

Enhancing Customer Satisfaction In Banking Sector By Overcoming Web Challenges through Application of E-Commerce

Dr.A.K.VAGEETHA ABDUL KHADER¹

1 Assistant Professor, Rathnavel Subramaniam College of Arts& Science, Sulur,
Coimbatore-641402, Tamilnadu.

Abstract

Great many improvements in many sectors have gone web-based in the beyond five years, having understood the significance of the Web for the trade and dispersion of data. With the E commerce ascent in internet business exercises over the Web. The ensuing decrease being developed throughout the course of recent years without advanced options, thus advancement associations might have the option to take advantage of this new business methodology to counterbalance their working expenses. Most sectors are embracing "E commerce," for the purpose of extending markets, further developing client assistance, decreasing expenses, and improving efficiency. Banking sectors is booming, banks are doing whatever it takes to extend the utilization of systems administration innovation in their business activities. For these foundations, nonetheless, the appearance of electronic business suggests conversation starters as well as any open doors. Will the job of banks in online business fundamentally reflect their part in customary trade? Or on the other hand will banks offer new items that will change the idea of the financial business as internet business grows? What dangers could go with such a change in banks' conventional business? The objective of this paper focuses on Overview of E-commerce security, understand the online Shopping steps to place an order, understand the purpose of Security in E-commerce and discuss the different security issues in E-commerce. It also investigates the potential ramifications of web based business for banks' business exercises and operating paths of banks', utilizing online business, with a glance at the vital and functional modes.

keywords: *E-commerce, Security, online hopping, data innovation, transaction modes*

1. INTRODUCTION

Organizations have customarily utilized internet options to deal with their customers and access client information. Presently, nonetheless, propels in systems administration innovation have empowered firms to smooth out their exchanges with providers, merchants, and retailers through the electronic trade of data. Outstanding development of web populace and use of its true capacities in different areas prompt India to be associated with data super thruway. Performing business and exchanges over web has become more straightforward especially for B2B area. In spite of the fact that publicity is existed among various partners of different nations all over the planet in partaking electronic correspondence and exchanges, the pattern, size and volume of exchanges are changed.

Progression in data advancements and improvement of the Web access have not just altered the manner in which organizations are being led, yet have additionally brought about vicious rivalry on the worldwide market. As an outcome, key organizations have consolidated and coordinated data advances in their tasks to make upper hands and to support their current upper hand. The financial business has integrated online data innovations to synchronize with the market patterns (1). Definitively, banks have taken on electronic trade (online business) items and administrations in a transition to stay in contact with the globalized economy and progressing movement of individuals, substances, and organizations to the internet. Both Business-to-Consumer (B2C) Internet business model and Business-to-Business (B2B) Internet business model are executed by banks to support their upper hand; to take out traffic in financial lobbies; to further develop client experience; to decrease working expenses; as well as to expand their piece of the pie inside

the financial business (2). Nonetheless, high execution costs, similarity issues with heritage frameworks, protection concerns, and security gambles with challenge full reception and ease of use of online business items and administrations in banking.

Web based business isn't just a promising region in the data innovation (IT) industry, yet in addition a sparkling point toward progress of banking sector. The world exchange association and different round conversations on the exchange related issues have opened up another field of worldwide competition. The Internet can be considered as the correct way which gives the potential chance to conquer the boundary of general setting in building purchaser merchant relationship (3). Hence, Online business ought to be embraced as the compelling media for showcasing and selling of an item or administrations through the web. Fast development of world's web populace and reception of ICT in various areas have reshaped the method of correspondence and request using its true capacities to the advancement of exchange and trade. Speed, proficiency, viability, energy and other uniqueness of the innovation made it as the quickest embraced and diffused innovation. The blast in the utilization of electronic trade (internet business) by the business area has been enormous since its origin a couple of years prior (4). From legislatures to worldwide organizations to one-individual new companies, internet business is progressively seen as a key business methodology representing things to come. Simplicity of exchange, augmenting markets, and diminished overheads are factors that make internet business arrangements increasingly appealing, as apparent with the development of online deals.

