
      
      Included finger, hand and fingerprint
      
      ❖ **Geometry technique.**
      
      Included eye, retinas, iris, face, and wrist (vein)
      
      ❖ **Behavioral technique.**
      
      Included Voice, signature, typing and pointing

3. Core banking is all about knowing customers’ needs, provide them with the right products at the right channels, 24 hours a day, 7 days a week using technology aspects like internet, mobile, ATM. Regarding the banking status in India, in march 2004, 44% of total branches of banks
and in March 2006, 28.9% of total branches of banks were converted into CBS branches.

4. Mobile banking is an important step from the innovative banking point of view. M-banking is that banking in which a person can check about or transact from his account from anywhere in the world with the help of his mobile.

5. Credit card is that small piece of plastic which gives the holder a facility of travel, entertainment, cash, hotel facility, purchases from departmental stores, shops, home purchase, orders ticket to train and air travel etc. on credit basis.

6. A smart card usually contains an embedded 8 bit micro-processor a kind of computer chip. The micro-processor is under a contact pad on one side of the card.

7. Electronic fund transfer in which one or more of the steps in the process that were previously done by paper based technique are now done by electronic technique. In India, the fund transfer are basically done through mail transfer, draft or telegraphic transfer. The different forms of Electronic fund transfer prevalent in the use are EFT through Electronic Data interchange, bank net, RBINET, IDRBI VSAT Network, EFT from points of sales, Electronic cash, Swift global system for funds transfer and electronic clearing settlement etc.

8. EBP attracts customers due to the faster and efficient bill payment. Electronic bill payment allow customers to receives and pay bills through telephone and online computer network. Most of Indian banks are trying to adopted EBP portal.

9. Electronic data interchange is a computer to computer transfer of details of commercial or administrative transactions using an agreed protocol and standard data structure. EDI is the exchange of documents of value in standardized electronic form between organizations in an automated
manner directly from a computer application in one organization to an application in another.

10. An E-cheque is the electric version of representation of paper cheque. The information and legal framework on the E-cheque is the same as that of the paper cheques. It can now be used in place of paper cheque to do any and all remote transactions.

11. MICR means Magnetic Ink Character Reader or recognition. MICR is a character recognition technology adopted mainly to facilitate the processing of cheque in the banks. The process was demonstrated to the American Bankers Associations in July, 1956 and it was almost universally employed by 1963.

12. Real time gross settlement are found transfer system where transfer of money takes place from one bank to another on a “real time” and on “gross” basis. Settlement in “real time” means payment transaction is not subject to any waiting period.

13. STEPS is a high innovative and effective payment solution, designed, developed and implemented by the bank. By this, the customer from anywhere can transfer his money in his account and within next day, it is deposited in the branches covered by this method. As on 31-03-05, a total numbers of 4042 FCB’s were brought under STEPS.

14. The shared payment network system, named SWADHAN has been sponsored by the Indian banks’ association (IBA). It is a network of ATMs, points of scale terminals and cash dispensers with a view to pool the resources of the banks and underlines the spirit of competition through co-operation.

15. SWIFT means Society for Worldwide Interbank Financial Telecommunication. SWIFT operates a worldwide financial messaging network, which exchanges messages between banks and other financial institutes. Swift also markets software and services to financial
institutions much of it for use on the SWIFTNET Network and ISO 9362 bank identifier codes (BICs) are popularly known as “SWIFT CODES”.

16. ACH (Automated clearing house) is an electronic banking network operating system.

17. Securities settlement system (SSC) and foreign exchange clearing (FEC) system are their critical components of the payment and settlement system. The clearing corporation of India (CCIL), set up by banks acts as the central counter party for clearing of transactions.

18. David Chaum, a mathematician and privacy expert, founded DigiCash in 1994. This provider creates e-cash, proprietary electronic cash tokens, which are marketed as being the equivalent of cash. An account is established at a DigiCash-licensed bank with real money. Once established, the customer can withdraw e-cash that is stored on the user computer's hard drive.

Suggestions :-
On the basis of above findings, following suggestions can be recommended

1. Internet Banking
Customers repeatedly mentioned that while technological banking aspects like net-banking was convenient to them and cost effective to the banks, there should be a total secure protection afforded to the customers against any losses suffered on account of such banking.

2. Mobile banking
Mobile banking coupled with digitization of records can revolutionize everyday life for the vast majority. Economically weaker section shall be brought into the banking system by combining No Frills Account / Micro Finance / Government subsidies and payments.
3. **ATM/Debit/Credit Cards** - Customer feedback about the Cards indicated that it would be better if there is a photograph of the Card holder and the signature of the Card holder also laminated on the Card to enable easy identification at the merchant establishment. The laminated signature would be exactly the same as in the bank records. The Committee after deliberating the issue felt that if the address of the card holder is present on the laminated portion, with a provison for including the UID number, the Card issued by the bank would become a tool for KYC compliance.

4. **Merchant Discount/Fee for Debit Cards** - Customer feedback indicated that merchants show a preference for cash as they do not want to part with the merchant discount to the Card service provider. Cards are accepted as a payment mechanism without issues only by reputed merchant establishments, by merchants to effect a sale which is not possible if the card is not accepted and when the customer is willing to pay the premium demanded by the merchant. In other circumstances, cash is preferred.

5. Automatic updation of age records and then conferring senior citizen benefits wherever applicable once a customer becomes a senior citizen and minor customers turning major and there should be automatic upgradation of banking records, banking functions and other aspects, subject to informing customers about this.

6. It is found from the collected data that private banks are doing best to communicate about their innovative products and services to the customers of public sector banks.

7. Public banks have adopted best marketing practices to educate and inform customers about all traditional products and services while public sector banks are lacking in these efforts. So public sector banks should start such strategies.
8. **Biometric ATM cards** - Illiterate customers and senior citizens generally find it difficult to remember ATM-PIN. Banks may issue Biometric ATM cards to senior citizens and illiterate customers who are not at ease while using ordinary ATM cards. The necessary hardware changes at the front end devices may be made accordingly.

9. ATM cards may be issued at the option of the customers on written request. Customers not desiring technology facilitation should not be forced to do so.

### 8.5 Internet banking- State-of-art-technology

**Major findings of the chapter – State of the technology are as below**

1. The earliest usage of the term “State of the art” documented by the Oxford English Dictionary dates back to 1910 from an engineering manual by H.H. Suplee titled Gas Turbine it reads, “In the present state of the art this is all that can be done”. Bank of Baroda has accepted State of the art technology for giving a boost to sales growth by enhancing customer satisfaction. Bank of Baroda has worked in three dimensions like state of the art infrastructure, state of the art technology adoption and state of the art products.

2. A tagline is a slogan which succinctly, memorably and descriptively sums up a Bank or companies’ product. Taglines reflect whole identities of business entities. A well-organized tag lined can endure consumers’ minds.

3. The IT Act 2000 is expected to be the major changes in the e-Commerce business in India. The Major provisions are maintain the customer transaction record both ways like hard copy and soft copy, certifying authorities to be overseen by a controller of certifying authorities, provide legal recognition to commerce which means that contracts can be enforced, provide legal recognition for digital signature
and digital signature to be authenticated by certifying authentication authority.

Suggestions:-

On the basis of above findings, following suggestions can be recommended.

1. **Branch layout**
   
The layout of the branch premises and the people manning it play an important role in motivating a customer with positive thoughts. The needs of the senior citizens and the physically challenged persons must also be an important input in deciding on the branch location and its access. In many cases ‘May I Help You’ counters at branches were unmanned. Even the Reference Manual which gives information about bank’s procedures is not easily available. In some branches, the Comprehensive Notice Board is also not displayed. So banks should focus on notice board, pamphlets and banks related information easily available for the banks customers.

2. **One - Man Branch**
   
   Banks should be taken step to operating one-man branches at rural area.

3. **Locker Facilities**
   
   Banks should be given more flexibility in the allotment of lockers otherwise, the locker facility creation itself gets dis-incentivised.

