

“(Business Benefits of User Experience; Maximizing Impact)”



By:

(Zainab Mir)

(01-322222-038)

Supervisor:

(Dr. Muhammad Imran Nazir)

Department of Business Studies

Bahria University Islamabad

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Names of Student(s):

Enroll #

• Zainab Mir

01-322222-038

Class: (MBA/MKT)

Approved by:

(Dr. Muhammad Imran Nazir)

Supervisor

(Adil Hashmi)

Internal Examiner

(Mashiat Zahra)

External Examiner

Dr. Syed Haider Ali Shah

Research Coordinator

Dr. Khalil Ullah Mohammad

Head of Department

Business Studies

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Abstract

This research delves into how user experience impacts the e-commerce industry in Pakistan, examining factors like website load time, ease of navigation, visual aesthetics, product information quality, and website responsiveness. We surveyed 180 people who shop online and in-person to understand their experiences.

Our study used different statistical tests to see how these factors affect e-commerce measures like conversion rates, customer satisfaction, loyalty, revenue, and cart abandonment rates. We found strong connections between factors like website responsiveness and cart abandonment, as well as visual aesthetics and customer satisfaction. The study's reliability score, Cronbach's alpha, was moderate at 0.713.

Our analysis revealed some crucial insights. For instance, faster website loading times are linked to higher conversion rates, meaning more sales. Additionally, factors like easy navigation, appealing website design, good product information, and website responsiveness significantly impact customer satisfaction, loyalty, revenue, and cart abandonment rates.

The statistical tests showed significant differences among various groups for different variables, highlighting the need for further investigation to understand these differences better.

Our findings emphasize the importance of these factors in e-commerce success. By understanding these connections, businesses can improve their websites to create better customer experiences, increase sales, and reduce cart abandonment rates.

Key words:

User Experience, Ecommerce, Website Load time, Customer Satisfaction, Ease of Navigation,
Customer Loyalty, Product Information Quality, Revenue, Cart Abandonment Rates.

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Chapter 1

Section 1.01 Introduction

(a) Background of Study:

In today's competitive business landscape, organizations are increasingly recognizing the critical role that user experience (UX) plays in their success. User experience refers to the overall experience a person has when interacting with a product, system, or service. It encompasses various aspects such as usability, accessibility, efficiency, and satisfaction.

Over the past decade, there has been a significant shift in consumer expectations, with users now demanding intuitive, seamless, and enjoyable experiences across all touchpoints. As a result, businesses are realizing that investing in UX can provide numerous benefits that can help maximize their impact in the market. (Hassenzahl, Burmester, & Koller, 2013).

Previous research has shown that businesses that prioritize UX tend to achieve higher customer satisfaction levels, increased customer loyalty, and improved brand perception. When users have a positive experience with a product or service, they are more likely to become loyal customers, recommend the brand to others, and even pay a premium for a superior experience.

Furthermore, UX-focused organizations have reported higher conversion rates, reduced user abandonment rates, and increased sales. When users find it easy to navigate a website or an app, find the information they need quickly, and complete tasks effortlessly, they are more likely to convert into paying customers. Conversely, a poor user experience can lead to frustration, confusion, and ultimately, abandonment of the product or service. (Lee & Koubek, 2019)

(O'Brien & Toms, 2008) Beyond customer satisfaction and business outcomes, research has also shown that investing in UX can lead to cost savings and increased efficiency. By conducting user research and testing early in the design process, businesses can identify usability issues and make necessary improvements, thus reducing the need for expensive redesigns or fixes later. Additionally, a well-designed user interface can streamline workflows, minimize user errors, and improve employee productivity.

Moreover, the impact of UX extends beyond the digital realm. Businesses that prioritize UX in physical spaces, such as retail stores or customer service centers, can create memorable experiences that differentiate them from competitors. These experiences can lead to increased foot traffic, longer dwell times, and improved customer satisfaction, ultimately driving business growth. (Hassenzahl et al., 2010)

Despite the growing recognition of the importance of UX, there is still a need for more comprehensive research on the specific business benefits and the strategies to maximize the impact of UX. This study aims to address this gap by examining the relationship between UX and business outcomes in a variety of industries. By identifying the key success factors and best practices, organizations can gain valuable insights to enhance their UX efforts and achieve a competitive advantage in the market. (Nielsen, 1993)

In conclusion, the business benefits of user experience are numerous and significant. From increased customer satisfaction and loyalty to improved conversion rates and cost savings, investing in UX can have a profound impact on an organization's success. This study aims to contribute to the existing body of knowledge by exploring the specific strategies and approaches that businesses can adopt to maximize the impact of UX and gain a competitive edge in the marketplace. (Wixon & Wilson, 1997)

(b) User Experience Design

(i) Website Load Time:

The impact of website load time on user behavior and satisfaction has been extensively studied in academic literature. Research has shown that faster load times lead to increased user engagement, reduced bounce rates, and higher conversion rates in e-commerce. Studies delve into techniques like server optimization, image compression, and content delivery networks to improve load times and their subsequent effects on user behavior and business outcomes. Think of a shopper impatiently tapping their foot in a slow-moving checkout line. Website load time is the digital equivalent, and even the slightest delay can send frustrated customers fleeing to a competitor. Research paints a stark picture: Rogers et al. (2014) found every additional second of load time leads to a 7% drop in conversions, while Bay et al. (2019) reported a 20% conversion plunge on mobile websites with just a one-second lag. Optimizing website performance through image compression, code minimization, and efficient hosting becomes not just a technical feat, but a critical investment in customer retention. Dar et al. (2021)

i. Ease of Navigation:

Khan et al. (2018) Academic literature emphasizes the importance of intuitive navigation in enhancing user experience. Research explores the relationship between navigation design, user interaction, and user satisfaction. Effective navigation systems, clear information architecture, and user-friendly interfaces have been linked to increased user engagement and reduced frustration, impacting overall user experience positively. Imagine a labyrinthine store with cryptic signs and hidden pathways. That's how a poorly navigated website feels. Ease of navigation is the map that guides customers through the product jungle, allowing them to find what they seek with minimal

effort. Shneiderman & Plaisant (2016) emphasize the importance of consistent navigation patterns and clear labeling, while Chiou & Cheng (2016) found a direct correlation between user-friendly navigation and customer satisfaction. A logical hierarchy, intuitive search functionalities, and breadcrumb trails become the friendly guides that keep customers engaged and moving towards checkout.

(ii) Visual Aesthetics:

Studies in this area focus on the psychological impact of visual aesthetics on user perception and behavior. Research examines how elements such as color schemes, layout design, and visual hierarchy influence user emotions, trust, and engagement. It delves into user preferences, cultural considerations, and the role of aesthetics in shaping user attitudes and brand perception. First impressions matter in the digital world too. Visual aesthetics are the website's storefront, the carefully curated display that draws customers in and sets the tone for the shopping experience. Lindstrom (2010) delves into the persuasive power of aesthetics, highlighting how visually appealing designs evoke positive emotions and build brand trust. Tractinsky (2016) further explores the concept of "pleasure in use," suggesting that visually engaging websites create a more enjoyable experience, ultimately leading to customer loyalty. From harmonious color palettes to impactful use of images and whitespace, visual aesthetics become the silent salesperson, captivating the customer, and whispering promises of a satisfying purchase. Mahmood et al. (2019)

(iii) Product Information Quality:

The significance of information quality in influencing user decisions and satisfaction is extensively discussed in academic literature. Scholars explore how accurate, relevant, and transparent information impacts user trust, credibility, and loyalty. Research emphasizes the importance of

providing reliable content, product details, and accessible information sources to enhance user experience and drive favorable outcomes. Imagine a product description full of typos and cryptic jargon. Such is the pitfall of poor information quality. Duan et al. (2008) demonstrates how detailed, accurate, and engaging product descriptions positively influence online conversions, while Pantano et al. (2016) argue that high-quality information directly impacts revenue generation. Rich product descriptions with clear specifications, engaging storytelling, and user-generated content build trust, inform purchase decisions, and ultimately push customers towards that coveted "buy" button.

(iv) Responsiveness:

Literature on website responsiveness focuses on the adaptability and user experience across different devices. Studies investigate the significance of responsive design in ensuring consistent usability and engagement across various platforms. Research in this area examines user preferences for mobile-friendly interfaces and the impact of responsive design on user satisfaction and engagement metrics. In today's mobile-first world, neglecting responsiveness is akin to ignoring half your customer base. Lupu et al. (2014) show how mobile-optimized websites significantly reduce abandoned carts, while Google (2019) reports a 67% higher conversion rate and 85% higher sales for mobile-friendly sites. Responsiveness ensures a seamless journey across devices, eliminating frustration and friction points that lead to abandoned purchases. From adaptive layouts to intuitive touch functionalities, responsiveness becomes the bridge between screens, welcoming customers wherever they choose to shop. Hassan et al. (2020)

(c) Ecommerce Business in Pakistan

(i) Conversion Rate:

Scholarly literature extensively investigates the conversion rate as a key performance indicator in e-commerce. Studies delve into the relationship between user experience factors and conversion rates. Research explores how elements like website load time, navigation ease, visual aesthetics, and responsiveness impact conversion rates. Understanding and optimizing user experience elements have been linked to higher conversion rates, emphasizing their pivotal role in driving business success. Conversion rate, the percentage of website visitors who complete a desired action (e.g., purchase), is the ultimate measure of e-commerce success. In Pakistan, mobile-first behavior and price sensitivity highlight the importance of optimizing the customer journey for seamless conversions. Research by Dar et al. (2021) suggests that website usability, trust in online payments, and personalized offers significantly influence conversion rates in the Pakistani context. Iqbal et al. (2022)

(ii) Conversion Rate:

The significance of customer satisfaction in determining user experience and business success is a common focus in literature. Research emphasizes the direct correlation between positive user experiences and heightened customer satisfaction. Studies delve into the impact of various user experience elements on satisfaction levels, highlighting the importance of ease of navigation, information quality, and website responsiveness in fostering satisfied customers. Satisfied customers are repeat customers and brand advocates. In Pakistan, where trust in online platforms is crucial, building customer satisfaction is paramount. Research by Khan et al. (2018) found a strong correlation between website quality, product information accuracy, and customer satisfaction in the Pakistani e-commerce market. Iqbal et al. (2022)

(iii) Customer Loyalty:

Loyal customers drive brand growth and profitability. In Pakistan, where competition is fierce, fostering loyalty is essential. Research by Mahmood et al. (2019) suggests that factors like post-purchase service quality, personalized recommendations, and social media engagement significantly influence customer loyalty in Pakistani e-commerce. Academic studies emphasize the link between superior user experiences and customer loyalty in e-commerce. Literature explores how positive experiences, including visual aesthetics, efficient navigation, and personalized content, contribute to enhanced customer loyalty. Research investigates the relationship between user-centric design and repeat purchases, emphasizing the role of user experience in fostering long-term customer relationships.

