INTERACTION OF CUSTOMERS WITH E-COMMERCE

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Abstract:

In the dynamic landscape of contemporary commerce, the interaction between customers and e- commerce platforms play a pivotal role in shaping consumer behavior and driving business success. This capstone project delves into the multifaceted world of customer engagement with e-commerce platforms, examining the complexities and dynamics that define this relationship. Drawing insights from marketing, psychology, and technology, the study investigates various aspects of customer interaction, including user experience design, behavioral patterns, social influence, and customer service. A central focus is placed on user experience (UX) design in e-commerce interfaces, analyzing design elements, usability features, and interface aesthetics to identify factors contributing to a seamless and intuitive user experience. Furthermore, empirical research and data analysis are utilized to understand the cognitive processes, decision-making mechanisms, and emotional triggers that influence consumer behavior online. By providing valuable insights and concrete advice, this study aims to assist businesses in optimizing their digital strategies and fostering meaningful relationships with their online audience in the ever-evolving digital marketplace.

CHAPTER 1

1.1   Introduction: **Interaction of Customers with E-commerce**

About:

In the rapidly evolving digital era, the interaction between customers and digital platforms has become a cornerstone of contemporary commerce and communication. The advent of technology has not only transformed the way businesses operate but has also redefined the very essence of customer engagement. From online shopping to social media interactions, customers now navigate a multifaceted digital landscape that shapes their perceptions, preferences, and purchasing behaviors. This paradigm shift has profound implications for businesses, necessitating a deep understanding of the dynamics involved in the interaction between customers and digital platforms.

In the digital age, when technology has transformed how businesses function, e-commerce has emerged as a critical platform for transforming the retail sector. With the convenience of internet shopping, customers now have unprecedented access to a diverse range of products and services. However, the relationship between customers and e-commerce platforms goes much beyond the transactional aspect, spanning other dimensions of user experience, behavior, and pleasure.

Digital platforms are transforming customer interactions through personalized and data- driven approaches. Big data and analytics enable businesses to tailor offerings, enhancing satisfaction and loyalty. However, ethical considerations regarding data privacy remain.

Social media platforms influence brand perception, making online reputation management crucial. Artificial intelligence and chatbots have revolutionized real-time customer support, providing prompt, personalized assistance and enhancing user experience.

This capstone project dives into the varied world of customer contact with e-commerce, seeking to understand the complexities and dynamics that define this connection. This study, using an interdisciplinary lens and insights from marketing, psychology, and technology, seeks to investigate the various ways in which customers interact with e-commerce platforms, the factors influencing their interactions, and the implications for businesses operating in the digital marketplace.

The investigation's central focus is on user experience (UX) design in e-commerce interfaces. UX design has a significant impact on how customers perceive and navigate online platforms, influencing engagement and, ultimately, purchasing decisions. This study examines the design elements, usability features, and interface aesthetics to identify the factors that lead to a seamless and intuitive user experience, fostering good interactions and driving conversion rates.

Furthermore, this study seeks to deconstruct customer behavior patterns in the e-commerce context. Understanding the cognitive processes, decision-making mechanisms, and emotional triggers that influence consumer behavior online is critical for organizations looking to optimize their strategies and adjust their offers to effectively meet customer needs. This study uses empirical research and data analysis to understand the underlying drivers of customer interactions with e-commerce platforms, giving insight on the factors that influence browsing behaviors, product selection, and buy intent.

In summary, this capstone thesis is a thorough examination of the interactions between customers and e-commerce platforms, covering user experience, behavior, social influence, and customer service. By delving into these complexities, this study hopes to provide useful insights and concrete advice for businesses looking to optimize their digital strategy and create meaningful relationships with their online audience. Businesses can get a competitive advantage in the ever-changing digital marketplace by knowing how customers interact with e-commerce.

1.2   **OBJECTIVES OF STUDY**

1.   Objective 1: Investigate the Mechanisms of Two-Way Conversations on social media: This study explores consumer-brand interactions on social media, analyzing user chats to identify common themes and sentiments, and examining factors influencing the start, progression, and resolution of two-way conversations.

2.   Objective 2: Understand the Impact of User-Driven Content Creation on Brand Perception: The study explores user motivations for creating and modifying social media content, its impact on brand perception, loyalty, and purchase intentions, and itsrole in consumer engagement.

3.   Objective 3: Explore the Dynamic Evolution of Digital Platforms' Roles: Research findings provide practical recommendations for businesses to enhance consumer interactions in e-commerce, suggest strategies for social media engagement, and optimize digital platform design to meet evolving consumer expectations.

4.   Analyze the Evolution of Digital Platforms' Roles in E-commerce: The study examines the evolution of digital platforms' dual roles as technological foundations and market intermediaries, comparing their effectiveness across various industries andidentifying strategies for optimizing their functionality.

1.3   Problem statement:

"E-commerce platforms have become integral in modern retail, yet disparities persist in how various demographic groups interact with and benefit from these platforms.

Despite the widely acknowledged importance of social media in shaping consumer-brand interactions and the changing roles of digital platforms in supporting online commerce, there is still a major gap in grasping the complexities of these digital environments. Specifically, little study has been performed to investigate the mechanics and impacts of two-way talks on social media, the impact of user-generated content production on

brand perception, and the

dynamic growth of digital platform roles. While existing literature acknowledges social media's revolutionary impact on online communication, there is a paucity of in-depth research into how two-way interactions on social media platforms influence customer opinions of brands. Furthermore, although user-generated content plays a vital role in creating brand engagement and loyalty, there has been little research to understand the motivations behind users' active participation and the consequences.

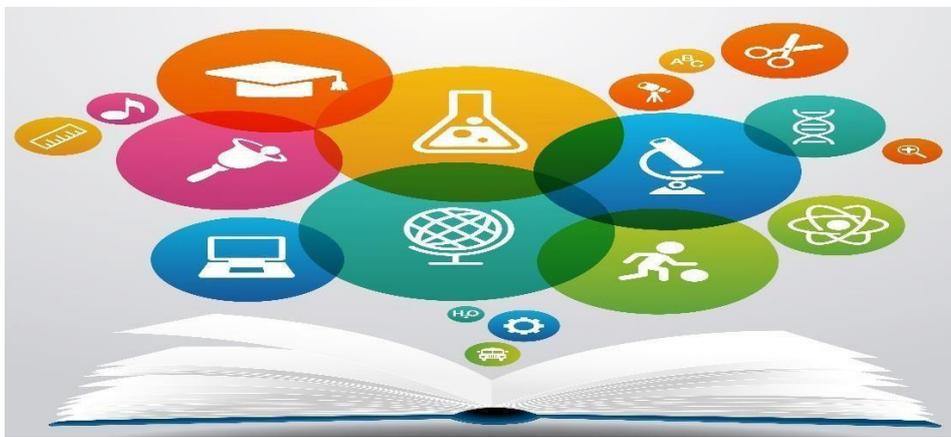## CHAPTER 2

2.1   LITERATURE REVIEW:

Fig no. 2.1

1.   Problems Faced by Customers Towards E-Commerce Shopping

Summary: The increasing popularity of online shopping has led to businesses investing heavily in online platforms and services to reach more customers and sell products worldwide. With the vast variety of products available, people are more likely to buy instead of saving for the future. However, e-commerce also presents challenges with delivery, such as failed or missed deliveries, damaged or lost packages, inaccurate tracking information, inefficient customer support, inconsistent delivery experiences, and delayed deliveries. Failed or missed deliveries can occur due to various reasons, such as delivery issues, lack of address, or mistakes in the delivery process. Damaged or lost packages can result from shipping accidents or company mistakes, necessitating customer service for refunds or replacements. Inaccurate tracking information can also cause confusion and stress. Inefficient customer support can result in long wait times for help or unresolved issues. Inconsistent delivery experiences can result from different companies handling packages differently, affecting the speed and reliability of the service. Late deliveries can also be frustrating due to numerous orders, delivery process issues, or unexpected issues.