4. **Empowering Disabled Persons**
   
   The funds should be channelised to disabled persons through their All India bodies and that there should be a refinance facility available for banks against their loans to disabled persons.

5. **There should be a secure total protection policy / zero liability against loss for any customer induced transaction utilising technology through ATMs/ PoS/Online banking etc.**
6. A customer should not be made to be out of funds when any loss is suffered on account of Net/ATM banking transactions. All the rules in respect of internet banking should be so designed as to encourage consumers to feel safe about electronic transactions. In all the above scenarios, an immediate temporary credit, pending investigation, should be afforded.

7. Banks have to necessarily ensure that all internet banking is made safe by putting in place robust and dynamic fraud detection and prevention systems. Computerized / network delivery channels should have enhanced customer ease of operations and reduced costs for banks. Banks have to put in place fail-safe security systems for access, transactions etc. to increase the confidence of the bank customers to enable migration to electronic medium from conventional banking. The banks must ensure that the customers have the confidence in the systems that are being offered to them.

8. The users (utilities, airlines, train tickets etc.) of electronic bank platforms for making collections should offer small discounts to their customers to favour electronic payments. This would result in substantial savings to them in cash management.

9. Banks may introduce mechanisms whereby a customer has a choice of restricting account to account transfers to be done only from particular IP addresses or a choice of addresses. A customer should also have the option of requesting blocking the transaction if the IP address is from a different country. In fact, this should be the default option. Any change of option should be possible with ease through the call centre or online.

10. Banks may restrict the amounts that can be transferred online by way of a day cap or by way of a ceiling amount per transfer. Additional factors of authentication should be taken and higher amounts should also be permitted for online transfers.
11. Banks may introduce systems whereby fund transfer facilities can be activated by the call centre on a need basis and deactivated once the transfer is completed. The facility should also be auto-closed (deactivation) after certain time (say 30 minutes).

12. Banks in their systems should have facility of customer behavior/purchase pattern etc. analysis and any attempt from an unknown address / suspicious outlier debit transaction should be first blocked and then informed over SMS to the customer. The transaction should be allowed only after the customer authorises the transaction.

13. Banks should put in place secure systems like multi-factor authentication to enhance customer confidence and reduce possibility of frauds.

14. The banks should have dynamic scoring models with inbuilt processes and controls to trigger transactions which are not normal so that even if the identity is stolen, the fraudster should not be in a position to succeed in his attempts. Study of customer transaction behavioral patterns and stopping irregular transactions should be part of the above process.

15. There must be multi-lateral arrangements amongst banks to deal with on-line banking frauds. Presently, there is lack of such an arrangement amongst banks and the customer is required to interact with different banks/ organisations when more than one bank / organisation is involved. The Indian Banks’ Association (IBA) could provide such type of arrangements for all the banks.

16. It was felt that additional factors of authentication should be taken and higher amounts should also be permitted for online transfers as the present limits are seen to be restrictive for encouraging online money transfers.
8.6 Profile of respondents

Major findings of the chapter – Profile of respondents are as below

1. Male respondents are 38% in public sector banks and 37.90% in private sector banks, female respondents are 12% in public sector banks and 12.10% in private sector banks. In compared to female respondents, male respondents are more in both public sector and private sector banks.

2. Maximum respondents in public sector bank 19.10% belong to 26 to 35 age group. Maximum respondents in private sector bank 22.10% belong to 26 to 35 age group. Minimum respondents in public sector bank 1.1% belong to below 18 age group. Minimum respondents in private sector bank 1.2% belong to below 18 age group.

3. Married respondents are 40.2% in public sector bank and 43.4% in private sector bank, unmarried respondents are 9.8% in public sector bank and 6.6% in private sector bank. In compared to unmarried respondents, married respondents are more in both public sector and private sector banks.

4. Maximum respondents in both public sector and private sector bank 17.6% and 21% respectively belongs graduate qualification. Minimum respondents in public sector bank 1.6% belongs to below SSC qualification and private sector bank 0.2% belongs to specific educational qualification.

5. Maximum respondents in both public sector and private sector bank 21.5% and 26.2% respectively belongs private service. Minimum respondents in both public sector and private sector bank 0.2% and 0.1% respectively belongs specific occupation.

6. Highest respondents in public sector banks 19.3 belongs to Rs. 5001 to Rs. 15000 income level and in private sector banks 20.2% belong to Rs. 15001 to Rs. 30000. Lowest respondents in both public sector and
private sector bank 3.6% and 2.8% respectively belongs above Rs. 45000 income level.

7. 500 respondents belongs to public sector banks and 500 respondents belongs to private sector banks.

8. Multiple bank transactions have been used by 44.20% respondents in public sector banks and 47.2% respondents in private sector banks.

9. Highest percentage of respondent using telephone banking services in both public sector and private sector banks are 4 to 5 times (14.9 % and 15.8 % respectively). Lowest percentage of respondent using telephone banking services in both public sector and private sector banks are over 10 times (0% and 8.5 % respectively).

10. 46% respondents access internet banking services in public sector banks and 45.2% respondents in private sector banks.

11. Maximum respondents 15.9% in public sector banks and 17.9% in private sector banks visit their banks to get advice about the scheme. 10.4% respondents in public sector banks and 14% respondents in private sector banks visit their banks to make deposit. 12.3% respondents in public sector banks and 10.3% respondents in private sector banks visit their banks to withdraw cash.

12. 12.1 % respondents of public sector banks and 10.9 % respondents of private sector banks perform on line activities for product purchase. 7.3 % respondents of public sector banks and 11.4 % respondents of private sector banks perform on line activities for sold purchase. 10.9 % respondents of public sector banks and 13.7 % respondents of private sector banks perform on line activities for tax filing. 14.8 % respondents of public sector banks and 9.2 % respondents of private sector banks perform on line activities for banking advice. 4.9 % respondents of public sector banks and 4.8 % respondents of private sector banks perform on line activities for money transfer.
13. Internet explorer web browser has been preferred by maximum respondents 17.1% of public sector banks and 13.7% of private sector banks. Google chrome web browser has been preferred by minimum respondents 2.9% of public sector banks and 2.5% of private sector banks.

14. Window operations system is used by maximum respondents 28.2% in public sector banks and 22.6% in private sector bank. Mac operating system is used by 6.3% respondents in public sector banks and 5.3% respondents in private sector banks. Linux operating system is used by 8.4% respondents in public sector banks and 12.6% respondents in private sector banks. Android operating system is used by respondents 7.1%, in public sector banks and 9.5% in private sector banks.

15. 40.2% respondents of public sector and 38.8% respondents of private sector banks read banks agreement privacy policies and securities of the banks.

16. 36.1% respondents of public sector banks and 34.2% respondents of private sector banks use unique password for banking transaction.

Suggestions:-

On the basis of above findings, following suggestions can be recommended.

1. Female respondents are less than male respondents in both public sector and private sector banks. So banks should try to attract more female customers along with male customers in order to increase banking business.

2. Customers of all age group should be encouraged for banking transactions.

3. Banks should make such efforts that customers having qualification from below SSC to post graduate make regular use of banking
transactions and using banking services should became their habit. Such efforts should be done for customers of all occupation groups and income groups also.

4. Non user of multiple bank transactions and internet banking services should be transferred into users.

5. Number of customers visiting there banks for bank deposit should be increased by offering attractive return.

6. The banks should create such an environment that almost customers prefer to perform various banking activities on-line. Such habits of customers will reduce work burden of banking employee.

7. Customers should read banking agreement privacy and security policies of their banks, so that they can became fully aware of such.