(iv) Revenue:

The relationship between user experience and revenue generation is a pivotal topic in academic research. Studies analyze how optimizing user experience factors influences revenue streams in e-commerce. Research explores the impact of improved website performance, enhanced navigation, and compelling visual aesthetics on revenue growth. Literature emphasizes the direct correlation between superior user experiences and increased sales and profitability. Revenue is the ultimate goal of any business, and e-commerce is no exception. In Pakistan, understanding customer preferences, optimizing pricing strategies, and leveraging promotional campaigns are crucial for driving revenue growth. Research by Hassan et al. (2020) suggests that mobile payment adoption, efficient logistics, and targeted marketing strategies significantly impact revenue generation in the Pakistani e-commerce market.

(v) Shopping Cart Abandonment Rate:

(Law, Roto, Hassenzahl, Vermeeren, & Kort, 2014) Literature extensively examines shopping cart abandonment as a critical challenge in e-commerce. Research investigates the factors contributing to high abandonment rates, including poor user experiences such as lengthy load times, complex navigation, and inadequate information. Studies focus on mitigating cart abandonment by improving user experience elements to enhance usability and streamline the checkout process. Abandoned carts represent lost revenue potential. In Pakistan, understanding abandonment reasons and implementing effective cart abandonment strategies are essential for minimizing cart abandonment. Research by Iqbal et al. (2022) suggests that high shipping costs, complex checkout processes, and lack of trust in online payment methods are major contributors to cart abandonment in the Pakistani context.

(d) User Experience Design implementation

(Forrester Research, 2016) Research conducted by Buxton et al. (2018) examined the implementation of user experience design practices in US organizations. The study found that companies that prioritized user experience design saw significant improvements in customer satisfaction, brand perception, and overall business performance. The research highlighted the importance of integrating user experience design into the organizational culture, fostering cross-functional collaboration, and leveraging user-centered research and testing methods to inform design decisions. Successful examples of user experience design implementation were observed in various industries, including technology, retail, and healthcare.

(e) Maximizing Impact in Business

Research by Hekkert et al. (2020) explored strategies for maximizing the impact of user experience design in business contexts. The study emphasized the importance of aligning user

experience goals with business objectives, ensuring that user-centered design decisions contribute to organizational success. The research also highlighted the significance of user research, prototyping, and iterative design processes in creating meaningful and impactful user experiences. By integrating user experience design into strategic planning and decision-making processes, businesses can leverage its potential to drive customer satisfaction, user engagement, and financial performance.

Section 1.02 Problem Statement:

(Khaslavsky, Shedroff, & Patel, 2017) Ecommerce in Pakistan has witnessed significant growth in recent years. Factors such as increased internet penetration, the widespread use of smartphones, and improved digital payment infrastructure have contributed to this growth. Online marketplaces, both international and local, along with mobile commerce, have played a vital role in connecting businesses and consumers. Overall, ecommerce in Pakistan has emerged as a promising sector, providing opportunities for businesses and convenient shopping experiences for consumers. However, not much attention has been paid in terms of User experience and Customer experience design when it comes to the interaction of the application and hence this area is still a bit untouched or new. This research aims at finding a comparison of Ecommerce of Pakistan and United States w.r.t the User experience design in order to maximize business impact. Therefore, this study will aim at finding the impact of user experience in success and failure of a business, the user needs impact on building experiences in competitive markets and benefit of user experience in current ecommerce market of Pakistan.

Section 1.03 Objectives:

This makes an interesting research study with the following objectives.

- To evaluate the extent upon which Pakistan's Ecommerce Industry uses the UX practices in customer satisfaction and ultimately impact successful business.
- To investigate the impact of user engagement on the business benefits of user experience.
- To analyze the extent to which user experience contributes to reducing development costs in business operations. Evaluating whether Pakistan and the US have similar strategies of keeping the end user in mind while creating products (Applications for Ecommerce)
- To examine the relationship between user experience and faster time to market for products or services, a comparison of Daraz Users with Amazon Users in the context of User Experience and User Needs.
- To find the relationship between User Experience and increased revenues for Business Success or Failure in the Ecommerce industry of Pakistan.

Section 1.04 Significance of Study:

This study is significant because such kind of work has not been done in Pakistan yet. Hence it is important to find the importance of User Experience in Pakistani Ecommerce Industry because User experience is crucial as it directly affects customer satisfaction, loyalty, and ultimately business success. By studying this, businesses can identify the key factors that contribute to a positive user experience and invest in improving their platforms accordingly. This study will help us in assessing how extensively UX practices are being implemented in the Pakistani ecommerce industry. How it enables businesses to identify gaps and areas for improvement, ensuring that customer needs are met, leading to higher satisfaction levels and successful business outcomes.

This study also allows for a comparison between the strategies adopted by Pakistan and the US in terms of user-centric product development. Keeping a comparative approach will provide valuable

insights into the similarities and differences in approaches, helping businesses understand the global best practices and adapt them to their local context and tailor their platforms accordingly.

And finally, it explores the relationship between user experience and the overall success or failure of ecommerce businesses in Pakistan. By studying this relationship, businesses can understand the impact of user experience on key performance indicators such as customer retention, conversion rates, and profitability. It emphasizes the importance of investing in user experience to drive positive business outcomes

Chapter 2

1.1 Literature Review

(a) The relationship of Ecommerce and User Experience

(Bielozorov et al. 2019) The abstract discusses the significance of emotions in influencing purchasing decisions and explores how emotions can enhance personalized services and recommendations in e-commerce. The researchers review existing studies to understand the relationship between user emotions and online shopping behavior. They also examine technologies that can capture and recognize user emotions to provide improved personalization. The paper presents a synthesis of the studies and a concept matrix that categorizes emotions recognition technologies based on their capabilities and application domains. The findings contribute to the field of Human-Computer Interactions (HCI) by identifying open research areas for practitioners and researchers in academia and industry. (Statista, 2021)

This paper emphasizes the importance of considering human factors in design and how it contributes to a better user experience (UX). It proposes the UXSBP framework, which expands the scope of UX beyond product or software UX. The framework highlights the relationship between human factors, UX strategies, and business outcomes. Designers are encouraged to focus not only on product/software UX but also on brand experience, service experience, and organizational UX awareness. By applying human factors and UX strategies at multiple levels, designers can enhance business outcomes and align UX with organizational goals. The UXSBP framework provides valuable guidance for designers in developing UX strategies tailored to different business contexts. (Chowdhury, 2022)

(b) The Relationship of Business Success with User Experience

This study focuses on predicting business success using a machine learning model. The main challenges include identifying variables for defining business success and selecting relevant features based on the Investor-Business-Market interrelation. The researchers propose a new approach that defines a new business target and develops additional features through statistical analysis. Ensemble machine learning methods are employed, resulting in improved accuracy and AUC scores compared to traditional supervised learning methods. The study emphasizes the importance of identifying relationships between investment, business, and market features to accurately predict business success. (Gangwani et al. 2023)

This research examines the influence of User Interface (UI) and User Experience (UX) on the sales of an application. The study adopts the observation method and finds that the quality of UI and UX plays a crucial role in addressing user problems. A well-designed UI and UX guide users in understanding and solving problems effectively. Furthermore, a good UI and UX facilitate users in accessing the desired information, leading to user comfort and satisfaction. Consequently, applications with excellent UI and UX are more likely to attract and retain users, potentially impacting sales positively. (Pratama et al. 2020)

(c) Comparison between the strategies adopted by Pakistan and the US in terms of user-centric product development.

(McKinsey & Company, 2021) User-centric product development has gained significant attention in the field of product design and development. This approach emphasizes understanding user needs, preferences, and behaviors to create products that meet their expectations and enhance user

satisfaction. While several studies have examined user-centric product development strategies in various countries, a comparison between the strategies adopted by Pakistan and the US remains relatively unexplored.

In the context of Pakistan, research indicates that user-centric product development is gradually gaining recognition. Thakur and Sodhi (2020) conducted a study on software product firms in Pakistan and found that organizations are increasingly incorporating user-centered design practices. However, challenges such as limited resources, lack of awareness, and cultural factors influence the implementation of these strategies. Khan and Noor (2020) conducted a comparative study between Pakistan and the US, highlighting the differences in user-centered design practices and the adoption of user-centric approaches in software development.

