



“E-BANKING OPERATIONS AT KOTAK MAHINDRA BANK”

Research Project submitted to Jain Online (Deemed-to-be University)

In partial fulfilment of the requirements for the award of:

Master of Business Administration

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Bangalore

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DECLARATION

I, *Uday Kumar*, hereby declare that the Research Project Report titled “**E-Banking Operations at Kotak Mahindra Bank.**” *has been* prepared by me under the guidance of the *Dr. Prasad Kulkarni*. I declare that this Project work is towards the partial fulfillment of the University Regulations for the award of the degree of Master of Business Administration by Jain University, Bengaluru. I have undergone a project for a period of Eight Weeks. I further declare that this Project is based on the original study undertaken by me and has not been submitted for the award of any degree/diploma from any other University / Institution.

Place: Delhi (Noida)

Date: 22/11/2023

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CERTIFICATE

This is to certify that the Research Project report submitted by Mr./Ms. *Uday Kumar* bearing **(212VMBR01742)** on the title “**E-Banking Operations at Kotak Mahindra Bank.**” is a record of project work done by him/ her during the academic year 2022-23 under my guidance and supervision in partial fulfillment of Master of Business Administration.

Place: Delhi (Noida)

Dr. Prasad Kulkarni

Date: 22/11/2023

Faculty Guide

ACKNOWLEDGEMENT

Success is a time-limited activity that requires the participation of all participants.

I would want to take this time to convey my heartfelt thanks and respect to all of those who have assisted and supported me in my efforts to complete the Project Report successfully. “ **E-Banking Operations at Kotak Mahindra Bank.**” has been a wonderful learning experience for me as I worked on the topic.

I would like to express my gratitude to **Dr. Prasad Kulkarni** for mentoring and assisting me with the completion of this assignment on a regular basis.

Last but not least, I would want to express my appreciation to the Almighty and to my parents, without whose care and dedication to the project, the project would not be where it is now.

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ABSTRACT

E-banking services are the most important in the Indian economy's banking sector. It benefits both banks and customers. The Reserve Bank of India is taking all necessary steps to develop these banking services. There are a number of impediments to successfully implementing these services in our Indian banking system. The primary threat to implementing these services is online risks such as Trojans, malware, and phishing. Additionally, information technology literacy is low, compounding the difficulties associated with effective banking.

The report discusses the various risks associated with e-banking, its products, and the various precautions to take when using e-banking. The report focuses on the advantages of electronic banking. This proposal contains a summary of the research papers I read on my topic; this information aided me in defining the research's objective. Additionally, it includes a problem definition and the research methodology that will be used to conduct the research on the limited use of e-banking services. My survey's results and analysis are analysed using sophisticated software such as Microsoft Excel and SPSS (Statistical Package for the Social Sciences)

The results and findings are presented in the form of tables and pie charts, followed by a detailed analysis in a separate chapter.

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INTRODUCTION

Banks have historically been pioneers in leveraging technology to enhance their products, services, and efficiency. They have been utilising electronic and telecommunications networks for a long period of time to deliver a diverse range of value-added products and services.

Direct dial-up connections, private networks, and public networks are all examples of delivery channels, while devices include telephones, personal computers, and automated teller machines. With the popularity of personal computers (PCs), easy access to the Internet, and the World Wide Web (WWW), banks are increasingly using the Internet to receive instructions and deliver products and services to their customers.

Although this type of banking is commonly referred to as Internet Banking, the range of products and services offered by different banks varies significantly in terms of both content and sophistication. Broadly speaking, the levels of banking services available via the INTERNET can be classified into **three** categories:

(i) The Basic Level Service consists of banks' websites that disseminate information about various products and services available to customers and the general public. It may receive and respond to customer e-mail inquiries.

(ii) The following level is Simple Transactional Websites, which allow customers to submit instructions, applications for various services, and inquiries about their account balances, but do not allow customers to conduct fund-based transactions on their accounts.

(iii) The third level of Internet banking services is provided by Fully Transactional Websites, which enable customers to manage their accounts by transferring funds, paying various bills, subscribing to other bank products, and transacting in the purchase and sale of securities, among other things. The aforementioned Internet banking services are offered by traditional banks as an additional method of serving customers, or by new banks that primarily deliver banking services via the Internet or other electronic delivery channels as value added services.

Several of these banks are referred to as "virtual banks" because they operate without a physical presence in a country despite offering a variety of banking services.

Internet banking, in terms of banking products and services offered via the Internet, is nothing more than traditional banking services delivered via an electronic communication backbone, namely the Internet. However, it has raised issues that go beyond the scope of a new delivery channel and has compelled regulators worldwide to take notice of this emerging channel. Several of e-distinguishing banking's characteristics include the following:

1. It eliminates traditional geographical barriers by allowing it to connect with customers from various countries / legal jurisdictions. This has raised the issue of the law's / supervisory system's jurisdiction over such transactions.
2. It has added a new dimension to the various risks traditionally associated with banking, exacerbating some and posing new risk management challenges.
3. The security of banking transactions, the validity of electronic contracts, and the privacy of customers, which have always been concerns of both bankers and supervisors, have taken on new dimensions due to the fact that the Internet is a public domain that is not controlled by any single authority or group of users.
4. It creates a strategic risk for banks that fail to respond quickly enough to this new technology, which is the most efficient and cost effective delivery mechanism for banking services.
5. A new type of competition has emerged between established players and new market entrants who are not strictly banks.

Regulators and supervisors are particularly concerned with the aforementioned unique aspects of e-banking. These issues fall into three major categories: (1) legal and regulatory concerns, (2) security and technological concerns, and (3) supervisory concerns.

In addition to operational concerns. Legal issues include questions about the jurisdiction of the law, the legality of electronic contracts, especially the issue of repudiation, and gaps in the legal / regulatory environment governing electronic commerce. On the subject of jurisdiction, the question is whether to apply the law of the country from which Internet connection was obtained or the law of the country from where the transaction finally occurred.

The authorities' principal concern is the security of electronic banking transactions. Security considerations include, but are not limited to, the adoption of internationally recognised minimum technical standards for access control, encryption / decryption (minimum key length, for example), firewalls, digital signature verification, and Public Key Infrastructure (PKI). The regulator is equally concerned with the banking industry's security policies, as well as public awareness and education regarding security.

Banking and technology are diametrically opposed. Both are consistent. Technology is currently required in every field, and its use in daily life is rising. Because electronic banking benefits both banks and their consumers, we must eliminate e-banking fraud and aid institutions in reducing these risks.

Additionally, there is a need to educate customers about such malpractices and aid them in overcoming these risks, as well as to change their perceptions of traditional banking services in favour of modern banking services. Electronic banking's key difficulty is the security risks that both banks and their consumers confront. TROJAN, MALWARE, PHISING, and HACKING all hamper the development of e-banking services.

THE STUDY'S OBJECTIVE

- To research and educate e-banking users about various e-banking risks such as phishing, identity theft, plastic, money fraud, Trojan, and malware
- To investigate the factors that contribute to the limited use of e-banking services
- To increase customer awareness of e-banking services

SCOPE OF THE STUDY

The scope would be broad, as we could discuss both the benefits and various risks and threats associated with e-banking. To obtain accurate results for the study, 100 people completed a questionnaire indicating HOW SATISFIED THEY ARE WITH KOTAK'S E-BANKING SERVICESBANK. . The study's scope was limited to KOTAK bank customers and the city of Noida.

STUDY LIMITATIONS

1. Because the sample size of 100 was insufficient to cover the entire geographical area of Noida and the entire population of Kotak Mahindra Bank E-banking users, there is a possibility that the results obtained will vary.
2. During data collection, respondents did not complete questionnaires honestly; for example, respondents who did not use e-banking services attempted the segments designed for e-banking service users. As a result, the results obtained may vary.
3. The respondents refrained from responding to the aforementioned questions out of fear of disclosing their views to others.

STATEMENT OF THE PROBLEM

The primary issue with electronic banking services is the security concerns that both banks and their customers face. Security concerns such as TROJAN, MALWARE, PHISING, and HACKING, among others, impede the development of e-banking services. Additionally, the issue involves determining the level of satisfaction of KOTAK BANK'S E-BANKING CUSTOMERS.

HYPOTHESIS

- Ho: Gender and the motivation for using e-banking services are unrelated. H1: Gender and the reason for using e-banking services are associated
- Ho: The Reason and the Purpose for Choosing E-banking are unrelated. H1: The Reason for Choosing E-Banking and the Purpose for Choosing E-Banking are related.
- Ho: Awareness of the risks associated with electronic banking and the precautions associated with electronic banking are unrelated. H1: Awareness of E-banking risks and precautions is associated with E-banking.
- H0: E-Usage banking's and Precautions are unrelated. H1: E-Usage banking's and Precautions are related.
- H0: The reasons for using e-banking services and the reasons for visiting a bank are unrelated. H1: The reasons for using e-banking services and the reasons for visiting a bank are related.
- H0: The type of account and the number of monthly visits are unrelated.
- H1: The type of account and the number of monthly visits are related.

COMPANY PROFILE

THE KOTAK MAHINDRA BANK

INTRODUCTION

Kotak Mahindra Bank is a financial services company based in India that was founded in 1985. Previously, it was known as Kotak Mahindra Finance Limited, a non-bank financial institution.

The Reserve Bank of India granted the group's flagship company, Kotak Mahindra Finance Ltd, a banking licence in February 2003. (RBI).

Kotak Mahindra Finance Ltd. is the first company to convert to a bank in Indian banking history. Today, it has over 363 branches, 20,000 employees, and a revenue of 10,000 crore.

Mr. Uday Kotak is Kotak Mahindra Bank Ltd's Executive Vice Chairman and Managing Director

Mr. C. Jayaram and Mr. Dipak Gupta, who had previously served as full-time directors of the Bank, were appointed Joint Managing Directors of Kotak Mahindra Bank in July 2011. Dr. Shankar Acharya serves as the chairman of the company's board of directors.

The Bank's registered office is located in Mumbai at **Nariman Bhavan, Nariman Point.**

Kotak Mahindra bank was ranked among the top 100 most trusted brands in India in 2011 by Trust Research Advisory's The Brand Trust Report.

STATEMENT OF VISION

The Indian Financial Services Brand on a Global Scale

- Our customers will benefit from dealing with a global Indian brand that genuinely understands their needs and provides pragmatic, customised solutions across multiple platforms.
- We will be a global financial services conglomerate headquartered in India. Our technology and best practises will be internationally benchmarked, but our customer understanding will be uniquely Indian. We will be more than a safekeeping place for our customers' money. We, the group, will act as a single point of contact for all financial services available to a customer.

The Financial Services Industry's Most Desired Employer

- A culture of empowerment and an entrepreneurial spirit attract and retain bright minds with an entrepreneurial streak.
- Working with a locally grown, professionally managed company that maintains relationships with global leaders provides our people with a perspective that is both universal and unique.