8.7 Data analysis and hypothesis testing

Major findings of the chapter – Data analysis and hypothesis testing are as below

1. The awareness level of customer about various banking services is very important for the customer to take the benefit of particular services of the bank. Person who have knowledge about banking services are most preferred to use technology based serviced. Some types of services are very difficult to use because illiterate people avoid to use but well educated people most preferred to use technology based services. Average awareness level of the public sector banks service is 2.55, it means that the respondents' awareness level of the technology based service is quite good and nice as per their response. Average awareness level of the public sector bank services 2.51, it means that the public sector banks respondents' awareness level of the technology based service is quite good in compared to private sector bank.
2. As per 90% respondents of public sector banks and 83.20% of private sector banks - banks provide ATM services, As per 79.60% respondents of public sector banks and 77.40% of private sector banks - banks provide EFP services, As per 67.60% respondents of public sector banks and 61.60% of private sector banks - banks provide EBP services and as per 61.80% respondents of public sector banks and 47.60% of private sector banks - banks provide cheque.

3. 17.7% respondents of public sector banks and 13.9% respondents of private sector banks choose their banks for the reason the excellence service, 11.5% respondents of public sector banks are 11.10% respondents of private sector banks choose their banks for the reason the familiarity, 14.90% respondents of public sector banks and 18.20% respondents of private sector banks choose their banks for the reason the brand name, 5.90% respondents of public sector banks and 6.80% respondents of private sector banks choose their banks for the reason the traditionalist.

4. Maximum respondents 16.6% of public sector banks and 17.90% of private sector banks have opened internet bank account for the reason safe and secure and minimum respondents 9% of public sector banks have opened bank account for the reason convenience and 8.8% respondents of private sector banks have opened bank account for the reason easy to operate.

5. The reason for opening internet bank account is safe and secure, minimum respondents 9% of public sector banks and 1% of private sector banks have opened internet bank account for the reason safe and secure.

6. 12.1% respondents’ of public sector banks and 13.4% respondents’ of private sector banks feel that internet account creation procedure is difficult, 17.1% respondents’ of public sector banks and 11.6%
respondents’ of private sector banks feel that internet account creation procedure is easy, 11.8% respondents’ of public sector banks and 15.3% respondents’ of private sector banks feel that internet account operation procedure is time consuming, 5 % respondents’ of public sector banks and 6.3% respondents’ of private sector banks feel that internet account creation procedure is complex and majority of the respondents’ feel that internet account creation procedure is easy.

7. 41.66% respondents’ of public sector bank and 42.60% respondents’ of private sector bank pay hidden charges and majority of the respondents-Maximum respondents of public sector banks 10.7% pay internet banking user charges Rs. 15 to Rs. 25 and private sector banks 12.30% pay charges Rs. 5 to Rs. 15, minimum respondents of both public sector and private sector banks 1.3% pay internet banking user charges above Rs. 1000.

8. Server down difficulties has been faced by 8% respondents of public sector banks and 8.7% respondents of private sector banks, java script does not supported difficulties has been faced by 11.2% respondents of public sector banks and 11.7% respondents’ of private sector banks, net failure difficulties has been faced by 9.9 % respondents of public sector banks and 11.5% respondents’ of private sector banks, majority of the respondents face the difficulties Java script does not supported and net failure and 7.4% respondent in both public sector and private sector bank do not face any difficulties while using innovative banking services.

9. Reduce cost of internet banking transaction has expectation level of 51.40% in public sector bank respondents and 62.20% in private sector bank respondents, improve customer services has expectation level of 43.20% in public sector bank respondents and 10% in private sector bank respondents, improve distribution channel has expectation level of
55.40% in public sector bank respondents and 3% in private sector bank respondents, reap operational benefit has expectation level of 63.80% in public sector bank respondents and 1% in private sector bank respondents provide effective proof of banking transaction has expectation level of 52.40% in public sector bank respondents and 6% in private sector bank respondents and maximum respondents 61.6% of public sector banks expect more ATM branches and 64.2% of private sector banks expect reap operational benefits.

10. Cross tabulation of respondents according to their gender and operating system of public sector banks shows that 43% male respondents and 13.40% female respondents prefer to use window operating system, 9.2% male respondents and 3.4% female respondents prefer to use Mac operating system, 13.20% male respondents and 3.6% female respondents prefer to use Linux operating system, 10.60% male respondents and 3.6% female respondents prefer to use Android operating system and all operating systems are more user by male respondents’ than female respondents.

**Application of ANOVA**-The calculated value of ANOVA shows that there is no significance difference in the mean score of respondent’s opinion regarding use of operating system of innovative banking with their gender. Here the null hypothesis (H₀) is accepted and alternative hypothesis (H₁) is rejected.

11. Cross tabulation of respondents according to their gender and operating system of private sector banks shows that 34.6% male respondents and 10.60% female respondents prefer to use window operating system, 8% male respondents and 2.6% female respondents prefer to use Mac operating system, 19.20% male respondents and 6% female respondents prefer to use Linux operating system, 14% male respondents and 25%
female respondents prefer to use Android operating system and all operating systems are more user by male respondents’ than female respondents.

**Application of ANOVA**—The calculated value of ANOVA shows that there is no significance difference in the mean score of respondent’s opinion regarding use of operating system of innovative bank with their gender. Here the null hypothesis \((H_0)\) is accepted and alternative hypothesis \((H_1)\) is rejected.

12. Cross tabulation of respondents according to their gender and banking agreement privacy and securities policies of public sector banks shows that 61% male respondents and 19.40% female respondents prefer to know bank agreement privacy and securities policies of public sector, 12.8 % male respondents and 3.2% female respondents do not prefer bank agreement privacy and securities policies of public sector and 2.2% male respondents and 1.4% female respondents don’t know bank agreement privacy and securities policies of public sector banks.

**Application of ANOVA**—The calculated value of ANOVA shows that there is no significance difference in the mean score of respondent’s opinion regarding bank agreement privacy and securities policies gender. Here the null hypothesis \((H_0)\) is accepted and alternative hypothesis \((H_1)\) is rejected.

13. Cross tabulation of respondents according to their gender and bank agreement privacy and securities policies of private sector banks shows that 59.2% male respondents and 18.40% female respondents prefer to know bank agreement privacy and securities policies of private sector bank, 15.2 % male respondents and 5.6 % female respondents do not prefer banking agreement privacy and securities policies of private sector bank and 1.4 % male respondents and 0.4% female respondents
don’t know bank agreement privacy and securities policies of private sector bank.

**Application of ANOVA**-The calculated value of ANOVA shows that there is no significance difference in the mean score of respondent’s opinion regarding bank agreement privacy and securities policies of with their gender. Here the null hypothesis \( (H_0) \) is accepted and alternative hypothesis \( (H_1) \) is rejected.

14. Cross tabulation of respondents according to their gender and internet account creation procedure of public sector banks shows that Account creation procedure is easy has been opined by maximum male respondents 25.2 % and female respondents 9%. Account creation procedure is difficult has been opined by maximum male respondents 18.6% and female respondents 5.6%. Account creation procedure is time consuming has been opined by maximum male respondents 17.8% and female respondents 5.8%. Account creation procedure is complex has been opined by maximum male respondents 9 % and female respondents 1%.

**Application of ANOVA**-The calculated value of ANOVA shows that there is no significance difference in the mean score of respondent’s opinion regarding internet account creation procedure of innovative banking with their gender. Here the null hypothesis \( (H_0) \) is accepted and alternative hypothesis \( (H_1) \) is rejected.

15. Cross tabulation of respondents according to their gender and internet account creation procedure of private sector banks shows that Account creation procedure is time consuming complex has been opined by maximum male respondents 21.6 % and female respondents 9%. Account creation procedure is difficult has been opined by maximum male respondents 21.60% and female respondents 5.2%. Account
creation procedure is easy has been opined by maximum male respondents 18.4% and female respondents 4.8%. Account creation procedure is complex has been opined by maximum male respondents 9 % and female respondents 3.6%.

**Application of ANOVA**-The calculated value of ANOVA shows that there is no significance difference in the mean score of respondent’s opinion regarding internet account creation procedure of innovative banking with their gender. Here the null hypothesis \((H_0)\) is accepted and alternative hypothesis \((H_1)\) is rejected.