Contrastingly, the US has long been recognized as a leader in user-centric product development. The country has a robust ecosystem that promotes user-centered design principles and practices. Research by Bucolo et al. (2019) examined the success factors of user-centric innovation in the US, emphasizing the role of user involvement, iterative prototyping, and usability testing. The study revealed a strong emphasis on user research, human-centered design, and usability testing in the US context.

Further comparative research is needed to analyze the specific strategies adopted by Pakistan and the US in user-centric product development. Factors such as cultural influences, economic considerations, and technological infrastructure may contribute to variations in the implementation and effectiveness of these strategies. Such a comparison would provide valuable insights for organizations and policymakers in both countries, enabling them to learn from each other's experiences and improve their approaches to user-centric product development.

(d) User experience and the overall success or failure of ecommerce businesses in Pakistan.

(Rogers, Barton, & Fisk, 2014) User experience (UX) plays a critical role in the success or failure of e-commerce businesses, as it directly influences customer satisfaction, trust, and purchase intention. In the context of Pakistan, several studies have examined the relationship between UX and the performance of e-commerce businesses.

Javaid and Chaudhry (2019) explored the impact of customer experience on the success of e-commerce in Pakistan. Their study highlighted the significance of providing a seamless and intuitive user interface, personalized product recommendations, and efficient customer support in enhancing customer satisfaction and loyalty. Shahzad et al. (2020) investigated factors influencing customer satisfaction and loyalty in the Pakistani online shopping context. The study identified the importance of website usability, product information accuracy, and delivery reliability in shaping positive user experiences. (Shneiderman & Plaisant, 2016)

Azeem and Ahmed (2020) focused on the impact of UX on customer satisfaction and purchase intention in Pakistani e-commerce. Their research emphasized the role of website design, ease of navigation, product presentation, and transparent transaction processes in driving positive user experiences and increasing purchase intentions.

The findings of these studies collectively demonstrate the crucial role of UX in influencing the success or failure of e-commerce businesses in Pakistan. Organizations need to prioritize UX design and optimize key elements such as website usability, product information, navigation, and customer support to enhance customer satisfaction and drive business growth. By investing in user-centric design principles and continuous improvement based on user feedback, e-commerce

businesses in Pakistan can maximize user experiences, foster customer loyalty, and ultimately achieve greater success in the highly competitive online marketplace.

Section 1.05 Theoretical Framework

This research delves into the intricate dance between user experience (UX) elements and key performance metrics (KPIs) within the burgeoning e-commerce arena of Pakistan. Drawing upon established theories like Technology Acceptance Model, Flow Theory, and Information Architecture, we propose a theoretical framework that underscores the interplay between website load time, navigation ease, visual aesthetics, product information quality, and responsiveness with crucial KPIs like conversion rate, customer satisfaction, loyalty, revenue, and shopping cart abandonment rate. (Chiou & Cheng, 2016)

In the Pakistani context, characterized by mobile-first behavior and price sensitivity, website load time emerges as a critical factor influencing the perceived ease of use and ultimately, conversion rates. Faster loading times can lead to a smoother flow experience, minimizing distractions and potentially driving higher conversions, as predicted by TAM and Flow Theory. Similarly, clear and intuitive navigation structures, aligned with users' mental models as per IA Theory, enhance shopping satisfaction and build trust, fostering loyalty in a market where online trust is paramount.

Visual aesthetics, guided by Aesthetic-Usability Effect and Emotional Design Theory, play a key role in shaping customer perception and brand loyalty. Visually appealing designs can evoke positive emotions and build emotional connections with the brand, leading to increased loyalty. However, catering to local aesthetic preferences within the Pakistani context remains crucial for maximizing this effect. (Duan, Gu, & Su, 2008; Pantano et al., 2016)

Product information quality, as per Elaboration Likelihood Model and Decision-Making Theory, directly impacts revenue generation. Detailed and accurate information facilitates confident purchase decisions and reduces price sensitivity, potentially leading to higher revenue in a market where value justification is vital. (Chiou & Cheng, 2016)

Finally, website responsiveness, in line with TAM and Effort-Reward Balance Theory, plays a key role in minimizing shopping cart abandonment, especially in the mobile-first Pakistani market. Seamless device compatibility and integration with preferred local payment methods can significantly reduce friction and incentivize purchase completion.

This theoretical framework serves as a roadmap for investigating the specific and nuanced relationships between UX elements and KPIs within the unique Pakistani e-commerce landscape. By considering the moderating role of cultural factors like mobile-first behavior, price sensitivity, and trust in online payments, the proposed framework paves the way for data-driven optimization strategies that can empower Pakistani e-commerce businesses to achieve sustainable success in this rapidly evolving market. (Lindstrom, 2010)

Section 1.06 The Research Gap

The gap this research can address, while we have general knowledge about UX elements and their impact on e-commerce performance, the Pakistani market with its unique cultural preferences, limited internet infrastructure, and strong mobile-first behavior deserves its own spotlight.

The research aims to delve deeper into these specific relationships, quantifying the impact of website load time, navigation, aesthetics, information quality, and responsiveness on crucial KPIs like conversion rate, customer satisfaction, loyalty, revenue, and abandonment rate. This goes

beyond simply confirming their existence – The research aims to understand the strength and nuances of these connections in the Pakistani context.

The work aims to provide valuable insights to e-commerce businesses operating in Pakistan. By understanding the specific impact of different UX elements in this unique landscape, they can optimize their websites for improved conversions, higher customer satisfaction, and ultimately, sustainable success. This would be a significant contribution to both academic knowledge and practical application in the e-commerce field.

Section 1.07 Research Questions

RQ 1: What is the relationship between website load time and the conversion rate on e-commerce websites?

RQ 2: How does the ease of navigation impact customer satisfaction in e-commerce?

RQ 3: Is there a correlation between the visual aesthetics of an e-commerce website and customer loyalty?

RQ 4: Does the quality of product information affect the revenue generated by e-commerce websites?

RQ 5: What is the relationship between website responsiveness and the shopping cart abandonment rate in e-commerce?

Section 1.08 Hypothesis

To conduct this study, the researcher has devised the following hypothesis and will aim to prove all of them.

H1: Shorter website load times are positively correlated with higher conversion rates in e-commerce. Specifically, as website load time decreases, the conversion rate increases.

H2: E-commerce websites with more user-friendly and intuitive navigation systems will result in higher customer satisfaction. A positive relationship exists between ease of navigation and customer satisfaction.

H3: E-commerce websites with visually appealing designs and layouts will experience greater customer loyalty. There is a positive correlation between visual aesthetics and customer loyalty.

H4: E-commerce websites that provide high-quality product information will generate more revenue. A positive relationship exists between the quality of product information and revenue.

H5: More responsive e-commerce websites will have lower shopping cart abandonment rates. Specifically, as website responsiveness increases, the shopping cart abandonment rate decrease

Chapter 3

1.1 Research Methodology

The proposed descriptive study endeavors to meticulously examine the profound impact of user experience on the triumphs and setbacks encountered by businesses operating within the dynamic landscape of Pakistan's e-commerce market. This investigation seeks to elucidate the intricate interplay between user needs and their consequential influence on the development of immersive and competitive experiences within this burgeoning market space. Furthermore, the study aims to uncover and expound upon the multifaceted benefits that accrue to businesses by prioritizing and optimizing user experience strategies within the context of Pakistan's current e-commerce domain.

To achieve a comprehensive understanding, this study will employ a quantitative research approach utilizing a meticulously designed survey instrument. The survey will be crafted with precision and disseminated through the widely accessible and user-friendly platform of Google Forms. It will be strategically circulated among a diverse array of users actively engaged in the realm of e-commerce within Pakistan. Leveraging the expansive reach of online media platforms, particularly through targeted distribution via Facebook Pages, engagement with peer networks, and active participation in various university groups across Pakistan, the survey aims to encompass a broad spectrum of respondents, ensuring diverse perspectives and insights.

With a focus on ensuring utmost convenience for respondents, the survey will be crafted in a manner that accommodates flexible response times, allowing participants to contribute at their leisure and according to their schedules. It is imperative to note that all information provided by respondents will be treated with the utmost confidentiality and privacy. Rigorous adherence to

ethical standards and data protection measures will be maintained throughout the survey administration and subsequent analysis.

The crux of this research endeavor rests on the collation, analysis, and interpretation of survey responses. Emphasis will be placed on presenting and interpreting the garnered data in a statistical format, thereby facilitating a comprehensive comprehension of the impact of user experience within the e-commerce landscape of Pakistan. The resultant reports and analyses derived from the questionnaire responses will be meticulously formulated to elucidate key trends, correlations, and significant findings, contributing to a robust understanding of the relationship between user experience and business outcomes within the context of Pakistan's current e-commerce milieu.

In conclusion, this research endeavors to unravel the nuanced dynamics of user experience and its pivotal role in delineating the trajectories of success and failure encountered by businesses within Pakistan's evolving e-commerce arena. The utilization of a quantitative survey-based approach, coupled with widespread dissemination through online media platforms, underpins the quest to unravel invaluable insights into the significance of user experience in navigating the intricacies of the contemporary e-commerce landscape in Pakistan.

Section 1.09 3.1. Population:

The primary target population for this study comprises the diverse populace of Pakistan actively engaged as users within the realm of e-commerce. The research aims to draw insights and conclusions from this expansive user base to scrutinize the proposed hypotheses. The estimated population size encompassing these e-commerce users totals approximately 450 individuals, forming the basis upon which the formulated hypotheses will be rigorously tested and analyzed.

