

Advancement in Technology and Limitations for M-Commerce

Dr. Gopal Methew

Professor, Florida Memorial University, United States

Abstract: M-commerce is a growing trend that entails the use of wireless handheld devices to conduct a variety of financial and promotional transactions. This term refers to the transactions that are possible with these devices.

E-commerce refers to the process of purchasing or selling products over the Internet. It is generally defined as the purchasing or selling of products via electronic means. The terms e-commerce and business-to-business or business-to-consumer are frequently used interchangeably.

INTRODUCTION

E-commerce is the process of transacting business online. It encompasses a variety of different types of businesses, including retail sales, banking, investing, and rental properties. By launching their own website, even small businesses can benefit from this type of commerce. Electronic commerce is a broad term that encompasses a variety of technologies used in the transaction processing process. Electronic funds transfer, Internet marketing, credit and debit card processing, and inventory management systems are just a few of these.

E-commerce is distinct from e-business, which is a process of value exchange across multiple borders. Rather than that, it entails the use of electronic platforms to conduct transactions. Mobile commerce is a subset of electronic commerce that utilises a mobile phone. E-commerce, or online shopping, is a type of electronic retailing that enables consumers to purchase goods and services online. E-commerce is a broad term that refers to a variety of online businesses that sell a variety of products and services. Among these are an e-store, an Internet cafe, a web store, a virtual store, and an e-wallet. Consumers have developed a strong interest in privacy. E-commerce security is a factor that affects how an end user interacts with a business on a daily basis.

M-COMMERCE CHARACTERISTICS

- Ubiquity, convenience, interactivity, and localization are all properties. Privacy and security are becoming increasingly important concerns when it comes to electronic technology. There have been concerns raised in a variety of contexts, including social networking and e-commerce.
- Security Challenges: Modular exponentiation is slow, processing power is limited, memory is slow, and there is no tamper resistance, among others.

REVIEW OF THE LITERATURE

Electronic commerce is a rapidly growing industry. It is primarily used to make online purchases of goods and services. Numerous protocols are required for efficient and secure transactions. M-commerce is a subset of online commerce in which financial transactions and purchases are made over a wireless network. The growth of mobile commerce has compelled the corporate world to develop a new platform capable of reaching a mass audience.

Electronic communication devices are becoming more prevalent in our daily lives as their popularity grows. This is largely due to the interactions that people have on a daily basis. As cloud computing grows in popularity, communication networks are being used in novel ways to enable people to work remotely. Without a secure environment, m-commerce can be challenging to implement. This scenario presents a number of security challenges. While Ecommerce can be used only when the user is at home or at work, the

same cannot be said for M-commerce. It is simply a mobile application that enables users to perform a variety of tasks, including accessing media such as television and the Internet. M-commerce has grown in popularity, making it more useful and comprehensive for consumers. This online transaction has a number of advantages.

Online commerce is a necessary component of today's world. There are four primary areas in which businesses can operate. E-commerce is the process of purchasing and selling goods and services over the Internet. It has resulted in a paradigm shift in the way businesses operate. M-commerce has evolved into a necessary component of society. Due to its growing popularity, numerous academics and practitioners have conducted research on it. M-commerce is a relatively new field that focuses on the convergence of electronic commerce and emerging computing technology. Due to the rapidity with which it is implemented and the complexity of its implementation, it is difficult to analyse its technological issues. In today's world, e-commerce has altered the way businesses operate. This category includes a variety of applications, including banking, publishing, and sales portals.

TYPES OF COMMERCE

E-commerce is classified as Business to Consumer (B2C), Business to Business (B2B), and Business to Government (B2G) (B2G). Second, American consumers are more accustomed to the concept of remote shopping, as it has been a part of their lives for decades. Additionally, they may be more confident in the security of their transactions. The e-commerce industry is gradually addressing the various security concerns that arise when internal networks are operated. A recent article discusses the various security concerns that must be addressed in order for e-commerce systems to operate successfully.

THE STUDY'S OBJECTIVE

E-commerce and M-commerce: A Study examines the primary benefits and drawbacks of both forms of commerce. COMPARISON OF E-COMMERCE AND M-COMMERCE Which is the superior choice? There are numerous advantages to starting a business, including lower operational costs, improved service quality, and the elimination of the need for physical company setups. Additionally, customers can easily shop for products and services without visiting a physical store.

ECOMMERCE'S BENEFITS AND DISADVANTAGES

Con: It's too restrictive for sellers while there are numerous websites that enable consumers to easily compare prices, filtering out the most popular ones is frequently insufficient.

This is one of the most advantageous features of ecommerce for the majority of customers. However, dealing with the lengthy queue can be a pain. Similarly, ecommerce expands business opportunities.

Internet Access Device: An Internet connection is required to conduct an online transaction. This is beneficial to the seller, but detrimental to the buyer.

