



**THE IMPACT OF CUSTOMER JOURNEY INTEGRATED WITH
ARTIFICIAL INTELLIGENCE ON CUSTOMER EXPERIENCE**

Master's Thesis in Business Administration

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ÖZET

The Impact of Customer Journey Integrated with Artificial Intelligence on Customer Experience

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İşletme Bölümü

Anadolu Üniversitesi, Lisansüstü Eğitim Enstitüsü, Ocak 2025

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Yapay Zekâ (YZ), müşteri etkileşimlerini yeniden şekillendirerek işletmelerin müşteri yolculuğunun farklı aşamalarında tüketicilerle daha etkili bir şekilde bağlantı kurmasını sağlamaktadır. Bu çalışma, YZ çağında müşteri yolculuğunun çeşitli aşamalarındaki müşteri etkileşimlerini incelemeyi hedeflemiştir. Müşteri yolculuğu, farkındalık, değerlendirme, satın alma ve satın alma sonrası deneyim aşamalarını kapsamaktadır. Araştırma, 352 katılımcıdan veri toplamak için kendi kendine doldurulan bir anket kullanılarak yürütülmüş ve nicel bir yöntem uygulanmıştır. Farklı sektörlerin temsil edilmesi ve sonuçların daha genellenebilir olması için kolayda örnekleme tekniği tercih edilmiştir. Yapılan Açıklayıcı Faktör Analizi (EFA), ölçüm aracının yapı geçerliliğini doğrulamış ve güvenilirliği 0.864 olarak belirlemiştir. Betimsel istatistikler, YZ'nin rolüne ilişkin müşteri farkındalığının en yüksek ortalamaya sahip olduğunu; bunu, YZ'nin kişiselleştirilmiş önerilerine duyulan güven ve YZ tabanlı satın alma sorgularının takip ettiğini göstermiştir. T-testi ve ANOVA analizleri, cinsiyet, yaş, medeni durum, istihdam durumu ve gelir gibi demografik faktörlerin, müşterilerin YZ'ye yönelik algılarını anlamlı bir şekilde etkilediğini ortaya koymuştur. Çoklu regresyon analizi, müşteri farkındalığı ve değerlendirme aşamalarının, müşteri deneyimini en güçlü şekilde öngören faktörler olduğunu göstermiştir. Genel model, müşteri deneyimindeki varyansın %45.9'unu açıklamaktadır. Araştırma, işletmelere YZ'nin şeffaflığını ve güvenilirliğini artırmalarını; özellikle YZ destekli karar verme ve öneri sistemlerinde müşteri güvenliğini geliştirmek için satın alma sonrası etkileşimlerde YZ'nin işlevini güçlendirmelerini tavsiye etmektedir.

Anahtar Kelimeler: Yapay Zekâ, Müşteri Yolculuğu, Müşteri Deneyimi

ABSTRACT

The Impact of Customer Journey Integrated with Artificial Intelligence on Customer Experience

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Anadolu University, Graduate School, January 2025

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Artificial Intelligence (AI) transforms customer interactions by improving how businesses connect with consumers at different customer journey stages. This study aims to analyze the stages of customer interaction during the customer journey in the era of AI. The essential stages of the customer journey encompass customer awareness, consideration, purchase, and post-purchase experiences. The study employs a quantitative research design, utilizing a self-administered questionnaire to collect data from 352 participants. Convenience sampling was employed to guarantee diverse industry representation, thereby augmenting the generalizability of the results. Exploratory Factor Analysis (EFA) confirmed the construct validity of the measurement instrument, with reliability of 0.864. Descriptive statistics revealed that customer awareness of AI's role scored the highest mean, followed by strong customer trust in AI's personalized recommendations, and AI-driven purchase inquiries. Inferential statistics, including t-tests and ANOVA, confirmed that demographic variables such as gender, age, marital status, employment status, and income did not significantly affect customer perceptions of AI's role. The multiple regression analysis identified customer awareness, and customer consideration as the most influential predictors of customer experience. The overall model explained 45.9% of the variance in customer experience. The study suggests businesses enhance AI transparency and reliability, augmenting AI's function in post-purchase engagements to cultivate increased customer trust, especially in AI-driven decision-making and recommendation systems.

