

# Exploring the Benefits of E-commerce Applications for Efficient Online Operations

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## ABSTRACT

An E-commerce application provides a comprehensive solution for businesses to manage their online sales and operations. It enables merchants to set up an online store, list products or services, and accept payments from customers. The platform provides a user-friendly interface for customers to browse and purchase products, track orders, and receive updates on delivery status.

E-commerce applications provide tools for managing inventory, shipping, and taxes in addition to selling and processing payments. Retailers can monitor stock levels, restock alerts, and sales reports with the aid of inventory management. Merchants can configure shipping options, print shipping labels, and monitor deliveries thanks to shipping management. The management and calculation of taxes guarantees that businesses follow all applicable local tax laws and regulations.

Customer relationship management (CRM) features for e-commerce applications also include email marketing, customer reviews and ratings, and customer support. By offering top-notch customer support, promoting goods, and interacting with customers via email campaigns, these features assist businesses in establishing and maintaining a loyal customer base. Additionally, e-commerce applications offer a variety of analytics and reporting tools that enable retailers to learn more about sales, consumer behaviour,

Overall E-commerce applications offer businesses a comprehensive and affordable way to expand their customer base and efficiently run their online operations. E-commerce applications assist merchants in saving time and resources while expanding their online businesses by automating various business processes and offering robust features.

Keywords: E-Commerce, Payment, Tools, Technology

## I. INTRODUCTION

An E-commerce application is a software platform which is designed to help businesses sell products and services online. It incorporates a number of operations required to run an online store, including order management, shipping, order management, payment processing, and customer relationship management. E-commerce applications give business owners a centralised location from which to run every aspect of their online operations, including product listing and sales, order processing, and customer service.

Product catalogue management, shopping carts and checkouts, payment gateway integration, shipping management, order tracking, and customer management are some of the essential features of e-commerce applications. Additionally, reporting and analytics features are provided by E-commerce applications, giving business owners the ability to monitor website traffic, track sales and customer behaviour, and analyse the effectiveness of their online operations.

Depending on the requirements and resources of the company, e-commerce applications can be self-hosted or hosted in the cloud. They can be tailored to fit the particular needs of each business, and many of them provide integrations with well-liked third-party programmes, including shipping companies, payment processors, and accounting software.

## II. LITREATURE STUDY

Abdhulla et al.,(2012)[1] discusses the ways in which the internet has altered how we shop and conduct business. E-commerce has made it simpler for businesses to reach a wider audience with their products and services while also enabling consumers to access a wider variety of products and services. The ability for businesses to reach customers outside of their physical location is one of the main advantages of e-commerce. An organization's ability to sell to

customers within a particular geographic area is constrained by a traditional brick-and-mortar store. On the other hand, a company can use an e-commerce website or application to sell to customers anywhere in the world with an internet connection. Abdulla et al. (2012) claim that because consumers can browse and buy products from the comfort of their homes, physical stores are becoming less and less relevant. E-commerce has made shopping more convenient for consumers.

Nagothu et al.,(2021)[2] tells us on how utilizing MERN technology, which combines the react and node js platforms with mongodb and the express framework, an e-commerce application was created. Their application's goal is to develop a website for online shopping that allows customers to make secure payments while maintaining customer privacy. React is used to build the front end, Node.js is used to build the back end, and MongoDB and the Mongoose Framework are used to build the database. Building a platform that any textile industry, no matter how big or small, can use to sell their goods directly to customers is their aim. They mentioned that the application will have functions like login authentication, a shopping cart, and a payment gateway to make transactions easier

E-commerce, or electronic commerce, has altered how businesses run and how customers shop, according to Shahid et al., (2016). E-commerce is the exchange of goods and services as well as the transfer of money and data over the internet. It has facilitated consumer access to a range of goods and services and allowed businesses to reach a wider audience. The ability for businesses to reach customers outside of their physical location is one of the main advantages of e-commerce. An organization's ability to sell to customers within a particular geographic area is constrained by a traditional brick-and-mortar store. On the other hand, a company can use an e-commerce website or application to sell to customers anywhere in the world with an internet connection. According to Shahid et al[3]., the internet, payment

gateways, analytics, social media, autonomous vehicles, etc. are the primary enablers of e-commerce, and the fact that e-commerce offers almost all products has restricted the growth of physical stores (2016).

E-commerce is defined by Nithya et al. (2019)[4] as the exchange of goods and services, as well as the transfer of money and data, over the internet. E-commerce has significantly expanded globally and changed how companies run and how customers shop. Particularly e-commerce has gained popularity among start-ups as a distinctive business model. Investigating e-commerce's potential and taking into account the environmental ramifications of this business model are crucial because of the significant environmental impact it has. The goal of the study by Nithya et al. (2019) is to analyse the potential of e-commerce and how it has affected the business world, as well as to describe the past, present, and future scenarios of e-commerce. Nithya et al. (2019) provide a clear overview of all significant developments in the field of e-commerce as well as predictions for its future in India. In their conclusion, Nithya et al. (2019) discuss the modernization and increased competitiveness that e-commerce can bring to developing nations. The development of e-commerce has benefited greatly from IT, which has made it easier for companies to expand into new markets and assess their performance. Technology has been incorporated into service delivery by numerous companies across a wide range of industries, including education, banking, commerce, and tourism, to enhance their offerings. But there are some e-commerce problems that are dangerous for the future and demand careful thought and strategic planning from marketers.

