THE IMPACT OF ONLINE PAYMENT SYSTEM USED BY E-COMMERCE COMPANIES

Mr.S.Muruganantham[1], A.Swathi[2]

[1]*Assistant Professor, Department of B.com IT, Dr.N.G.P Arts and Science College*
[2]*Student, Department of B.com IT, Dr.N.G.P Arts and Science College*

ABSTRACT

The rise of e-commerce has been significantly influenced by the adoption of online payment systems, which have revolutionized the way businesses and consumers conduct transactions. These systems offer convenience, speed, and security, making digital purchases more accessible and efficient. This study examines the impact of online payment systems on e-commerce companies, focusing on their role in enhancing customer satisfaction, streamlining transactions, and fostering business growth. The availability of multiple payment options, such as credit/debit cards, mobile wallets, and cryptocurrencies, has contributed to increased consumer trust and expanded market reach.

INTRODUCTION

As e-commerce continues to grow at an unprecedented pace, payment systems have evolved to meet the demands of security, efficiency, and customer convenience. These systems act as the backbone of online transactions, facilitating the seamless exchange of funds between customers and businesses, while ensuring data protection and fraud prevention.

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Offering a wide range of payment methods, such as credit cards, digital wallets, and Buy Now, Pay Later (BNPL) services, ensures accessibility and flexibility for diverse customer bases. The E-Commerce companies are Amazon, Flipkart, Meesho, Myntra and etc…

1994: The first online purchase was made when a man sold a Sting CD through a platform called Net Market. This is considered one of the earliest e-commerce transactions. **1995:** The launch of Amazon and eBay marked the beginning of large-scale e-commerce platforms, leading to the need for online payment systems. During the **2000s,** the introduction of digital wallets like Google Wallet (launched in 2011) and later Apple Pay (launched in 2014) further revolutionized the way people made online and mobile payments.

Payment systems incorporate various technologies, such as encryption, tokenization, and fraud detection algorithms, to protect sensitive data and minimize risks. Moreover, they offer flexibility by supporting multiple payment methods, including credit and debit cards, digital wallets, bank transfers, cryptocurrencies, and newer models like Buy Now, Pay Later (BNPL) services.

STATEMENT OF THE PROBLEM

The e-commerce industry is rapidly growing, with online payment systems playing a central role in facilitating transactions. However, despite the increased adoption of these systems, several challenges persist. Many e-commerce companies face issues related to payment processing, user experience, security, and compliance, which can significantly impact customer satisfaction and business performance. E-commerce companies face challenges in selecting and implementing online payment systems that meet their business needs and customer expectations.

OBJECTIVES OF THE STUDY

1. To evaluate the security and reliability of online payment systems used by e-commerce companies.
2. To assess the user experience and ease of use of online payment systems.
3. To identify the most commonly used online payment methods by e-commerce companies.

RESEARCH METHODOLOGY

In this project, the research methodology has been done based on Quantitative & Qualitative, Primary & secondary data. Questionnaire is entrusted with 121 respondents for data collection. The research methodology is planned to known and understand the different objectives of the study of e commerce in the particular study the analysis is used to systematically collect evaluate and analyse and summarize the result from a number of respondents.

REVIEW OF LITERATURE

Tarafdar and Vaidya (2021) examined the factors that determine the organizational inclination to adopt E- commerce (EC). The study proposes a framework based on the qualitative data on four financial firms in India collected through multiple case study design. Face to face interview was used to collect

primary data and existing database, company documents, press reports and website are used to collect secondary data. The frame work describes two board factors leadership characteristics and organizational characteristics--- To explain the influence of organizational factors on the propensity to employ EC technologies. The study found that both leadership and organizational characteristics influence EC adoption.

Viswanathan and Pick (2020) examined the issue of e-commerce in India and Mexico from the framework of developing countries as suggested by Tallon and Kraemer. The framework included from the factors that might impact the diffusion of e-commerce. The factors are government policy, legal framework, technology infrastructure, relationship with developed economics and extent of e-commerce usage by individual, corporate and government. The study's primary focus is on India. Mexico is more briefly, and compared with India based on common international dataset. The study suggests that substantial efforts have to be made to invest in telecommunications infrastructure, and to create of electronic payments and e commerce usage that will support economic growth.

Huang et al.,(2019) Digital wallets, such as PayPal and Apple Pay, have gained popularity in recent years. Research has shown that digital wallets offer customers a convenient and secure payment experience .
E-commerce companies have integrated digital wallets into their websites and mobile apps to improve customer satisfaction.