Keywords: Artificial Intelligence, Customer Journey, Customer Experience

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This thesis is a testament to the collective strength, sacrifices, and support of those around me, and I dedicate it to them with immense gratitude.

14/01/2025

STATEMENT OF COMPLIANCE WITH ETHICAL PRINCIPLES AND RULES

I hereby truthfully declare that this thesis is an original work prepared by me; that i have behaved in accordance with the scientific ethical principles and rules throughout the stages of preparation, data collection, analysis and presentation of my work; that I have cited the sources of all the data and information that could be obtained within the scope of this study, and included these sources in the references section; and that this study has been scanned for plagiarism with “scientific plagiarism detection program” used by Anadolu University, and that “it does not have any plagiarism” whatsoever. I also declare that, if a case contrary to my declaration is detected in my work at any time, I hereby express my consent to all the ethical and legal consequences that are involved.

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Yasmin E.N.AL Nabahin

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ABBREVIATIONS

AI	Artificial Intelligence
B2B	Business to Business
NLP	Natural Language Processing
CX	Customer Experience
PWC	Price water house Coopers
WEF	World Economic Forum
AR	Augmented Reality
CJ	Customer Journey
AICJECE	AI and the Customer Journey: Enhancing the CX

INTRODUCTION

AI has transformed the customer journey in recent years, affecting business. It has transformed customer experience management, giving companies new ways to interact with customers (Lemon & Verhoef, 2016). Companies can improve customer engagement, personalization, and prediction by integrating AI into the customer journey (Bag et al., 2020). The customer journey typically involves multiple business-consumer touchpoints. The initial awareness and post-purchase support touchpoints shape consumer perception and brand loyalty (Lemon & Verhoef, 2016). AI has made this journey more dynamic and personalized, allowing businesses to offer customized experiences based on individual preferences and behaviors (Chopra & Rajan, 2016). Companies can now analyze consumer data in real-time using AI, enabling proactive engagement and quick customer responses.

Customer journeys were traditionally reactive, with businesses responding to stated requests or complaints (Stein & Ramaseshan, 2016). AI has changed this model by encouraging proactive engagement. Based on data patterns, AI technologies allow businesses to predict customer needs and provide personalized interventions before they ask (De Keyser et al., 2020). It has transformed the customer experience, increasing satisfaction and loyalty in a competitive market. AI's ability to efficiently process large amounts of data significantly benefits the customer journey. AI-driven systems can analyze data regarding customers to reveal their preferences, behaviors, and pain points (Grewal et al., 2017). This real-time analysis helps businesses make decisions and implement strategies that improve customer experience and operational performance. Thus, AI may be said to transform business strategies from reactive to proactive engagement.

The customer journey, from awareness to post-purchase, relies on AI. Machine learning algorithms help businesses identify and target the right audience for their products and services during awareness (Chopra & Rajan, 2016). AI boosts engagement and interest by targeting the right consumer segments with personalized marketing content. It provides personalized recommendations based on customer behavior and preferences during consideration (Huang & Rust, 2018). Personalization guides potential buyers through the decision-making process, increasing conversion rates. AI can simplify the purchase process by suggesting products or using dynamic pricing models based on

customer profiles (Bag et al., 2020). It also improves customer experience after purchase. AI-powered chatbots and virtual assistants reply to customer inquiries quickly and personally. These tools simplify post-purchase engagement, improving customer satisfaction and loyalty (De Keyser et al., 2020).