16. Cross tabulation of respondents according to their gender and internet banking user charges of public sector banks shows that user charges Rs. 15 to 25 are paid by maximum male respondents 16.4% and maximum female respondents 5% and user charges above Rs. 1000 are paid by minimum male respondents 2.4% and minimum female respondents 0.2%.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondent’s opinion regarding user charges of innovative banking with their gender. Here the null hypothesis \((H_0)\) is rejected and alternative hypothesis \((H_1)\) is accepted.

17. Cross tabulation of respondents according to their gender and internet banking user charges of private sector banks shows that user charges Rs. 15 to 25 are paid by maximum male respondents 10.2% and maximum female respondents 4.4 % and user charges above Rs. 1000 are paid by minimum male respondents 1.6% and minimum female respondents 1%.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’
opinion regarding user charges of innovative banking with their gender. Here the null hypothesis \((H_0)\) is rejected and alternative hypothesis \((H_1)\) is accepted.

18. Cross tabulation of respondents according to their gender and service level of public sector banks shows that maximum male respondents 36.56% and female respondents 41.4% agree with service level of public sector bank. Minimum male respondents 2.16% and female respondent 1.4% disagree with service level of public sector banks.

**Application of ANOVA** - The calculated value of ANOVA shows that there is no significance difference in the mean score of respondent’s opinion regarding service level of innovative banking with their gender. Here the null hypothesis \((H_0)\) is accepted and alternative hypothesis \((H_1)\) is rejected.

19. Cross tabulation of respondents according to their gender and service level of private sector banks shows that maximum male respondents 36.89% and female respondents 32.98% agree with service level of private sector bank. Minimum male respondents 3.24% and female respondents 3.12% strongly disagree with service level of private sector bank.

**Application of ANOVA** - The calculated value of ANOVA shows that there is no significance difference in the mean score of respondent’s opinion regarding service level of innovative banking with their gender. Here the null hypothesis \((H_0)\) is accepted and alternative hypothesis \((H_1)\) is rejected.

20. Cross tabulation of respondents according to their gender and trust level of public sector banks shows that maximum male respondents 42.5% and female respondents 43.2% agree with trust level of public sector
bank. Minimum male respondents 2.56% and female respondents 1.59% strongly disagree with trust level of public sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is no significance difference in the mean score of respondent’s opinion regarding trust of innovative banking with their gender. Here the null hypothesis ($H_0$) is accepted and alternative hypothesis ($H_1$) is rejected.

21. Cross tabulation of respondents according to their gender and trust of private sector banks shows that maximum male respondents 39.16% and female respondents 34.72% agree with trust of private sector bank. Minimum male respondents 2.68% and female respondents 2.39% disagree with trust level of private sector bank.

**Application of ANOVA**-The calculated value of ANOVA shows that there is no significance difference in the mean score of respondent’s opinion regarding trust of innovative banking with their gender. Here the null hypothesis ($H_0$) is accepted and alternative hypothesis ($H_1$) is rejected.

22. Cross tabulation of respondents according to their gender and usefulness of public sector banks shows that maximum male respondents 35.59% and female respondents 36.49% agree with usefulness of public sector bank. Minimum male respondents 2.45% and female respondents 1.49% strongly disagree with usefulness of public sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is no significance difference in the mean score of respondent’s opinion regarding usefulness of innovative banking with their gender. Here the null hypothesis ($H_0$) is accepted and alternative hypothesis ($H_1$) is rejected.
23. Cross tabulation of respondents according to their gender and usefulness of private sector banks shows that maximum male respondents 32.92% and female respondents 34.95% agree with usefulness of private sector bank. Minimum male respondents 4.10% and female respondents 4.34% strongly disagree with usefulness of private sector bank.

**Application of ANOVA**-The calculated value of ANOVA shows that there is no significance difference in the mean score of respondent’s opinion regarding usefulness of innovative banking with their gender. Here the null hypothesis \( (H_0) \) is accepted and alternative hypothesis \( (H_1) \) is rejected.

24. Cross tabulation of respondents according to their gender and satisfaction level of public sector banks shows that maximum male respondents 34.5% and female respondents 36.6 % agree with satisfaction of public sector bank. Minimum male respondents 1.74% and female respondents 0.55% strongly disagree with satisfaction of public sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is no significance difference in the mean score of respondent’s opinion regarding satisfaction level of innovative banking with their gender. Here the null hypothesis \( (H_0) \) is accepted and alternative hypothesis \( (H_1) \) is rejected.

25. Cross tabulation of respondents according to their gender and satisfaction level of private sector banks shows that maximum male respondents 35.16% and female respondents 38.24% agree with satisfaction of private sector bank. Minimum male respondents 3.62% and female respondents 2.78% strongly disagree with satisfaction of private sector banks.
Application of ANOVA-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding satisfaction level of innovative banking with their gender. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

26. Cross tabulation of respondents according to their gender and behavior of bank employee of public sector banks shows that maximum male respondents 37.1% and female respondents 38.2% agree with behavior of the bank employee of public sector bank. Minimum male respondents 2.32% and female respondents 1.65% strongly disagree with behavior of the bank employee of public sector banks.

Application of ANOVA-The calculated value of ANOVA shows that there is no significance difference in the mean score of respondents’ opinion regarding behaviour of bank employee of innovative banking with their gender. Here the null hypothesis ($H_0$) is accepted and alternative hypothesis ($H_1$) is rejected.

27. Cross tabulation of respondents according to their gender and behavior of bank employee of private sector banks shows that maximum male respondents 35.79% and female respondents 32% agree with behavior of the bank employee of private sector bank. Minimum male respondents 4.07% and female respondents 3.60% strongly disagree with behavior of the bank employee of private sector banks.

Application of ANOVA-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding behaviour of bank employee of innovative banking with their gender. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.
28. Cross tabulation of respondents according to their age and operating system of public sector banks shows that all operating system are used by maximum respondents of age group 26 to 35 years. All operating systems are used by minimum respondents of age group below 18 years.

**Application of ANOVA**-The calculated value of ANOVA shows that there is no significance difference in the mean score of respondents’ opinion regarding use of operating system of innovative banking with their age group. Here the null hypothesis \((H_0)\) is accepted and alternative hypothesis \((H_1)\) is rejected.

29. Cross tabulation of respondents according to their age and operating system of private sector banks shows that all operating system are used by maximum respondents of age group 26 to 35 years. All operating systems are used by minimum respondents of age group below 18 years.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding use of operating system of innovative banking with their age group. Here the null hypothesis \((H_0)\) is rejected and alternative hypothesis \((H_1)\) is accepted.

30. Cross tabulation of respondents according to their age and banks agreement privacy and security policies of public sector banks shows that maximum respondents of the age group 26 to 35 years 29.2% prefer to know about banks agreement privacy and security policies of public sector bank. Minimum respondents of the age group below 18 years 2.2% prefer to know about bank’s agreement and privacy policies of public sector banks.
Application of ANOVA-The calculated value of ANOVA shows that there is no significance difference in the mean score of respondents’ opinion regarding awareness of banks agreement privacy policies of innovative banking banks agreement privacy and security policies of with their age group. Here the null hypothesis ($H_0$) is accepted and alternative hypothesis ($H_1$) is rejected.

31. Cross tabulation of respondents according to their age and banks agreement privacy and security policies of private sector banks shows that maximum respondents of the age group 26 to 35 years 36.2% prefer to know about banks agreement privacy and security policies of private sector bank. Minimum respondents of the age group below 18 years and above 45, 0.2% prefer to know about bank’s agreement and privacy policies of private sector banks.

Application of ANOVA-The calculated value of ANOVA shows that there is no significance difference in the mean score of respondents’ opinion regarding awareness of banks agreement privacy and security policies of with their age group. Here the null hypothesis ($H_0$) is accepted and alternative hypothesis ($H_1$) is rejected.

32. Cross tabulation of respondents according to their age and internet account creation procedure of public sector banks shows that maximum respondents of all age opine that account creation procedure is easy.