Gap:

The lack of investigation into client viewpoints and experiences beyond delivery problems in e-commerce constitutes a research gap in the literature that has been supplied.

While issues like failed deliveries, damaged packages, erroneous tracking information, ineffective customer service, uneven delivery experiences, and delayed deliveries are covered in de tail in the content, it is necessary to investigate other important issues and worries that customers have when they shop online.
For instance, problems with payment processing, return policies, website usability, security and privacy issues, product quality, and general happiness with online purchasing are not sufficiently addressed.

Future studies should therefore strive to expand the field of study to include a thorough comprehension of the various opportunities and problems in e-

commerce from the perspective of the client.

2.   Review of "Understanding the Impact of Digital Platforms on CustomerPurchase Intent"

Abstract:

This paper explores how the quality of services on digital platforms affects customers' decision to make a purchase, based on their experiences. The study combines different research methods, using both a literature review and surveys from experts in the restaurant industry who use popular platforms like Snapfood, Changal, and Delivery.

Strengths:

•   **Unique Approach:** The study uses a mix of methods, combining research from existing studies with insights from experts in the restaurant industry, making the findings more robust.

•   **Clear Findings:** The results show that different aspects of digital platforms, like ease of use, information quality, and trustworthiness, impact customers' feelings and thoughts while using them, ultimately influencing their decision to buy.

•   **Practical Insights:** The research provides valuable insights for digital platforms and restaurants to understand what aspects matter most to customers. This information can guide these platforms in improving their services to enhance customer satisfaction andincrease purchase intent.

Weaknesses:

•   **Limited Industry Focus:** The study concentrates on the restaurant industry, and the findings might not apply to other types of businesses. Expanding the scope to include diverse industries could provide a more comprehensive view.

•   **Potential Bias in Expert Opinions:** The reliance on expert opinions from the restaurant industry could introduce some bias. Including feedback from regular users might offer a more balanced perspective.

•   **Future Exploration:** While the research uncovers various dimensions influencing purchase intent, it

doesn't delve deeply into potential strategies or improvements that digital platforms could implement. A discussion of practical recommendations could enhance the paper's value.

RESEARCH GAP-

This study is valuable in uncovering how different aspects of digital platforms influence customers' decisions to buy food. However, it mainly focuses on the restaurant industry and experts' opinions, leaving out regular users' perspectives. To improve, future research could include a broader range of businesses and consider what everyday users think. Additionally, the study highlights the problem but doesn't dive deep into specific solutions or improvements that digital platforms can make. Exploring practical recommendations would enhance the paper's usefulness for businesses aiming to improve their online services.

3. Analysis, Interpretation, and Results Problems faced by Customer towards E- Commerce Shopping

Summary: E-commerce refers to the convenience of buying and selling items online, offering a wide variety and cost-effectiveness. However, customers may face problems when shopping online. Researchers used regression analysis to examine eight factors, including delivery issues. These issues, such as delayed or damaged packages, can impact online shopping experiences. By analyzing these factors, researchers can better understand the problems customers face and work towards improving online shopping experiences for everyone. By addressing these issues, they can work towards making online shopping more enjoyable and cost-effective for all.

Gap: The lack of investigation into other plausible aspects that might affect customers' online purchasing experiences besides delivery problems represents a study gap in this field. While delivery issues are undoubtedly important, there could be other difficulties that also have an impact on customer satisfaction in e-commerce, such as usability of the website, product quality, responsiveness of customer care, security concerns, and payment difficulties. To provide a more thorough understanding of the issues customers have with e-commerce shopping and to provide useful ideas for enhancing the overall online shopping experience, future research should therefore seek to examine a wider range of elements.

4. Review of "Digital Business Platforms: Unraveling Success Factors and Marketing's Role"

Summary:

This paper dives into the world of Digital Business Platforms (DBPs) like eBay, Google, and Uber, investigating what makes them tick, the crucial role marketing plays in their success, and suggesting areas for further exploration. It introduces a new way of thinking about DBPs using transaction cost analysis, focusing on how marketing helps these platforms thrive. A primary task for marketing is to boost positive interactions on the platform, making things smoother and more cost-effective for users and the platform itself. The paper emphasizes that the data and interactions happening on DBPs are crucial for creating and getting value from these platforms. However, it points out the challenges in making sure everyone using the platform gets what they need. The paper suggests that

researchers can explore new ideas about how marketing works in the context of DBPs, presenting exciting opportunities for theory and practice.

RESEARCH GAP-

The paper explores how digital platforms like eBay and Uber succeed with marketing. It talks about the challenges they face in creating value for different users. However, it doesn't deeply explore how exactly marketing can tackle these challenges and improve interactions. The research gap lies in understanding specific strategies or approaches that marketing can use to overcome hurdles and enhance the overall success of digital platforms. In simpler terms, the paper opens the door to understanding digital platforms better but leaves room for more insights on how marketing can navigate their complex landscape effectively.

5.   Review of "Cracking the Code: Marketing Challenges in Digital Platforms"

Summary:

This paper delves into the world of digital platforms like eBay and Uber, investigating how they use marketing to thrive. It highlights the hurdles these platforms face in providing value to different users. While the paper acknowledges these challenges, it falls short of providing in-depth insights into specific strategies marketing can employ to overcome them and improve user interactions. The research gap here is like having a map that shows the destination but not the best route to get there. The paper sets the stage for understanding digital platforms, but there's room for more practical insights on how marketing can navigate the complexities and ensure these platforms truly succeed.

RESEARCH GAP-

The paper talks about how marketing helps digital platforms like eBay and Uber, but it doesn't give clear strategies for overcoming the challenges these platforms face in satisfying different users. In simpler terms, it's like having a guidebook that introduces exciting places but doesn't provide the best ways to reach them. The research gap is like missing details on the most effective paths for marketing to make digital platforms work better for everyone involved. There's room for more practical advice on how to tackle the obstacles and make these platforms even more successful.

6.   Understanding How Online Shopping Impacts Customer Happiness Using Advanced Data Analysis

Summary: The rapid advancement of technology has led to the increased use of big data algorithms, which are computer programs used to analyze data and make predictions. This article explores how these interactions affect customer satisfaction using these algorithms, focusing on the online shopping platform JD and women's clothing shoppers' experiences. The study found that certain aspects of the interaction, such as risk perception and trust, may not have a significant impact on customer satisfaction. However, after adjustments, the interaction positively influences overall satisfaction. This suggests that creating a positive environment for sellers and customers to chat and interact during shopping can lead to happier customers. However, it is crucial to protect customer privacy and

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ensure fair and transparent algorithms. By doing so, online businesses can maintain customer satisfaction and build trust, which is crucial for their long-term success. By ensuring fair and transparent algorithms, online businesses can maintain customer satisfaction and build trust, ultimately benefiting their long-term success.