2. RESEARCH METHODOLOGY

The purpose of this study is concentrated on these areas

- Study the Overview of E-commerce security.
- Understand the Online Shopping - Steps to place an order.
- Understand the purpose of Security in E-commerce.
- Discuss the different security issues in E-commerce.

The Methodology of this paper focused on secondary based and analytical in nature, which enhance the objective of this work. The progress in E-banking in Indian banking industry is measured through various parameters such

- Online Transaction flows,
- online E commerce Transaction modes and
- Bank changing reaction with client experience using E commerce.

2.1 E COMMERCE IN BANKING SECTOR-Online Transaction Flow

E-banking (Internet banking) is an E-commerce application which allows the customers to perform any of the virtual banking functions, financial functions online in a protected and secure manner. It involves using the of internet for delivery of banking products and services. E-commerce alludes to the usage of the web as a dissemination channel to offer financial items and administrations to either existing or likely clients. According to a more extensive point of view, online business includes electronic trade of items (for the most part benefits), data, and installments. At the end of the day, business in the financial area goes past intranets, extranets, web, and electronic information exchanges. Instances of web based business exercises in the financial area incorporate web based banking (putting aside installments and withdrawal on the web); online credit applications; online admittance to bank articulations; bury and intra banks settlements; pay handling; global exchanges; and utilization of virtual entertainment organizations

to increment mindfulness, piece of the pie, and for advertising. E-banking likewise incorporates electronic funds transfer, Frameworks, Bill Paying Assistance, Shopping, Master cards, and Charge Cards (5). Moreover, banks utilize two e-commerce models so as to synchronize with technological advancement ever fluctuating demand patterns in the present globalized and digitized markets. Some of the latest technologies include cloud computing, proliferation of handheld devices, and growing demand for high-speed internet access. Primarily, E commerce depends on internet.

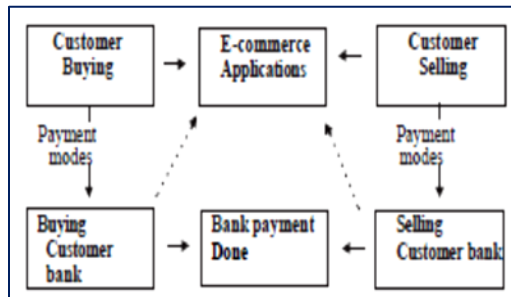


Figure 1 Ecommerce in Banks

Ecommerce highlight its applications in banking sectors through marketing, Customer buying and selling through bank transactions, web hosting, web design, merchant account, payment gateway, credit card processing, and accounting services as shown in figure1. Customers from banking services have been attracted to online or mobile banking because of the quick, fast service and desire to save time, transfer more information during transactions rather than just saving money. Bank sites provide more information than ever, thus shifting power to consumers in terms of selecting services offered by a bank (6). Customer can access loan facility or a mortgage, make online comparisons, hence making strategic and informed decisions. From the banks' perspective, the bank is alleviated the duty to explain to or inform the customer about available services through a face-to-face platform. In other words, the bank enjoys reduced marketing costs. In the same line, sales representatives benefit from the fact they have extra time to work on something different from their usual chores, hence increasing their morale and productivity. Motivation and productivity can also be translated to better business and customer relations, in turn improving customer experience.

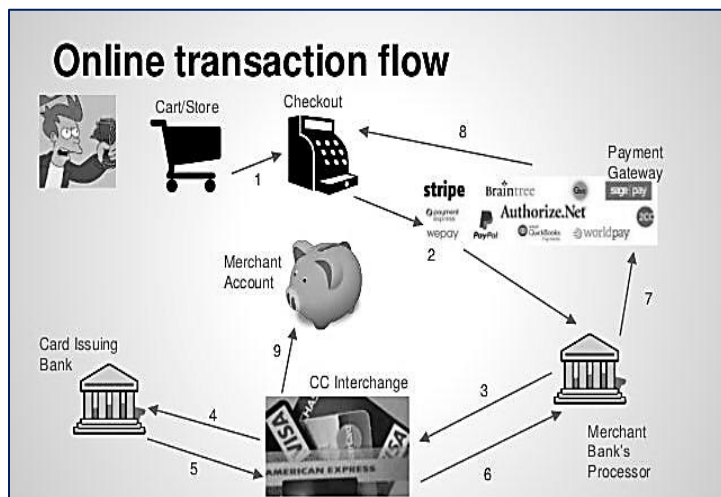


Figure 2 shows Online transaction flow.