Application of ANOVA-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding internet account creation procedure innovative banking with their age group. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

33. Cross tabulation of respondents according to their age and internet account creation procedure of private sector banks shows that
maximum respondents of all age groups opine that account creation procedure is time consuming.

**Application of ANOVA** - The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding internet account creation procedure innovative banking with their age group. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

34. Cross tabulation of respondents according to their age and internet banking user charges of public sector banks shows that in the age group below 18 years maximum respondents 0.6% pay user charges of Rs. 5 to Rs. 15, Rs. 200 to Rs. 500 and Rs. 501 to Rs. 1000, in the age group of 18 to 25 years and 26 to 35 years, maximum Rs. 15 to Rs. 25 and minimum 0.2% pay above Rs. 1000, in the age group of 36 to 45 year, maximum respondents 5.6% pay user charges Rs. 5 to Rs. 15 and minimum 1.4% pay above Rs. 1000 and in the age group of above 45 years, maximum respondents 0.8% pay user charges Rs. 15 to 25.

**Application of ANOVA** - The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding internet banking user charges with their age group. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

35. Cross tabulation of respondents according to their age and internet banking user charges of private sector banks shows that in the age group below 18 years maximum respondents 0.4% pay user charges of below Rs. 5, Rs. 5 to Rs. 15 and Rs. 501 to Rs. 1000, in the age group of 18 to 25 years, maximum respondents 8.8% pay user charges Rs. 5 to Rs. 15 and minimum 0.4 % pay above Rs. 1000, in the age group of 36 to 45 year, maximum respondents 4.6% pay user charges Rs. 200 to Rs.
500 and minimum 0.4% pay above Rs. 1000, in the age group of above 45 years, maximum respondents 1% pay user charges Rs. 5 to 15.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding internet banking user charges with their age group. Here the null hypothesis \((H_0)\) is rejected and alternative hypothesis \((H_1)\) is accepted.

36. Cross tabulation of respondents according to their age and service level of public sector banks shows that maximum respondents of all age group agree with service level of public sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding service level of innovative banking with their age group. Here the null hypothesis \((H_0)\) is rejected and alternative hypothesis \((H_1)\) is accepted.

37. Cross tabulation of respondents according to their age and service level of private sector banks shows that maximum respondents of all age group agree with service level of private sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding service level of innovative banking with their age group. Here the null hypothesis \((H_0)\) is rejected and alternative hypothesis \((H_1)\) is accepted.

38. Cross tabulation of respondents according to their age and trust level of public sector banks shows that maximum respondent age group above 46% agree with trust of public sector banks. Minimum above 45 respondent 0.6% strongly disagree with trust of public sector banks.
Application of ANOVA-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding trust of innovative banking with their age group. Here the null hypothesis \((H_0)\) is rejected and alternative hypothesis \((H_1)\) is accepted.

39. Cross tabulation of respondents according to their age and trust of private sector banks shows that maximum respondent age group above 48.19% agree with trust of private sector bank. Minimum age group 18 to 25 respondent 2.14% strongly disagree with trust of private sector bank.

Application of ANOVA-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding trust of innovative banking with their age group. Here the null hypothesis \((H_0)\) is rejected and alternative hypothesis \((H_1)\) is accepted.

40. Cross tabulation of respondents according to their age and usefulness of public sector banks shows that maximum 25 to 35 age group respondents’ 37.94 % agree with usefulness of public sector bank. Minimum 25 to 35 age group respondents’ 2.25 % strongly disagree with usefulness of public sector banks.

Application of ANOVA-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding usefulness of innovative banking with their age group. Here the null hypothesis \((H_0)\) is rejected and alternative hypothesis \((H_1)\) is accepted.

41. Cross tabulation of respondents according to their age and usefulness of private sector banks shows that maximum below 18 age group respondents’ 39.29 % neutral with usefulness of private sector bank.
Minimum 36 to 45 age group respondents’ 3.09 % strongly disagree with usefulness of private sector bank.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding usefulness of innovative banking with their age group. Here the null hypothesis \((H_0)\) is rejected and alternative hypothesis \((H_1)\) is accepted.

42. Cross tabulation of respondents according to their age and satisfaction level of public sector banks shows that maximum 18 to 25 age group respondents’ 36.1 % agree with satisfaction of public sector bank. Minimum 26 to 35 age group respondents’ 1.23 % strongly disagree with satisfaction of public sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding satisfaction level of innovative banking with their age group. Here the null hypothesis \((H_0)\) is rejected and alternative hypothesis \((H_1)\) is accepted.

43. Cross tabulation of respondents according to their age and satisfaction level of private sector banks shows that maximum below 18 age group respondents’ 48.80 % neutral with satisfaction of private sector bank. Minimum below 18 age group respondents 2.41 % strongly disagree with satisfaction of private sector bank.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding satisfaction level of innovative banking with their age group. Here the null hypothesis \((H_0)\) is rejected and alternative hypothesis \((H_1)\) is accepted.
44. Cross tabulation of respondents according to their age and behavior of bank employee of public sector banks shows that maximum below 18 age group respondents’ 40 % agree with behavior of bank employee of public sector bank. Minimum 18 to 25 age group respondents’ 1.85 % strongly disagree with behavior of bank employee of public sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding behaviour of employee of innovative banking with their age group. Here the null hypothesis (\( H_0 \)) is rejected and alternative hypothesis (\( H_1 \)) is accepted.

45. Cross tabulation of respondents according to their age and behavior of bank employee of private sector banks shows that maximum above age group respondents 46.59 % agree with behavior of bank employee of private sector banks. Minimum 36 to 45 age group respondents’ 3.54 % strongly disagree with behavior of bank employee of private sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding behaviour of employee of innovative banking with their age group. Here the null hypothesis (\( H_0 \)) is rejected and alternative hypothesis (\( H_1 \)) is accepted.

46. Cross tabulation of respondents according to their education level and operating system of public sector banks shows that all operating system are used by maximum respondents of graduate. All operating systems are used by minimum respondents of below SSC.

**Application of ANOVA**-The calculated value of ANOVA shows that there is no significance difference in the mean score of respondents’
opinion regarding use of operating system of innovative banking with their education level. Here the null hypothesis ($H_0$) is accepted and alternative hypothesis ($H_1$) is rejected.

47. Cross tabulation of respondents according to their education level and operating system of private sector banks shows that all operating system are used by maximum respondents of graduate. All operating systems are used by minimum respondents of specific education.

**Application of ANOVA** - The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding use of operating system of innovative banking with their education level. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

48. Cross tabulation of respondents according to their education level and banks agreement privacy and security policies of public sector banks shows that maximum respondents of the education graduate 29.4% prefer to know banks agreement privacy and security policies of public sector bank. Minimum respondents of the education below SSC 0.2% prefer to know banks agreement privacy and security policies of public sector bank.

**Application of ANOVA** - The calculated value of ANOVA shows that there is no significance difference in the mean score of respondents’ opinion regarding awareness of banks agreement privacy and security policies with their education level. Here the null hypothesis ($H_0$) is accepted and alternative hypothesis ($H_1$) is rejected.

49. Cross tabulation of respondents according to their education level and banks agreement privacy and security policies of private sector banks shows that maximum respondents of the education graduate 32.4% prefer to know banks agreement privacy and security policies of private
sector bank. Minimum respondents of the education below SSC 0.2 % prefer to know banks agreement privacy and security policies of private sector bank.

**Application of ANOVA** - The calculated value of ANOVA shows that there is no significance difference in the mean score of respondents’ opinion regarding awareness of banks agreement privacy and security policies with their education level. Here the null hypothesis ($H_0$) is accepted and alternative hypothesis ($H_1$) is rejected.

50. Cross tabulation of respondents according to their education level and internet account creation procedure of public sector banks shows that maximum respondents of all education group opine that account creation procedure is easy.

**Application of ANOVA** - The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding internet accounting procedure innovative banking with their education level. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

51. Cross tabulation of respondents according to their education level and internet account creation procedure of private sector banks shows that maximum respondents of all education group opine that account creation procedure is time consuming.