RESEARCH Gap: The narrow focus on a single online shopping platform (JD) and a specific demographic (women who shop for apparel) is the research gap in this body of work. Although the study offers insightful information on how interactions during online shopping affect customer satisfaction, more extensive research is required, encompassing a wider range of platforms, product categories, and customer segments. Furthermore, the study mainly uses sophisticated data analysis methods without considering additional variables that might affect how happy customers are with their online purchases, like website design, product variety, pricing policies, and after-sale services. Moreover, not enough research has been done to determine how consumer happiness affects loyalty and the likelihood of repeat purchasesover the long run.

7. BENEFITS AND RISKS OF E-COMMERCE

Summary: E-commerce offers numerous benefits for consumers, businesses, and society, including a wider range of products, convenience, competitive prices, and the ability to buy and sell without waiting in line. For businesses, it provides access to a global market at low costs, reduces expenses related to storing and distributing products, and offers flexibility in scheduling. It also allows for new business models with low initial investment. In society, e-commerce improves the availability of public services and quality of life by offering affordable prices. However, there are limitations to e-commerce strategies, both technological and non-technological. Non-technological limitations include physical touch, resistance to change, limited supply chain collaboration, and concerns about security and privacy. Technological challenges include the need for universal standards for quality, security, and reliability, which can increase costs. Special platforms may be required for e-commerce operations, and businesses may become heavily dependent on their websites. These benefits and limitations are closely tied to the environment of e-commerce, primarily the Internet.

RESEARCH GAP: The need for a more thorough examination of the unique opportunities and problems that e-commerce presents in many industries and contexts accounts for the research gap in this body of work. The text discusses the broad advantages and drawbacks of e-commerce, but it skips over the subtleties and differences that might occur in a variety of industries, like manufacturing, services, retail, and so on. In addition, the claims made about how e-commerce affects society, companies, and customers are not backed up by case studies or empirical data. Future studies could fill in these gaps by analyzing individual industries and providing real-world examples that highlight the advantages and disadvantages of e-commerce in various fields.

8. E-COMMERCE AND GLOBALIZATION

Summary: The development of 5G technology and globalization significantly impact e- commerce. Faster, reliable internet speeds make online shopping more efficient and enjoyable, allowing faster and higher-quality ads to reach

people. E-commerce is closely linked to globalization, as it is a significant part of international trade. Big global companies use e-commerce to stay competitive and efficient, as it allows them to process transactions faster, manage supply chains better, and gather valuable customer data, ultimately cutting costs and improving their overall efficiency.

RESEARCH GAP: This literature's narrow examination of the complex relationships of globalization, e-commerce, and 5G technology represents a research need. The essay recognizes the potential advantages of 5G technology for improving online shopping experiences and the significance of e-commerce in promoting international trade, but it doesn't go into greater detail on the precise mechanisms by which these elements interact and affect one another. Furthermore, the literature ignores potential obstacles and negative effects of e-commerce globalization, like digital gaps, cultural hurdles, and regulatory difficulties. By undertaking empirical studies to investigate the complex relationships between globalization, e-commerce, and 5G technology, as well as by investigating strategies to maximize their synergies while minimizing potential dangers and problems, future studies could fill in these gaps.

9.   DIFFERENT GENERATIONS OF CONSUMERS AND E-COMMERCE

Summary: The text explores the impact of different generations on e-commerce, focusing on Generation Z and Generation Alpha, who grew up with the internet and digital technology. These generations, often referred to as "screen addicts" or "digital natives," are comfortable using these technologies for information, communication, and shopping. Generation Z, known for being tech-savvy, innovative, and environmentally conscious, uses the internet to share information, express opinions, and discuss their preferences. Despite being young and not yet having much purchasing power, Generation Z is already significantly impacting e-commerce. The COVID-19 pandemic has led to a surge in various aspects of life, including increased weight gain and the proliferation of food channels on platforms like YouTube. However, retail sales have consistently declined, with the UK experiencing the largest drop in three decades. The retail sector is also facing significant upheaval, with 43 retailers filing for bankruptcy, including prominent brands like Art Van Furniture and Lord & Taylor. A report by S&P Global Market Intelligence predicts 2024 to witness the highest number of retail bankruptcies in the last ten years.

RESEARCH GAP: The lack of a clear link between the consideration of various customer generations and the effects of COVID-19 on the retail industry represents a research gap in this body of work. While the essay sheds light on how Generation Z and Generation Alpha impact e-commerce, it doesn't examine how the COVID-19 pandemic and the ensuing financial difficulties have impacted these generations' preferences and behaviors. Furthermore, the study neglects to investigate the possible effects of the pandemic-caused reduction in retail on the internet purchasing habits of various generational groups. Therefore, future studies might look into how the COVID-19 epidemic has affected customer behaviors and views toward e-commerce across a range of age groups, as well as any potential long-term repercussions for the retail sector.

10.   E-Commerce: Silver lining to the 2024 retail sector

Summary: In 2024, the retail sector experienced significant disruptions, with the accelerated adoption of digital platforms. With more people staying at home, there has been a significant increase in Google searches, leading to consumers turning to e-commerce for products they previously purchased from physical stores. Google India's Country Head and VP, Sanjay Gupta, noted that businesses have condensed four years of changes into just four months since the onset of lockdowns. Microsoft's CEO, Satya Nadella, emphasized the acceleration of digital transformation, indicating a promising outlook for the e-commerce sector in the 'new normal.' Predictions suggest that by 2040, 95% of purchases will be conducted online, underscoring the urgency for retailers to confront the challenges posed by e-commerce and devise effective solutions.

RESEARCH GAP: The absence of study findings or empirical evidence to back up the assertions and predictions made about the rapid uptake of e-commerce and its effects on the retail industry constitutes the research gap in the literature that has been presented. There is a need for empirical research that examines trends, consumer behavior, and the effects of digital transformation on retail sectors, even as the literature presents quotes from prominent figures in the business and forecasts the expansion of e-commerce in the future. Furthermore, the literature briefly touches on common obstacles encountered by nascent e-commerce enterprises, such as worries about data and cyber security and difficulties with online identity verification, but it doesn't go into greater detail or offer workarounds for these problems. Therefore, the goal of future study should be to present empirical data.

11.   Comparison of e-commerce in Finland and Nepal

Summary: E-commerce is growing in Finland and Nepal, but faces significant challenges due to infrastructure, consumer behavior, and technological literacy. Finland has well-developed infrastructure and internet accessibility, while Nepal faces challenges in infrastructure development and limited internet penetration. The purchasing habits of consumers in both countries differ, with Finnish consumers accustomed to fixed prices and bargaining. Challenges faced by consumers include protracted delivery times, product integrity issues, online fraud, inadequate mechanisms for resolving complaints, technical glitches, and difficulty accessing product warranties and legal rights. To foster trust and confidence in e- commerce environments, robust regulatory frameworks and enhanced security measures are needed. Additionally, poor logistics and long delivery times pose significant challenges, with 23% of shoppers abandoning their carts due to shipping-related issues.

RESEARCH GAP: A more thorough examination of the cultural, social, and economic elements affecting e-commerce acceptance and growth in each nation is required to close the research gap in the literature comparing e-commerce in Finland and Nepal. There is little examination of the fundamental causes of the infrastructural and consumer behavior differences between Finland and Nepal in the literature, although these discrepancies are highlighted. Furthermore, there is a dearth of empirical research that looks at the difficulties and chances that e-commerce companies operating in these nations encounter, especially concerning market dynamics, regulatory

frameworks, and technology developments. Moreover, the literature mostly concentrates on comparisons at the macro level and provides little understanding of the micro-level elements that influence the growth of e-commerce,such as the unique perspectives, inclinations, and incentives of both customers and companies.