E commerce is proceeding to empower substances inside the financial business to accomplish their goals by using data innovations and the Web to change or improve their business processes. Buyer patterns in the present globalized economies have increased present expectations of administration advertising and administration conveyance in the financial area. Client assumptions have developed more than ever. Clients hope to get benefits always. This has been made conceivable by further developed Web openness and expansion of Web empowered cell phones (7). The customary service in financial corridors has been virtualized and robotized such that withdrawals can be made from a distance or installments can be settled from a distance without the need to truly get to banks.

2.2 ONLINE E-COMMERCE MODES

Online business comprises of two wide models: Business-to-Business (B2B) and Business-to-Consumer (B2C). B2B is intended to increment organizations collaborations between organizations while decreasing the expense of exchanges (8). Thus, the B2C model is intended to build the offer of labor and products while further developing client experience or fulfillment at sensible expenses. Notwithstanding the way that banks execute or offer monetary administrations to other business elements, clients are offered a lot of consideration since they are the mainstay of the financial business. It follows that the business-to-shopper model is at the focal point of banking benefits. Notwithstanding, as of this composition, banks were broadening the two web based business models in order to synchronize with mechanical headway truly fluctuating interest designs in the present globalized and digitized markets. A portion of the prominent mechanical advancement or troublesome innovations incorporate distributed computing, multiplication of handheld gadgets, and developing interest for fast web access .Principally, web based business depends on the web. Subsequently, the segment that follows talks about advantages of web based (internet business) exchanges inside the financial area.

E commerce is proceeding to empower substances inside the financial business to accomplish their goals by using data innovations and the Web to change or improve their business processes (9). Buyer patterns in the present globalized economies have increased present expectations of administration advertising and administration conveyance in the financial area. Client assumptions have developed more than ever, truth be told. Clients hope to get benefits anyplace and whenever. This has been made conceivable by further developed Web openness and expansion of Web empowered cell phones. The customary course of lining in financial corridors has been virtualized and robotized such that withdrawals can be made from a distance or installments can be settled from a distance without the need to truly get to banks (10).

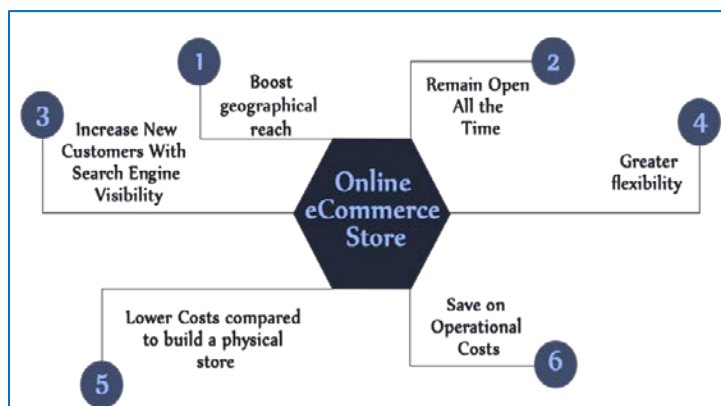


Figure 2. Online Ecommerce modes

E commerce store focuses on the following as shown in figure 2

- Boosting geographical reach,
- Remains open at all the time,
- Increase customers with search engine visibility,
- Greater flexibility,
- lower costs compared to build a physical store
- Save operational costs.

Elements inside the financial business have a significant objective to embrace the direct of business on the web(11). The essential target of creating gain by offering banking administrations and the reasoning of advertising or offering to convey items or administrations and get installment wait. A tremendous change radiates in how administrations are given, installments are made, and elite execution and benefit are accomplished. These progressions can be surely known by featuring advantages of online business in banking.