According to Manish et al., (2022)[5] e-commerce is a potent tool for both customers and businesses. Businesses are able to reach more clients and widen their markets, and clients gain access to a wider range of goods and services, convenience, and affordable prices. E-commerce has a favorable effect on the environment because it lessens the need for product

or service transportation and boosts supply chain effectiveness. As businesses use digital platforms to inform customers about their environmental policies and sustainability initiatives, it can also reduce waste and promote sustainable practices. Additionally, e-commerce can lessen the need for physical stores, which can lessen a company's environmental impact. Manish et al.,(2022) also discuss the benefits that businesses can receive from implementing business-to-consumer (B2C) e-commerce, including cost savings, increased revenue, quicker delivery, lower administrative costs, and better customer service. The definition of implementation can be debatable and perplexing for academics, according to research on the implementation of e-commerce. However, it is evident that the growth of e-commerce through B2B and B2C can assist clients in achieving their goals and offer a number of advantages to companies. Companies must carefully weigh the potential advantages and disadvantages of implementing e-commerce and develop plans to ensure a smooth transition to an e-commerce business model.

### III. RESULTS AND DISCUSSION

#### Advantages of using E-commerce application

- Convenience: E-commerce applications make it easier for customers to make purchases because they let them shop whenever and from wherever they are.
- Economical: Since E-commerce applications do not require physical stores, businesses can avoid paying for rent, utilities, and other costs associated with maintaining a storefront.
- Greater reach: E-commerce tools give businesses access to a global clientele, which can boost earnings and sales.
- Personalization: By tailoring the shopping experience for customers, e-commerce applications can use data and analytics to increase the likelihood that they will make a purchase.

- Better customer service: By giving customers immediate access to support, e-commerce applications can raise customer satisfaction and loyalty.
- Greater efficiency: Many online shopping-related tasks can be automated by e-commerce applications, which makes it simpler for businesses to manage inventory, complete orders, and handle payments.
- Greater transparency: E-commerce applications can give customers more information about the availability of products, shipping estimates, and prices, which can foster customer loyalty and trust.

Overall, e-commerce applications are becoming a more significant component of the retail landscape because they provide a wide range of advantages for both businesses and consumers.

#### **Disadvantages of E-commerce Application**

- Technical problems: Because E-commerce applications rely on technology, there may occasionally be technical problems, such as website crashes, problems with payment processing, or security breaches.
- Lack of physical interaction: Because E-commerce applications prevent physical contact between customers and products, it can be challenging for consumers to evaluate a product's quality prior to making a purchase.
- Delays in shipping: Since e-commerce applications depend on shipping services to deliver goods to customers, there may occasionally be delays or other problems that negatively affect customer satisfaction.
- Customers who use E-commerce applications must provide personal and financial information, which puts them at risk of identity theft and security breaches.
- Limited customer service: Automated customer service systems are frequently used in e-commerce

- applications, which can make it challenging for customers to get the assistance they require.
- Returns are challenging: Because of shipping logistics and return regulations, e-commerce applications may make it more challenging for customers to return items.
- The need for ongoing maintenance: To keep them functioning properly, e-commerce applications need regular maintenance and updates, which can be time-consuming and expensive.

Overall, even though e-commerce applications have many advantages, it is crucial for companies to think about these potential drawbacks and take action to eliminate them in order to give their customers the best experience.

#### **IV. CONCLUSION**

In conclusion, e-commerce has fundamentally changed the retail industry in many ways. Customers can now shop from anywhere in the world at any time thanks to the development of E-commerce platforms and applications, greatly increasing convenience and accessibility. The ability to reach customers outside of their immediate area and increase their customer base has been advantageous for businesses. E-commerce has also made it possible for the shopping experience to be more personalised and automated, which has increased effectiveness and client satisfaction. But e-commerce has also brought its own share of difficulties, including technical problems, security worries, and logistical issues with shipping and returns. In general, the emergence of E-commerce has significantly altered the retail sector, and it will continue to influence how companies and customers interact in the years to come.

#### **V. REFERENCES**

- [1]. Abdullah S A., Robert Goodwin.,(2012) E-commerce Smartphone Application (IJACSA)

International Journal of Advanced Computer Science and Applications, Vol. 3, No.8

- [2]. Nagothu D N., Pentapati A., Sabharindra R., Gumpula R., Uppu S K., Vikash S.,(2021) E-Commerce web Application by using MERN Technology International Journal for Modern Trends in Science and Technology, 7(05)
- [3]. Shahid A., Keshav K., Jenifur M., (2016) A Review Paper on E-Commerce Research gate publication 304703920
- [4]. Nithya E., Elisha G., Arya S., STEPPING INTO DIGITAL WORLD: ECOMMERCE Research gate publication 332874693
- [5]. Manish K., Siddesh J.,(2022) Neel D., Harsh S., Nilam P., E-commerce Website International Journal & Research Paper Publisher 10(5)

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