The Most Reliable Financial Services Provider

- We will instil a culture of trust among all of our constituents. Adhering to rigorous compliance and corporate governance standards will be critical to establishing trust.

Creation of Value

- Our business will be driven by value creation rather than sheer size.

THEIR ACTIVITIES

Kotak Mahindra Bank Ltd

Kotak Mahindra Bank Ltd is an all-in-one banking solution provider. The bank provides a range of personal finance solutions, from savings accounts to credit cards, mutual fund distribution to life insurance products. Kotak Mahindra Bank provides transaction banking,

operates lending verticals, manages initial public offerings (IPOs), and lends working capital. Kotak has one of the largest and most reputable wealth management teams in India, offering the most comprehensive range of solutions to high net worth individuals, entrepreneurs, business families, and employed professionals.

Kotak Mahindra Old Mutual Life Insurance Ltd

Kotak Mahindra Old Mutual Life Insurance Ltd is a company that leverages both international and local strengths to offer its customers a diverse portfolio of innovative life insurance products that enables them to make critical financial decisions at every stage of life and maintain financial independence. The company insures over 3 million lives and is one of India's fastest growing insurers.

Kotak Securities Private Limited

Kotak Securities is one of India's largest broking houses, with a national footprint. Kotak Securities' operations include stock broking and distribution of a variety of financial products, including debt, equity, and mutual funds, through private and secondary placement.

- Kotak Securities operates in five primary business segments:
- Depository Services (retail and institutional)
- Services for Portfolio Management Mutual Fund Distribution
- Distribution of products by Kotak Mahindra Old Mutual Life Insurance Company Limited

Kotak Mahindra Capital Company (KMCC)

Kotak Investment Banking (KMCC) is a full-service investment bank headquartered in India that provides a comprehensive range of capital market and advisory services to leading domestic and multinational corporations, banks, financial institutions, and government entities.

Our capabilities include equity and debt capital markets, mergers and acquisitions advisory, private equity advisory, restructuring and recapitalization, structured finance, and infrastructure advisory and fund mobilisation.

Kotak Mahindra Prime Ltd. (KMPL)

Kotak Mahindra Prime Ltd is one of the largest vehicle finance companies in India. KMPL offers loans on a wide variety of vehicles, including passenger cars, multi-utility vehicles, and pre-owned vehicles. Additionally, inventory financing and infrastructure financing are available to car dealers through strategic alliances with various automobile manufacturers in India as their preferred financier.

International Business Kotak

Kotak International Business is a financial services company that specialises in providing a range of services to international customers interested in investing in India. Kotak International Business provides asset management services to institutions and high net worth individuals outside India through a range of offshore funds, as well as advisory and discretionary investment management services.

Company Limited Kotak Mahindra Asset Management (KMAMC)

Kotak Mahindra Asset Management Company offers a comprehensive suite of asset management products and services that are tailored to each investor's unique risk-reward profile. The sponsors of Kotak Mahindra Pension Fund Ltd are KMAMC and Kotak Mahindra Bank. The fund has been appointed as one of six fund managers to manage pension funds under the New Pension Scheme (NPS).

Kotak Private Equity is a private equity firm (KPEG)

Kotak Private Equity Group assists emerging businesses and mid-sized enterprises in developing into industry leaders of the future. KPEG also offers expertise through a combination of equity capital, strategic support, and value added services. What sets KPEG apart is that we invest not only in companies, but also actively participate in their growth as board members, advisors, strategists, and fund-raisers.

Kotak Real Estate Investment Trust

Kotak Realty Fund invests in equity in a variety of sectors, including hotels, information technology parks, residential townships, shopping centres, industrial real estate, health care, retail, and education, as well as property management. The investment strategy here is concentrated on development projects and enterprise-level investments, both of which are concentrated in real estate-intensive businesses.

KOTAK MAHINDRA BANK'S SWOT ANALYSIS

External Environment	Threats	Confront	Avoid
	Opportunities	Exploit	Search
		Strengths	Weaknesses
Internal Environment			

STRENGTHS:

- 1 Diverse financial products that are innovative
2. In Indian banking history, Kotak Mahindra Finance Ltd. is the first company to convert into a bank.
3. For By, and Of the customers.
4. Employs more than 20,000 people
5. Over 2.7 million customer accounts

WEAKNESS:

1. In comparison to other premium banks in the urban area, there is little publicity and marketing.

OPPORTUNITIES:

- 1 Investigate international banking opportunities.
- 2 Kotak has launched a campaign called SPIRIT OF SERVICE. It can achieve ever-increasing levels of CUSTOMER SATISFACTION, LOYALTY, and so on through this campaign.

THREATS:

1. Major corporations such as TATA & SONS, RELIANCE CAPITAL, L&T, ADITYA BIRLA, BAJAJ FINSERV, and MUTHOOT FINANCE are pursuing banking licences aggressively and are leaving no stone unturned.
2. Competitors include ICICI, SBI, AXIS, BOB, and HSBC, among others.

LITERATURE REVIEW

E-BANKING IS AN ABBREVIATION FOR ELECTRONIC BANKING. Provision of banking services via electronic channels with customers having access to data regardless of time or geographic location.

"Internet banking (or E-banking) is a term that refers to the process by which any user equipped with a personal computer and a browser can connect to his bank's website and perform any of the virtual banking functions. The internet banking system utilises a centralised database that is web-enabled by the bank."

HISTORY

Banking in India began in the late 18th century. The first banks were The General Bank of India, founded in 1786, and Bank of Hindustan, founded in 1790; both have since ceased operations. The State Bank of India is India's oldest bank, having originated in June 1806 as the Bank of Calcutta, which was almost immediately renamed the Bank of Bengal. This was one of three presidency banks established under charters from the British East India Company, the other two being the Bank of Bombay and the Bank of Madras. For many years, the Presidency banks, as well as their successors, operated as quasi-central banks. The three banks merged in 1921 to form the Imperial Bank of India, which was renamed the State Bank of India following India's independence.

NATIONAL IDENTIFICATION

Despite the Reserve Bank of India's provisions, control, and regulations, banks in India, with the exception of the State Bank of India or SBI, continued to be privately owned and operated. By the 1960s, the Indian banking industry had developed into a critical tool for facilitating the Indian economy's development. Simultaneously, it had established itself as a significant employer, sparking a debate about the banking industry's nationalisation. Indira Gandhi, India's then-Prime Minister, expressed the Government of India's intention in a paper titled "Stray Thoughts on Bank Nationalization" at the All-India Congress Meeting's annual conference. The paper was enthusiastically received at the meeting.

Following that, her movements were swift and abrupt. With effect from midnight on July 19, 1969, the Government of India issued an ordinance nationalising the country's fourteen largest commercial banks. India's national leader, Jayaprakash Narayan, described the move as a "masterstroke of political sagacity." Parliament passed the Banking Companies (Acquisition and Transfer of Undertaking) Bill within two weeks of the ordinance's publication, and it received presidential approval on 9 August 1969.

In 1980, a second round of nationalisation was administered, this time to six additional commercial banks. Nationalization was justified on the grounds that it would give the government greater control over credit delivery. With

After the second dose of nationalisation, the Indian government controlled approximately 91 percent of the country's banking business. The government later merged New Bank of India and Punjab National Bank in 1993. It was the sole merger of nationalised banks, reducing the number of nationalised banks from 20 to 19. Following this, until the 1990s, nationalised banks grew at a rate of around 4%, more in line with the Indian economy's average growth rate.

AFTER-INDEPENDENCE

In 1947, India's partition had a detrimental effect on the economies of Punjab and West Bengal, paralysing banking activity for months. India's independence signalled the end of a laissez-faire banking regime in India. The Government of India initiated measures to play a more active role in the nation's economic life, and the government's 1948 Industrial Policy Resolution envisioned a mixed economy. This resulted in the state becoming more involved in various sectors of the economy, including banking and finance. Among the significant steps taken to regulate banking were the following:

On January 1, 1949, the Reserve Bank of India, the country's central banking authority, was nationalised pursuant to the Reserve Bank of India (Transfer to Public Ownership) Act, 1948. (RBI, 2005b) In 1949, the Banking Regulation Act established the Reserve Bank of India (RBI) with the authority to "regulate, control, and inspect banks in India."

ELIMINATION OF RESTRICTIONS

In the early 1990s, the government of then-President Narasimha Rao implemented a liberalisation policy, licencing a small number of private banks. These became known as New Generation technology-savvy banks, and included Global Trust Bank (the first of these new generation banks to be established), which was later merged with Oriental Bank of Commerce, Axis Bank (previously known as UTI Bank), ICICI Bank, and HDFC Bank.

Along with India's rapid economic growth, this move revitalised the banking sector, which has experienced rapid growth with significant contributions from all three sectors of banks, namely government banks, private banks, and foreign banks.

The next stage for Indian banking has been set with the proposed relaxation of Foreign Direct Investment (FDI) rules, which would allow all foreign investors in banks to have voting rights exceeding the current cap of 10%, which has been increased to 74 percent with some restrictions.

The new policy completely upended India's banking sector. Bankers had previously been accustomed to operating on a 4-6-4 basis (borrow at 4%; lend at 6%; return home at 4%). For traditional banks, the new wave brought a fresh perspective and tech-savvy ways of working. All of this contributed to India's retail boom. Not only did consumers demand more from their banks, they also received more.

Banking in India is generally quite mature at the moment (2007) in terms of supply, product range, and reach—even if rural India remains a challenge for the private sector and foreign banks. In terms of asset quality and capital adequacy, Indian banks are widely regarded as having clean, strong, and transparent balance sheets in comparison to banks in comparable economies in the region. The Reserve Bank of India is an autonomous body that faces little government pressure. The Bank's stated policy toward the Indian Rupee is to manage volatility while maintaining a floating exchange rate—and this has largely been true. With the Indian economy expected to grow at a rapid pace for the foreseeable future—particularly in the services sector—demand for banking services, particularly retail banking, mortgages, and investment services, is expected to be strong. Additionally, mergers and acquisitions, takeovers, and asset sales are possible.

BANKING AND DEVELOPMENT GROWTH IN INDIA

India, the world's second most populous country, is currently the apple of the world's eye. The world's economies view it as a possible market. This has been going on for a long time, ever since the 1991 liberalisation, globalisation, and privatisation reforms.

Given that India's urban markets have grown significantly and are on the verge of saturation, corporate have begun tapping rural markets, where more than 60% of the population lives.