E-COMMERCE SECURITY TOOLS

- Firewalls – Software and Hardware
- Passwords
- Digital certificates
- Digital Signatures
- Public Key infrastructure
- Encryption software
- Locks and bars – network operations centers
- Biometrics – retinal scan, fingerprints, voice etc

2.3 BANKS' CHANGING REACTION TO E COMMERCE

Security is very important in online shopping sites. Now days, a huge amount is being purchased on the internet, because it's easier and more convenient. Almost anything can be bought such as music, toys clothing, cars and food. Audit of the financial business' reaction to on-line trade recommends that even as of late as a long time back, banks' inclusion with the Web was very restricted. A bank could set up a site to furnish shoppers with data about its administrations. Genuine financial exchanges, nonetheless, still occurred at the branch, through the mail, by phone, or over the automated teller machine organization.

The adoption of Information Communication Technology (ICT) is a timely demand to adopt almost everyone in the society so it is necessary to develop a sustainable e-commerce ecosystem. Besides there is another challenge related to increasing fake products gradually which reduces the trust of e-commerce business (12). Both consumers and traders are suffering from this problem which affects the ecommerce ecosystem. Accordingly, the third party of e-commerce have a significant role to overcome the situation as a mediator. Over the most recent couple of years, notwithstanding, many banks have started to involve the Web as a beneficial channel for conveying conventional items to shoppers and organizations (13). A few banks are likewise researching the way in which they could grow their ebb and flow administration contributions to incorporate a few items planned only for web based business.

Electronic conveyance of customary financial items

Many banks have laid out value-based sites where people and organizations can perform numerous essential financial capabilities, for example, actually taking a look at balances, moving assets, or applying

for charge cards. Private ventures can apply for credits, start wire moves, and exploit cash, the executives and finance services. When restricted to such administrations, these sites capability as another entrance station for essential financial administrations — one that isn't exactly unique in relation to the branch organizations or phone focuses kept up with by banks with the exception of that clients utilize PCs and the Web to speak with their banks.

The value-based sites offer banks and their clients eminent benefits. Clients are drawn in by the comfort of this entrance channel, while banks invite the expense reserve funds that emerge when clients play out the actual exchanges as opposed to managing a bank delegate at a teller window or via telephone. A new gauge recommends that between 6 million and 7 million customers are relying upon line, with high paces of new clients intrigued by this service.

Confirming identities

Banks offer services that would safeguard internet business members against extortion emerging from the deception of personalities. Utilizing encryption innovation, each bank would affirm the identities of its own record holders and act as the go-between through which its record holders could check the personalities of record holders at different banks (14). Along these lines, the two sides of a web based business exchange would have some confirmation that they were not managing a sham.

Helping independent companies into e commerce.

One more exertion being attempted by certain banks includes assisting more modest firms with setting up the framework intelligent site and installment capacities for taking part in web based business. Likewise, a couple of banks are offering private companies electronic obtainment administrations, including the exchange of volume limits from merchants

Electronic charging.

Electronic bill presentment and assortment administrations are being created as an upgrade to the current money the executives and settlement handling administrations presented by banks to enormous organizations that convey significant volumes of repeating bills. In this work, banks will consolidate the email capacity of the Web to convey bills with their own capacity to handle installments electronically through the interbank installment organizations.

To begin with, the biller sends its bank an electronic record containing its month to month charges. The bank then disseminates the bills electronically to sites chose by the biller and purchasers. Purchasers survey the bills on a site and start installment by tapping on an exceptional symbol (15). At last, the bank gathers the assets electronically and refreshes the biller's records receivable. The whole charging and installment cycle is led electronically, without resort to paper archives of any sort.

In offering web based business items, banks enjoy a few vital upper hands over possible contenders. General society is probably going to esteem the "brand names" of banks and to see these organizations as dependable outsiders laid out account associations with purchasers and organizations. Besides, on the off chance that banks are searched out as merchants of web based business items, they might see a few increases in their different lines of business. Online business would set out open doors for banks to reinforce their associations with clients, sell extra administrations, and forestall infringement on their business exercises by the innovation organizations and other nonbank monetary specialist co-ops dynamic in web based business.