12.   <u>Consumer Experience in Digital Environments</u> There may be a study gap in understanding how the consumer experience varies in digital vs traditional settings, given the growing importance of digital interactions. Examining the distinct obstacles and prospects in digital customer encounters may prove to be a beneficial field of study.

Long-term Impact of Consumer Engagement Strategies:

The article makes the implication that increased customer involvement should lead to increased customer loyalty, however, it skips over the long-term effects of various engagement tactics. The long-term viability and efficacy of different engagement strategies should be studied.

Consumer needs for interactive, collaborative, and personalized interactions have been strongly influenced by the rapid proliferation of social media, which provides a new mode of communication and interaction, not only among consumers but also between consumers and brands **(Hollebeek et al. 2014; Sasser et al. 2014).**

Observation: This highlights that consumer needs for interactive, collaborative, and personalized interactions have been significantly influenced by the rapid proliferation of social media.

Research Gap:

Social media's impact on customer requirements is discussed in the text, which highlights its significance as a new channel for consumer-brand communication and interaction (Hollebeek et al., 2014; Sasser et al., 2014). It skips over the complex mechanics of these brand-customer exchanges on social media, though. Social media's impact on customer requirements is discussed in the text, which highlights its significance as a new channel for consumer-brand communication and interaction (Hollebeek et al., 2014; Sasser et al., 2014). It skips over the complex mechanics of these brand-customer exchanges on social media.

Potential avenues for further research within this gap could include:

1.   **Nature of Interactions:** Investigate the types and nature of interactions between consumers and brands on social media platforms. This could include exploring the content of interactions, the frequency of engagement, and the factors that contribute topositive or negative interactions.

2.   **Impact on Brand Perception:** Examine how consumer interactions with brands on social media influence brand perception, loyalty, and trust. Understanding the mechanisms through which social media interactions shape consumer attitudes towardbrands can provide valuable insights for businesses.

3.   **Effectiveness of Engagement Strategies:** Analyze the effectiveness of different engagement strategies employed by brands on social media. This could involve studying the impact of personalized content, collaborative campaigns, and interactive initiatives on consumer engagement and satisfaction.

13.   Social media have transformed the nature and practice of online communication into an extensive, two-way dialog among users, which may cover private and/or social topics and issues, as well as about companies' products, brands, and services (Lehmkuhl and Jung 2013)

Objective: Transformative impact of social media on online communication, emphasizing the evolution into a two-way dialogue among users. This dialogue spans a range of topics, including private and social matters, as well as discussions about companies' products, brands, and services.

Research gap: Recognising the Mechanisms and Effects of Two-Way Conversations on Social Media in Developing Brand Opinions

Although the passage recognizes the evolution of online communication into a two-way conversation on social media, more research is needed to fully comprehend the dynamics of these conversations, particularly concerning how they affect consumers' impressions of brands. Research topics can be.

User Engagement Patterns: Examine the unique trends and interactions of users participating in two-way conversations on social media. Recognise the variables affecting the start, progress, and end of these discussions as well as the variations in these patterns among other user groups.

Content Analysis of User Dialogues: the content of user conversations to find recurring ideas, feelings, and conversational subjects. Examine how people negotiate social and private themes about companies, goods, and services, and how these conversations affect the conversation on the internet.

Networked consumers no longer merely act as passive recipients of product-, brand, or firm-related information, but are enabled to create, modify, and exchange their own, personalized content and applications through social media (Kaplan and Haenlein 2010; Hollebeek and Brodie 2016)

Objective: customer transformation into networked participants actively involved in social media creation, modification, and exchange of personalized content and apps.

Research gap: Recognising the Insights, Processes, and Consequences of User-Driven Application and Content Development on Social Media

Motivations for Active Participation:

Examine why users are motivated to actively participate in the creation and modification of personalized applications and content on social media. Examine whether the motivations of various demographic groups such as age, interest, or cultural background differ.

Impact on Brand Perception and Loyalty:

Analyze how consumer-driven apps and content affect how people perceive and remain loyal to brands. Examine the effects that user-generated content and applications have on brands— both good and bad—and how these elements affect customer loyalty and purchase intentions.

User Empowerment and Digital Inclusion:

Examine how social media helps to empower people and advance digital inclusion. Examine whether social media's capacity for content creation, modification, and sharing leads to a more inclusive digital environment or whether involvement is restricted for some groups.

User Privacy Concerns and Expectations: Examine user expectations and privacy problems in the context of two-way social media conversations. Recognize how consumers navigate conversations about social and private issues while taking their expectations for datasecurity and privacy into account.

14.   Platforms are successful due to two central roles they can perform: acting as a technological foundation and as a market intermediary (Gawer 2014; Schreieck et al. 2016).

From a technological perspective, innovation platforms enable the creation of complementary solutions by others. They do so by offering a stable core with standardized interfaces and boundary resources for third parties (Baldwin and Woodard 2009; Ghazawneh and Henfridsson 2013). From a market intermediary perspective, transaction platforms facilitate interactions between different groups of actors, such as providers of applications (as sellers) and users (as buyers), by offering a marketplace (Parker et al. 2016). Platforms often jointly play both roles, as is also the case for digital industrial platforms.

Research gap:

Few research appears to be concerned with the dynamic evolution of platform responsibilities throughout time. A more delicate view might be obtained by looking into how platforms transition between their technological base and market intermediary functions in reaction to changes in the industry, improvements in technology, or demands from the market.

Effectiveness of Dual Roles in Different Industries

Although digital industrial platforms are mentioned in the above ROL, more research is needed to determine whether different industries have different levels of platform efficacy in fulfilling both tasks at the same time. Sectors with unique features can need customized strategies for juggling these jobs.

2.2   Research Gap and Problem Statement:

The existing literature has extensively explored various aspects of e-commerce, including challenges faced by customers, the impact of digital platforms on purchase intent, and the dynamics of online shopping experiences. However, a significant research gap lies in understanding the nuanced interactions and complexities within digital environments, particularly concerning user engagement on social media platforms and the evolving roles of digital platforms.

While studies have acknowledged the transformative impact of social media on online communication, there is a lack of comprehensive research into the mechanisms and effects of two-way conversations on social media,

especially in terms of their influence on consumers' perceptions of brands. Additionally, the literature highlights the importance of user-driven content creation and application development on social media but fails to delve into the motivations behind such active participation and its implications for brand perception and loyalty.Moreover, the literature briefly touches upon the dual roles of digital platforms as technological foundations and market intermediaries. However, there is a notable absence of dynamic analysis regarding how platforms transition between these roles over time and across different industries.

Therefore, the overarching research gap lies in the need for in-depth investigations into:

1.   The mechanisms and effects of two-way conversations on social media in shaping consumer brand perceptions.

2.   The motivations for and consequences of user-driven content creation and application development on social media, including its impact on brand loyalty and customer engagement.

3.   The dynamic evolution of digital platforms' roles as both technological foundations and market intermediaries, and their effectiveness in fulfilling these dual roles acrossvarious industries.