A review of online payment systems by UKEssays (2018) discussed the state of electronic payment instruments, including credit cards, debit cards, electronic purse cards, and electronic banking.[3] the review also examined the relationship between the usage of electronic payment systems and user behavior and perception.

OVERVIEW OF STUDY
E-commerce companies use a variety of online payment systems to facilitate transactions for their customers. These systems are designed to offer flexibility, security, and convenience for buyers while ensuring smooth processing for merchants. The online payment systems used by e-commerce companies vary based on factors like their target market, business scale, and customer preferences. Online payment in e-commerce is a critical component of digital transactions that allows customers to purchase goods or services through the internet using various payment methods.
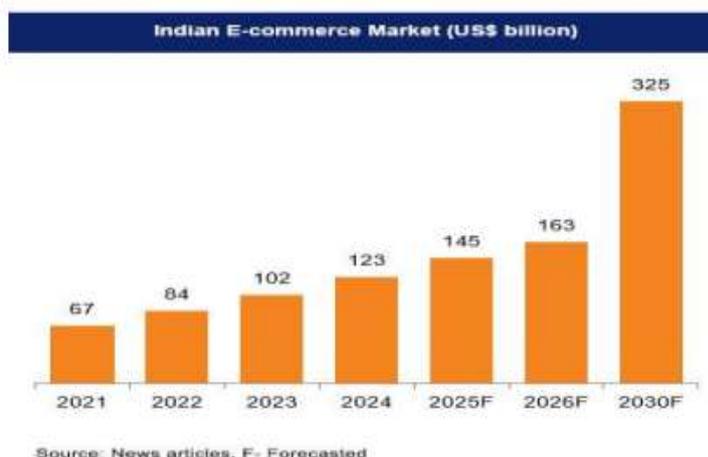
Online payment systems are electronic platforms that facilitate financial transactions over the internet. They enable customers to make payments for goods and services online, providing a secure, convenient, and efficient way to complete transactions. Online payment systems play a crucial role in e-commerce, as they provide a seamless and secure payment experience for customers. With the rise of online shopping, online payment systems have become an essential component of e-commerce platforms.

Overall, the impact of online payment systems on e-commerce companies has been significant, offering customers more convenience and flexibility, while also reducing transaction costs and improving security. As technology continues to evolve, we can expect to see even more innovative payment solutions emerge, making it easier for customers to make payments and for e-commerce companies to process transactions.

The use of online payment systems by e-commerce companies has had a significant impact on the way customers make payments. On the positive side, online payment systems have increased convenience for customers, allowing them to make payments quickly and easily from anywhere in the world.

GROWTH IN E-COMMERCE ONLINE PAYMENT IN INDIA
The growth of e-commerce online payment in India has been remarkable over the past few years. With the increasing penetration of smartphones and internet connectivity, online shopping has become a norm in India. According to a report by Google and Boston Consulting Group, the Indian e-commerce market is expected to reach $150 billion by 2025, growing at a compound annual growth rate (CAGR) of 30%.

Indian E-commerce Market (US$ billion)

2021	2022	2023	2024	2025F	2026F	2030F
67	84	102	123	145	163	325

Source: News articles, F- Forecasted

This growth has been fueled by the increasing adoption of digital payment methods such as Unified Payments Interface (UPI), mobile wallets, and credit/debit cards. The Indian government's push for digital payments through initiatives such as Digital India and demonetization has also contributed to the growth of online payments. As a result, online payment transactions in India have grown significantly, with UPI transactions alone reaching 1.5 billion in January 2022, up from just 0.1 billion in January 2018.

TYPES OF ONLINE PAYMENT
1. **Digital Wallets:** Electronic wallets that store payment information and enable customers to make payments online (e.g., Apple Pay, Google Pay).
2. **Bank Transfers:** Online payment systems that enable customers to transfer funds directly from their bank accounts to e-commerce companies.
3. **QR Code Payments:** Payments made by scanning a QR code using a mobile device.
4. **UPI Payments:** Payments made using Unified Payments Interface (UPI), a real-time payment system.
5. **3.Credit/Debit Card Payments:** Online payment systems that enable customers to make payments using their credit or debit cards.

TABLE SHOWING PRODUCT TYPICALLY PURCHASE ONLINE TO USE THE RESPONDENTS

Product Type	Frequency(f)	Percentage (%)
Electronics	17	14.16
Clothing & Accessories	72	59.16
Home Goods	19	15.83
Other	13	10.83
Total	121	100

Source: Primary Data

MEAN CALCULATION
Mean = Total Respondents / Number of Categories = 120 / 4 = 30
So, the mean number of responses per category is 30.

INTERPRETATION
The survey results indicate that Clothing and Accessories is the most commonly purchased product online, accounting for 59.17% of total responses, followed by Home Goods (15.83%), Electronics (14.17%), and Others (10.83%).