India has largely escaped the global recession. To begin, we are not overly reliant on exports for GDP and have a sizable consumer base in India. Second, we are a saving-oriented economy, in contrast to the consumption-oriented economies of the West. Thirdly, while banks worldwide are collapsing like a pyramid of playing cards, we are safe, steady, and strong, thanks to our banks, which have served as a strong backbone to our economy during this period of turmoil. And, similar to the FMCG sector, the banking sector has enormous growth potential, because rural populations are accustomed to saving and spending only when necessary. Secondly, their credit requirements are minimal for agriculture, cottage industry, and marriages, among other things.

According to Reserve Bank of India (RBI) research, 59% of the adult population in the country has a bank account, while 41% do not. Banks cover 39% of rural areas, compared to 60% in urban areas. For a population of 13000, there is only one bank.

Within the retail segment, housing loans grew at a 20% compound annual growth rate and accounted for 10% of total bank credit during the same period. Thus, while banks faced significant challenges in the unsecured loan market, they also faced a greater opportunity in the mortgage-backed security market.

During FY10, ample liquidity was maintained in the banking system due to secular growth in deposits, low credit demand, and a prudent borrowing schedule issued by the government to maintain balanced growth. Despite the government's massive borrowings of Rs 4,510 billion in FY10, the money held in reverse repo by banks remained stable, according to a research report.

Significantly high. This will enable banks to use money more efficiently and effectively, benefiting both customers and the economy as a whole, which includes a variety of stakeholders. After discussing convenient liquidity and the much-desired stability of the banking system, one can anticipate that bond yields will remain elevated and unlikely to fall significantly. Additionally, the following reasons are likely to support this assertion:

- Government borrowings are lower than expected
- Reduction in the global risk premium
- Increased credit growth.

This creates another opportunity for banks to increase their revenue. Apart from the favourable liquidity conditions and high bond yields, it is anticipated that the Net Interest Margin (NIM) will remain relatively stable. To improve NIMs, banks must have a higher incremental CD ratio, narrower spreads, and a stable yield on investments. Banks are expected to have low deposit costs as a result of a stable interest rate environment and ample system liquidity.

Fee income has been the primary source of revenue for private sector banks in recent years. Private sector banks have leveraged areas where public sector banks have been unable to do so, including transaction-related services and third-party product sales, to increase this non-fund based income.

Thus, we can confidently assert that the current environment has created numerous opportunities and challenges for existing banks.

ELECTRONICAL BANKING SERVICES AND PRODUCTS

Internet banks offer a plethora of features and benefits in an attempt to attract online customers. The race is on to expand market share and build customer loyalty through features that make online banking more user-friendly, useful, and affordable. E-banking entices customers with the promise of "convenience."

THESE ARE THE THREE MAJOR FACILITIES THAT E-BANKING PROVIDES:

- Convenience- Conduct your banking at your leisure, from the comfort of your home or from any location with Internet access.
- No more questions - An online bank does not have queues.
- 24/7 service – Access your account online 24 hours a day, 7 days a week, 52 weeks a year.

The following is a comprehensive list of features found in Internet banking systems worldwide.

APPLICATIONS ONLINE:

Consumers can initiate their banking relationship online. There is no need to spend time driving to a branch to initiate a banking relationship. Consumers can electronically complete and submit all required information to open a checking, savings, or even a fixed deposit account. After you submit your application, the bank will mail you a signature card for its records and will request that you mail or wire your initial funds. American Express, for example, enables customers applying for an account to fund it electronically using a credit card or a check from another financial institution. Certain firms, such as Wingspan and USA BancShares.com, allow customers to sign their applications digitally.

ACCESS TO ACCOUNT:

Customers who use Internet banking can now view their accounts online, including checking, savings, loans, and credit cards. There is no need to wait for monthly statements or to queue up to speak with the next available customer service representative. Customers can view the most recent activity on their accounts, including cleared checks, deposits, and ATM transactions and balances in accordance with the previous day's activities. Customers are no longer required to retain cleared checks, as their bank will securely store them online.

TRANSFERS OF ACCOUNTS:

Customers who use internet banking can transfer funds to and from their accounts online. Customers can transfer funds from a checking account to a savings account and vice versa using a simple online form, all from the safety and convenience of their own home. Online

funds transfers are updated within less than three hours. Additionally, customers may establish recurring transfers to their accounts. A recurring transfer will occur on the date and amount specified by the customer.

PAYMENT OF BILLS:

Customers can use online bill payment to pay anyone, including friends and family, as well as pay their bills electronically. Bill payment, which is available as an add-on to Internet banking, enables customers to send paper checks or electronic checks to any institution that accepts electronic bill payments. To use bill payment, customers must first create online payees. Customers can then set up recurring, automatic payments to a specific biller on a specified day, or they can make a one-time payment. Payments should be made three to five days prior to the due date to ensure prompt delivery. It's critical to keep in mind that not all banks offer bill payment as a complimentary service.

MACHINE FOR AUTOMATED TELLERS:

ATMs are designed to perform the bank's primary function. It is operated via a plastic card that has unique features. The plastic card has supplanted the cheque, the customer's personal appearance, banking hours restrictions, and paper-based verification. Debit cards are available. ATMs serve as a jumping-off point for electronic funds transfers. The ATM can both provide information about the customer's account and accept instructions from the customer - the ATM cardholder. An ATM is an Automated Teller Machine (ATM) that accepts cash deposits, transfers between accounts, balance inquiries, cash withdrawals, and payment of bills. It could be on- or off-line. The online ATN enables customers to access banking services from any location. Off-line, the facilities are limited to the ATM to which they have been assigned. Any customer who is in possession of an ATM card issued by the Shared Payment Network System may conduct his transactions at any ATM connected to the Shared Payment Networks.

CARD CREDIT-DEBIT:

The Credit Card holder has the freedom to spend his Credit Card wherever and whenever he pleases, within the limits set by his bank. A credit card is a reloadable card. On the other hand, a debit card is a prepaid card that contains some stored value. Each time someone uses this card, the Internet Banking company receives funds from the buyer's bank. The

purchaser's account is debited in full for all purchases. An individual must open an account with the bank that issues the debit card, which includes a Personal Identification Number (PIN). He enters his PIN on the shop's PIN pad when he makes a purchase. When the card is slurped through the electronic terminal, it contacts the acquiring bank's system - either MasterCard or VISA - which verifies the PIN and determines whether the transaction should be accepted or declined by the issuing bank. The customer will never overspend, as the system will reject any transaction that exceeds his account balance. The bank is never in default because the funds are immediately debited from the customer's account.

CARDS SMART:

Banks are chipping their existing magnetic stripe cards in order to increase security and provide a new service called Smart Cards. Smart Cards enable the storage of thousands of times the amount of data that magnetic stripe cards can. Additionally, these cards are more secure, more reliable, and capable of performing multiple functions.

They store a wealth of personal data, ranging from medical and health records to personal banking and preferences.

Apart from ALERTS, SMS BANKING, MOBILE BANKING, and PHONE BANKING are also available.

Additionally, it is a component of E-banking.

BENEFITS OF ELECTRONICAL BANKING

Customer service is available 24 hours a day:

Although it is tempting to allow the Internet to take the place of costly branch personnel and overhead, many banks have discovered that having a customer service staff available at all hours is well worth the expense. This is especially true for customers who are new to online banking and require assistance learning the features. The provision of telephone and email contact is a fundamental level of service. Providing live chat assistance is an exceptional level of service.

Access to prior activities:

Among the choices made when designing the Internet interface is the amount of history that will be available online. Some banks display only 30-45 days of history, while others display six months or a year.

Classify transactions and generate reports:

Functionality reigns supreme, as online banking customers who take advantage of these features benefit from a Web interface that mimics the functionality of a money management software application.

Export your financial information:

The majority of banks that offer a management interface also make it simple to download financial data into files that can be imported into Microsoft Money or Intuit's Quicken.

Interactive guides & tools to assist in product selection:

While interactive guides to a bank's products complicate programming, they benefit the bank by assisting potential customers in selecting new products or services. Interactive tools for developing a savings strategy, selecting a mortgage, and obtaining online insurance quotes are all connected to applications. These tools assist in dispelling some of the mystery surrounding the numerous account options and associated costs.

Information about the loan and the credit card account:

While bank customers are accustomed to reviewing their checking account information, many banks are expanding their offerings to include loan status and credit card information. The goal appears to be to gain access to as many bank accounts as possible.

Publication of digital copies of checks:

This, once again, eliminates a disadvantage of online banking. It makes check images available in lieu of cancelled checks or sheets of printed check images.

Online forms for ordering checks, stop payments, and other services

Convenience is popular, and if a customer frequently visits his or her online account, it makes sense to allow the customer to reorder checks or perform certain other commands via the

same interface. These and numerous other features help customers save time, simplify their lives, and provide a higher level of value than traditional banking.

THREATS TO E-BANKING CONTROLLED BY INDIVIDUALS

1] HACKING: Hacking is the process of identifying and exploiting weaknesses in an established system. A computer hacker is someone who discovers and exploits computer weaknesses. Hackers may be motivated by a variety of factors, including profit, protest, or competition. Although the subculture formed around hackers is frequently referred to as the computer underground, it has evolved into an open community.

2] COMPUTER VIRUSES A virus is a piece of malicious software designed to infiltrate a computer without the user's permission or knowledge. It is self-replicating and thus spreads. While some viruses do little more than replicate, others can cause significant harm or adversely affect the program's and system's performance. Never assume a virus is harmless and leave it on a system.

3] ATTACK ON DENIAL-OF-SERVICE (DOS): A denial-of-service (DOS) or distributed denial-of-service (DDoS) attack is an attempt to render a computer or network resource inaccessible to its intended users. While the means by which a DOS attack is carried out, the motivations for it, and the targets vary, it generally consists of the concerted efforts of a single person or a group of people to prevent an Internet site or service from functioning efficiently or at all, temporarily or indefinitely. DOS attacks are typically directed at websites or services hosted on prominent web servers, such as banks, credit card payment gateways, and even root name servers. One common technique is to flood the target machine with external communications requests, rendering it incapable of responding to legitimate traffic or responding so slowly that it is effectively unavailable.

Typically, such attacks result in a server overload. In general, DOS attacks are carried out by forcing the targeted computer(s) to reset, depleting its resources to the point where it can no longer provide the intended service, or obstructing the communication media between the intended users and the victim, preventing them from communicating effectively. When a

DOS Attacker sends numerous packets of information and requests to a single network adapter, the DOS attack has an effect on every computer on the network.

4] IDENTITY THEFT: It is a type of identity theft in which someone assumes the identity of another person in order to gain access to resources or obtain credit and other benefits in that person's name. The victim of identity theft (here, the individual whose identity has been stolen) may face adverse consequences if held accountable for the perpetrator's actions. Organizations and individuals duped or defrauded by an identity thief may also suffer negative consequences and losses, and are thus also victims.