Addressing these research gaps will contribute to a deeper understanding of consumer behavior in digital environments, offer insights for enhancing brand-consumer interactions, and inform strategies for the effective management of digital platforms in the ever-evolvinglandscape of e-commerce.

2.3   Dependent and Independent Variable

- **Independent Variable**: Digital Transformation
- **Dependent Variable**: Challenges Faced by Customers

Independent Variable: This is the variable that is manipulated or changed by the researcher. In this case, the independent variable would be "digital transformation." It represents the transformation efforts, initiatives, technologies, and strategies implemented by businesses or organizations to adapt to the digital age.

Dependent Variable: This is the variable that is being studied and measured in response to changes in the independent variable. In this case, the dependent variable would be "challenges faced by customers." It represents the difficulties, obstacles, or issues that customers encounter because of interacting with digital transformation efforts.

Digital Transformation: This refers to the integration of digital technology into all areas of a business or organization, fundamentally changing how they operate and deliver value to customers. It involves the adoption of digital tools, processes, and strategies to improve business operations, enhance customer experiences, and drive growth and innovation.

Now, let's look at how digital transformation affects various industries:

1.   **Retail Industry**: Retailers are using websites, apps, and online payment systems to make shopping easier. But sometimes, customers find it hard to use these websites or worry about their payment information being safe.

2.   **Financial Services Industry**: Banks are moving their services online, like mobile banking and investing apps. However, some people worry about their personal information being safe online, and others find it hard to understand the new digital services.

3.   **Healthcare Industry**: Doctors are using computers to keep track of patient records and offer online appointments. However, some patients find it difficult to access their medical information online or worry about their privacy when sharing sensitive information.

4.   **Manufacturing Industry**: Factories are using computers and machines to make products more efficiently. But sometimes, customers might not get what they ordered on time because of problems in the production process. They also worry about the quality and safety of products made with new technology.

5.   **Hospitality Industry**: Hotels are using websites and apps for booking rooms and offering personalized services. However, customers might have trouble trusting these online systems with their personal information. Also, they might find it confusing to use digital check-in and other features during their stay.

1.   **Let's elaborate on the dependent variable "Challenges Faced by Customers" and explore how it manifests across different industries impacted by digital transformation: Retail Industry**:

o   **Customer-Friendly Websites**: Some online shopping sites are hard to use, making it frustrating for customers to buy things.

o   **Keeping Information Safe**: Customers worry that their personal and payment information might not be secure when they shop online.

o   **Too Many Choices**: With so many products available online, customers can feel overwhelmed and find it hard to decide what to buy.

2.   **Financial Services Industry**:

o   **Security Concerns**: People might hesitate to use online banking or payment apps because they're worried about hackers getting their money.

o   **Confusing Financial Terms**: Some digital financial services use complicated language that makes it hard for customers to understand what they're signing up for.

o   **Access Issues**: Some people, especially those who aren't good with computers, find it hard to use online banking, which makes it tough for them to manage their money.

3.   **Healthcare Industry**:

o   **Privacy Worries**: Patients are concerned that their personal health information might not be kept private when they use digital health services.

o   **Technology Problems**: Older people or those who aren't used to computers might find it

difficult to use online doctor appointments or health tracking devices.

o   **Trouble with Records**: It can be hard for patients to see all their medical records online, especially if they use different healthcare providers.

4.   **Manufacturing Industry**:

o   **Delays in Getting Products**: Sometimes, customers have to wait longer than expected to get the things they ordered online because of problems in the delivery process.

o   **Quality Issues**: Products made with new technology might not be as good as they should be, which can be frustrating for customers.

o   **Not Getting Help When Needed**: If something goes wrong with a product that has smart technology, customers might find it hard to get help fixing it.

5.   **Hospitality Industry**:

o   **Problems with Booking**: Customers might have trouble booking a hotel room online or using mobile check-in because of mistakes in the booking system.

o   **Privacy Concerns**: People worry that hotels might use their personal information in ways they don't like, such as sending them targeted ads based on their location.

o   **Communication Issues**: Sometimes, it's hard for customers to talk to hotel staff or get help using digital services during their stay, which can make them unhappy with their experience.

E-commerce:

☐   In the context of customer interaction with e-commerce, the independent variable "digital transformation" refers to the changes, advancements, and innovations in technology, processes, and strategies adopted by e-commerce businesses to adapt to the digital age. This includes the implementation of online platforms, mobile apps, digital payment systems, personalized marketing techniques, and other digital tools to enhance the shopping experience and streamline operations.

☐   The dependent variable, "challenges faced by customers," encompasses the difficulties, obstacles, and issues that customers encounter while engaging with e- commerce platforms because of digital transformation efforts. These challenges may include issues with website usability, navigation, security concerns, payment processing, delivery delays, customer service interactions, and privacy concerns, among others.

2.4   Thus, in the context of customer interaction with e-commerce, the independent variable of digital transformation influences the dependent variable of challenges faced by customers, as the changes brought about by digital transformation can impact various aspects of the customer experience, both positively and negatively.

2.5   TIMELINETABLE NO. 2.4

DATE	TASK & TO-DO-LIST
December 2023:	Selection of the topic
1-2 week	conduct initial literature review on interaction of customers with e-commerce.
3-4 week	Define the research objectives and methodology for data collection.
January 2024:	
1-2 week	Develop survey/questionnaire for collecting data of consumers.
3-4 week	Begin data collection through online surveys forms, and interviews with customers.
February 2024:	
1-2 week	Analyze collected data to identify trends and patterns in consumer interaction with e-commerce.
3-4 week	Start drafting the capstone report, including findings and recommendations.
March 2024:	
1-2 week	Refine the capstone report based on feedback from advisors or peers.
3-4 week	Finalize the capstone report, prepare a presentation, and present findings to faculty and peers.
April 2024:	
1st week	Submit the capstone project to the publication.

CHAPTER 3

3.1 RESEARCH METHODOLOGY:

"Interaction of Customers with E-commerce," a mixed-methods research methodology would be highly suitable. This approach combines both qualitative and quantitative research methods to provide a comprehensive understanding of customer interactions.

Here's a brief overview of how each method contributes to the research:Qualitative Research

☐   In-depth Interviews: Conduct interviews with customers to explore their experiencesand perceptions.

☐   Focus Groups: Gather groups of customers to discuss their views on e-commerceinteractions.

☐   Observational Studies: Observe customer behavior on e-commerce platforms to gather non-verbal data.

Quantitative Research

☐   Surveys: Distribute questionnaires to many customers to collect numerical data ontheir interactions.

☐   Experiments: Perform controlled experiments to test hypotheses about customerbehavior.

☐   Analytics: Analyze customer data from e-commerce platforms to identify patterns andtrends.

By integrating these methods, you can gain insights into the subjective experiences of customers as well as objective data on their behavior, leading to a more holistic understanding of their interactions with e-commerce platforms. Remember to tailor the specific methods to the research questions and objectives of your study.

3.2 COLLECTION OF DATA:

For the data collection there we use interviews and circulate survey forms, which includes steps as follows:

☐   Firstly, we prepare list of questions related to our topic and select best 7 questionsfrom them.

☐   Questions including:

▪   How easy do you find it to navigate through e-commerce websites or apps?

▪   Do you find product descriptions and details clear and informative?

▪   Are you concerned about the security of your personal and financial information when using digital services?

▪   How often do you encounter issues such as slow loading times or crashes?

▪   How satisfied are you overall with your experiences using e-commerce anddigital services?

▪   How do you rate the ease of the payment process?