AI's most significant benefit is its ability to strengthen business-customer relationships. It helps businesses create emotional connections through personalized and relevant experiences (Bag et al., 2020). Personalization fosters trust and loyalty, crucial for customer retention in today's competitive market. Accordingly, AI affects business operations beyond customer interactions. Various marketing activities (e.g., sales and customer support) can be optimized using AI insights, improving operational efficiency (Stein & Ramaseshan, 2016). Automating routine tasks saves money and frees up resources for strategic projects, improving customer satisfaction (Grewal et al., 2017). AI and the customer journey transform business strategy. AI helps businesses target and personalize customer interactions by analyzing large datasets regarding customer behavior (Huang & Rust, 2018). This is vital for businesses because maintaining competitiveness in today's market requires personalized and timely experiences to meet rising consumer expectations (Lemon & Verhoef, 2016).

Today, consumers want to engage in experiences that meet their needs and preferences, not just buy goods and services. AI's ability to deliver these experiences throughout the customer journey gives businesses a competitive edge (Bag et al., 2020). Businesses competing in the digital age must offer hyper-personalized interactions (Grewal et al., 2017). Linear customer journeys have given way to fluid, interconnected ones. AI insights into customer journeys help businesses navigate this complexity (De Keyser et al., 2020). These insights help them deliver the right content, product recommendations, and support at the right time for a seamless and engaging customer experience (Stein & Ramaseshan, 2016). AI enhances customer journey mapping accuracy. The effectiveness of traditional mapping methods was limited by generalized consumer behavior assumptions (Lemon & Verhoef, 2016). AI can analyze customer behaviors in real-time, allowing businesses to create highly personalized journey maps that reflect each consumer's unique path (Chopra & Rajan, 2016). This level of personalization increases customer satisfaction and loyalty.

AI improves customer journey strategies continuously. Businesses can dynamically optimize their strategies using AI-driven systems that analyze customer feedback and behavior (Huang & Rust, 2018). Businesses stay competitive and agile by adapting quickly to consumer expectations and market conditions. AI in customer journeys is not limited to large businesses. Due to their accessibility, small and medium-sized businesses also use AI tools to improve customer experience (Bag et al., 2020). AI-driven innovation democratization allows businesses of all sizes to compete in customer experience management. However, implementing AI in the customer journey is difficult. Businesses must have the proper infrastructure and trained teams to manage AI systems (Grewal et al., 2017). Considerations should include data privacy, transparency, and AI bias (De Keyser et al., 2020). If businesses implement AI carefully, the benefits of improving the customer journey outweigh the risks (Canhoto & Clear, 2020; Challoumis, 2024). AI has become a key driver of customer experience improvement throughout the customer journey. Despite its growing presence, little is known about how AI affects awareness, consideration, purchase, and post-purchase and whether these effects vary by gender. Technology has complicated the customer journey, a dynamic and multifaceted process. AI often provides customers with personalized, seamless experiences that meet their needs and wants. The impact of AI on customer engagement at each stage of the journey is unclear.

AI tools like chatbots, recommendation engines, and social media algorithms shape first impressions of brands during the awareness stage. Businesses rarely have empirical evidence on how AI-driven customer awareness strategies improve customer experience. Understanding AI's role in customer awareness can help brands boost visibility and engagement. In the consideration stage, AI-driven personalization and predictive analytics influence customers' choices. AI can help customers make informed decisions, but its impact on customer experience is unclear. Businesses seeking to provide personalized, data-driven recommendations that resonate with customers must understand AI's role in this stage. Perhaps the most critical stage of the customer journey is purchase. Optimization of this stage often uses AI applications like dynamic pricing models, fraud detection algorithms, and streamlined checkout processes. The relationship between AI-driven processes and customer satisfaction in this stage needs further study. Many businesses still struggle to balance automation and personalization, resulting in inconsistent customer satisfaction.