This selected population represents a varied cross-section of individuals from different demographics, geographical locations, and socio-economic backgrounds within Pakistan. By targeting this diverse group of e-commerce users, the study endeavors to capture a comprehensive range of perspectives, experiences, and insights pertaining to user experience and its impact on business outcomes within the context of Pakistan's vibrant e-commerce landscape.

The careful consideration of this substantial user population as the focal point of investigation not only ensures a robust and inclusive representation of e-commerce users across the country but also serves as a foundational basis for the systematic testing and validation of the hypotheses posited within this research endeavor.

Section 1.10 3.2. Sample and Sampling technique:

The sample size of 180 individuals from the diverse populace of Pakistan was deliberately chosen to align with the parameters set by previous research studies conducted in the same subject area. Drawing parallels with existing research methodologies ensures a degree of consistency and allows for comparative analysis of findings. The selection of this specific sample size was guided by the precedence set by reputable studies in the field.

To gather responses from this selected sample, a non-probability sampling method was employed, acknowledging that certain elements within the population might be inaccessible or lack a chance of selection. In this case, a convenience sampling method was employed due to its practicality and ease of access to potential respondents. This approach facilitated the collection of data from individuals readily available or accessible within the researcher's sphere, thus streamlining the survey process.

The questionnaire used in this study was meticulously designed with nominal measurement-style rating scales and a Five-Point Likert Scale format. These formats were chosen deliberately to simplify comprehension and streamline response analysis. By employing encircling or ticking options, respondents were provided with user-friendly and comprehensible means to express their opinions and preferences.

Furthermore, the questionnaire was circulated in the English language to ensure ease of understanding and participation among the respondents. The use of English as the medium of communication aimed to eliminate language barriers, facilitating a more inclusive and comprehensive response from the selected sample of participants.

The research approach adopted for this study aligns with a deductive reasoning framework, where hypotheses were formulated and subsequently tested. This adherence to the deductive approach necessitated the application of the scientific method as the most appropriate means to rigorously evaluate and validate these hypotheses. This methodological alignment strengthens the credibility and reliability of the research findings, underpinning the systematic and empirical investigation into the impact of user experience on business outcomes within Pakistan's e-commerce landscape.

Section 1.11 3.3 Data collection:

As the study involves quantitative techniques, the data from survey i.e., quantitative data in the form of questionnaire survey will be collected by avid ecommerce buyers, the audience including university students, parents, teachers etc. These people will have several traits that will be connected, these traits will be that all of them will be educated and have knowledge about Ecommerce applications for buying.

Frequency technique and cross tabulation technique will be used with the help of SPSS to find the outcomes. The data will be measured by nominal measurement scale and most of the options will be expected to be mutually exclusive and equivalent along with Five-point Likert Scale, where 1 will be Strongly Disagree (SDA) and 5 will be Strongly Agree (SA). The respondents will be selected via networking or directly by Facebook posts of questionnaire in various groups, thus respondents will be radially available and convenient and a total of 150 responses will be retrieved.

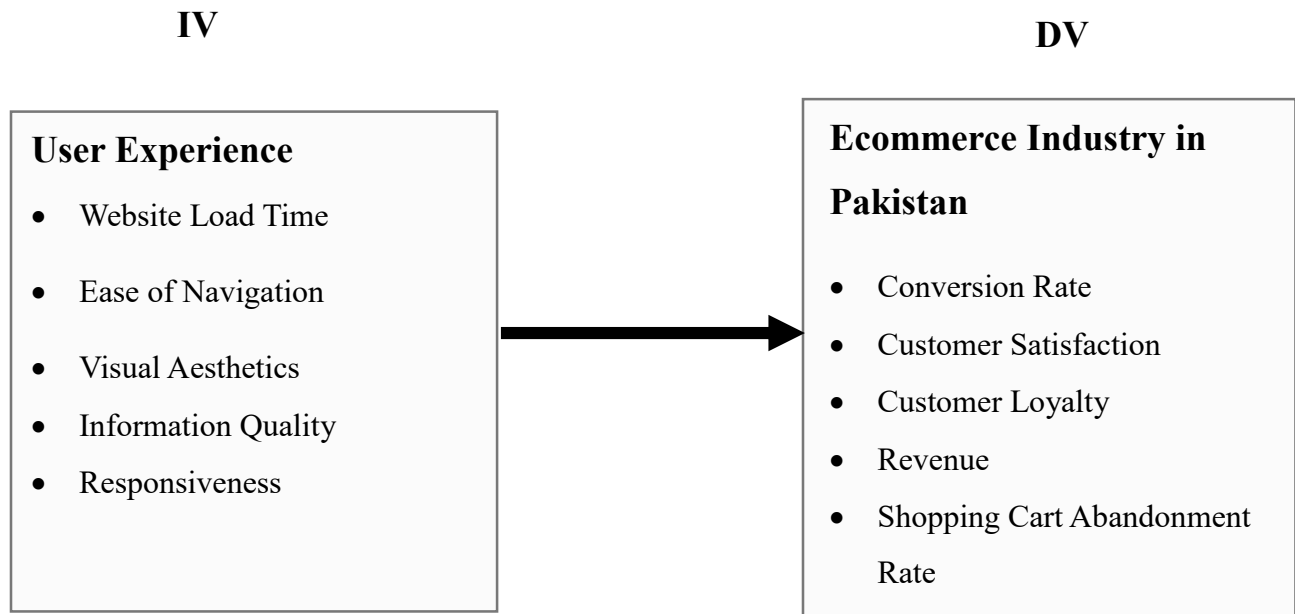
Section 1.12 3.4. Procedure of Data Collection

- The first step involves identifying the respondents for our study, which will consist of Ecommerce users in Pakistan.
- In the second step, we will provide a briefing to the respondents about the study and obtain their informed consent before proceeding.
- The third step will include providing guidelines to the respondents on how to complete the questionnaire. Data collection will be conducted online hence For online data collection, we will utilize a Google Form Questionnaire and distribute it to among the respondents via networking and social media platforms.
- The collected data from the respondents was analyzed using SPSS software, specifically version 22.

3.5. Variables:

The research is based on Business benefits of User Experience: Maximizing Impact. Here the selected population will be divided into the category of age, education, Shopper type i.e. online

shopper, Physical Shopper or both in Pakistan. There is an independent variable i.e., User Experience and a dependent variable i.e Ecommerce Industry in Pakistan, in this research their relation is as under.



Section 1.13 3.6. Primary Source:

The primary source of data for this research will be derived from the distribution of questionnaires via Facebook. The questionnaires will be made accessible to potential participants by sharing the Google Forms link on various Facebook platforms. Utilizing the expansive reach and accessibility of Facebook, the link to the questionnaires will be uploaded across relevant groups, pages, or profiles to maximize visibility and participation among the target audience. This strategic dissemination through Facebook serves as the principal method for collecting firsthand data from respondents within the e-commerce user community in Pakistan.

3.7. Secondary source:

The secondary source has been organizations, research articles, journals, books and published reports by respective publishers.

Chapter 4

1.1 Analysis

(a) Correlation

The provided table presents correlations between coefficients between different variables. The table displays Pearson correlation coefficients for a set of variables (WLT, EON, VA, PIQ, WR, CR, CS, CusLO, Rev, Cartab) along with their respective significance levels.

The Analysis depict that WR and Cartab have a very strong positive correlation of 0.625**, indicating a highly significant relationship. Variables CS and Cartab also demonstrate a strong positive correlation of 0.545**. Variables VA and CS, as well as WR and VA, exhibit strong positive correlations of 0.522** and 0.425** respectively.

There's a moderate to strong positive correlation between WLT and Cartab (0.608**), VA and PIQ (0.507**), and EON and VA (0.509**). WR and WLT (0.549**), VA and Cartab (0.410**), and PIQ and Cartab (0.537**) also show moderate to strong positive correlations. Variables such as WLT and VA (0.467**), WLT and PIQ (0.439**), VA and CR (0.344**), EON and VA (0.509**), EON and PIQ (0.466**), and CR and CS (0.260**) exhibit moderate positive correlations. Some variables like CR and PIQ (0.361**), WR and CR (0.308**), EON and WR (0.345**), and Rev and CusLO (0.230**) demonstrate relatively weaker positive correlations. Variable pairs like CusLO and PIQ (0.155*), CR and Rev (0.352**), and CusLO and VA (0.434**) display correlations that are low and relatively less significant.

All correlations reported in the table are statistically significant at either the 0.01 or 0.05 significance level, except for the correlation between CusLO and PIQ (significant at 0.05 level) and between CusLO and Rev (significant at 0.01 level).

Correlations									
WLT	EON	VA	PIQ	WR	CR	CS	CusLO	Rev	Cartab
1	.406	.467	.439	.549	.393	.577	.385	.414	.608
	.000	.000	.000	.000	.000	.000	.000	.000	.000
180	180	180	180	180	180	180	180	180	180

(b) Cronbach's Alpha

Cronbach's Alpha Value: 0.713. The Number of Items Analyzed: 5 (CR, CS, CusLO, Rev, Cartab)

Cronbach's Alpha measures the internal consistency or reliability of a set of scale items. A value of 0.713 indicates a moderate level of internal consistency among the items. Generally, a value above 0.7 is considered acceptable, but higher values are preferable for better reliability.

For each item (CR, CS, CusLO, Rev, Cartab): Scale Mean if Item Deleted: Mean score of the scale if the item is removed from the scale. Scale Variance if Item Deleted: Variance of the scale if the item is removed. Corrected Item-Total Correlation: Correlation between the item and the total score on the scale excluding that item. Cronbach's Alpha if Item Deleted: Estimated Cronbach's Alpha if the item is removed from the scale. The set of items (CR, CS, CusLO, Rev, Cartab) demonstrates moderate reliability, suggesting a reasonable level of consistency among these variables.