Fraudulent Use of Credit Cards This crime affects the majority of businesses and consumers alike. According to some doomsayers, it will result in the demise of online businesses. Businesses are at risk of security breaches.

Without visiting a physical music store, one can now purchase digital goods such as music and movies. It is now possible to advertise your products and services requirements online and have suppliers compete for them. Scam artists frequently take orders and then vanish.

Even as a business grows, it must contend with the logistical challenges inherent in operating an e-commerce business. With the right third-party logistics provider, one's operations can easily be scaled up. Even a few downtimes can result in a financial loss.

This is especially true when the buyer and seller are geographically separated. This can result in double taxation and increased expenses. Simple to Use An ecommerce merchant can easily send promotional emails when sending emails.

No Requirement for Currency Notes Customers typically pay with currency notes. This eliminates the need for cash management and improves the retailer's operational efficiency. Using e-commerce platforms streamlines the purchasing process for goods and services. It enables businesses to save both time and money.

The complexity of operating an effective ecommerce website increases exponentially as the website becomes more complex. Even with best-of-breed solutions, implementing an effective infrastructure requires a significant investment of time and resources.

Numerous jobs for lower-level roles are being created as a result of the rapid growth of e-commerce. However, these jobs are easily replaceable by individuals with greater levels of expertise. Conventional retailers stock high-demand items that are frequently obsolete. The economics of ecommerce allow for the inclusion of slow-moving items in the catalogue, even if they are not sold quickly.

Capability of Logistics Tracking An ecommerce business can benefit from the ability to efficiently track and monitor their supply chain. Returning merchandise is a more pressing concern for an e-commerce business than receiving it. As a result, the reverse logistics function has grown in popularity.

In comparison to other forms of business, e-commerce is not constrained by any constraints. This means that it can be carried out in any region without restriction. The company saves money by eliminating the need for employees to stand in front of customers and take orders. This obviates their need to interact with customers. Comparing prices across multiple stores at the same time is extremely convenient for customers. It saves them time and enables them to make a more informed purchase. For example, customers of Dell can now see the status of their order at any point in time. This is a significant advantage for the business.

Savings will eventually be passed on to customers. E-commerce provides a fantastic platform for businesses of all sizes. Because of its low cost and ease of use, it is an ideal marketing medium for businesses. Globally, e-commerce is becoming more prevalent, enabling businesses to strengthen their brand image and expand their customer base. This is also advantageous for them because it enables them to compete in the market.

DISADVANTAGES AND LIMITATIONS:

Among the disadvantages of e-commerce are the length of the delivery process and the requirement for physical goods to be delivered. Additionally, it is possible to purchase items that are not available in local stores. There are some exceptions, such as music downloads and books, as these are not physical goods. In some instances, consumers make e-commerce purchases in the belief that the goods and services being sold are legitimate. This is because there is no guarantee that the businesses are legitimate in the majority of cases. It's difficult to complain about a company's goods or services if the customer is dissatisfied.

This alters the consumer's preference away from perishable goods and toward more localised e-commerce transactions. In other circumstances, the absence of intermediaries results in disintermediation. Although the Internet provides minimal information on our senses, it does enable us to view images and listen to noises. However, it precludes us from having complete sensory experiences.

When we purchase a new vehicle, we frequently prioritise what we look at first, followed by how we look at it. On the other hand, if we were looking for a car online, we would most likely see images of the vehicle but not the features we would check for in person. The Internet cannot represent the whole breadth of human experience. As a result, individuals choose to purchase generic goods than sophisticated ones.

Returning an item after it has been delivered can be a difficult chore, much more so if the goods are not insured or return postage is not provided. This can also have an effect on the buyer's refund. Online experience is distinct from offline experience. Numerous challenges occur when dealing with sensitive data such as credit card numbers. E-commerce is a method of managing the numerous transactions that occur on a daily basis. However, it is insufficient for dealing with novel or unforeseen situations.

To resolve disagreements and investigate complaints, human interaction is required. E-commerce is limited in its ability to deliver a high level of connection and personalised service. Feedback on how customers react to your items and services is frequently confined to a few critical factors: how they browse for them, rather than the overall effectiveness of your e-commerce strategy.

E-commerce is a term that refers to the process of collecting and analysing client feedback. This enables organisations to establish effective plans and adapt to their customers' shifting needs. The size of transactions is also determined by the cost of physical goods transportation. For example, if you purchase a box of pens from a company situated in the United States, the cost of shipping them to Australia will exceed the cost of having them delivered to you.

Delivering things from many overseas firms is substantially more expensive than purchasing everything from a single store. This means that purchasing all of the things from a single foreign retailer is much more expensive. M-commerce is a subset of e-commerce that occurs via mobile devices. This enables consumers to shop for items and services regardless of their location. Between e-commerce and mobile commerce, there are numerous parallels. While video conferencing is also possible via m-commerce, it is not possible via e-commerce. When it comes to Internet connection, handhelds outperform mobile laptops. Additionally, they can execute a variety of tasks and capabilities that are exclusive to mobile phones.