The post-purchase stage is also crucial to customer retention and brand loyalty. AI-driven customer support, feedback analysis, and loyalty programs enhance post-purchase experiences. However, little is known about how AI affects customer satisfaction at this stage, which is crucial for long-term retention. Investigating AI's role in post-purchase experiences can boost customer loyalty and decrease churn. Finally, Businesses may alienate specific customer segments by not exploring these differences, missing opportunities for AI application improvements. Therefore, this study investigates how the AI-integrated customer journey stage affects customer experience while considering if there are any differences between the genders to fill the knowledge gap. Businesses that want to improve customer experience, satisfaction, and long-term relationships must understand these dynamics. Accordingly, this study aims to give businesses actionable insights into how AI improves customer experience at each stage of the customer journey, taking gender into account. Also, the study can help businesses to improve AI-driven strategies, customer satisfaction, and customer loyalty.

The structure of the thesis begins with an Introduction, which sets the research context and objectives, establishing a foundation for the study. The Literature Review (Chapter 1) delves into relevant concepts such as the customer journey (CJ), its stages, and the critical touchpoints, providing theoretical grounding. Next, Research Methodology (Chapter 2) outlines the research design, data collection methods, analysis techniques, and ethical considerations, ensuring methodological transparency and reliability. Following this, the Results and Data Analysis (Chapter 3) presents the collected data, analyzes it systematically, and interprets the findings in relation to the research questions. Finally, Summary and Conclusions (Chapter 4) encapsulates the findings, discusses their implications, and concludes the study, offering insights and recommendations for future research. This structure ensures logical flow and clarity, guiding readers from foundational theory to research findings and practical outcomes.

CHAPTER 1

1. LITERATURE REVIEW

1.1. Background

In the contemporary arena of commerce, the amalgamation of AI with the intricate pathway known as the customer journey stands as a dynamic force shaping the very fabric of how businesses function and interact with their clientele (He & Liu, 2024). This fusion represents more than a mere technological integration; it embodies a profound shift in strategy, perception, and engagement that has redefined the contours of modern-day commerce. At its core, this synergy between AI technologies and the customer journey elucidates an intricate dance of interactions, insights, and experiences. It's not solely about leveraging AI's algorithms or machine learning capabilities, but rather about reimagining customer relationships from mere transactions to enduring, personalized journeys (Okazaki & Inoue, 2022).

Understanding the depth and implications of this convergence is paramount in today's digitally charged economy. It signifies a pivotal moment, a juncture where businesses are poised at the threshold of innovation and adaptation. Those who harness this transformative potential can sculpt unparalleled customer experiences while concurrently fortifying the very foundations of their operational prowess (Davenport et al., 2007). The journey of a customer, from that initial point of contact to becoming a devoted brand advocate, meanders through multifaceted landscapes of interaction. Each touchpoint, each engagement, encapsulates opportunities and challenges for businesses. Herein lies the potency of AI - an intelligence that can decipher intricate patterns within these interactions, unearth latent preferences, and predict future behavior (Wetter Edman, 2011).

The significance of this convergence cannot be overstated. It's a catalyst for redefining the traditional paradigms of customer engagement (Vuong & Mai, 2023). No longer is it sufficient to merely react to customer needs; the integration of AI empowers businesses to proactively address these needs, often before they are articulated, fostering a sense of anticipation and satisfaction that forges enduring customer loyalty. Moreover, this symbiosis transcends the realms of customer-centricity. It permeates the operational fabric of businesses, infusing efficiency, agility, and innovation into their core. AI-driven

insights not only refine marketing strategies or optimize sales processes but also permeate supply chains, enhance product development, and redefine service delivery mechanisms (De Bruyn et al., 2020).