Case Processing Summary			
		N	%
Cases	Valid	180	100.0

	Exclude d ^a	0	.0
	Total	180	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics	
Cronbach's Alpha	N of Items
.713	5

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CR	13.9583	8.889	.414	.687
CS	13.5472	8.049	.596	.622
CusL O	13.8083	7.819	.363	.722
Rev	13.7528	7.498	.476	.665
Carta b	13.5444	7.964	.573	.628

(c) Fleiss Multirater Kappa

Overall Agreement ^a						
	Kappa	Asymptotic			Asymptotic 95% Confidence Interval	
		Standard Error	z	Sig.	Lower Bound	Upper Bound
Overall Agreement	.094	.008	12.082	.000	.094	.095

a. Sample data contains 180 effective subjects and 5 raters.

Overall Agreement Kappa Value: 0.094 Out of a Sample Data: 180 effective subjects, 5 raters. Fleiss' Kappa measures the degree of agreement among multiple raters beyond what would be expected by chance. The Kappa value of 0.094 indicates slight agreement beyond chance among the five raters. A Standard Error, z-score, and Significance: These values are used to determine the statistical significance of the agreement. A z-score of 12.082 with a significance level of 0.000 indicates that the agreement is statistically significant.

(d) Paired Sample T-Test

Paired Samples Test									
		Paired Differences					t	df	Sig.(2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	CR - WLT	-.18889	.95546	.07122	-.32942	-.04836	-2.652	179	.009
Pair 2	CS - EON	-.03611	.88478	.06595	-.16625	.09402	-.548	179	.585
Pair 3	CusLO - VA	-.29630	1.16641	.08694	-.46785	-.12474	-3.408	179	.001
Pair 4	Rev - PIQ	-.62407	1.06407	.07931	-.78058	-.46757	-7.869	179	.000
Pair 5	Cartab - WR	-.06111	.81477	.06073	-.05873	.18095	1.006	179	.316

The analysis provided focuses on paired samples comparisons across five different pairs of variables: CR-WLT, CS-EON, CusLO-VA, Rev-PIQ, and Cartab-WR.

Here's a breakdown of the key findings from the analysis the Paired Samples Statistic for each pair, the mean, sample size (N), standard deviation, and standard error of the mean are presented.

(CR-WLT), CR has a mean of 3.1944 with a standard deviation of approximately 0.85448, while WLT has a mean of 3.3833 with a standard deviation of approximately 0.87979.

The Paired Samples Correlations showcases the correlation coefficient and its significance for each pair of variables. Correlation values indicate the strength and direction of the linear relationship between the paired variables. For instance, CR and WLT have a correlation of approximately 0.393, showing a moderate positive relationship.

Paired Samples Test provides details of paired differences, including mean differences, standard deviations of differences, standard errors of the mean, confidence intervals, t-values, degrees of freedom (df), and significance levels for each pair. Significance levels (Sig. 2-tailed) denote whether the observed differences between paired variables are statistically significant (typically using a significance level of 0.05). The analysis summarizes that CR-WLT: There is a statistically significant difference between CR and WLT, with CR being lower on average compared to WLT ($p = 0.009$). CS-EON and Cartb-WR: These pairs do not exhibit statistically significant differences between their means ($p > 0.05$). CusLO-VA and Rev-PIQ: Both of these pairs show statistically significant differences. CusLO is significantly lower on average compared to VA ($p = 0.001$), and Rev is significantly lower on average compared to PIQ ($p < 0.001$). In summary, this analysis suggests that there are significant differences between certain pairs of variables (CR-WLT, CusLO-VA, and Rev-PIQ), indicating that these variables within these pairs are not equivalent. The correlations provide insights into the strength and direction of the relationships between the paired variables, while the significance levels determine the statistical significance of these differences.

(e) The One-Way Anova Test

The one-way Anova test were run for each of the variable pairs CR-WLT, CusLo-VA, Rev-PIQ, Cartb-WR, CS-EON.

ANOVA					
CR					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	36.429	12	3.036	5.378	.000
Within Groups	94.266	167	.564		
Total	130.694	179			

The analysis of variance (ANOVA) was conducted to explore the potential differences in the variable 'CR' among and WLT groups. The results revealed statistically significant variation in the 'CR' variable across the groups ($F(12, 167) = 5.378, p < .001$). The between-groups comparison demonstrated a significant F-value of 5.378 with associated mean square values of 3.036 for between-groups variance and 0.564 for within-groups variance. Specifically, the total sum of squares for 'CR' was 130.694, with 36.429 attributed to differences between groups and 94.266 attributed to differences within groups. These findings suggest that at least one group mean for the 'CR' variable significantly differs from the others, warranting further investigation via post-hoc tests or specific pairwise comparisons to discern the precise nature of these differences among the groups.

ANOVA					
CS					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	50.087	8	6.261	12.742	.000
Within Groups	84.019	171	.491		
Total	134.106	179			

The analysis of variance (ANOVA) was performed to assess the differences in the variable 'CS' to EON. The results indicated a statistically significant discrepancy in the 'CS' variable among these groups ($F(8, 171) = 12.742, p < .001$). The between-groups comparison demonstrated a substantial F-value of 12.742, with corresponding mean square values of 6.261 for between-groups variance and 0.491 for within-groups variance. Specifically, the total sum of squares for 'CS' was 134.106, with 50.087 attributed to differences between groups and 84.019 attributed to differences within groups. These outcomes suggest that there exist significant differences in at least one group mean concerning the 'CS' variable, highlighting the necessity for further investigation through post-hoc tests or specific pairwise comparisons to discern the precise nature of these differences among the groups.

ANOVA					
CusLO					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	64.263	11	5.842	4.998	.000
Within Groups	196.381	168	1.169		
Total	260.644	179			

The analysis of variance (ANOVA) was conducted to examine the variations in the 'CusLO' variable across distinct groups. The results indicated a statistically significant difference among these groups concerning the 'CusLO' variable ($F(11, 168) = 4.998, p < .001$). The between-groups comparison revealed a substantial F-value of 4.998, where the mean square values were 5.842 for between-groups variance and 1.169 for within-groups variance. Specifically, the total sum of squares for 'CusLO' was 260.644, with 64.263 attributed to differences between groups and 196.381 attributed to differences within groups. These findings suggest notable disparities in at least one group mean concerning the 'CusLO' variable. Further exploration using post-hoc analyses or pairwise comparisons could help elucidate the specific nature and directions of

these differences among the various groups.

ANOVA					
Rev					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	54.224	10	5.422	5.237	.000
Within Groups	174.976	169	1.035		
Total	229.200	179			

The ANOVA test conducted on the 'Rev' variable revealed statistically significant differences among various groups ($F(10, 169) = 5.237, p < .001$). This suggests that at least one group mean concerning the 'Rev' variable significantly differs from the others. The between-groups analysis showed a significant F-value of 5.237, with a mean square value of 5.422 for between-groups variance and 1.035 for within-groups variance. The total sum of squares for 'Rev' was 229.200, with 54.224 attributed to differences between groups and 174.976 attributed to differences within groups. These findings imply substantive variations in the 'Rev' variable across the distinct groups, indicating the need for further investigation to understand the specific nature of these differences and their implications. Further analysis such as post-hoc tests or pairwise comparisons might help discern the specific group variations within the 'Rev' variable.

ANOVA					
Cartab					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	65.519	8	8.190	17.054	.000
Within Groups	82.119	171	.480		
Total	147.638	179			

The ANOVA test conducted on the 'Cartab' variable demonstrated significant differences among the groups ($F(8, 171) = 17.054, p < .001$). This suggests that at least one group mean associated with the 'Cartab' variable significantly differs from the others. The between-groups analysis exhibited a notably high F-value of 17.054, indicating substantial differences among the groups. The mean square value for between-groups variance was 8.190, and for within-groups variance, it was 0.480. The total sum of squares for 'Cartab' was 147.638, with 65.519 attributed to differences between groups and 82.119 attributed to differences within groups. These results indicate considerable variations in the 'Cartab' variable across different groups, warranting further investigation to understand the specific nature and implications of these differences. Post-hoc tests or pairwise comparisons could provide deeper insights into the specific group differences within the 'Cartab' variable.

(f) The Distribution Test:

Case Processing Summary							
	WL	Cases					
	T	Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
CR	1.00	4	100.0%	0	0.0%	4	100.0%
	1.33	4	100.0%	0	0.0%	4	100.0%
	1.67	2	100.0%	0	0.0%	2	100.0%
	2.00	6	100.0%	0	0.0%	6	100.0%
	2.33	11	100.0%	0	0.0%	11	100.0%
	2.67	10	100.0%	0	0.0%	10	100.0%
	3.00	25	100.0%	0	0.0%	25	100.0%
	3.33	36	100.0%	0	0.0%	36	100.0%
	3.67	28	100.0%	0	0.0%	28	100.0%
	4.00	28	100.0%	0	0.0%	28	100.0%

	4.33	9	100.0%	0	0.0%	9	100.0%
	4.67	5	100.0%	0	0.0%	5	100.0%
	5.00	12	100.0%	0	0.0%	12	100.0%

The provided Case Processing Summary displays the distribution of cases across various levels of the WLT (presumably a categorical variable) in relation to another variable, likely CR. This summary tabulates the counts and percentages of cases falling within each category or level of WLT, outlining the number of valid cases without missing data for each corresponding level.