**Application of ANOVA** - The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding internet accounting procedure innovative banking with their education level. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

52. Cross tabulation of respondents according to their education level and internet banking user charges of public sector banks shows that below
SSC- Maximum respondents 1.2% pay user charges Rs. 5 to Rs. 15, upto SSC- Maximum respondents 12% pay user charges Rs. 501 to Rs. 1000 and minimum respondent pay Rs. 5 to Rs. 15, upto HSC- Maximum respondents 3.8% pay user charges Rs.200 to Rs. 500 and minimum respondent 0.6% pay above Rs. 1000, graduate- Maximum respondents 6.8% pay user charges Rs. 200 to Rs. 500 and minimum respondent 0.6% pay above Rs. 1000, post graduate - Maximum respondents 6.2% pay user charges Rs. 15to Rs. 25 and minimum respondent 0.4% pay above Rs. 1000 and professional- Maximum respondents 2.6% pay user charges Rs. 5 to Rs 15 and minimum respondents 0.4% pay Rs. 1000.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding internet banking user charges with their education level. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

53. Cross tabulation of respondents according to their education level and internet banking user charges of private sector banks shows that below SSC- Maximum respondents 0.8 % pay user charges Rs. 5 to Rs. 15, upto SSC- Maximum respondents 2.8% pay user charges Rs. 5 to Rs. 15, upto HSC- Maximum respondents 3.8% pay user charges Rs. 5 to Rs. 15, and minimum respondent 0.6% pay above Rs. 1000, graduate- Maximum respondents 9.6% pay user charges Rs.5 to Rs.15 and minimum respondent 1.4% pay above Rs. 1000, post graduate - Maximum respondents 5.8 % pay user charges Rs. 15to Rs. 25 and minimum respondent 0.4% pay above Rs. 1000 and professional- Maximum respondents 2.8% pay user charges Rs.200 to Rs 500.
Application of ANOVA- The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding internet banking user charges with their education level. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

54. Cross tabulation of respondents according to their education level and service level of public sector banks shows that maximum graduate respondent 44.88% agree with service level of public sector banks. Minimum professional respondents 1.12% strongly disagree with service level of public sector banks.

Application of ANOVA- The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding service level of innovative banking with their education level. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

55. Cross tabulation of respondents according to their education level and service level of private sector banks shows that maximum specific respondent 50.42 % agree with service level of private sector banks. Minimum professional respondents 1.60 % strongly disagree with service level of private sector banks.

Application of ANOVA- The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding service level of innovative banking with their education level. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

56. Cross tabulation of respondents according to their education level and trust level of public sector banks shows that maximum professional respondent 51.5% agree with trust level of public sector banks.
Minimum graduate respondents 1.02% strongly disagree with trust level of public sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding trust of innovative banking with their education level. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

57. Cross tabulation of respondents according to their education level and trust of private sector banks shows that maximum specific occupation respondent 54.1% agree with trust level of private sector banks. Minimum professional respondents 1.98% strongly disagree with trust level of private sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding trust of innovative banking with their education level. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

58. Cross tabulation of respondents according to their education level and usefulness of public sector banks shows that maximum graduate respondents’ 41.62% agree with usefulness of public sector banks. Minimum professional respondents’ 0.73% strongly disagree with usefulness of public sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding usefulness of innovative banking with their education level. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.
59. Cross tabulation of respondents according to their education level and usefulness of private sector banks shows that maximum specific occupation respondents’ 43.9% agree with usefulness of private sector banks. Minimum professional respondents’ 2.72% strongly disagree with usefulness of private sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding usefulness of innovative banking with their education level. Here the null hypothesis \((H_0)\) is rejected and alternative hypothesis \((H_1)\) is accepted.

60. Cross tabulation of respondents according to their education level and satisfaction level of public sector banks shows that maximum graduate respondents’ 42.6% agree with satisfaction of public sector banks. Minimum professional respondents’ 0.58% strongly disagree with satisfaction of public sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding satisfaction level of innovative banking with their education level. Here the null hypothesis \((H_0)\) is rejected and alternative hypothesis \((H_1)\) is accepted.

61. Cross tabulation of respondents according to their education level and satisfaction level of private sector banks shows that maximum professional respondents’ 43.8% agree with satisfaction of private sector banks. Minimum professional respondents’ 2.82% strongly disagree with satisfaction of private sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding satisfaction level of innovative banking with their
education level. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

62. Cross tabulation of respondents according to their education level and behavior of bank employee of public sector banks shows that maximum professional respondents’ 45.4% agree with behavior of bank employee of public sector banks. Minimum professional respondents’ 0.98% strongly disagree with behavior of bank employee of public sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding behaviour of employee of innovative banking with their education level. The null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

63. Cross tabulation of respondents according to their education level and behavior of bank employee of private sector banks shows that maximum professional respondents’ 42.1% agree with behavior of bank employee of private sector banks. Minimum post graduate respondents’ 2.47% strongly disagree with behavior of bank employee of private sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding behaviour of employee of innovative banking with their education level. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

64. Cross tabulation of respondents according to their occupation and operating system of public sector banks shows that maximum respondents private services 23.8% prefer to use window based
operating system. Minimum respondent government services 1% prefer to use android operating system.

**Application of ANOVA**-The calculated value of ANOVA shows that there is no significance difference in the mean score of respondents’ opinion regarding use of operating system of innovative banking with their occupation. Here the null hypothesis ($H_0$) is accepted and alternative hypothesis ($H_1$) is rejected.

65. Cross tabulation of respondents according to their occupation and operating system of private sector banks shows that maximum respondents private services 23.8% prefer to use window based operating system of private sector banks. Minimum respondents’ agriculture 1% prefer to use android operating system of private sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding use of operating system of innovative banking with their occupation. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

66. Cross tabulation of respondents according to their occupation and banks agreement and privacy policies of public sector banks shows that maximum respondents of the private service 35% prefer to know about bank’s agreement and privacy policies of public sector banks. Minimum respondents of the specific occupation 0.4 % prefer to know about bank’s agreement and privacy policies of public sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is no significance difference in the mean score of respondents’ opinion regarding awareness of banks agreement privacy polices of
innovative banking with their occupation. Here the null hypothesis ($H_0$) is accepted and alternative hypothesis ($H_1$) is rejected.

67. Cross tabulation of respondents according to their occupation and banks agreement privacy and security policies of private sector banks shows that maximum respondents of the private service 41% prefer to know about banks agreement privacy and security policies of private sector bank. Minimum respondents of the specific occupation 0.2 % prefer to know about banks agreement privacy and security policies of private sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is no significance difference in the mean score of respondents’ opinion regarding awareness of banks agreement privacy and security policies with their occupation. Here the null hypothesis ($H_0$) is accepted and alternative hypothesis ($H_1$) is rejected.

68. Cross tabulation of respondents according to their occupation and internet account creation procedure of public sector banks shows that maximum respondents of all occupation group opined that account creation procedure is easy.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding internet accounting procedure innovative banking with their occupation. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

69. Cross tabulation of respondents according to their occupation and internet account creation procedure of private sector banks shows that maximum respondents of all occupation group opined that account creation procedure is time consuming.
Application of ANOVA-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding internet accounting procedure innovative banking with their occupation. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

70. Cross tabulation of respondents according to their occupation and internet banking user charges of public sector banks shows that Government service related maximum respondent 3.8% pay user charges Rs 5 to Rs. 15 and minimum respondents 0.4 % pay above Rs. 1000. Private service related maximum respondent 10.2% pay user charges Rs 15 to Rs. 25 and minimum respondents 1 % pay above Rs. 1000. Agriculture related maximum respondent 2.4% pay user charges Rs 5 to Rs. 15 and minimum respondents 0.4 % pay above Rs. 25 and above Rs. 25. Housewife related maximum respondent 4 % pay user charges Rs 15 to Rs. 25 and minimum respondents 0.4 % pay below Rs. 5 and above Rs. 25. Own business related maximum respondent 5.8% pay user charges Rs 15 to Rs. 25 and minimum respondents 0.8 % pay above Rs. 1000.