5] PHISHING: Phishing is a technique used to attempt to obtain information such as usernames, passwords, and credit card numbers by impersonating a trustworthy entity in an electronic communication. Communications ostensibly from popular social networking sites, auction sites, online payment processors, or IT administrators are frequently used to deceive the unsuspecting public. Phishing is frequently carried out through email spoofing or instant messaging, and it frequently directs users to enter information on a fake website that looks and feels almost identical to the legitimate one. Phishing is a type of social engineering technique that is used to deceive users and takes advantage of the current web security technologies' poor usability.

6] SPAM: Spam is the practise of sending unsolicited bulk messages via electronic messaging systems (including the majority of broadcast media and digital delivery systems). While email spam is the most widely recognised form of spam, the term is also used to refer to similar abuses in other media, including instant messaging spam, Usenet newsgroup spam, Web search engine spam, spam in blogs, wikis, online classified ads spam, junk fax transmissions, social networking spam, television advertising, and file sharing network spam. In India, approximately 3.6 trillion spam messages are sent each year.

7] KEY LOGGING: Software that is installed on the customer's computer and records all of the customer's keystrokes, providing a complete record of user IDs, passwords, pin codes, account numbers, and transactions. Occasionally, this is combined with additional malicious software, and it typically sends the data it has gathered to the hacker.

8] PHARMING: This is a type of hacker attack in which the hacker attempts to redirect a website's traffic to another, bogus website. Pharming can be carried out in two ways: by

modifying the hosts file on the victim's computer or by exploiting a vulnerability in the DNS server software. Symantec reported a drive-by phishing attack against a Mexican bank in January 2008, in which the DNS settings on a customer's home router were changed in response to an e-mail posing as from a legitimate Spanish-language greeting card company.

9] CROSS-SITE SCRIPTING (XSS): This is a type of computer security vulnerability that is most frequently found in Web applications and allows attackers to inject client-side script into Web pages viewed by other users. Attackers may exploit a cross-site scripting vulnerability to circumvent access controls such as the same origin policy.

10] COOKIE POISONING: Cookie Poisoning attacks alter the contents of a cookie (a piece of personal files contained on a Web user's computer) in order to defeat security mechanisms. Through cookie poisoning attacks, attackers can obtain unauthorised details about some other user and steal their identity.

Dr. Abha Chandra published an article in the global journal of enterprise information systems on "analytical research on Indian online banking and user privacy" in July 2010. The purpose of this empirical study is to determine the existence and format of privacy policies used by various Indian banks when conducting online banking through about their websites. The purpose of this paper is to shed some light on the study's methodology, findings, and conclusions.

One of the factors for the same is that websites disclose users' personal information to Third Parties, who may or may not have had their own privacy policies. Additionally, this study discovers that no Universal Standard format for such a Privacy Policy has been developed or declared for Indian banks. It will be extremely beneficial for consumers of online banking if there is an authority that monitors and controls the proper format and scores included in banks' privacy policies.

Connel Fullenkamp and Saleh m. Nsouli, (February 2004), have carried out a research on "six puzzles in electronic money and banking, credit and banking", IMF institute, vol. 34, pp 112-123. This paper presents a set of questions or puzzles whose answers will give a complete picture of electronic money and its impact on the economy. It focuses on six basic puzzles; these puzzles tend to build on each other. And will help us in understanding the concept of e-banking.

SIX PUZZLES IN E-MONEY AND E-BANKING:

- A. Do We Know What We Are Talking About?
- B. What Is Really Different About Electronic Money and Banking?
- C. Will Changing Bricks into Clicks Affect the Economy?
- D. Gresham's Law Puzzle
- E. Monetary Policy without Reserves? Without Money? Without a Clue?

Do We Need a Protective Firewall? Can We Build One?

The adoption of Internet e-banking has an important implication for monetary policy. Monetary policy will become less effective as money holdings become increasingly interest sensitive, because of Internet e-banking. The impact of this change has been incremental, since the widespread adoption of Internet e-banking is likely to take place over many years. The paper also states that the private e-banking activities need to be regulated by the central banks in order to avoid inflation. This paper provides several important insights into e-money and e-banking that will be useful to policymakers. It is said that the innovation in e-banking is the adoption of Internet e-banking, and that the innovation in e-money is the creation of private e-money. These innovations are the sources of the most significant effects, including potential problems, from e-banking and e-money.

Francisco Javier Miranda, Rosa Cortés and Cristina Barriuso, (2006), have carried out a research on “quantitative evaluation of e-banking web sites: an empirical-study of Spanish banks”, the electronic journal information systems evaluation volume 9 issue 2, pp 73 – 82.

This article discusses the necessary parameters for an e-banking website. The quality of web home pages was defined using an original Web Task Allocation that takes four factors into account: accessibility, speed, navigability, and content. A detailed report of the investigation's findings is presented and analysed in detail. These findings are beneficial for both scholars and scientists interested in gaining a better understanding of the issues surrounding electronic banking. We can conclude from this paper that, in addition to a strong IT infrastructure, e-banking websites play a critical role in facilitating online transactions. The language, speed, and content all play a significant role in motivating customers to use the various banks' online banking services.

Hans H. Bauer, Maik Hammerschmidt, and Tomas Falk (2005) published a study in "International Journal of Banking and Marketing," vol. 23 no. 2, pp. 153-175.

Given the fact that banks invest billions in the internet infrastructure (Deutsche Bank invests approximately half a billion US\$ per year), customer satisfaction and customer retention are increasingly developing into key success factors in e-banking. Most importantly, profitable e-banking requires a strong focus not only on the acquisition of new customers but also on the retention of existing customers. From the study it can be said that the banks should not only focus on the development of the infrastructure, but also put a large amount of focus on the convenience provided to their clients, they should be more oriented towards the satisfaction of their clients and make sure that the clients are more attracted towards these modern facilities.

"Al. I. cuza" Iasi, (2004), has carried out research on "some issues about risk management for E banking", electronic journal of information systems evaluation, volume 9, issue 2, pp 73-82. This Study Reveals that In E banking could become the Major Form for Payment Systems in Organizations as Technologies Will Improve to Create a Fully Secure Environment. It is believed that e-banking is only a supplement of traditional methods. This paper suggests that not only is it probable to use e-banking but that networks especially Internet will promote the quick development of such a services. The paper also suggests the risk associated with such transactions and the preventions for the same. E-banking presents new administrative control requirements and potentially increases the importance of existing controls. Management must evaluate its administrative controls to maximize the availability and integrity of e-banking systems. E-banking information can support identity theft for either fraud at the subject institution or for creating fraudulent accounts at other institutions. It can also be concluded that both the banks and the customers need to be cautious about what and how they are dealing with. They must take all necessary precautions while using such technology.

Octavian Dospinescu, Daniela Rusu, and "Alexandru Ioan Cuza" (2006) conducted a study on "the adoption of electronic banking services in developing countries – the Romanian case." information systems, vol. 2, pp. 34-67. The advancements in information and communication technology are having a global impact on financial institutions. This evolution altered the way banks provide services through the use of technologies such as automated teller machines, telephones, the Internet, credit cards, but instead electronic cash. Banking in

Romania had undergone some changes in this scenario. Numerous banks have invested in Internet technology to stay ahead of the competition and to better serve their customers. The Internet, phone, mobile, or electronic banking services offered in the Romanian banking market are still in their infancy, and banks must earn the trust of individual and corporate customers, given the high perceived risk associated with online transactions. However, the ease with which customers can conduct banking transactions directly from their company office or home without relying on pay-office hours drives an increasing number of customers to use these types of services.

Dr. Asma Mobarek (2004) published a study titled "e-banking practises and customer satisfaction in Botswana," in the peer - reviewed journal of bank marketing, vol. 21, pp. 94–103.

This study examines four commercial banks in Botswana: Standard Chartered Bank, First National Bank, Barclays Bank, and Bank of Baroda. All of these banks offer their customers e-banking services. Account management; bill payment and presentation; new account opening; consumer wire transfers; expenditure services; mortgage application and approval; account aggregation; cash management; small business loan applications, approvals, or advances; advert electronic payments; business-to-business payments; employee benefits/pension administration, and so on. The paper analyses customers' attitudes toward e- banking services, the quality of e-banking services provided by banks, and the barriers to customer satisfaction. The paper focuses on four distinct delivery channels: automated teller machines (ATMs), internet banking, telebanking, and manual banking. The primary focus is on internet banking, as this is the delivery channel that appears to be growing in popularity in Botswana, following ATMs. Consumer behaviour is changing in part as a result of decreased leisure time. Individuality, mobility, location and time independence, and flexibility are all characteristics of how financial services are used. Financial transactions resulting from purchases will increasingly be handled by non- and near-banks. These facts present significant difficulties for banks. Banks are utilising the Internet as a new channel of distribution. The hypotheses are tested and it is determined that there is a correlation between age group, occupation type, and certain aspects of electronic banking. Finally, banks must evolve to meet the demands of the electronic age. It is required by consumers. Economics is the driving force. Banks must capitalise on it.

Dr. S. Arumugaperumal conducted research on the "impact of cyber crime on virtual banking" in July 2006. Computer Science Journal-S.T.Hindu College, Nagercoil-2. This paper primarily discusses the online risks that banks and their customers face when conducting online transactions. As more businesses expand their customers' online access, professional criminals are successfully utilising phishing techniques to steal personal finances and commit identity theft on a global scale. The popularity of virtual banking services among customers is likely to grow in the future, owing to the speed, convenience, and continuous access they provide. However, several pressing issues would require proactive attention. While the majority of electronic banking incorporates security features such as encryption, the specification of maximum monetary limits, and authorizations, system operators must exercise extreme caution and provide clear operational guidelines. Concerning the broader issue of electronically initiated funds transfer, issues such as authentication of payment instructions and the customer's responsibility for the security procedure's secrecy would need to be addressed. Therefore, multifactor authentication is the best way to make virtual banking much safer and more secure in the coming years.

Gautam Ivatury and Ignacio Mas conducted research on "the early experience with branchless banking" in April 2008. CGAP, Washington, D.C. Branchless banking has enormous potential to expand financial services distribution to poor people who are not served by traditional bank branch networks; it also reduces the cost of delivery, including costs to banks for developing and maintaining a delivery channel as well as costs to customers for accessing services (e.g., travel or queuing times)

OBSERVATIONS:

1. Branchless banking can dramatically reduce the cost of delivering financial services to poor people.
2. Branchless banking channels are used mainly for payments, not for savings credit.
3. Few poor and unbanked people have begun using branchless banking for financial services.

4. Financial services providers view agent networks as key to achieving their business strategy.
5. Most mobile banking projects to extend market reach have been led by mobile operators.

PREDICTIONS:

1. Poor people will use mobile banking more than rich people.
2. Providers will manage the operational risks of using Agents, and customers will tolerate liquidity shortfalls.
3. Shared agent networks will be the key to massively expanding access to finance through branchless banking.
4. Mobile banking will be used by large numbers of poor, currently unnerved people in about three years, as a result of competitive market entry.