▪   Do you feel that e-commerce platforms provide enough customization and personalization options?

☐   After that we create a Google form and circulate the form among group of selected individuals to fill
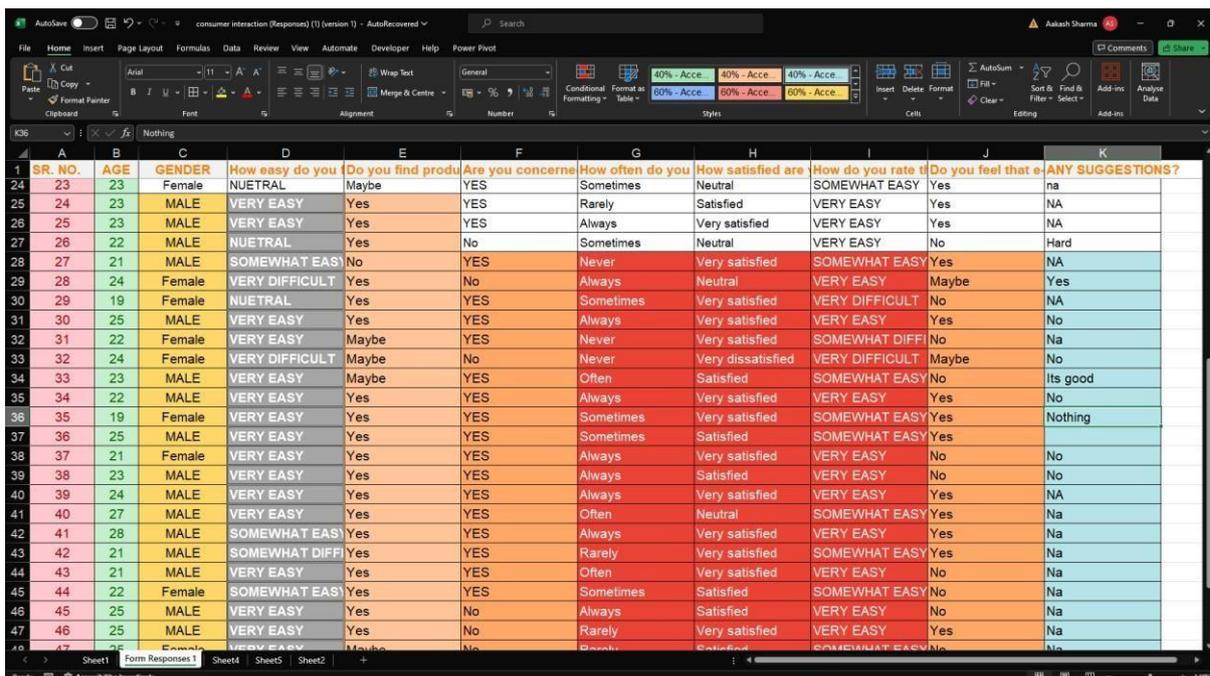
in the responses.

☐   The target group of people contains individuals of somewhat same age group including males and females.

☐   We select the targeted individuals by using segmentation, which is a technique of marketing.

☐   We divide the individuals based on their taste, preferences, interest, behavior, gender, age etc.

☐   Most of these individuals are college students which are frequently using e-commerece for their daily life purchases.

3.3   DATA ANALYSIS:

Data analysis is the systematic process of gathering, cleaning, transforming, characterizing, modeling, and analyzing data. It typically uses statistical approaches to transform raw data into relevant information for decision-making. This method is critical in both scientific research and industry, as it facilitates data-driven decision-making and gives insights from datasets.

Data Analytics Tools:

☐   **Microsoft Excel**: A spreadsheet tool known for its data wrangling and reporting capabilities.

☐   **Tableau**: A data visualization tool that helps in creating interactive and shareable dashboards.

☐   SPSS (Statistical Package for the Social Sciences): SPSS is a widely used statistical analysis, software that allows researchers to analyze data and perform various statistical tests to identify patterns and relationships.

➢   These tools are used for various purposes, from data mining and cleaning to advanced statistical analysis and machine learning. The choice of tool often depends on the specific needs of the project, the size and complexity of the data, and the preferred workflow of the data.

In the above case, we are using MS-Excel and SPSS for the analysis of the data that we have collected from the desired group of individuals.

➢   Firstly, we inserted data on excel sheet as shown in the image below:

Fig no.3.3.1

➢   After the data is added to the Excel sheet we will create a pivot table and insert slicers based on the categories that we want to show and create graphs and merge it with slicers as given in the image below:
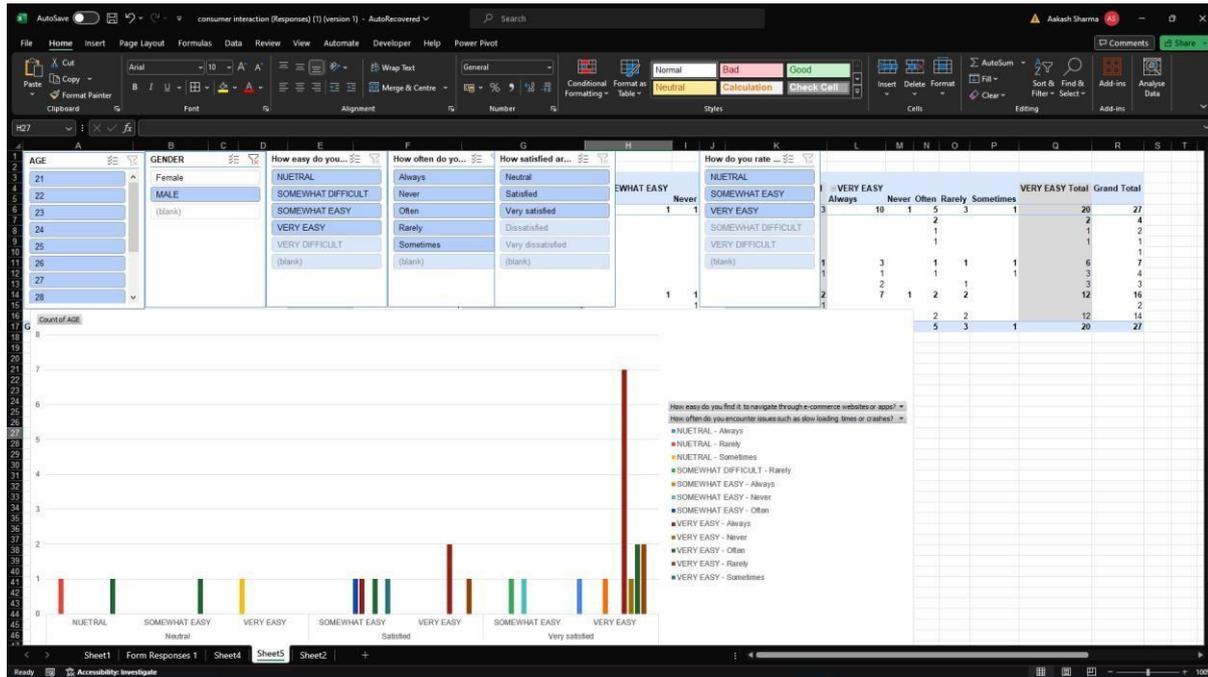

Fig no. 3.3.2

➢   Once, this is done in excel than we use SPSS for the remaining analysis of the data.