INFERENCE
Majority (59.17%) of the respondents are the survey result indicate that clothing and accessories is the most commonly purchased product online.

CHART SHOWING PRODUCT TYPICALLY PURCHASE ONLINE TO USE THE RESPONDENTS
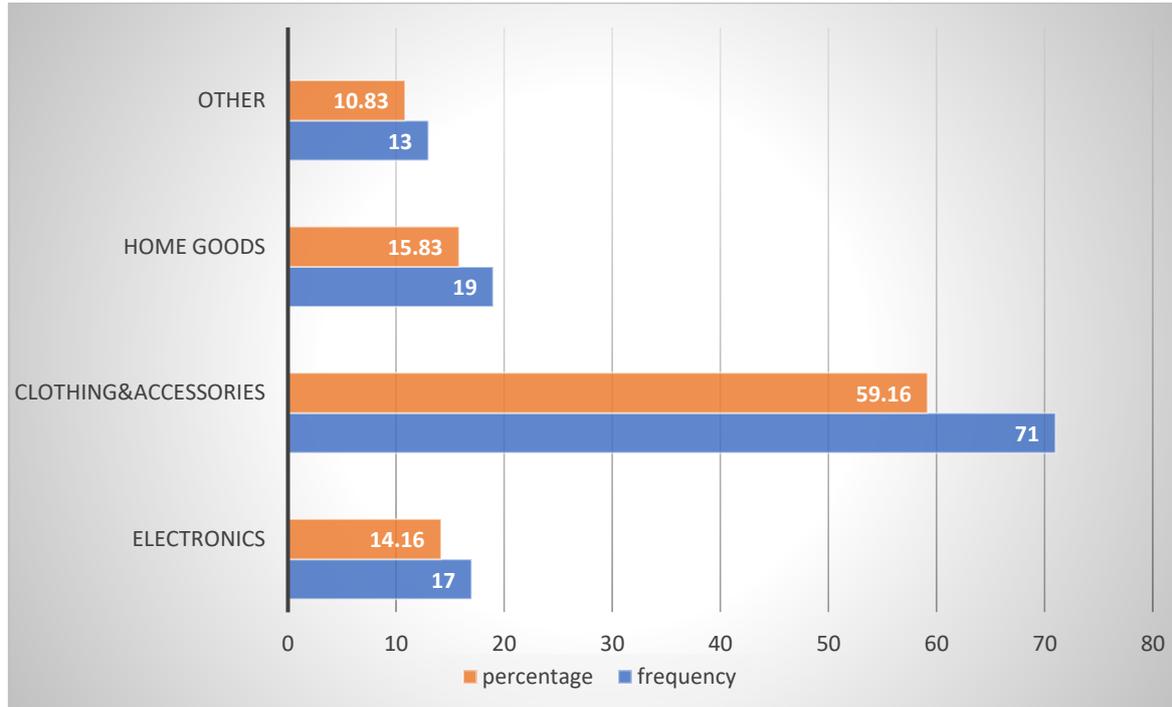
AWARENESS LEVEL ON PRODUCT TYPICALLY PURCHASE ONLINE TO USE THE RESPONDENTS

The following table highlights the awareness level on product typically purchase online to use the respondents.

TABLE SHOWING CHANNELS DO YOU PREFER TO USE FOR CUSTOMER SUPPORT FOR THE RESPONDENTS

| Customer Support	No of respondents	Percentage (%)
Phone	41	34.45
E-mail	28	23.52
Live Chat	17	14.28
Social media	35	27.73
Total	121	100

Source: Primary Data

INTERPRETATION

The survey results indicate that the most preferred customer support channel is phone support, chosen by 41 respondents, social media follows with 33 respondents, highlighting its growing importance as a support channel due to its accessibility and quick responses. E-mail support ranks third with 28 respondents, showing that while it is still widely used, it may not be the fastest option. Live chat is the least preferred, with only 17 respondents, indicating that it may not be as effective or reliable for customer concerns.

INFERENCE

Most (41%) of the respondents are customer support channel is phone.