Basel committee on banking supervision, (may2001), has carried out a research on “risk management principles for electronic banking, “electronic banking group initiatives and white papers”. Banking organizations have been delivering electronic services to consumers and Business for years. Electronic funds transfer, including small payments and corporate cash management systems, as well as publicly accessible automated machines for currency withdrawal and retail account management, are global fixtures. This study explains a clear need for more work in the area of e-banking risk management and that mission was entrusted to a working group comprised of bank supervisors and central banks, the Electronic Banking Group (EBG), which was formed in November 1999

INDIA'S ELECTRONIC BANKING FRAUD CASES

1] A CHILD IS ARRESTED FOR ONLINE BANKING FRAUD

MUMBAI: A 23-year-old man was arrested by the cyber police station on Monday after he opened a fictitious account and syphoned off Rs 4 lakh through net-banking. Pradeep Kanere was apprehended after the Bank of Baroda informed cyber police officials that a person with an under surveillance account had visited the bank.

Kanere has been charged with cheating and forgery, and cops are looking for his associates who used a similar scheme to withdraw a large sum from a private company. Kayesh Shah of Energy Park Boilers Private Limited filed the complaint. Shah informed police that his company had an account with Bank of Baroda and that the bank had granted him access to net banking. Although his brothers Uday and Kartik were also directors of the company, he added that only he had access to the net-banking password.

He was recently shocked to discover some transactions on his account statement that he had never made. "Approximately Rs 3.92 lakh was withdrawn via net banking between August 10 and August 18," a police officer said. Shah immediately brought it to the attention of bank officials, who began investigating the accounts into which the funds were credited.

Shah also lodged a complaint with the Bandra-Kurla Complex's cyber police station. Kanere entered the bank's Vile Parle branch on Monday, claiming to have misplaced his ATM card and needed to close the accounts. "Bank officials kept him occupied with documentation and notified the authorities. Officials are attempting to track down his associates in order to determine how he decoded the password," an official said.

2] POLICE INVESTIGATES ONLINE BANKING FRAUD

VADODARA: Police are investigating a Rs 68,000 internet banking fraud allegedly perpetrated by a Delhi-based hacker. "Anil Bansal stated in his police complaint that his wife's account with a private bank was hacked for Rs 68,000 over a two-day period on June 21 and 22," police said.

"Bansal also conducted his own investigations and discovered that one Ganesh Agrawal of Kirti Nagar, Delhi, was allegedly responsible for these transactions," police said, adding that the detective crime branch was compiling all available information on the accused.

3] A NIGERIAN 'KINGPIN' HAS BEEN ARRESTED IN CONNECTION WITH A MULTI-CRIME ONLINE BANKING FRAUD

KOLKATA: Exercise caution before clicking on an email sent by an unknown sender. You may be a victim of 'sphygmograph' - a sophisticated form of e-fraud - and fraudsters may empty your bank account within days.

On Thursday, the Kolkata Police's anti-bank fraud squad, led by Soumya Banerjee, uncovered a racket run by a group of Nigerians. According to police, one of the kingpins, Felix Nudubisieigs, has been apprehended in Puduchhery. Felix, who has been in India since 2006, is said to be one of the masterminds of the racket, which has defrauded people of crores of rupees in the last year alone.

In recent months, Kolkata Police has received strange reports from citizens alleging that their money has been withdrawn or transferred to an unknown account. Among the victims was Alind Jain. He stated that Rs 40,000 was withdrawn from his account and transferred to a private bank account at Shakespeare Sarani. He suspected his electronic banking password had been compromised but was unable to determine how.

The investigators were taken aback when they discovered the modus operandi. Scammers used to send lucrative mails across the country at random. Mails can take a variety of forms. You might receive an employment offer from a multinational corporation. Alternatively, a lottery or even a greetings card. When the recipient clicked on the email, the recipient's system was infected with a Trojan virus. When the victim logs out of the mail account, it remains dormant. When he logs back in, the virus begins copying each keystroke on the keyboard and the contents of the email and sends them to the fraudsters' mother server.

4] A CHARTERED ACCOUNTANT SUFFERS A NET BANKING FRAUD LOSS OF RS 1.41 LAKH

A chartered accountant employed by a Gurgaon-based multinational corporation and a resident of New Delhi's VasantKunj alleged that he was defrauded of Rs.1.31 lakh via internet banking fraud. According to victim Harsh Mehta, 27, the money was taken from his salary account at Standard Chartered Bank's Gurgaon branch. Additionally, he claimed to have misplaced Rs 10,654 on his credit card.

Since Friday, the KPMG employee has been commuting between Delhi and Gurgaon to register a police complaint. He claims his phone was hacked and a one-time password (OTP) obtained from the bank. A case has not yet been filed, and Mehta asserted that neither the mobile carrier nor the bank is assisting him. I do use internet banking, but this has never occurred previously. Additionally, the hacker disabled the bank's SMS alert service, which prevented me from receiving messages notifying me of transactions," Mehta claimed. I

received an SMS from Airtel around 5 p.m. on January 19 containing an ID for changing my SIM number.

Following that, my mobile phone lost signal. I was taken aback, as I had never made such a request before. I contacted an Airtel customer service representative, who assured me that nothing would happen and that they would keep an eye on things," he explained. The following morning, I received an email from the bank indicating that there were unknown transactions totalling Rs.1.31 lakh. The accused must have first hacked my phone, then requested an OTP from the bank, activated my SIM card on his phone, and finally transferred funds to his account. Due to the bank's daily limit of Rs.1 lakh, the accused transferred the money until midnight.

Following that, he transferred the remaining Rs 31,000 balance. Additionally, my credit card was used for Rs.10,650, the victim stated.

PRECAUTIONS FOR ELECTRONIC BANKING

1. REGULARLY CHANGE YOUR PASSWORD:

After the initial login to online banking, users must change their password. Additionally, change your password on a regular basis. Needless to say, never reveal your password to anyone, including banking staff.

2. AVOID BANKING AT CYBER CAFES:

Avoid using Internet banking services from cyber cafes, libraries, or public-access computers. However, if it is absolutely necessary, you must clear the browser cache and delete temporary files on the computer from which you accessed the Internet.

3. AVOID USING PERSONAL INFORMATION IN THE PASSWORD:

Avoid using your birthday, phone number, address, or full name as your password. This practise increases your account's vulnerability to hacking, as your password is easily guessable by almost anyone. Additionally, never leave your computer unattended while logged into the bank's website.

4. DO NOT ALLOW YOUR BROWSER TO RECALL YOUR DETAILS

Never allow your computer to remember your passwords, user names, or other personal information. Disable the browser's option to save user names and passwords at all times.

5. DO NOT E-MAIL DETAILS OF YOUR CREDIT CARD OR ACCOUNT:

As a general rule, avoid sending credit card or account information to anyone via e-mail, or in response to an e-mail.

6. BUY ONLY FROM REPUTABLE WEBSITES:

While shopping online, take a moment to verify that the website is established and a well-known name in the online shopping domain. Always verify that the shopping site has a secure, permanent address.

7. LOG OFF WHEN COMPLETED:

Always log out of Internet banking when you're finished. You must log out of the website and not close the window to end the session.

8. VERIFY THE ACCOUNT:

Whenever you make a transaction, check your account immediately to ensure that the correct amount has been deducted or added. Notify the bank immediately if there is any misappropriation.

9. DO NOT CLICK ON THE LINKS:

Always disregard any e-mail that requests that you click a link to your bank's website. You may end up disclosing personal information on a bogus bank website, from which hackers steal data.

10. DESTRUCTION OF RECEIPTS:

Keep no records or receipts for your online transactions. They frequently contain sensitive personal financial information. You'd be wise to shred or destroy such documents or receipts to keep them out of the wrong hands.

11. AVOID SHARING PERSONAL DATA ON WEBSITES:

You should never provide your e-mail address to a website unless you are certain how it will be used. Additionally, avoid sharing your personal information, such as your date of birth, on the Internet unnecessarily, as this information can be used to unlock or generate your account password.

SWOT ANALYSIS OF ELECTRONICAL BANKING

STRENGTHS:

- Access to information by customers 24 hours a day
- Access to information on a timely basis
- Capacity to provide a customer with multiple methods for retrieving information
- Technologically sophisticated systems
- Diversification enables the company to capture a variety of market segments.
- The capacity to reduce internal costs as a result of advanced technology
- Enhanced efficiency as a result of automation
- Increased transactional accuracy
- Convenience

WEAKNESS:

- High service costs
- Constant customer desires and needs
- Initial technology investment will be costly.

OPPORTUNITIES:

- The capacity to expand one's customer base
- Global expansion-This is a massive market that will present tremendous opportunities in the future.
- The ability to capitalise on the growing opportunity presented by internet banking.
- Capable of generating customer loyalty and satisfaction

THREATS:

- Technology is constantly evolving. The banking industry is in a state of uncertainty.
- Competition from low-cost operations.
- Product failure is a possibility as a result of customer rejection.

RESEARCH METHODOLOGY

Research design

The selection of appropriate methodology to conduct the research in context of the identified research problems is necessary to reach objective based outcomes (Bergh and Ketchen, 2009). The current chapter deals with the identification of the most suitable research paradigm, approach, design, data collection and analysis method that is applicable to resolve the research questions.

Research design refers to the way information is gathered. In this project descriptive research is used and, in the case of this research I have used the quantitative approach of data gathering. Quantitative study was done to understand the Impact of international trade and employment condition. Descriptive research design was used for the current research study using Convenience Sampling.

Research Approach

The selection of research approach, whether inductive or deductive depends on the nature of the research topic and the complexity of the problems identified. Inductive process is a theory building approach that starts with observation and data collection, formulating tentative hypothesis, analyzing the collected data and finally the development of new knowledge (Freshwater, 2007). As opposed to inductive approach, the deductive process starts with extensive study of existing theories, followed by identification of research gaps and hypothesis development, analyzing the existing data using scientific methods and finally testing the existing studies (Bryman and Bell, 2011).

Nature and source of data/ information to be collected

Secondary data collection

The use of secondary sources such as books, journals, articles, discourses, academic papers and internet sources will be made to gain knowledge relating to employee relations theories and related concepts. Academic databases such as Google scholar will be used to extract theoretical and literature that already exist in context of the chosen topic.

Primary data collection

Primary research is research that produces data that are only obtainable directly from an original source. In certain types of primary research, the researcher has direct contact with the

original source of the data. The decision to collect primary data for research project is influenced by the kind of research are carrying out. The need for primary information is far more frequently related to the practical, rather than the academic aspects of study.