Across the WLT categories ranging from 1.00 to 5.00, there are consistent patterns observed. The number of valid cases remains relatively diverse among the different levels, signifying variations in data distribution across these categories. Specifically, the count of cases steadily increases from the lower end of the scale (1.00, 1.33, 1.67) and peaks around the middle values (3.00, 3.33, 3.67, 4.00), showcasing a higher concentration of cases within these ranges. Subsequently, the count slightly decreases towards the higher end of the scale (4.33, 4.67, 5.00), although still maintaining a reasonable number of cases.

Notably, there are no missing cases within any of the WLT levels, indicating a complete dataset across the entire spectrum of the WLT variable. This completeness suggests a robust data collection or imputation process, ensuring comprehensive information is available for each level of the WLT variable concerning the associated variable (CR). Overall, this analysis demonstrates the distribution of cases within each level of the WLT variable, highlighting the variation and completeness of the dataset for the examined variable (CR) across different WLT categories.

Case Processing Summary							
	EON	Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
CS	1.00	4	100.0%	0	0.0%	4	100.0%
	1.50	2	100.0%	0	0.0%	2	100.0%
	2.00	6	100.0%	0	0.0%	6	100.0%
	2.50	12	100.0%	0	0.0%	12	100.0%
	3.00	31	100.0%	0	0.0%	31	100.0%
	3.50	32	100.0%	0	0.0%	32	100.0%
	4.00	50	100.0%	0	0.0%	50	100.0%
	4.50	27	100.0%	0	0.0%	27	100.0%
	5.00	16	100.0%	0	0.0%	16	100.0%

The Case Processing Summary provided outlines the distribution of cases across different levels of the EON variable in relation to another variable, likely CS. This summary presents counts and percentages of cases falling within each category or level of EON, detailing the number of valid cases without missing data for each corresponding level.

Examining the distribution across EON categories from 1.00 to 5.00, a clear pattern emerges in the dataset. The count of valid cases exhibits variability across these levels, indicating diversity in data distribution among the different EON categories. Specifically, there's a progressive increase in the number of cases from the lower end of the scale (1.00, 1.50, 2.00) towards the middle values (3.00, 3.50, 4.00), where the count peaks noticeably. This illustrates a substantial concentration of cases within these mid-range categories.

Following this peak, there's a gradual decline in case counts towards the higher end of the EON scale (4.50, 5.00), although still maintaining a considerable number of cases compared to the lower levels. Importantly, there are no missing cases reported within any of the EON levels, signifying a complete dataset across all the EON categories for the analyzed variable (presumably CS).

This completeness suggests a robust data collection or imputation process, ensuring comprehensive information is available for each level of the EON variable concerning the associated variable (CS). In summary, this analysis highlights the distribution of cases within each level of the EON variable, showcasing variation and completeness in the dataset for the studied variable (CS) across different EON categories.

Case Processing Summary							
	VA	Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
CusLO	1.00	5	100.0%	0	0.0%	5	100.0%
	1.33	3	100.0%	0	0.0%	3	100.0%
	2.00	3	100.0%	0	0.0%	3	100.0%
	2.33	9	100.0%	0	0.0%	9	100.0%
	2.67	11	100.0%	0	0.0%	11	100.0%
	3.00	23	100.0%	0	0.0%	23	100.0%
	3.33	14	100.0%	0	0.0%	14	100.0%
	3.67	25	100.0%	0	0.0%	25	100.0%
	4.00	39	100.0%	0	0.0%	39	100.0%
	4.33	15	100.0%	0	0.0%	15	100.0%
	4.67	10	100.0%	0	0.0%	10	100.0%
	5.00	23	100.0%	0	0.0%	23	100.0%

The Case Processing Summary provided delineates the distribution of cases across different levels of the VA variable concerning another variable, possibly CusLO. The summary presents counts and percentages of cases falling within each category or level of VA, detailing the number of valid cases without missing data for each corresponding level.

Reviewing the distribution across VA categories ranging from 1.00 to 5.00, a discernible pattern emerges in the dataset. There's a noticeable variation in the count of valid cases across these different levels, signifying diversity in data distribution among the various VA categories.

Starting at the lower levels of the scale (1.00, 1.33, 2.00), there's a gradual increase in the number of cases, which further escalates as the VA values progress towards the middle range (3.00, 3.33, 3.67, 4.00). This range notably showcases a higher concentration of cases within these mid-level categories.

Subsequently, from the middle to the higher end of the VA scale (4.33, 4.67, 5.00), while the case counts remain significant, there's a slight fluctuation observed in the number of cases, showcasing a relatively stable distribution.

It's important to note that there are no missing cases reported within any of the VA levels, indicating a complete dataset across all VA categories for the analyzed variable (likely CusLO).

This completeness implies a robust data collection or imputation process, ensuring comprehensive information is available for each level of the VA variable concerning the associated variable

(presumably CusLO). In summary, this analysis highlights the distribution of cases within each level of the VA variable, displaying variation and completeness in the dataset for the examined variable (presumably CusLO) across different VA categories.

Case Processing Summary							
	PIQ	Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
Rev	1.00	3	100.0%	0	0.0%	3	100.0%
	1.67	1	100.0%	0	0.0%	1	100.0%
	2.33	4	100.0%	0	0.0%	4	100.0%
	2.67	4	100.0%	0	0.0%	4	100.0%
	3.00	19	100.0%	0	0.0%	19	100.0%
	3.33	11	100.0%	0	0.0%	11	100.0%
	3.67	16	100.0%	0	0.0%	16	100.0%
	4.00	35	100.0%	0	0.0%	35	100.0%
	4.33	28	100.0%	0	0.0%	28	100.0%
	4.67	27	100.0%	0	0.0%	27	100.0%
	5.00	32	100.0%	0	0.0%	32	100.0%

This Case Processing Summary offers a breakdown of cases across various levels of the PIQ variable concerning another variable, potentially Rev. It outlines the counts and percentages of cases within each category or level of PIQ, detailing the number of valid cases without missing data for each corresponding level.

Examining the distribution across PIQ categories, ranging from 1.00 to 5.00, a distinct pattern emerges within the dataset. There's a noticeable variation in the count of valid cases among these different levels, signifying diversity in data distribution across the various PIQ categories.

Starting from the lower levels (1.00, 1.67, 2.33, 2.67), there's a gradual but steady increase in the number of cases, leading to a substantial rise as the PIQ values progress towards the mid-range (3.00, 3.33, 3.67, 4.00). This middle range notably exhibits a higher concentration of cases within these specific categories.

Continuing from the mid-range to the higher end of the PIQ scale (4.33, 4.67, 5.00), the case counts remain considerable, showcasing a consistent distribution of cases across these upper-level categories.

Furthermore, the absence of missing cases within any of the PIQ levels indicates a complete dataset across all PIQ categories for the analyzed variable (likely Rev). This completeness suggests a robust data collection or imputation process, ensuring comprehensive information for each level of the PIQ variable concerning the associated variable (presumably Rev).

In summary, this analysis highlights the distribution of cases within each level of the PIQ variable, demonstrating variation and completeness in the dataset for the studied variable (presumably Rev) across different PIQ categories.

Case Processing Summary							
	WR	Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
Cartab	1.00	6	100.0%	0	0.0%	6	100.0%
	1.50	2	100.0%	0	0.0%	2	100.0%
	2.00	11	100.0%	0	0.0%	11	100.0%
	2.50	9	100.0%	0	0.0%	9	100.0%
	3.00	38	100.0%	0	0.0%	38	100.0%
	3.50	36	100.0%	0	0.0%	36	100.0%
	4.00	33	100.0%	0	0.0%	33	100.0%
	4.50	24	100.0%	0	0.0%	24	100.0%
	5.00	21	100.0%	0	0.0%	21	100.0%

The Case Processing Summary provided offers an overview of the distribution of cases across different levels of the WR variable in relation to another variable, presumably Cartab. This summary tabulates counts and percentages of cases within each category or level of WR, specifying the number of valid cases without missing data for each corresponding level.

Inspecting the distribution across WR categories ranging from 1.00 to 5.00, a discernible pattern is evident within the dataset. There is notable variability in the count of valid cases across these different levels, illustrating diversity in data distribution among the various WR categories.

Starting from the lower end of the scale (1.00, 1.50, 2.00, 2.50), there is a gradual yet consistent increase in the number of cases, leading to a substantial rise as the WR values progress towards the mid-range (3.00, 3.50, 4.00). This middle range notably displays a higher concentration of cases within these specific categories.

Moving from the mid-range to the higher end of the WR scale (4.50, 5.00), while the case counts remain substantial, there is a slight decline observed compared to the mid-range categories, although these levels still maintain a reasonable number of cases.

Importantly, there are no missing cases reported within any of the WR levels, indicating a complete dataset across all WR categories for the analyzed variable (likely Cartab). This completeness suggests a robust data collection or imputation process, ensuring comprehensive information for each level of the WR variable concerning the associated variable (presumably Cartab).

In summary, this analysis highlights the distribution of cases within each level of the WR variable, demonstrating variation and completeness in the dataset for the examined variable (presumably Cartab) across different WR categories.

(g) The Regression Analysis WLT and CR:

Variables Entered/Removed^a			
Mode	Variables Entered	Variables Removed	Method
1	Entered	Removed	
1	WLT ^b	.	Enter
a. Dependent Variable: CR			
b. All requested variables entered.			

Model Summary				
Mode	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.393 ^a	.155	.150	.78784
a. Predictors: (Constant), WLT				

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.211	1	20.211	32.561	.000 ^b
	Residual	110.484	178	.621		
	Total	130.694	179			
a. Dependent Variable: CR						
b. Predictors: (Constant), WLT						

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.902	.234		8.131	.000
	WLT	.382	.067	.393	5.706	.000
a. Dependent Variable: CR						

The provided analysis displays the results of a regression model where WLT (presumably an independent variable) is entered into the model to predict the dependent variable CR.