In essence, this convergence is more than just a technological partnership. It's an evolution in mindset, a realization that the future of commerce resides in the seamless interplay between advanced technologies and human-centric experiences. It is about the marriage of data-driven precision with the art of understanding human emotions, needs, and aspirations (Kong et al., 2018). In today's hyper connected and information-abundant world, businesses are presented with an unprecedented canvas upon which to paint remarkable experiences. AI serves as both brush and palette, enabling businesses to craft intricate portraits of customer journeys that resonate deeply, fostering relationships that extend beyond transactions into realms of emotional connection and brand advocacy (Heikkinen, 2022). This exploration seeks to delve into the intricacies of this transformative fusion - unveiling how the synergy between AI and the customer journey redefines the essence of business-customer relationships, propelling enterprises towards the zenith of success in an era characterized by perpetual evolution and ever-heightening consumer expectations (Parshivlyuk & Panchenko, 2022).

The symbiotic integration of AI within the customer journey framework stands as the cornerstone of a transformative era in the fabric of modern business. This fusion represents more than a technological collaboration; it embodies a strategic metamorphosis, empowering enterprises to traverse uncharted terrains of customer engagement with unparalleled precision and insight (Ameen et al., 2021). The evolution of AI technologies across diverse industry sectors has propelled these innovations beyond mere tools. They have evolved into indispensable assets, enabling businesses to decode, forecast, and respond to the intricate tapestry of customer behaviors, preferences, and expectations. AI becomes the discerning eye that peers into the intricate mosaic of consumer interactions, deciphering subtle patterns that elude human observation and discernment (Ahmad et al., 2023).

The promise embedded within this fusion extends far beyond the realms of traditional customer engagement. It heralds an epoch where businesses not only react but anticipate, not only respond but preemptively cater to the diverse needs and aspirations of their clientele. This empowerment to foresee and fulfill unspoken customer demands

is the essence of customer-centricity in its truest form (Roslan & Ahmad, 2023). AI's ability to synthesize vast troves of data, discern latent insights, and extrapolate future trends equips enterprises to craft bespoke, personalized experiences that resonate profoundly with their clientele. It's akin to an intuitive understanding of individual preferences, tailored to fit each customer's unique journey. The result is an ecosystem where consumers feel seen, heard, and understood a foundational pillar in nurturing enduring brand loyalty and advocacy (Shah et al., 2023).

This transformation is not merely transactional; it transcends the customary buyer-seller relationship. It engenders an emotional bond, an empathetic connection forged through personalized interactions and anticipatory solutions. In this era of information abundance, where consumers are inundated with choices, the ability to curate experiences that align seamlessly with their desires becomes the differentiator between mere service providers and cherished brand partners (Masitenyane, 2020). Moreover, this fusion is a catalyst for innovation. It catalyzes the genesis of novel business models, facilitates agile adaptations, and fuels a culture of continual improvement. It is the impetus behind the development of products and services meticulously honed to cater precisely to the evolving needs and aspirations of a dynamic customer base (MAHAR, 2023).

As businesses navigate an ever-changing marketplace, the fusion of AI and the customer journey guides them toward sustainable growth and resilience. It is the fusion of human ingenuity with technological prowess, propelling enterprises towards a horizon where customer satisfaction isn't merely a goal but an intrinsic facet of every operational aspect (Aldoseri et al., 2023). The symbiosis between AI and the customer journey encapsulates a promise to reimagine, redefine, and revolutionize how businesses engage, understand, and serve their clientele. It embodies the potential to transform transactions into meaningful relationships, aspirations into realities, and businesses into catalysts of enduring customer satisfaction and loyalty.

This study embarks on a multifaceted exploration with the overarching objective of unraveling the intricate relationship between AI-integrated customer journey and customer experience. Its primary aim is to delineate how the amalgamation of these realms redefines customer experiences while concurrently optimizing business performance. This will analyze how AI interventions intersect with distinct stages of the customer journey, elucidating the specific touchpoints where AI-driven strategies

augment engagement, satisfaction, and retention. Furthermore, it will navigate the terrain where AI optimizes internal operations, propelling businesses toward heightened efficiency, revenue generation, and competitive advantage (Allioui & Mourdi, 2023).