Sample Design

QUESTIONNAIRE DESIGN

In this questionnaire there are 11 questions. In this survey the author has used these types of questions: -

- The Dichotomous Survey Questions
- The Multiple-Choice Survey Questions
- Demographic Survey Questions
- Likert Questions

The questionnaire will be sent to 100 people and based on the responses collected the data will be analyzed.

Sampling Method

Sampling refers to the process of selecting a group (sample) from a city of Noida's defined population with the intent that the sample will accurately represent that population.

The advantage of selecting a small sample from a larger target population is that it saves the time and expenses of studying the entire population. In this study convenience sampling is used.

Convenience Sampling (also called availability sampling) is a non-probability/non-random sampling technique used to create sample as per ease of access, readiness to be a part of the sample, availability at a given time slot or any other practical specifications of a particular element. The researcher chooses members merely on the basis of proximity and doesn't consider whether they represent the entire population or not. Using this technique, they can observe habits, opinions, and viewpoints in the easiest possible manner

Tools and techniques used for data collection

Questionnaire tool –

As Bryman and Bell (2011) explain that conducting surveys through questionnaires distribution is a cost effective and convenient method of collecting quantitative data by gaining easy access to the human subjects. In the current research, survey forms in the form of questionnaires will be distributed to people.

Methods to be used for data collection

The methods to be used for empirical data collection will be mixed methods, by combining quantitative and qualitative data collection methods. Each of the methods are discussed as follows --

Quantitative data collection

Harrison and Reilly (2011) opine that quantitative research provides numerical data that can be statistical calculated and the results can be diagrammatically represented using visual aids such as graphs and charts. Quantitative data can be collected using a number of strategies such as surveys, case studies, experiments etc depending on the nature of topic and the feasibility of data collection tool.

Qualitative data collection

Saunders *et al.* (2009) argue that qualitative research is exploratory in nature and helps to obtain an understanding of the area under investigation. The data provided by qualitative research is subjective and needs careful interpretation to arrive at the correct data analysis (Bryman and Bell, 2011). In order to collect qualitative data, the use of interviews, observation, focus group, action research etc can be made.

Work Plan (Week 1 to Week 8)

This subsection outlines the planned activities and timeline for the research study.

Week	Activity
1	Literature Review: Conduct an extensive review of literature on e-banking operations, with a focus on Kotak Mahindra Bank.
2-4	Data Collection: Gather primary data through interviews, surveys, and observations, and collect secondary data from relevant sources.
5-6	Data Analysis: Utilize appropriate methodologies to analyses the collected data and derive meaningful insights.
7	Drafting Preliminary Findings: Develop an initial report on the findings and insights from the data analysis.

8	Feedback and Revisions: Seek feedback from advisors and stakeholders, and make necessary revisions to the research report.
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This work plan provides a roadmap for the research process, ensuring a systematic and organized approach to investigating e-banking operations at Kotak Mahindra Bank.

Research Project Outline: E-Banking Operations at Kotak Mahindra Bank

Week 1: Introduction and Literature Review

Introduction

Define the research problem and objectives.

Justify the importance of studying e-banking operations at Kotak Mahindra Bank.

Provide an overview of the research methodology.

Literature Review

Conduct an extensive review of literature on e-banking operations, focusing on relevant theories, concepts, and previous studies.

Identify key trends, challenges, and best practices in the e-banking sector.

Week 2-4: Data Collection

Define Research Questions and Hypotheses

Clearly articulate specific research questions and hypotheses that will guide the study.

Select Research Participants

Identify and select participants for interviews, surveys, and any other data collection methods.

Develop Interview and Survey Protocols

Create structured interview questions and survey instruments aligned with research objectives.

Conduct Interviews and Surveys

Administer interviews and surveys to gather primary data on e-banking operations.

Week 5-6: Data Analysis

Data Cleaning and Organization

Clean and organize collected data to prepare for analysis.

Quantitative Analysis

Employ statistical tools to analyse quantitative data obtained from surveys.

Qualitative Analysis

Utilize thematic analysis or other qualitative methods to interpret interview data.

Week 7: Drafting Preliminary Findings

Summarize Key Findings

Compile and summarize the key findings from the data analysis.

Create Preliminary Report

Draft a preliminary report outlining the main insights and observations.

Week 8: Feedback and Revisions

Seek Feedback

Share the preliminary report with advisors, stakeholders, or experts for feedback.

Revise Research Report

Incorporate feedback and make necessary revisions to improve the research report.

Finalize Research Report

Finalize the research report, ensuring clarity, coherence, and adherence to research objectives.

Prepare Presentation

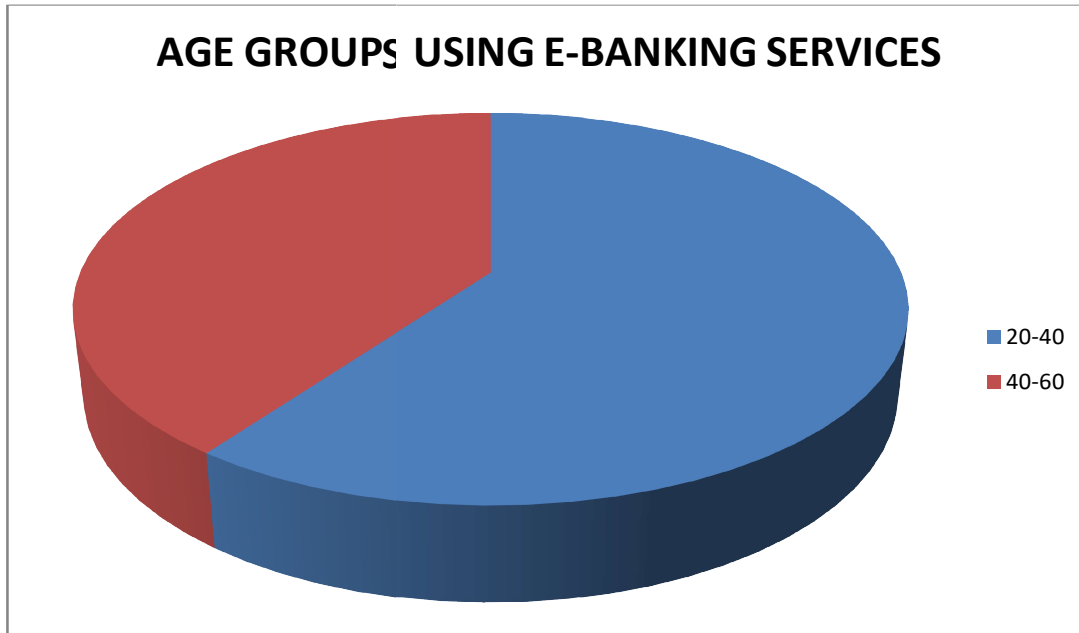
Develop a concise presentation summarizing the research findings for dissemination.

This comprehensive outline provides a structured plan for each week of your research project.

Adjustments can be made based on the actual progress and any unforeseen challenges encountered during the research process.

DATA ANALYSIS AND INTERPRETATION

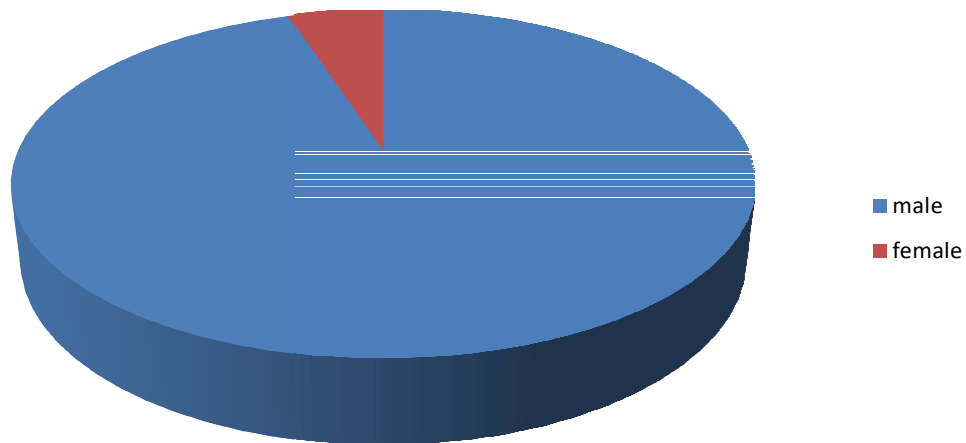
1] AGE GROUPS USING E-BANKING SERVICES



It is observed that only two age groups ranging, from 20 to 40 and 40-60 years out of four are users of E-banking services. From this we can conclude that even the preceding generation is becoming more & more aware of benefits & convenience of E-banking.

2] THE USE OF E-BANKING SERVICES BASED ON THE GENDER

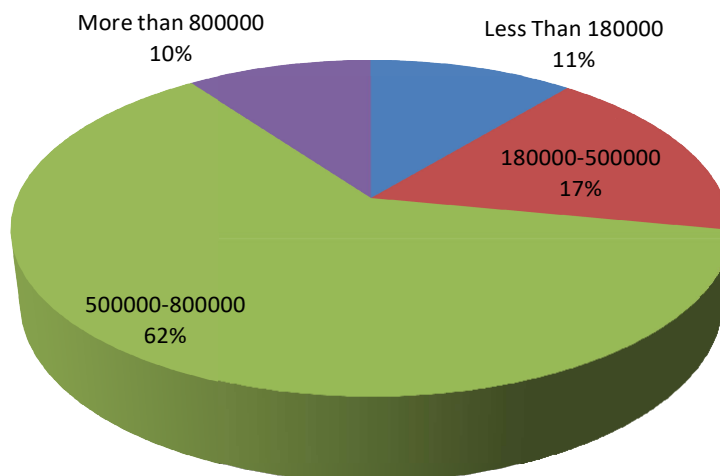
THE USE OF E-BANKING SERVICES BASED ON THE GENDER



From the response of the individuals it was observed that the number of male users is more than female users with respect to the use of e-banking services. One of the reasons could be that men are more into commercial use of the e-banking products than the females. It could also be possible that there may be a limited use of the e-banking services in case of females.