CHART SHOWING CHANNELS DO YOU PREFER TO USE FOR CUSTOMER SUPPORT FOR THE RESPONDENTS
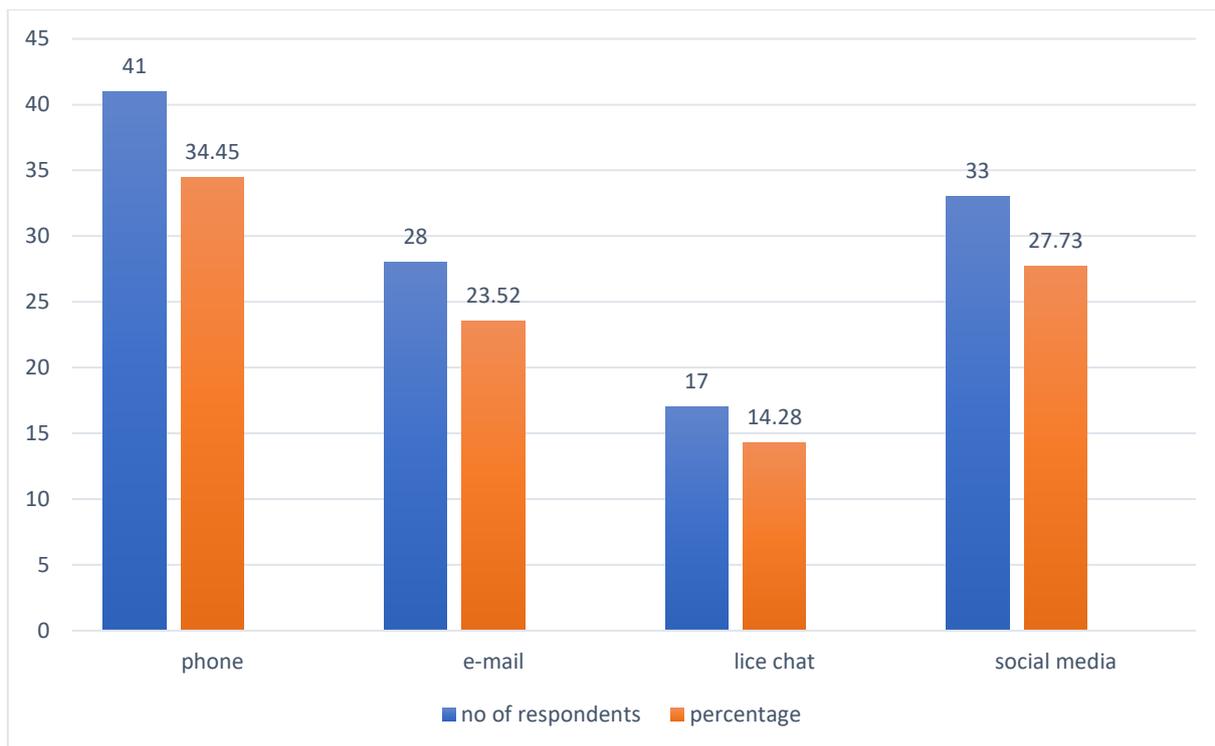
AWARENESS LEVEL ON CHANNELS DO YOU PREFER TO USE FOR CUSTOMER SUPPORT FOR THE RESPONDENTS

The following table highlights the awareness level on channels do you prefer to use for customer support for the respondents.

FINDINGS

➢ Majority (59.17%) of the respondents are clothing and accessories is the most commonly purchased product online.

➢ Most (41%) of the respondents are customer support channel is phone.

SUGGESTIONS

- A study on the impact of online payment systems used by e-commerce companies should focus on how different payment methods influence customer satisfaction, trust, and purchase behavior.
- It should analyse key factors like transaction speed, security, ease of use, and fraud risks while assessing

their effects on sales performance and cart abandonment rates.

- The study can collect data through surveys, interviews, case studies, and website analytics to compare various payment gateways and their adoption trends across regions.

- Additionally, challenges such as cybersecurity threats, regulatory compliance, and technical failures should be explored. The findings can help e-commerce businesses optimize their payment systems to enhance user experience, improve trust, and drive revenue growth.

- Suggest strategies for improving online payment security and customer trust. Recommend best practices for e-commerce companies to optimize their payment systems for better user experience and revenue growth.

CONCLUSION

The study on the impact of online payment systems used by e-commerce companies concludes that efficient, secure, and user-friendly payment solutions significantly enhance customer satisfaction and trust, leading to increased sales and reduced cart abandonment rates. The availability of multiple payment options, such as digital wallets, credit/debit cards, and BNPL (Buy Now, Pay Later), improves customer convenience and encourages repeat purchases. However, challenges such as cybersecurity risks, transaction failures, and regulatory compliance must be addressed to ensure a seamless payment experience. Businesses that invest in secure, fast, and flexible payment systems are more likely to retain customers and achieve long-term growth in the competitive e-commerce landscape.

JOURNALS REFFERED

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3. Kim, J., Lee, J., & Kim, B. (2015). An empirical study on the adoption of online payment systems in e-commerce. Journal of Electronic Commerce Research, 16(1), 1-15.