➢   The first step is to import the data into SPSS data view and select the variables accordingly based on the data.
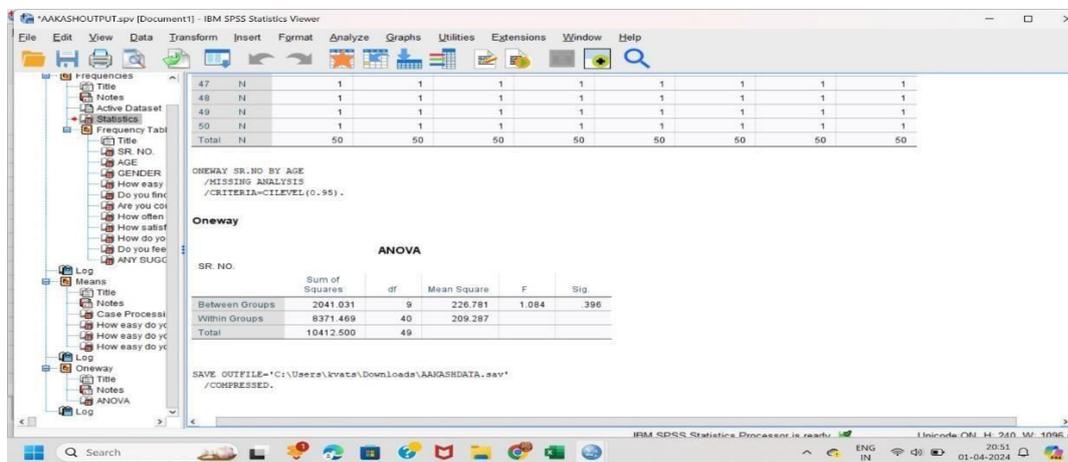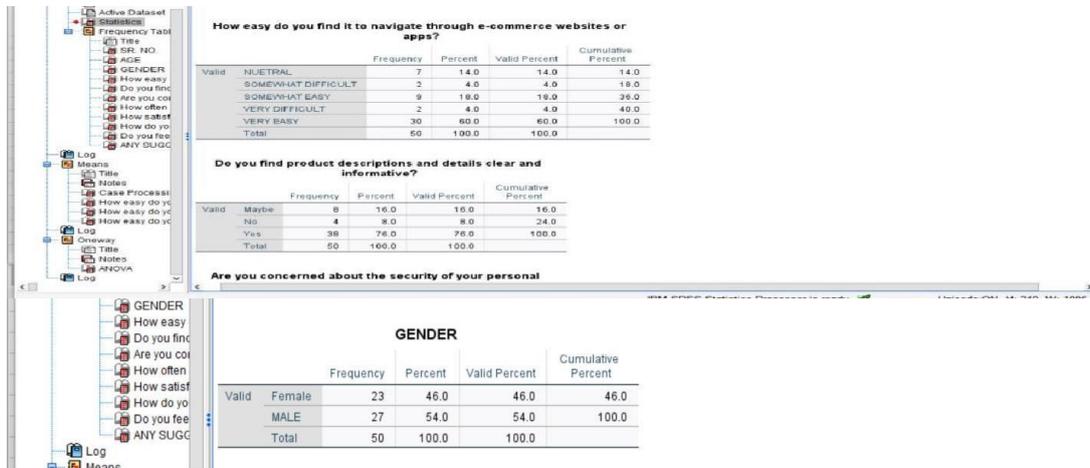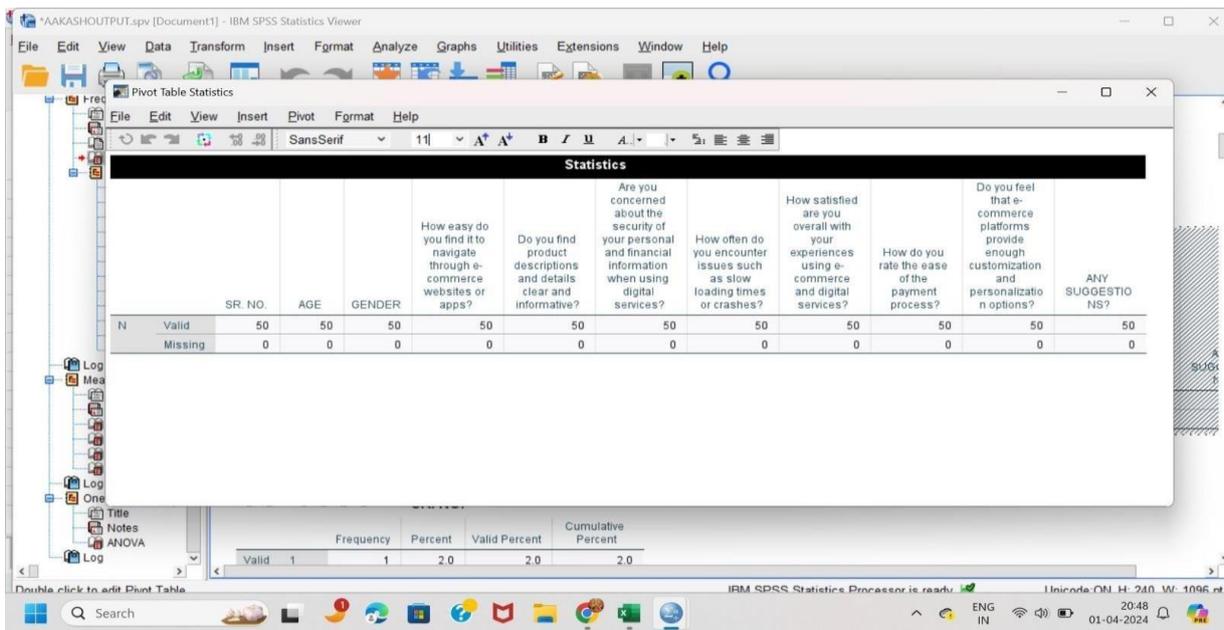
Fig no. 3.3.3

Fig no. 3.3.4

Fig no. 3.3.5

3.4   INTERPRETATION:

The interpretation of data collected:

➢   From the data, we can see that most of our customers are having age 24 years which is near about 26%, after that 20% of customers are having age 25 years and 8% are above 25 years and remaining 14%, 16%, 8% and 4% are having age of 23, 22, 21, 19years respectively.

➢   After that we can see that out of 100% there are 54% males and rest of 46% are females in group of customers.

➢　　　After that we can analyse that the maximum number of customers find very easy to navigate through e-commerce websites or apps which is nearly about 60%, 18% of customers find to be somewhat easy to navigate, 14% of customers choose neutral neither difficult nor easy and remaining 8% of customers will find the navigation tobe somewhat difficult and very difficult.

➢　　　Most of the customers that is 76% find product description and details clear and informative but 16% of them find it as maybe it is important or may be no and rest 8% did not find this informative.

➢　　　Most of the customers are concerned about the security of personal and financial information when using digital services which is equal to 74% and rest of 26% will not concerned about these reasons.

➢　　　Maximum number of customers says they always face issues such as slow loading time or crashes while using e-commerce apps or website that is equal to 30%, while the rest 25% faces sometimes, 20% faces rarely, 14% faces often and remaining 10% never faces any issues related to slow loading time or crashes.

➢　　　The large number of customers are very satisfied with experiences using e-commerce and digital services which is about 46%, with this 34% of customers are just satisfied with experience, 16% of customers are neutral means not very satisfied not unsatisfied, rest of 4% of customers are dissatisfied or very dissatisfied with the experience.