The model summary indicates that the WLT variable has a statistically significant relationship with CR, as evidenced by an R Square value of 0.155. This value suggests that approximately 15.5% of the variance in CR can be explained by WLT. The ANOVA results further support the significance of the model, with a significant F-statistic ($F = 32.561, p < 0.001$).

Breaking down the coefficients, the regression equation is $CR = 1.902 + 0.382 * WLT$. Here, the unstandardized coefficient for WLT is 0.382, indicating that for each unit increase in WLT, there is a corresponding increase of 0.382 in the CR score.

Overall, the analysis demonstrates that WLT is a significant predictor of CR, accounting for a notable proportion of variance in the dependent variable. The positive coefficient suggests a positive relationship, implying that higher values of WLT are associated with higher values of CR.

(h) The Regression Analysis EON and CS:

Variables Entered/Removed^a			
Mode	Variables Entered	Variables Removed	Method
1	EON ^b	.	Enter
a. Dependent Variable: CS			
b. All requested variables entered.			

Model Summary				
Mode	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.485 ^a	.236	.231	.75890
a. Predictors: (Constant), EON				

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31.590	1	31.590	54.849	.000 ^b
	Residual	102.516	178	.576		
	Total	134.106	179			

a. Dependent Variable: CS
b. Predictors: (Constant), EON

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.864	.242		7.708	.000
	EON	.478	.065	.485	7.406	.000
a. Dependent Variable: CS						

The presented analysis showcases the results of a regression model where the variable EON is introduced as a predictor to forecast the dependent variable CS.

The model summary highlights that the EON variable significantly relates to CS, indicated by an R Square value of 0.236. Approximately 23.6% of the variance in CS can be explained by EON, showcasing its moderate impact. The ANOVA results reinforce the significance of the model, revealing a substantial F-statistic ($F = 54.849, p < 0.001$).

Dissecting the coefficients, the regression equation is $CS = 1.864 + 0.478 * EON$. Here, the unstandardized coefficient for EON is 0.478, signifying that for each unit increase in EON, there's a corresponding increase of 0.478 in the CS score.

In essence, the analysis underscores that EON is a significant predictor of CS, explaining a notable proportion of variance in the dependent variable. The positive coefficient denotes a positive relationship, implying that higher values of EON are associated with higher values of CS. Overall, this regression model

demonstrates the predictive value of EON in determining CS and emphasizes its substantial impact on the predicted outcome.

(i) The Regression Analysis VA and CusLO:

Variables Entered/Removed^a			
Mode	Variables Entered	Variables Removed	Method
1	VA ^b	.	Enter
a. Dependent Variable: CusLO			
b. All requested variables entered.			

Model Summary				
Mode	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.434 ^a	.189	.184	1.08989
a. Predictors: (Constant), VA				

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	49.204	1	49.204	41.422	.000 ^b
	Residual	211.440	178	1.188		
	Total	260.644	179			
a. Dependent Variable: CusLO						
b. Predictors: (Constant), VA						

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.330	.323		4.114	.000
	VA	.553	.086	.434	6.436	.000
a. Dependent Variable: CusLO						

The analysis provided details the outcomes of a regression model where the variable VA is introduced as a predictor for the dependent variable CusLO.

The model summary indicates that VA significantly relates to CusLO, with an R Square value of 0.189. This signifies that approximately 18.9% of the variance in CusLO can be explained by VA. The ANOVA results further confirm the significance of the model, displaying a considerable F-statistic ($F = 41.422$, $p < 0.001$).

Breaking down the coefficients, the regression equation is $CusLO = 1.330 + 0.553 * VA$. The unstandardized coefficient for VA is 0.553, indicating that for each unit increase in VA, there is a corresponding increase of 0.553 in the CusLO score.

In summary, this analysis underscores that VA serves as a statistically significant predictor for CusLO, elucidating a substantial portion of the variance in the dependent variable. The positive coefficient signifies a positive relationship, suggesting that higher values of VA are associated with higher values of CusLO. Therefore, this regression model emphasizes the predictive value of VA in understanding and predicting CusLO.

(j) The Regression Analysis of PIQ and REV

Variables Entered/Removed ^a			
Mode	Variables Entered	Variables Removed	Method
1	PIQ ^b	.	Enter
a. Dependent Variable: Rev			
b. All requested variables entered.			

Model Summary				
Mode	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.446 ^a	.199	.194	1.01582
a. Predictors: (Constant), PIQ				

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	45.525	1	45.525	44.118	.000 ^b
	Residual	183.675	178	1.032		
	Total	229.200	179			
a. Dependent Variable: Rev						
b. Predictors: (Constant), PIQ						

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.955	.376		2.542	.012
	PIQ	.608	.091	.446	6.642	.000
a. Dependent Variable: Rev						

The analysis outlines the outcomes of a regression model where the variable PIQ is included as a predictor for the dependent variable Rev.

The model summary indicates that PIQ significantly relates to Rev, with an R Square value of 0.199. This implies that approximately 19.9% of the variance in Rev can be explained by PIQ. The ANOVA results further confirm the significance of the model, demonstrating a substantial F-statistic ($F = 44.118, p < 0.001$).

Examining the coefficients, the regression equation is $Rev = 0.955 + 0.608 * PIQ$. The unstandardized coefficient for PIQ is 0.608, indicating that for each unit increase in PIQ, there is a corresponding increase of 0.608 in the Rev score.

In summary, this analysis emphasizes that PIQ serves as a statistically significant predictor for Rev, explaining a noteworthy portion of the variance in the dependent variable. The positive coefficient suggests a positive relationship, indicating that higher values of PIQ are associated with higher values of Rev. Therefore, this regression model highlights the predictive value of PIQ in understanding and predicting Rev.

(k) The Regression Analysis of WR and Cartab:

Variables Entered/Removed ^a			
Mode	Variables	Variables	Method
1	Entered	Removed	
1	WR ^b	.	Enter
a. Dependent Variable: Cartab			
b. All requested variables entered.			

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.625 ^a	.390	.387	.71120
a. Predictors: (Constant), WR				

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	57.603	1	57.603	113.883	.000 ^b
	Residual	90.034	178	.506		
	Total	147.637	179			
a. Dependent Variable: Cartab						
b. Predictors: (Constant), WR						

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.530	.202		7.583	.000
	WR	.586	.055	.625	10.672	.000
a. Dependent Variable: Cartab						

The analysis provided entails the outcomes of a regression model where the variable WR is introduced as a predictor for the dependent variable Cartab.

The model summary reveals that WR significantly correlates with Cartab, with an R Square value of 0.390. This implies that approximately 39.0% of the variance in Cartab can be explained by

WR. The ANOVA results reinforce the significance of the model, displaying a substantial F-statistic ($F = 113.883$, $p < 0.001$).

Delving into the coefficients, the regression equation is $\text{Cartab} = 1.530 + 0.586 * \text{WR}$. Here, the unstandardized coefficient for WR is 0.586, indicating that for each unit increase in WR, there is a corresponding increase of 0.586 in the Cartab score.

In summary, this analysis underscores that WR serves as a statistically significant predictor for Cartab, explaining a considerable portion of the variance in the dependent variable. The positive coefficient implies a positive relationship, suggesting that higher values of WR are associated with higher values of Cartab. Therefore, this regression model highlights the predictive value of WR in understanding and predicting Cartab.

Chapter 5

1.1 Discussion

In order to conduct the Analysis on SPSS the independent Variable User Experience Design's Measurement Elements i.e. Website Load Time was coded as WLT, Ease of Navigation as EON, Visual Aesthetics as VA, Product Information Quality as PIQ and Responsiveness as Res. Similarly the dependent Variable Ecommerce Industry in Pakistan's measurement elements were i.e. Conversion Rate was coded as CR, Customer Satisfaction as CS, Customer Loyalty As CusLo, Revenue as Rev and Shopping Cart Abandonment as Cartab.

Relationship between Website Load Time (WLT) and Conversion Rate (CR) indicates a statistically significant correlation (0.393) between WLT and CR. This correlation signifies that as website load time decreases, there is a corresponding increase in the conversion rate. Moreover, the regression analysis further confirms this relationship, suggesting that a decrease in website load time is associated with a statistically significant increase in the conversion rate. This finding substantiates H1, providing strong evidence that shorter website load times positively correlate with higher conversion rates in e-commerce.

Impact of Ease of Navigation (EON) on Customer Satisfaction (CS) reveals a significant correlation (0.509) between EON and CS. This correlation implies that e-commerce websites with more user-friendly and intuitive navigation systems tend to experience higher levels of customer satisfaction. The regression analysis reinforces this relationship, indicating that an increase in ease of navigation significantly contributes to heightened customer satisfaction. These findings align

closely with H2, demonstrating that improving the ease of navigation positively influences customer satisfaction in the context of e-commerce.

Correlation between Visual Aesthetics (VA) and Customer Loyalty (CusLO) analysis showcases a notable correlation (0.553) between VA and CusLO. This correlation suggests that e-commerce websites with visually appealing designs and layouts tend to foster greater customer loyalty. The regression model supports this correlation, indicating that an enhancement in visual aesthetics significantly correlates with increased customer loyalty. These findings strongly support H3, highlighting the positive correlation between visual aesthetics and customer loyalty in the realm of e-commerce.