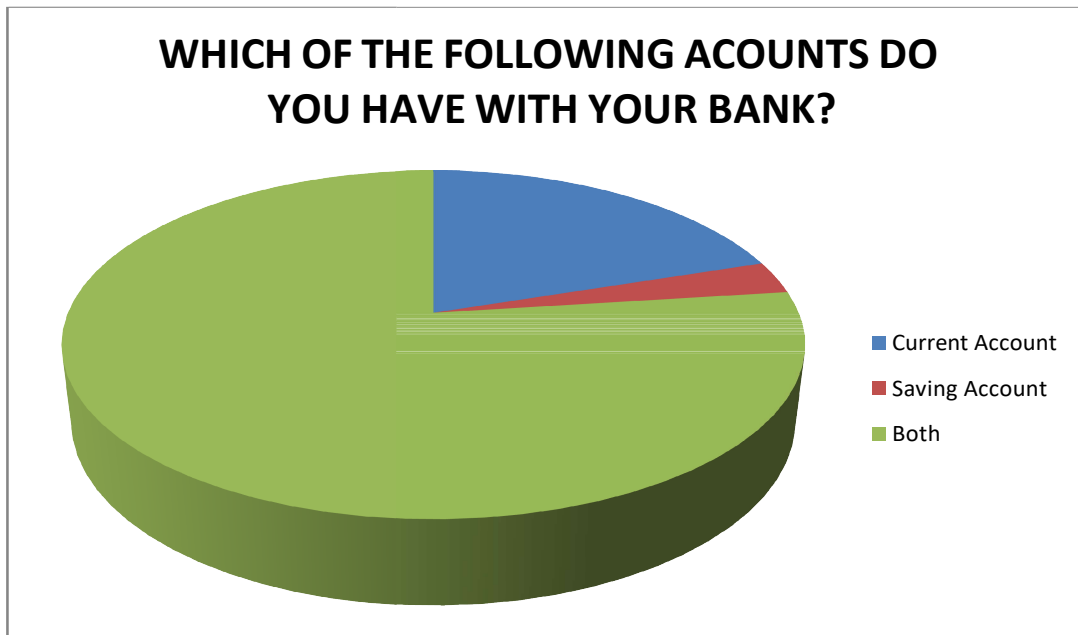
3] ANNUAL INCOME OF E-BANKING USERS

ANNUAL INCOME OF E-BANKING USERS



When asked to the respondents about their income about 11 % are those who earn less than 180000, 17% are those who earn between 180000 – 500000, 62% are those who earn between 500000-800000 and the rest 10% are more than 800000.

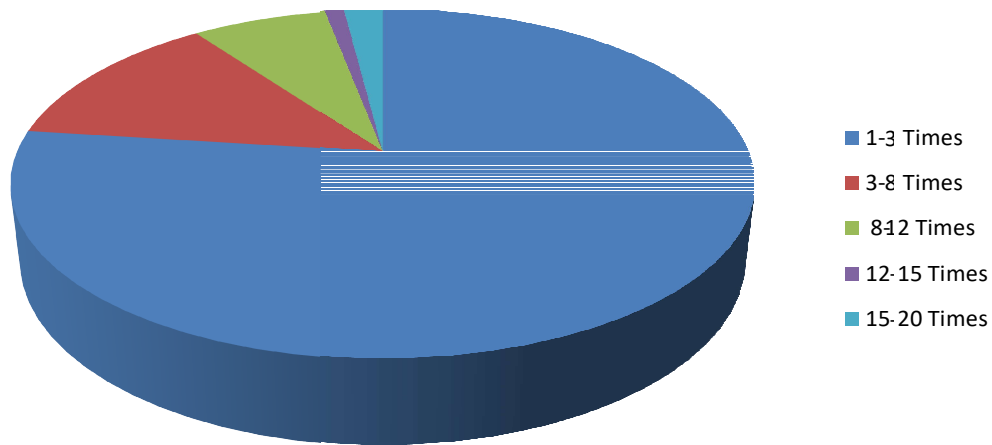
4] WHICH OF THE FOLLOWING ACCOUNTS DO YOU HAVE WITH YOUR BANK?



From the data collected majority of customers had both current & savings a/c at Kotak bank. So customers are concerned with savings as well as carrying out business transactions smoothly from one branch only

5] HOW FREQUENTLY DO YOU VISIT YOUR BANK BRANCH PER MONTH?

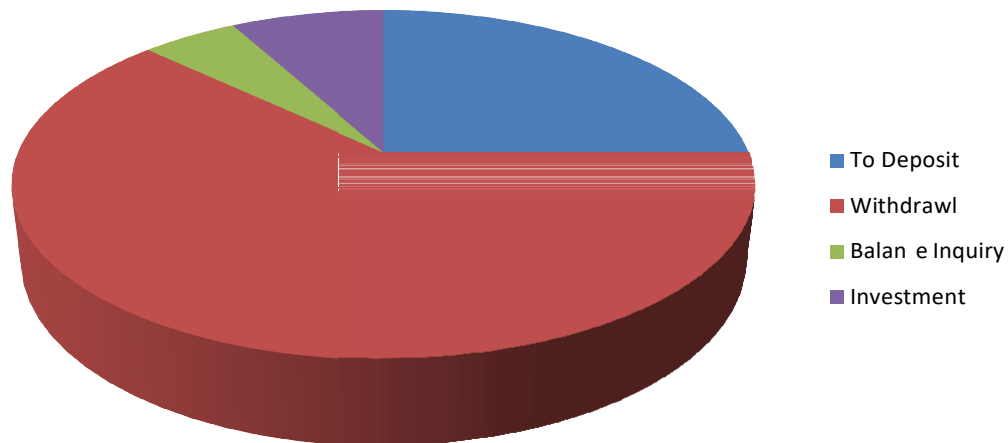
HOW FREQUENTLY DO YOU VISIT YOUR BANK BRANCH PER MONTH?



Majority of e-banking users visit the bank at the most 1-3 times a month. Majority of e-banking users visit the bank at the most 1-3 times a month. This basically shows the potential of high degree of development E-banking services & also, awareness regarding its ease, time saving and convenience is now is wide spread .

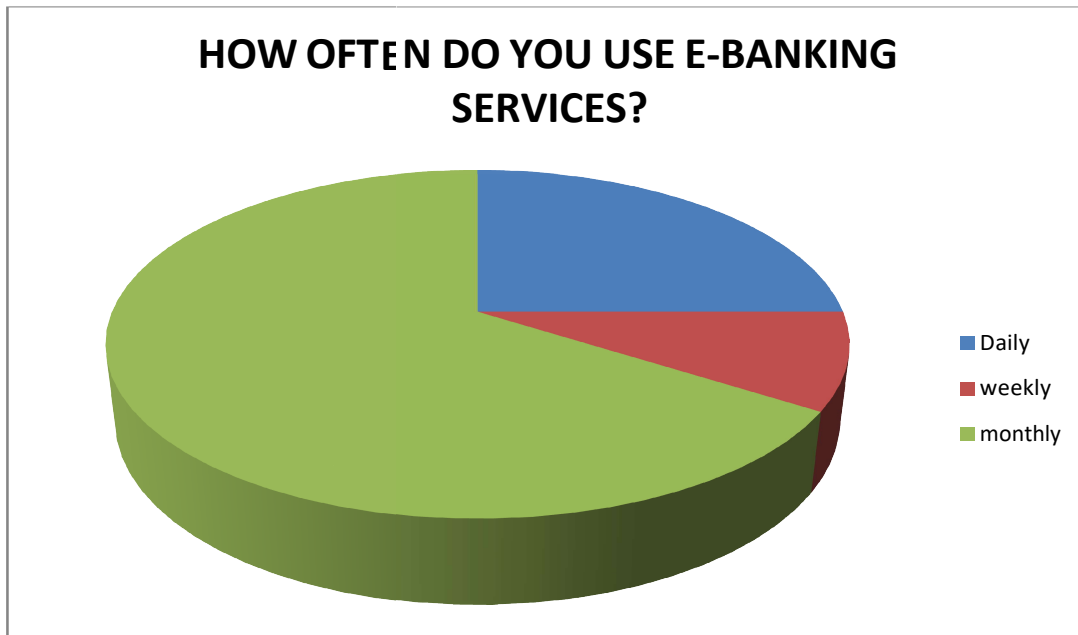
6] WHAT IS THE MAIN REASON THAT YOU TYPICALLY VISIT YOUR BANK BRANCH?

WHAT IS THE MAIN REASON THAT YOU TYPICALLY VISIT YOUR BANK BRANCH?



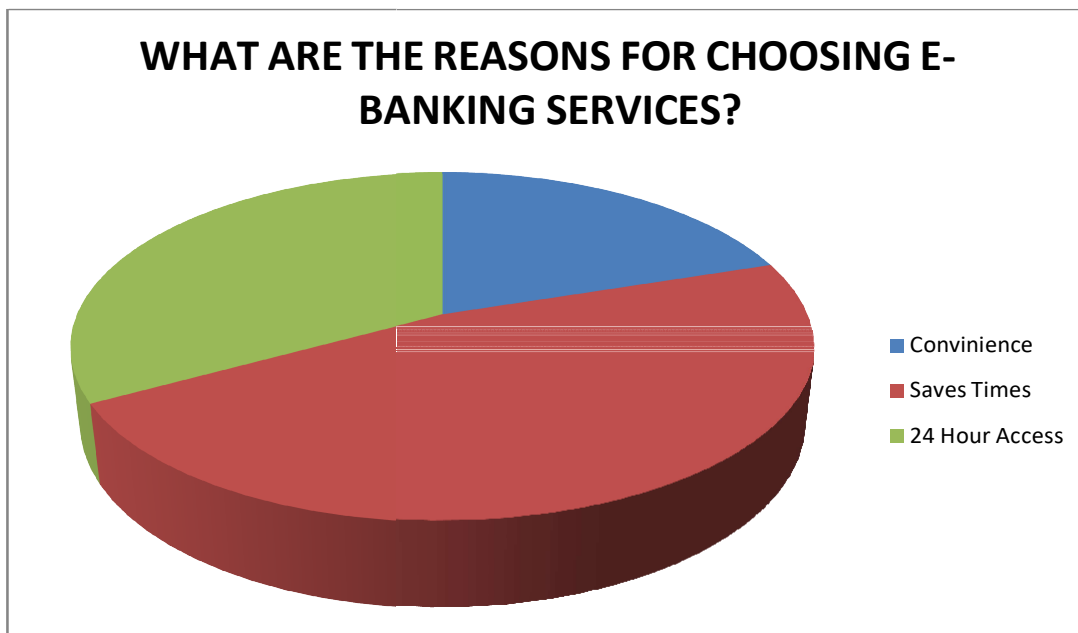
From the data collected most of the customers mainly visit the bank for withdrawal of cash.

7] HOW OFTEN DO YOU USE E-BANKING SERVICES?



Majority of e-banking users use e-banking services monthly. The reason may be for paying their monthly bills like telephone bill, electricity bill mobile bill, online tax payment VAT, TDS, CST on monthly basis. etc.