Working with Business-to-Business E commerce.

A couple of the biggest business banks have started to offer firms the innovation for electronic business-to-business trade. These banks are basically embraced to computerize the whole data stream related with the acquisition and circulation of labor and products among organizations. According to the banks' viewpoint, this help is a characteristic expansion of the robotized cash the executives administrations they as of now give to huge partnerships.

Incorporating the ATM and Web Organizations.

Some innovation organizations and a financial innovation bunch are investigating the possibility of permitting admittance to the Web and to bank sites from ATMs. On the off chance that the reconciliation of these two organizations can be achieved, buyers ought to have the option to utilize ATMs to participate in web based business or to direct their banking in the adaptable climate of their bank's site.

2.3.1 FURTHER DEVELOPED CLIENT EXPERIENCE

More purchasers of banking administrations have been drawn to on the web or versatile banking due to the craving to save time and access more data during exchanges instead of simply setting aside cash. Monetary destinations give more data than any other time, hence moving capacity to purchasers as far as choosing administrations presented by a bank (6). Before a purchaser applies for a credit office or a home loan, the individual can make online correlations, thus settling on key and informed choices. According to the banks' point of view, the bank is eased the obligation to make sense to illuminate the client about accessible administrations through an up close and personal stage. As such, the bank appreciates decreased showcasing costs. In similar line, agents benefit from the reality they have additional opportunity to deal with something else from their standard tasks, consequently expanding their resolve and efficiency. Inspiration and efficiency can likewise be meant better business and client.

Speed up Capacity and Admittance to Assets

Internet business has additionally further developed financial activities by speeding up capacity and admittance to reserves. Development of assets has been accelerated by banks and Visa firms. New innovation further develops network of individuals and business substances on a worldwide scale. Gadgets like savvy cards, remote gadgets, biometric gadgets, as well as broadened networks improve capacity and move of crude information and handled data at higher rates (10). The way things are, clients or clients can finish practically all exchanges through handheld devices around the world.

Diminished Traffic in the Financial Lobby

As an ever increasing number of clients relocate on the web, the quantity of up close and personal exchanges is diminished. Importantly, the quantity of direct exchanges described by banking lobbies 10 years prior is limited. With presentation of portable financial administrations, clients can make online installments or electronic exchanges utilizing their web empowered cell phones, including Cell phone and note pads to execute from a distance as opposed to going to banks truly (11). This doesn't just save clients or clients the expense of being genuinely present at the bank, yet in addition saves their time, which is diverted to other business or confidential exercises. For instance, another client can open records either by finishing e-structures or via mailing appropriately finished structures to foundations offering the assistance. In one or the other occasion, the new client can support opening of another record by wire move, check, or one more type of electronic installment. It follows that with the reception of online business no actual connection point between an expected client and a bank is required. In a similar climate, the bank makes an interpretation of the opportunity to basic business exercises.

Decreased Working Expenses

Generally, web based business is a modest way to deal with carrying on with work in the ongoing globalized financial industry. The immediate expense of overhauling an electronic exchange or a credit from a bank's site is nearly lower than keeping up with a similar exchange through a conventional paper-based framework. Online electronic report the executives frameworks mechanize handling of credits, monitoring records from their creation to the furthest limit of their lifecycle. Keeping that in mind, the handling system is improved and security of a record is upgraded in light of the fact that the online transactions guarantee security through validation and approval components (8). Further, such frameworks file handled records for some time later. Web based business sites likewise diminish working costs as in a large part of the work is computerized, consequently decreasing the expense of employing more human resources. Also, electronic exchanges wipe out misfortunes ascribed to human handling mistakes. In particular, exchanges are moved quicker and all the more advantageously for new clients.