Mobile websites can be created using the same database as their desktop equivalents. They are simple to administer and maintain. The m-commerce industry's objective is to facilitate the development of new applications and technology that will enable seamless customer transactions. Mobile phones are also extremely convenient for individuals with limited mobility. Additionally, they can be used to access a variety of web services such as Gmail and Yahoo! via their mobile messengers. They can, however, be deterred from doing so by powering down their gadgets.

THE BENEFITS AND LIMITATIONS OF M-COMMERCE

The mobile and wireless broadband infrastructure is still constrained by the screen size of the majority of devices. Mobile Internet access is currently restricted to the current generation of portable devices and mobile phones. Businesses are concerned about the cost of creating wireless and mobile broadband infrastructure.

APPLICATIONS OF M-COMMERCE

M-Commerce is prevalent in a variety of industries, including finance, retail, telecommunications, and information technology. This is because it enables firms to transact directly with one another. Mobile commerce is a wide term that encompasses a variety of applications. Mobile ticketing, loyalty cards, content purchase and delivery, and location-based services are just a few examples. M-commerce is not the same as e-commerce. It possesses a plethora of advantages and downsides.

A mobile device enables users to be contacted at any time and from any location. Additionally, they have the flexibility to limit their accessibility to specific individuals or times. 2.5G network evolution will provide quicker connectivity and improved overall performance. This technology will enable people to connect to the Internet smoothly. Personalization will occur through the customization of the information provided by users. This procedure enables them to securely save their personal information.

SECURITY CONCERNS

You alone have access to your account. This safeguards against illegal access. Security features are frequently employed to guard against illegal use and destruction of e-commerce assets. While they do not ensure security, they are important for its establishment. This discipline requires the maintenance of a transaction log. It enables retailers to establish that you purchased the precise item.

CONCLUSION

E-commerce security procedures are intended to safeguard e-commerce enterprises' assets from illegal access. M-Commerce is a broad term that refers to a variety of services that enable businesses to conduct

transactions using mobile devices. Mobile banking, location-based services, and shopping cart software are just a few examples. E-commerce is the online practise of purchasing and selling things. E-commerce, on the other hand, can be defined as any transaction that is conducted via electronic means.

References

1. Kshirsagar, Pravin R., et al. "Automation Monitoring With Sensors For Detecting Covid Using Backpropagation Algorithm." *KSII Transactions on Internet and Information Systems (TIIS)* 15.7 (2021): 2414-2433.
2. Pallathadka, Harikumar, et al. "Impact of machine learning on management, healthcare and agriculture." *Materials Today: Proceedings* (2021).
3. Asghar Afshar Jahanshahi, Alireza Mirzaie "MOBILE COMMERCE BEYOND ELECTRONIC COMMERCE: ISSUE AND CHALLENGES". *Asian Journal of Business and Management Sciences*-Vol. 1 No. 2 , ISSN: 2047-2528
4. Kavitha, S., et al. "An Internet Of Things For Data Security In Cloud Using Artificial Intelligence." *International Journal of Grid and Distributed Computing* 14.1 (2021): 1257-1275.
5. Pallathadka, Harikumar, et al. "Applications of artificial intelligence in business management, e-commerce and finance." *Materials Today: Proceedings* (2021).
6. Khalil Md Nor, Asghar Afshar Jahanshahi"FROM MOBILE TO MOBILE COMMERCE: AN OVERVIEW IN THE INDIAN PERSPECTIVE" - 2nd INTERNATIONAL CONFERENCE ON BUSINESS AND ECONOMIC RESEARCH (2nd ICBER 2011) PROCEEDING
7. Kavitha, S., et al. "An Internet Of Things For Data Security In Cloud Using Artificial Intelligence." *International Journal of Grid and Distributed Computing* 14.1 (2021): 1257-1275.
8. Rajiv Kumar "E-Commerce: Living and Working in an Interconnected World" -IRACST- International Journal of Research in Management & Technology (IJRMT), Vol. 1, No.2, December 2011
9. Prof .Waghmare G.T. "E-commerce; A Business Review And Future Prospects In Indian Business." - Indian Streams Research Journal Vol.2, Issue.IV/May; 12pp.1-4-ISSN:-2230-7850
10. E.W.T. Ngai- "A review for mobile commerce research and applications" Elsevier - Decision Support Systems 43 (2007) 3 – 15
11. Suresh Chari, Parviz Kermani- "Security Issues in M{Commerce: A Usage Based Taxonomy" - Springer-Verlag Berlin Heidelberg 2001
12. A.Koponen "E-COMMERCE, ELECTRONIC PAYMENTS" from Helsinki University of Technology, Telecommunications Software and Multimedia Laboratory