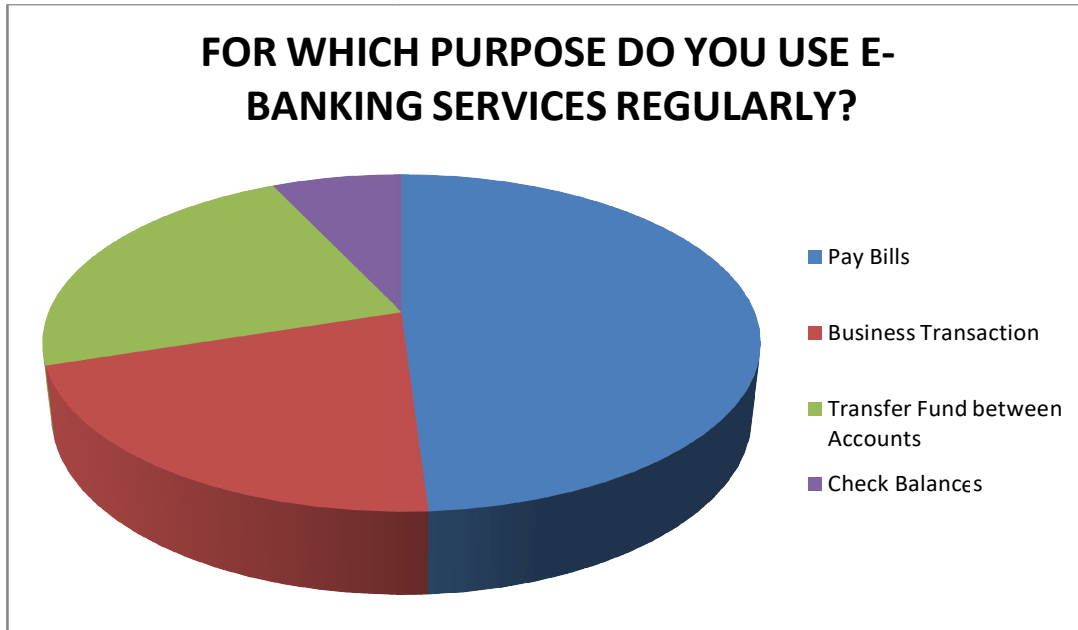
8] WHAT ARE THE REASONS FOR CHOOSING E-BANKING SERVICES?



From the e-banking users questioned majority of them choose e-banking services as it saves their time. Time is what majority of us don't have in our busy schedule. Second main reason

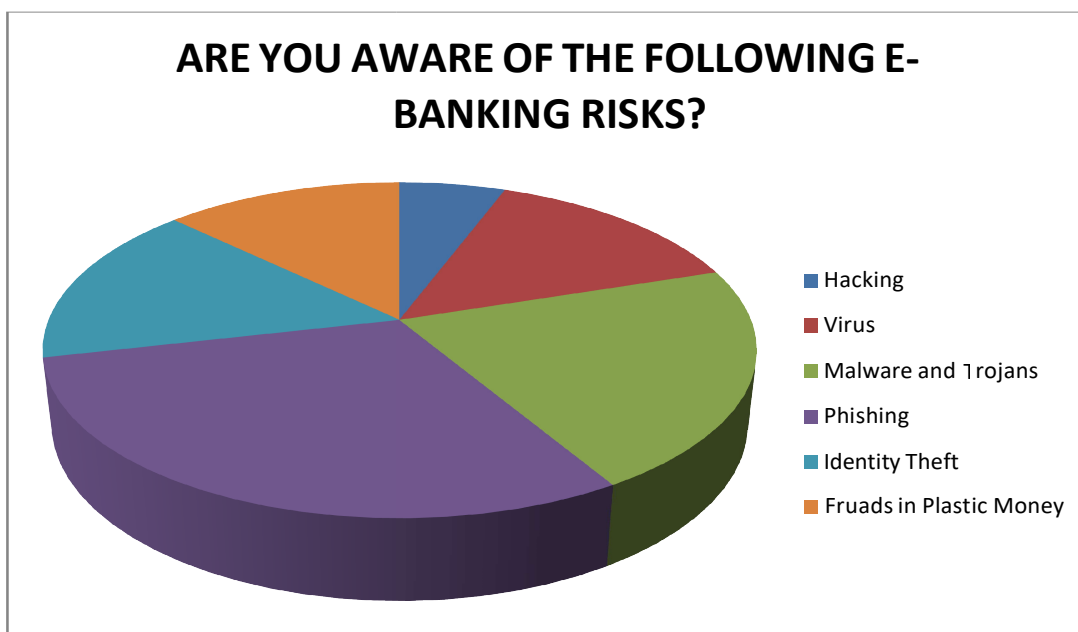
is that it has 24-hour access so at any point of time we can update ourselves with whatever information we want

9] FOR WHICH PURPOSE DO YOU USE E-BANKING SERVICES REGULARLY?



Majority of e-banking users use this service regularly for payment of their monthly bills, Kotak offers monthly payment of mobile, telephone, electricity bill & online tax payment- VAT, TDS, CST

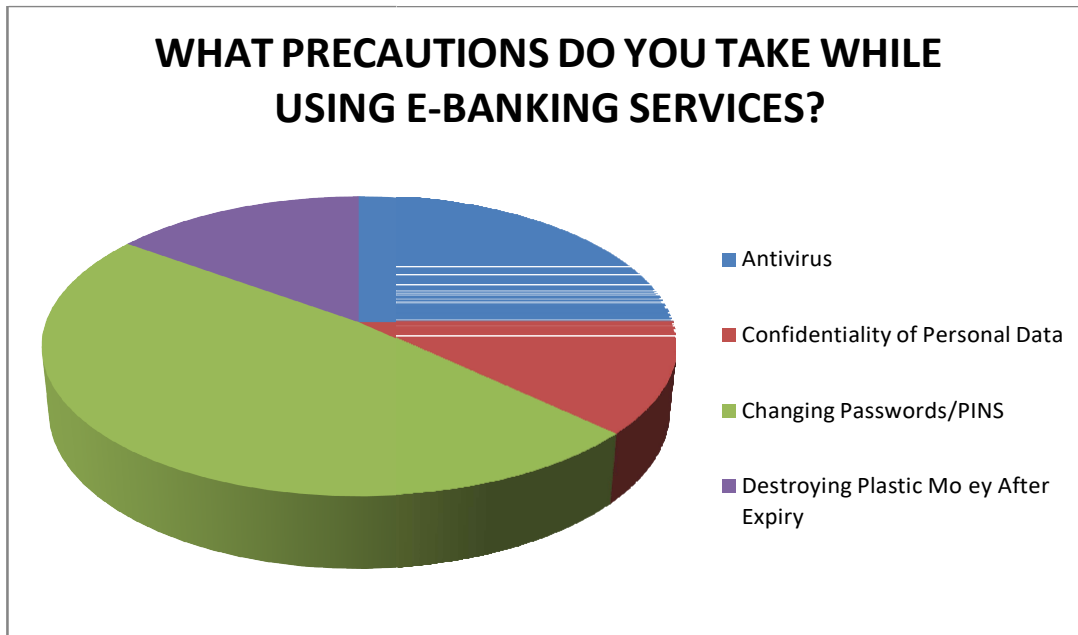
10] ARE YOU AWARE OF THE FOLLOWING E-BANKING RISKS?



Majority of e-banking users are aware of Hacking, and least is known to them of frauds of plastic money i.e., ATM,CREDIT/DEBIT CARD. Other risks are well known to them.

11] WHAT PRECAUTIONS DO YOU TAKE WHILE USING SERVICES?

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As a precaution against e-banking risks majority of e-banking users periodically keep on changing their PIN/PASSWORDS. And that is what the Kotak bank recommends & suggests every now & then to its E-banking users.

RECOMMENDATIONS

According to the responses of individuals, male users outnumber female users when it comes to e-banking services. It is possible that females will use e-banking services in a limited capacity.

Thus, the female gender should be made increasingly aware of the benefits, ease, convenience, precautions, risks, and threats associated with electronic banking.

E-banking users should be made increasingly aware of E-banking risks and threats, as well as how to protect themselves against them by taking precautions and adhering to their banks' SECURITY GUIDELINES.

E-banking users should NEVER ASSUME THE SECURITY OF THEIR BANKS, as YOUR SECURITY IS YOUR RESPONSIBILITY-KOTAK MAHINDRA BANK.

CONCLUSION

We draw several conclusions from our research.

1) It is noted that AGE has a significant impact on the use of e-banking services. Senior citizens are found to be less comfortable with the use of these services. Only two age groups, those between the ages of 20 and 40, and those between the ages of 40 and 60, are observed to use E-banking services. This indicates that even the preceding generation is becoming increasingly aware of the benefits and convenience of electronic banking.

2) In terms of literacy, it is observed that the majority of customers are familiar with only a few aspects of information technology.

3) No customers were harmed by e-banking threats, a positive sign for the future development of these services.

4) According to the study, customers are willing to use modern banking facilities if the bank provides adequate guidance and security measures.

5) In terms of frequency of visits, it is observed that customers visit banks frequently, which can be reduced through optimal provision of e-banking services.

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/ ♦E-BANKING OPERATIONS AT KOTAK MAHINDRA BANK♦ Research Project submitted to Jain Online (Deemed-to-be University) In partial fulfillment of the requirements for the award of: Master of Business Administration Submitted by: UDAY KUMAR USN: (212VMBR01742) Under the guidance of: Mention your Guide♦s Name (Faculty-JAIN Online) Jain Online (Deemed-to-be University) Bangalore 2022-23
DECLARATION I, **Uday Kumar**, hereby declare that the Research Project Report titled ♦E-Banking Operations at Kotak Mahindra Bank.♦ has been prepared by me under the guidance of the Faculty name.

I declare that this Project work is towards the partial fulfillment of the University Regulations for the award of the degree of Master of Business Administration by Jain University, Bengaluru. I have undergone a project for a period of Eight Weeks. I further declare that this Project is based on the original study undertaken by me and has not been submitted for the award of any degree/diploma from any other University / Institution.

Place: **Delhi (Noida)** Date: **22/11/2023** Name of the Student USN: **212VMBR01742** CERTIFICATE This is to certify that the

Research Project report submitted by Mr./Ms. **Uday Kumar** bearing (212VMBR01742) on the title ♦E-Banking Operations at Kotak Mahindra Bank.♦ is a record of project work done by him/ her during the academic year 2022-23 under my guidance and supervision in partial fulfillment of Master of Business Administration. Place: **Delhi (Noida)** Date: **22/11/2023** Faculty Guide ACKNOWLEDGEMENT Success is a time-limited activity that requires the participation of all participants.

I would want to take this time to convey my heartfelt thanks and respect to all of those who have assisted and supported me in my efforts to complete the Project Report successfully. ♦ E-Banking Operations at Kotak Mahindra Bank.♦ has been a wonderful learning experience for me as I worked on the topic. I would like to express my gratitude to **Dr. Prasad Kulkarni** for mentoring and assisting me with the completion of this assignment on

a regular basis. Last but not least, I would want to express my appreciation to the Almighty and to my parents, without whose care and dedication to the project, the project would not be where it is now.

Uday Kumar Name of the Student USN: **212VMBR01742** Executive Summary E-banking services are the most

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