To call attention to that functional advantages that radiate from taking on online business incorporate diminishing both staff and time expected to finish routine business processes, thus decreasing strain on different assets. According to a purchaser's perspective, internet business likewise offers critical advantages, including better client choice, expanded an open door to purchase elective items (like credit and home loans), and less time in settling installment disparities (5). The essential advantage of taking on internet business in banks is that it helps with diminishing abuse of assets, conveyance time, and significant expenses caused in a few regions, including report readiness, phone promoting, additional time, information passage, oversight costs, mail planning, advertising, and mistake identification and remedy. In view of these benefits, it is doubtful that the force of web based business has been outfit to switch banking administrations over completely to electronic banking by utilizing creative internet business arrangements made accessible by the Web and media transmission administrations.

3. Challenges in the Execution of Online business inside the Financial Business

Legal Issues, & security & Technology issues and regularity issues

Transactions between buyers and sellers in e-commerce include requests for information, quotation of prices, placement of orders and payment, and after sales services. The high degree of confidence needed in the authenticity, confidentiality, and timely delivery of such transactions can be difficult to maintain where they are exchanged over the Internet.

Notwithstanding various open doors or advantages introduced by online business in the financial business, there are a few difficulties coupled by digitization of conventional financial tasks. Key difficulties confronting banks as they take on and carry out web based business incorporate protection concerns, security risk, significant expense of rebuilding, and similarity challenges. Postponing to execute the B2C model in the financial business might open a bank to fierce opposition, winding up following forceful opponents that are in many cases zeroing in on reducing working expenses while further developing client comfort, client steadfastness, and overall revenues. As new innovations and gadgets arise, banks are expected to expand limits or versatility of their interchanges organizations, which is many times an expensive undertaking. Further, banks are compelled to rebuild their business to adapt to interrelations that emerge in the monetary or banking climate: bank-to-business and bank-to-client.

Technology and security concerns are of significance because the entire base of e-commerce rests on them. With increased proliferation of mobile devices from different vendors, cyber intrusion threats are also on the rise because these devices open a loophole for attack. Most banking systems employ Intrusion Detection Systems (IDS) and Intrusion Prevention Systems (IPS) to protect their networks. Regularly,

these frameworks depend on known danger marks and weaknesses (4). In this manner, multiplication of new gadgets and advances uncovered web based business stages to data fraud, extortion, and other digital violations in the financial business. Protection is one of the most disputable subjects since clients and clients present their own data to banking organizations, which have on numerous occasions detailed interruptions and robbery of private data .The security banter likewise stretches out to who and under what conditions could private data at any point be gotten to by an outsider other than a bank, like security organizations. Legitimate issues and debates will undoubtedly happen as banks embrace and change their tasks to the web in light of the fact that current regulations are not viable with the switchover or the fast change in advances. Ultimately, guideline and administrative issues will undoubtedly arise in light of the fact that banks work in genuine space, yet virtual climate has not been completely consolidated by administrative and administrative establishments.

Conclusion

The paper takes a gander at the advantages of E commerce business in banking sector, that influence execution to take on various methods of online business considering laying out computerized exchanges and organizations empowering the nation's business associations to adapt to the continuous worldwide difficulties. The driving forces of E commerce are focused towards new world of business, business pressures, organizational responses, strategic systems, continuous improvements efforts and business process re-engineering. Online business has empowered banks and related substances to accomplish their business objectives by utilizing data innovation to change or further develop their business processes. Internet business has digitized financial exchanges through electronic banking. Electronic banking is a general term alluding to processes by which clients or clients perform banking exchanges electronically without actual presence at the financial establishment. There are a few variations of electronic banking, including portable banking (utilization of cell phones) and internet banking (monetary sites). Electronic banking gives various advantages to remote access, including worldwide network, accessibility of exchange administrations 24hrs per day, simple entry to current and authentic exchange information, and client control of their assets without discretion of outsider monetary foundations. Hence, the objective of the paper is enhanced as this work focused towards the benefits of e-commerce that affect implementation to adopt different modes of e-commerce in view of establishing digital transactions and businesses enabling the countries business organizations to cope with the ongoing global challenges.

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