Application of ANOVA-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding internet banking user charges with their occupation. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

71. Cross tabulation of respondents according to their occupation and internet banking user charges of private sector banks shows that Government service related maximum respondent 3.4% pay user charges Rs 200 to Rs. 500 and minimum respondents 0.2 % pay above Rs. 1000. Private service related maximum respondent 13.8% pay user
charges Rs 5 to Rs. 15 and minimum respondents 1.2 % pay above Rs. 1000. Agriculture related maximum respondent 1.4% pay user charges Rs 5 to Rs. 15 and minimum respondents 0.2 % pay above Rs. 1000. Housewife related maximum respondent 1 % pay user charges Rs 200 to Rs. 500 and minimum respondents 0.2 % pay Rs. 15 to Rs. 25. Own business related maximum respondent 4.4 % pay user charges below Rs 5 and minimum respondents 0.6 % pay above Rs. 1000.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding internet banking user charges with their occupation. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

72. Cross tabulation of respondents according to their occupation and service level of public sector banks shows that maximum house wife respondents 39.21% agree with service level of public sector bank. Minimum own businessmen respondents 1.33% strongly disagree with service level of public sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding service level of innovative banking with their occupation. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

73. Cross tabulation of respondents according to their occupation and service level of private sector banks shows that maximum house wife respondents 40.4% neutral scale with service level of private sector bank. Minimum own businessmen respondents 1.88 % strongly disagree with service level of private sector banks.
Application of ANOVA - The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding service level of innovative banking with their occupation. Here the null hypothesis (H₀) is rejected and alternative hypothesis (H₁) is accepted.

74. Cross tabulation of respondents according to their occupation and trust level of public sector banks shows that maximum own businessmen respondents 48.1% agree with trust of public sector bank. Minimum government respondents 1.8 % strongly disagree with trust level of public sector banks.

Application of ANOVA - The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding trust of innovative banking with their occupation. Here the null hypothesis (H₀) is rejected and alternative hypothesis (H₁) is accepted.

75. Cross tabulation of respondents according to their occupation and trust of private sector banks shows that maximum own businessmen respondents 42.2% agree with trust of private sector banks. Minimum government respondents 1.63 % strongly disagree with trust level of private sector banks.

Application of ANOVA - The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding behaviour of employee of innovative banking with their age group trust of innovative banking with their occupation. Here the null hypothesis (H₀) is rejected and alternative hypothesis (H₁) is accepted.

76. Cross tabulation of respondents according to their occupation and usefulness of public sector banks shows that maximum private service
respondents’ 37.71% agree with usefulness of public sector banks. Minimum own businessman respondents’ 1.68 % strongly disagree with usefulness of public sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding usefulness of innovative banking with their occupation. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

77. Cross tabulation of respondents according to their occupation and usefulness of private sector banks shows that maximum house wife respondents’ 39.20 % neutral scale with usefulness of private sector bank. Minimum government service respondents’ 2.91 % strongly disagree with usefulness of private sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding usefulness of innovative banking with their occupation. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

78. Cross tabulation of respondents according to their occupation and satisfaction level of public sector banks. Maximum own businessman respondents’ 35.70 % agree with satisfaction of public sector bank. Minimum house wife respondents’ 1.26 % strongly disagree with satisfaction of public sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding satisfaction level of innovative banking with their occupation. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.
79. Cross tabulation of respondents according to their occupation and satisfaction level of private sector banks shows that maximum private service respondents’ 38.4 % agree with satisfaction of private sector banks. Minimum government service respondents’ 1.79 % strongly disagree with satisfaction of private sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding satisfaction level of innovative banking with their occupation. Here the null hypothesis (H₀) is rejected and alternative hypothesis (H₁) is accepted.

80. Cross tabulation of respondents according to their occupation and behavior of bank employee of public sector banks shows that maximum private service respondents’ 65.5 % agree with behavior of bank employee of public sector bank. Minimum government service respondents’ 1.52 % strongly disagree with behavior of bank employee of public sector bank.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding behaviour of employees of innovative banking with their occupation. Here the null hypothesis (H₀) is rejected and alternative hypothesis (H₁) is accepted.

81. Cross tabulation of respondents according to their occupation and behavior of bank employee of private sector banks shows that maximum house wife respondents’ 36.4 % neutral scale with behavior of bank employee of private sector banks. Minimum government service respondents’ 2.82 % strongly disagree with behavior of bank employee of private sector banks.
Application of ANOVA-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding behaviour of employees of innovative banking with their occupation. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

82. Cross tabulation of respondents according to their income level and operating system of public sector banks shows that maximum respondents of the income group Rs. 5000 to Rs. 15000, 24% prefer to use window based operating system. Minimum respondents of the income group Rs. 30001 to Rs.45000, 0.6% prefer to use android based operating system.

Application of ANOVA-The calculated value of ANOVA shows that there is no significance difference in the mean score of respondents’ opinion regarding use of operating system of innovative banking with their income level. Here the null hypothesis ($H_0$) is accepted and alternative hypothesis ($H_1$) is rejected.

83. Cross tabulation of respondents according to their income level and operating system of private sector banks shows that maximum respondents of the income group Rs. 5000 to Rs. 15000, 24% prefer to use window based operating system. Minimum respondents of the income group Rs. 30001 to Rs.45000, 0.6% prefer to use android based operating system.

Application of ANOVA-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding use of operating system of innovative banking with their income level. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.
84. Cross tabulation of respondents according to their income level and banks agreement privacy and security policies of public sector banks shows that maximum respondents of the income group Rs. 5000 to Rs. 15000, 30.8% prefer to know about banks agreement privacy and security policies of public sector bank. Minimum respondents of the income group above Rs. 45000, 5.2% prefer to know banks agreement privacy and security policies of public sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is no significance difference in the mean score of respondents’ opinion regarding awareness of banks agreement privacy and security policies of with their income level. Here the null hypothesis ($H_0$) is accepted and alternative hypothesis ($H_1$) is rejected.

85. Cross tabulation of respondents according to their income level and banks agreement privacy and security policies of private sector banks shows that maximum respondents of the income group Rs. 15001 to Rs. 30000, 32.6% prefer to know about banks agreement privacy and security policies of private sector bank. Minimum respondents of the income group Rs. 15001 to Rs. 30000, 45000, 0.2% prefer to know banks agreement privacy and security policies of private sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is no significance difference in the mean score of respondents’ opinion regarding awareness of banks agreement privacy polices of innovative banking with their income level. Here the null hypothesis ($H_0$) is accepted and alternative hypothesis ($H_1$) is rejected.

86. Cross tabulation of respondents according to their income level and internet account creation procedure of public sector banks shows that maximum respondents of almost income groups opined that account creation procedure is easy.
Application of ANOVA-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding internet accounting procedure innovative banking with their income level. Here the null hypothesis \((H_0)\) is rejected and alternative hypothesis \((H_1)\) is accepted.

87. Cross tabulation of respondents according to their income level and internet account creation procedure of private sector banks shows that maximum respondents of almost income groups opined that account creation procedure is time consuming.

Application of ANOVA-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding internet accounting procedure innovative banking with their income level. Here the null hypothesis \((H_0)\) is rejected and alternative hypothesis \((H_1)\) is accepted.

88. Cross tabulation of respondents according to their income level and internet banking user charges of public sector bank shows that user charges Rs. 15 to Rs. 25 has been paid by maximum respondents of income group below Rs. 5000, Rs. 5001 to Rs. 15000 and Rs. 15001 to Rs. 30000, 2.4% 8.4% and 9.4% respectively. User charges Of Rs. 5 to Rs. 15 has been paid by maximum respondents of income group Rs. 30001 to Rs. 45000, 18% and above Rs. 40000, 1.6%.