➢　　　The maximum number of customers which is near about 54% are rate the ease of payment process 5/5 which is very easy, 26% of customers rate this 4/5 which means somewhat easy, 12% rate this as 3/5 which is neutral and rest of 8% are 4% are somewhat difficult which is 2/5 and remaining 4% rate this as 1/5 which is very difficult.

➢　　　As per analysis 60% of customer's feel that e-commerce platforms provide enough customization and personalized options to them, 28% did not find this enough and restof 12% say may be.

Based on the interpretation of the data collected, several key findings emerge:

Many customers are aged 22-25, with 24 being the most common age. Navigation is easy for most, with product descriptions being clear and informative. However, a small percentage find navigation difficult. Security concerns are high, highlighting the need for robust measures. Technical issues, such as slow loading times or crashes, are reported by a significant percentage of customers. Most customers are satisfied with their experiences using e-commerce and digital services. The payment process is highly rated, although a small percentage finds it difficult. While e-commerce platforms offer enough customization options, there is room for improvement to cater to all customer preferences.

CHAPTER 4

RESULTS:

The research paper aimed to explore various aspects of customer interaction with e- commerce platforms, encompassing demographics, user experience, security concerns, technical issues, satisfaction levels, and customization options. The interpretation of the data revealed several key findings that shed light on customers' perceptions and experiences with e-commerce.

❖ Firstly, the demographic study revealed that many customers were between the ages of 22 and 25, with 24 being the most common age. Furthermore, there was a somewhat higher proportion of male clients than female ones. This demographic knowledge gives vital information for e-commerce platforms to modify their marketing tactics and user interfaces to better respond to the interests and wants of their target audience.

❖ Second, simplicity of navigation evolved as a critical component of the user experience. Most customers found it straightforward to navigate e-commerce websites or applications. However, a significant proportion of customers had difficulty navigating, highlighting the need for adjustments in website or app design to increase usability and streamline the browsing experience.

❖ Thirdly, the clarity and informativeness of product descriptions were crucial factors influencing customer satisfaction. Most customers found the product descriptions and details clear and informative, suggesting that comprehensive product information contributes to informed purchasing decisions and enhances the overall shopping experience.

❖ Furthermore, security concerns have emerged as a major factor for clients while utilizing digital services. A large majority of consumers expressed concern about the security of their personal and financial information, emphasizing the need of strong security measures in instilling trust and confidence in users.

❖ A significant percentage of customers also cited technical concerns, such as delayed loading times or crashes. These technical issues detract from the user experience, perhaps leading to irritation and desertion of the platform. As a result, addressing technical issues and improving website or app performance is critical for client retention and pleasant interactions.

❖ Despite these problems, many customers were satisfied with their e-commerce and digital service experiences. This positive feeling reflects the convenience and benefits provided by e-commerce platforms, such as accessibility, product diversity, and the ease of purchasing online.

Furthermore, the convenience of the payment process was identified as an important element impacting consumer happiness. A sizable majority of customers praised the payment procedure, highlighting the necessity of offering seamless and secure payment methods to facilitate purchases.

Lastly, customization and personalization options were deemed important by most customers. However, there is room for improvement to meet the preferences of all customers and enhance the level of customization offered by e-commerce platforms.

Improvements Required:

Based on the results of the research paper, several areas for improvement can be identified to enhance the customer experience and satisfaction with e-commerce platforms.

1.   **User Interface Optimization:** E-commerce platforms should focus website or app design to improve user friendliness and streamline navigation. This involves refining menu structures, search functionality, and page loading times to provide clients with aseamless browsing experience.

2.   **Comprehensive Product Information:** E-commerce platforms should prioritize offering clear and detailed product descriptions to assist customers in making educated purchasing decisions. This may include precise product descriptions, photos, user reviews, and other pertinent information to improve the purchasing experience.

3.   **Enhanced Security Measures:** Given customers' increasing concerns about the security of their personal and financial information, e-commerce platforms should prioritize establishing strong security measures. This involves using encryption technology, secure payment methods, and taking proactive steps to avoid data breaches and cyberattacks.

4.   **Technical Performance Optimization:** E-commerce platforms should solve technological concerns such as poor loading times and crashes to give users with a seamless and uninterrupted browsing experience. This could include investing in server infrastructure, optimizing code, and routinely monitoring and addressing performance concerns.

5.   **Payment Process Streamlining:** E-commerce platforms should prioritize optimizing the payment process to make it as simple and convenient as possible for clients. This involves providing a variety of payment methods, assuring secure transactions, and reducing the number of steps required to make a purchase.

6.   **Customization and Personalization:** E-commerce platforms should expand the level of customisation and personalization available to clients. This could include adding features like personalized suggestions, product customization tools, and targeted marketing campaigns based on user preferences and behavior.

7.   **Customer Support and Feedback Mechanisms:** E-commerce platforms should prioritize offering good customer service and creating feedback tools to address consumer issues and acquire insights for ongoing improvement. This could involve providing live chat help, email support, and quick access to client feedback forms or surveys.

FINAL CHAPTER

CONCLUSION:

The findings of this study project provide important insights into the complex dynamics of customer engagement with e-commerce platforms in the digital age. This study illuminated crucial variables impacting customer behavior and happiness in the online purchasing landscape by conducting a thorough investigation of demographics, user experience, security concerns, technological challenges, satisfaction levels, and customization options.

According to the literature assessment, e-commerce has transformed the retail sector, providing consumers globally with unrivaled convenience and accessibility. However, the success of e-commerce platforms is dependent on its ability to provide smooth user experiences, manage security concerns, and employ personalization tactics to satisfy customers' changing demands and preferences. Despite tremendous advances in technology and user interface design, there are still gaps in understanding the complex elements that influence customer interactions with e-commerce platforms, particularly in terms of user experience optimization and customization.

The research technique used in this study allowed for a comprehensive exploration of these complexity, including quantitative data analysis and interpretation to yield relevant insights. The data interpretation revealed numerous critical conclusions, including the client demographic profile, opinions of usability and security, satisfaction levels, and preferences for customisation. These findings provide a framework for identifying areas for improvement and supporting strategic decision-making for e-commerce platforms looking to gain a competitive advantage in the digital marketplace.

The findings show that there is a pressing need for changes across all dimensions of the e-commerce experience. User interface optimization, detailed product information, enhanced security measures, technical performance optimization, simplified payment processes, and more customization choices were identified as significant topics for enhancement. By addressing these areas, e-commerce platforms can deliver superior user experiences, foster greater trust and satisfaction among customers, and ultimately drive business growth and success.

Furthermore, the findings highlight the importance of constant innovation and adaptation in meeting the changing expectations of customers in an increasingly competitive landscape. E-commerce platforms must prioritize customer-centric approaches, using data-driven insights and feedback mechanisms to fine-tune their offerings and personalize services to specific needs. By remaining attentive to client requirements and preferences, e-commerce platforms may build genuine relationships with their audience, resulting in long-term loyalty and advocacy.

Finally, our research project has provided significant insights into the dynamics of customer interaction with e-commerce platforms, identifying areas for development and guiding strategic decision-making for enterprises participating in the digital marketplace. By addressing identified gaps and implementing targeted enhancements, e-commerce platforms can optimize user experiences, increase customer satisfaction and loyalty, and achieve long-term development and success in an increasingly competitive landscape.

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