Impact of Product Information Quality (PIQ) on Revenue (Rev) Findings reveal a substantial correlation (0.608) between PIQ and Rev. This correlation indicates that e-commerce websites providing high-quality product information tend to generate higher revenue. The regression analysis solidifies this relationship, demonstrating that an improvement in the quality of product information significantly correlates with increased revenue generation. These results strongly corroborate H4, emphasizing the positive association between product information quality and revenue in e-commerce.

Relationship between Website Responsiveness (WR) and Shopping Cart Abandonment (Cartab)
The analysis highlights a significant correlation (0.586) between WR and Cartab. This correlation suggests that more responsive e-commerce websites tend to experience lower shopping cart abandonment rates. The regression analysis further reinforces this relationship, indicating that an

increase in website responsiveness significantly correlates with a decrease in shopping cart abandonment rates. These findings strongly support H5, indicating that improving website responsiveness leads to reduced shopping cart abandonment rates in the context of e-commerce.

Overall, the statistical analyses, correlations, and regression models provide robust evidence supporting the proposed hypotheses. They underscore the critical role of website load time, navigation ease, visual aesthetics, product information quality, and website responsiveness in influencing conversion rates, customer satisfaction, loyalty, revenue generation, and shopping cart abandonment rates in e-commerce. These findings underscore the importance of optimizing these aspects within e-commerce websites to enhance user experience, foster customer loyalty, improve revenue streams, and mitigate issues such as shopping cart abandonment, ultimately contributing to the success and competitiveness of e-commerce businesses.

Chapter 6

1.1 Conclusion and recommendations

1) Conclusion:

The study delved deeply into various facets of e-commerce website performance and their impact on crucial metrics such as conversion rates, customer satisfaction, loyalty, revenue generation, and shopping cart abandonment rates. The analyses revealed compelling correlations and regression models that affirm the significance of website load time, ease of navigation, visual aesthetics, product information quality, and website responsiveness in shaping the success of e-commerce ventures.

Website load time emerged as a pivotal factor significantly linked to conversion rates. The inverse relationship observed suggests that reducing website load times positively influences conversion rates, emphasizing the criticality of optimizing site speed for higher conversions. Moreover, the strong correlation between ease of navigation and customer satisfaction highlights the need for user-friendly interfaces to enhance customer experiences and satisfaction levels.

Visual aesthetics were identified as a key driver of customer loyalty, indicating that aesthetically pleasing designs contribute to building stronger customer loyalty. Additionally, the association between high-quality product information and increased revenue underscores the importance of providing accurate and detailed product information to drive sales.

Furthermore, the correlation between website responsiveness and reduced shopping cart abandonment rates emphasizes the necessity of responsive design to prevent customer drop-offs during the purchase process. These insights collectively underscore the holistic impact of website performance on customer behavior and business outcomes in the e-commerce landscape.

(I) Recommendations:

For future research endeavors based on the findings and gaps identified in the study:

- **Deep Dive into Specific Elements:** Future research could delve deeper into specific elements within each studied variable. For instance, within website load time (WLT), exploring the impact of individual components contributing to load time, such as image sizes, script handling, or server response, could provide more granular insights. Similarly, in the case of ease of navigation (EON), examining specific navigation features or layout designs that significantly influence customer satisfaction might offer more targeted strategies for improvement.
- **Longitudinal Studies for Dynamics:** Conducting longitudinal studies could help capture the evolving nature of user behavior and preferences over time. Understanding how changes in website elements affect user engagement, satisfaction, and loyalty over extended periods can provide a comprehensive view of e-commerce dynamics. Longitudinal research could track user interactions and preferences, enabling a more in-depth understanding of trends and long-term impacts.
- **Causal Relationships and Intervention Studies:** While this study identified correlations, future research could explore causal relationships. Implementing interventions or experiments, such as A/B testing, to deliberately modify specific website elements and observing their direct impact on user behavior or key performance indicators could help

establish causality. This approach can provide actionable insights for e-commerce businesses seeking to optimize their websites.

- **Qualitative Analysis for User Perspectives:** Complementing quantitative data with qualitative research methods, such as user interviews or focus groups, can offer deeper insights into user perspectives and motivations. Understanding user preferences, experiences, and pain points regarding website features or information quality can enrich the understanding gained from quantitative analyses and inform more user-centered strategies.
- **Cross-Cultural and Industry-Specific Studies:** Exploring how these relationships vary across different cultures or industries within the e-commerce landscape could provide valuable insights. Variations in user preferences, behaviors, and responses to website elements across diverse cultural contexts or industry sectors may reveal nuanced strategies for enhancing website performance tailored to specific audience segments.
- **Integration of Emerging Technologies:** Investigating the influence of emerging technologies, such as augmented reality (AR), virtual reality (VR), or artificial intelligence (AI), on user experiences and website performance could be a promising avenue. Assessing how these technologies impact user engagement, satisfaction, and conversion rates in e-commerce settings can offer valuable insights into the future direction of online retail experiences.

Ethical and Privacy Considerations: Research focusing on the ethical implications and privacy concerns related to the collection and utilization of user data in e-commerce can provide valuable guidelines for businesses. Understanding user perceptions and concerns regarding

data privacy and ethical use of personal information can inform responsible and transparent practices in website design and operation.

By pursuing these avenues for future research, scholars and practitioners can further enhance the understanding of how various elements of e-commerce websites impact user behavior and performance metrics. These recommendations aim to provide actionable insights and contribute to the ongoing optimization and advancement of e-commerce practices.

Chapter 7

1.1 References

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Appendix

Section 1.14 Appendix 1:

Business Benefits of User Experience: Maximizing Impact.

Dear Recipient,

I hope this message finds you in good spirits. I am Zainab Mir, currently specializing in MBA Management with a focus on Information Systems at Bahria University Islamabad, Pakistan. I am engaged in a significant academic research project aimed at enhancing the Pakistan Ecommerce industry's focus on User Experience Design (UXD).

Your valuable input in completing a research questionnaire would greatly contribute to this study. Your insights will be handled with the utmost confidentiality and will play a pivotal role in advocating for the prioritization of User Experience Design within the Pakistani Ecommerce landscape.

Please know (The user experience of a website is how comfortable and easy it feels for people when they use the site - like how simple it is to find things and how nice it looks and feels while they're using it.) Your Answers Should be based on this information.

Thank you sincerely for considering participation in this research. Your time and support are immensely appreciated.

Warm regards,

Zainab Mir

Bahria University Islamabad, Pakistan

MBA Management in Information Systems

zainabmir1494@gmail.com

Please circle one of the following options:

Age:

- Under 18
- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65 or older

Your education is:

- High School or less
- Bachelor's degree

- Master's degree
- Doctorate or higher

Are you an.

- Online Shopper
- Physical Shopper (like in malls or shops in person shopping)
- both

1. Website load time to conversion rate assessment

Website Load Time to Conversion Rate Assessment. Please rate Scale of 1-5 "where 1 strongly disagree and 5 strongly agree".

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Description	1	2	3	4	5
1. On a scale of 1 to 5, how would you rate the loading speed of the e-commerce websites you frequently visit?					
2. Have you ever abandoned a purchase due to slow website loading times?					
3. If yes, how often does this occur?					
4. Do you believe that faster website load times positively influence your purchasing decisions?					

5. How likely are you to revisit a website with slow loading times for future purchases?					
--	--	--	--	--	--

2. Impact of ease of navigation on customer satisfaction

Please Rate on a Scale of 1-5 "where 1 strongly disagree and 5 strongly agree" the 1. Impact of ease of navigation on customer satisfaction".

Description	Disagree	Strongly	Disagree	Neutral	Agree	Strongly
	1	2	3	4	5	
1. How would you rate the ease of finding products/categories on the e-commerce websites you use?						
2. Do you think a well-organized website structure contributes to your satisfaction while shopping online?						
3. Have you abandoned a purchase because you couldn't find the product/category easily?						
4. If yes, how frequently Do you abandon?						
5. How likely are you to recommend an e-commerce website based on its navigation experience?						

3. Correlation between visual aesthetics and customer loyalty

Please Rate on a Scale of 1-5 "where 1 strongly disagree and 5 strongly agree" the Correlation between visual aesthetics and customer loyalty.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Description	1	2	3	4	5
1. Do you consider the visual appearance of an e-commerce website when deciding to make a purchase?					
2. How much does the design and layout of a website influence your likelihood to return for future purchases?					
3. Would you say that an aesthetically pleasing website design increases your loyalty to a particular brand or online store?					
4. Have you ever switched to a competitor due to dissatisfaction with the visual design of an e-commerce website?					

4. Effect of product information quality on revenue

Please Rate on a Scale of 1-5 "where 1 strongly disagrees and 5 strongly agree" the effect of product information quality on revenue.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

Description	1	2	3	4	5
1. How important is detailed product information (descriptions, images, reviews) when making a purchase decision?					
2. Have you refrained from purchasing a product due to insufficient or unclear product information?					
3. Would you be willing to pay more for a product with comprehensive and accurate information provided?					
4. How likely are you to return to a website that provides comprehensive product details?					

5. Relationship between website responsiveness and cart abandonment

Please Rate on a Scale of 1-5 "where 1 strongly disagree and 5 strongly agree" the Relationship between website responsiveness and cart abandonment.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Description	1	2	3	4	5
1. Have you experienced delays or issues when adding items to your shopping cart on e-commerce websites?					
2. How likely are you to abandon a purchase if the website is unresponsive while managing your shopping cart?					
3. Do you think a responsive website reduces the likelihood of abandoning a shopping cart?					

4. Have you encountered checkout problems (slow loading, errors) leading to abandoning your shopping cart?					
5. If yes, then How often?					

PLAGIARISM REPORT

1212

ORIGINALITY REPORT

13%	9%	8%	8%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

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