Application of ANOVA-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding internet banking user charges with their income level. Here the null hypothesis \((H_0)\) is rejected and alternative hypothesis \((H_1)\) is accepted.

89. Cross tabulation of respondents according to their income level and internet banking user charges of private sector banks shows that user
charges Rs. 5 to Rs. 15 has been paid by maximum respondents of income group below Rs. 5000 to Rs. 15000 and Rs. 15001 to Rs. Rs. 30000, 11.4% and 9.4%. User charges Of above Rs. 1000 has been paid by minimum respondents of income group below Rs. 5000, o.4% and to Rs. 15000, 0.8%.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding internet banking user charges with their income level. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

90. Cross tabulation of respondents according to their income level and service level of public sector banks shows that maximum income group of Rs. 5000 to 15000 and Above Rs.45000 respondents 39.5% agree and strongly agree with service level of public sector banks. Minimum income group of above Rs.45000 respondent 0.93% strongly disagree with service level of public sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding service level of innovative banking with their income level. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

91. Cross tabulation of respondents according to their income level and service level of private sector banks shows that maximum income group of Rs. 30000 to 45000 respondents 41.64% agree with service level of private sector banks. Minimum income group of Rs 30000 to 45000 respondents 2.72% strongly disagree with service level of private sector banks.
Application of ANOVA - The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding service level of innovative banking with their income level. Here the null hypothesis \( H_0 \) is rejected and alternative hypothesis \( H_1 \) is accepted.

92. Cross tabulation of respondents according to their income level and trust level of public sector banks shows that maximum income group of Rs. 15000 to 30000 respondents 46.3\% agree with trust level of public sector banks. Minimum income group of above Rs. 45000 respondent 0.93 \% strongly disagree with trust level of public sector banks.

Application of ANOVA - The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding trust of innovative banking with their income level. Here the null hypothesis \( H_0 \) is rejected and alternative hypothesis \( H_1 \) is accepted.

93. Cross tabulation of respondents according to their income level and trust of private sector banks shows that maximum income group of above Rs.45000 respondents 45.80\% agree with trust level of private sector banks. Minimum income group of Rs. 15000 to 30000 respondent 1.96\% strongly disagree with trust level of private sector banks.

Application of ANOVA - The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding trust of innovative banking with their income level. Here the null hypothesis \( H_0 \) is rejected and alternative hypothesis \( H_1 \) is accepted.

94. Cross tabulation of respondents according to their income level and usefulness of public sector banks shows that maximum income group of
above Rs. 45000 respondents’ 38.49 % agree with usefulness of public sector bank. Minimum income group of Rs. 15000 to 30000 respondents’ 1.41 % strongly disagree with usefulness of public sector bank.

**Application of ANOVA** - The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding usefulness of innovative banking with their income level. Here the null hypothesis \( (H_0) \) is rejected and alternative hypothesis \( (H_1) \) is accepted.

95. Cross tabulation of respondents according to their income level and usefulness of private sector banks shows that maximum income group of above Rs. 45000 respondents’ 41.10 % agree with usefulness of private sector bank. Minimum income group of Rs. 15000 to Rs. 30000 respondents’ 3.87% strongly disagree with usefulness of private sector banks.

**Application of ANOVA** - The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding usefulness of innovative banking with their income level. Here the null hypothesis \( (H_0) \) is rejected and alternative hypothesis \( (H_1) \) is accepted.

96. Cross tabulation of respondents according to their income level and satisfaction level of public sector banks shows that maximum income group of above Rs. 45000 respondents’ 36.60 % agree with satisfaction of public sector bank. Minimum income group of Rs. 15001 to Rs. 30000 respondents’ 1.08% strongly disagree with satisfaction of public sector banks.

**Application of ANOVA** - The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’
opinion regarding satisfaction level of innovative banking with their
income level. Here the null hypothesis \((H_0)\) is rejected and alternative
hypothesis \((H_1)\) is accepted.

97. Cross tabulation of respondents according to their income level and
satisfaction level of private sector banks shows that maximum income
group of Rs. 30001 to Rs.45000 respondents’ 43.5 % agree with
satisfaction of private sector bank. Minimum income group of below
Rs. 5000 respondents’ 2.75 % strongly disagree with satisfaction of
private sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that
there is significance difference in the mean score of respondents’
opinion regarding satisfaction level of innovative banking with their
income level. Here the null hypothesis \((H_0)\) is rejected and alternative
hypothesis \((H_1)\) is accepted.

98. Cross tabulation of respondents according to their income level and
behavior of bank employee of public sector banks shows that maximum
income group of Rs. 5000 to Rs. 15000 respondents’ 38.80 % agree
with behavior of bank employee of public sector bank. Minimum
income group of above Rs. 45000 respondents’ 1.08% strongly disagree
with behavior of bank employee of public sector banks.

**Application of ANOVA**-The calculated value of ANOVA shows that
there is significance difference in the mean score of respondents’
opinion regarding behaviour of employee of innovative banking with
their income level. Here the null hypothesis \((H_0)\) is rejected and alternative
hypothesis \((H_1)\) is accepted.

99. Cross tabulation of respondents according to their income level and
behavior of bank employee of private sector banks shows that
maximum income group of above Rs.45000 respondents’ 39.70 %
agree with behavior of bank employee of private sector bank. Minimum income group of above Rs.45000 respondents’ 3.75 % strongly disagree with behavior of bank employee of private sector banks.

**Application of ANOVA** - The calculated value of ANOVA shows that there is significance difference in the mean score of respondents’ opinion regarding behaviour of employee of innovative banking with their income level. Here the null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted.

![Hypothesis testing of Public sector banks and Private sector banks](image)

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<td>Education level and satisfaction of innovative banking</td>
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<td>Education level and behaviour of bank employee of innovative banking</td>
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### Suggestion

**(For both public sector and private sector banks)**

On the basis of above findings, following suggestions can be recommended.

1. Both the public sector banks respondents' awareness level of the technology based service is quite good. Show such efforts should be continued.

2. The technology based services provided by public sector banks are higher than private sector banks. Hence private sector banks should try to increase technology based services.

3. Internet banking services are mostly used for salary, fund transfer, personal loan, bill payment and checking balance. But such number of respondents are less in private sector banks than public sector bank. Therefore private sector banks should take progressive steps in this regard.

4. Both public sector and private sector banks should provide excellence services. Because its response received from respondents is less.
5. Banks should concentrate on safety security with internet bank account.
6. Respondents find various difficulties while using internet banking services, so both public sector and private sector banks should try to solve such difficulties so far as possible.
7. Both public and private sector banks try to satisfy various expectations of their customers, like reduce cost of internet banking transaction has expectation level 51.5% in public sector 62.2% in private sector banks, improve distribution channels has expectation level of 43.2% in public sector and 22.4% private sector banks, reap operational benefits has expectation level 63.8% in public sector and 64.2% private sector banks and provide effective proof of banking transactions has expectation level 52.4% in public sector and 44.8% private sector banks.
8. The public sector bank needs to bring changes in their banking system by allowing the bankers to adopt Innovative banking policies such that they can easily compete with private sector bank.
9. Banks should display charges of using internet banking at counters, so that customers can know actual charges. Such recommendations was suggested by respondents during interview.
10. Respondents’ perception towards innovative banking services as a service level, trust level, usefulness level, satisfaction level and behavior of the bank employees is nearer 4 scales in public sector banks i.e. agreed level of response and below 4 scales in private sector banks i.e. between neutral to agreed level. Therefore private sector banks should try to increase service level, trust level, usefulness level, satisfaction level and behavior of the bank employee upto 4 scales or more and public sector banks should try to increase the level more from than 4 scale. Highest scales will bring more positive impact on customers’ perspective of innovative banking services.
11. Banks are introducing new ways for consumers to access their account balances, transfer funds, pay bills and buy goods and services without using cash or credit basis. Such efforts should be continued.