1.2. Understanding the Customer Journey: Navigating Consumer Pathways

The customer journey stands as an intricate tapestry, intricately woven from the initial encounter individuals have with a brand or service to the eventual establishment of enduring relationships. This odyssey is far from a linear sequence; it transcends simple transactions, encapsulating a richly textured maze of diverse stages, touchpoints, and interactions. Each twist and turn hold profound significance within this labyrinth, subtly molding and sculpting consumer experiences and perceptions (Siregar et al., 2023). The various stages of customer journey are as follows;

1.2.1. Awareness Stage

At its core, the customer journey commences with the stage of awareness, where individuals become acquainted with a brand's existence, often through advertisements, social media exposure, or recommendations from peers. This initial interaction lays the foundation for subsequent engagements and significantly influences the path individuals traverse throughout their journey (Hayes et al., 2022). To deepen understanding at this stage, research indicates that effective advertising storytelling (Berger & Milkman, 2012) and engaging social media content (Smith et al., 2016) play pivotal roles in capturing consumer attention.

1.2.2. Consideration Stage

Progressing further, individuals enter the consideration stage, characterized by active exploration and evaluation. Here, consumers seek in-depth information, compare offerings, and weigh alternatives. Touchpoints during this stage range from extensive online research and consultation of reviews to engaging with sales representatives. These interactions influence consumers' decisions and shape their perceptions about brands (Lombardi et al., 2021). Research emphasizes the importance of transparent and easily accessible information (Flanagin & Metzger, 2014) and the role of peer reviews in shaping consumer choices (Chevalier & Mayzlin, 2006).

1.2.3. Purchase Stage

The journey then culminates at the pivotal purchase stage, where individuals commit to a transaction. This stage marks a significant milestone, transitioning consumers from contemplation to action, representing the culmination of their decision-making process (Vollrath & Villegas, 2021). Some research emphasizes the impact of various factors at this stage, including pricing strategies (Nagle & Müller, 2017), personalized offers (Bawa & Shoemaker, 2004), and the ease of the purchasing process itself (Kim & Moon, 1998).

1.2.4. Post-Purchase Stage

However, the journey doesn't conclude with a purchase; it extends into the post-purchase realm. The post-purchase experience encompasses consumer satisfaction, support, and engagement following the transaction. It includes some actions such as product usage, customer service interactions, and feedback sharing. This stage is instrumental in solidifying impressions, impacting brand loyalty, and influencing future interactions and purchases (Ramelan et al., 2023). Research highlights the significance of post-purchase communication (Hennig-Thurau et al., 2002) and the role of customer support in fostering long-term relationships (Reinartz & Kumar, 2002). Within this labyrinth of the customer journey, various touchpoints and interactions hold substantial influence. Online touchpoints, including websites, social media platforms, emails, and mobile applications, serve as primary channels for consumer engagement. Concurrently, offline touchpoints such as physical store visits, customer service calls, or traditional advertising contribute to tangible experiences that leave lasting impressions on consumers. In essence, this complex and multifaceted expedition epitomizes individuals' journey when engaging with a brand or service. Its significance lies in obtaining goods or services and in the mosaic of experiences, perceptions, and emotions that shape enduring relationships between consumers and brands (Marino & Lo Presti, 2019).

1.3. Exploring the Nuances of the Customer Journey Stages and Touchpoints

The customer journey, a dynamic and intricate expedition, navigates individuals through multiple stages, each playing a pivotal role in shaping their interactions with a brand. It serves as a roadmap guiding consumers from their initial awareness of a good or service to the culmination of transactions and beyond. This journey isn't just a mere progression; it's an immersive experience woven with touchpoints, decisions, and

emotions that intertwine to craft a narrative unique to each consumer (Patel & Gahletia, 2020). Amidst the stages of awareness, consideration, purchase, and the post-purchase experience, lies a mosaic of interactions, decisions, and experiences that paint a holistic picture of consumer engagement (Lahbib et al., 2023). This expedition embodies not just transactions but encapsulates the very essence of a brand-consumer relationship, fostering moments of connection, understanding, and satisfaction that shape lasting impressions and loyalty. The main customer journey stages in terms of touchpoints are as follows:

1.3.1. Awareness: The Foundation of Consumer Engagement

The initial stage of the customer journey, awareness, serves as the gateway to consumer-brand interactions, marking individuals' first encounters with a brand's existence and offerings. Research indicates that 90% of consumers form their initial impressions of a brand within the first few seconds of exposure, showcasing the critical importance of this touchpoint (Følstad & Kvale, 2018). Diverse channels act as facilitators during this stage. To illustrate, 83% of consumers trust recommendations from friends and family, making word-of-mouth recommendations a substantial influencer in shaping brand perceptions (Luo et al., 2019). Furthermore, the prevalence of social media platforms in this digital age cannot be overlooked. Research from Sprout Social reveals that 54% of consumers use social media to search for products. This proves the significance of social platforms as key channels for brand discovery and awareness-building (Nikolinakou & Phua, 2019). Moreover, the power of advertisements in fostering brand recognition is evident. To illustrate, 76% of consumers say that advertising has a significant impact on their purchasing decisions. Whether through TV commercials, online banners, or sponsored content, advertisements are instrumental in introducing consumers to brands, leaving a lasting imprint on their perceptions (Staniewski & Awruk, 2022).

Neuroscientific studies on consumer behavior highlight that these initial exposures trigger emotional responses that influence subsequent interactions (Cherubino et al., 2019). Emotional connection with a brand can lead to a 306% higher lifetime value, underlining the enduring impact of these first impressions on consumer loyalty and engagement (Segarra-Moliner & Moliner-Tena, 2022). Additionally, data-driven approaches have shown remarkable efficacy in targeting potential consumers during the awareness stage. Businesses can precisely identify and reach out to their target

demographic by leveraging analytics and consumer insights, optimizing their advertising efforts for enhanced impact and resonance (Aiolfi et al., 2021). The awareness stage might be said to form the bedrock of consumer-brand relationships, laying the groundwork for subsequent engagements. It's not merely an introduction but an impression significantly influencing consumer perceptions, emotions, and subsequent interactions with a brand or service.

1.3.2. Advancing to the Consideration Stage

As consumers progress along the customer journey, they transition into the consideration stage, a pivotal stage characterized by active and informed decision-making processes. Research from McKinsey reveals that 81% of consumers conduct online research before making a purchase, underscoring the critical importance of this stage in the decision-making journey (Trivedi et al., 2021). This stage involves meticulous scrutiny of available alternatives, thorough research, and comparisons (Qaisi et al., 2023). Academic studies in consumer behavior highlight that consumers engage in extensive information-seeking behaviors during this stage. They explore multiple touchpoints, seeking validation and information to aid their decision-making process (Towers & Towers, 2021).

Website visits constitute a significant touchpoint during the consideration stage. According to research by Forrester, 74% of B2B buyers conduct more than half of their research online before making an offline purchase. Websites serve as a key platform where consumers gather information, assess offerings, and explore product specifications and features (Steward et al., 2019). Online reviews and user-generated content hold considerable influence during this stage. To illustrate, 87% of consumers read online reviews for local businesses, with 79% trusting online reviews as much as personal recommendations. Forums and discussion boards provide additional avenues for consumers to gather insights, share experiences, and seek advice from peers, contributing significantly to their decision-making process (Raoof Panah, 2021). Product demos and trials also play a crucial role. Research by TechValidate indicates that 30% of consumers say a product demo significantly influences their decision-making process. Experiencing the good or service firsthand enables consumers to assess its suitability, functionality, and value, thereby shaping their perceptions and preferences (Cerqueira, 2022). Additionally, psychological studies on consumer decision-making processes reveal that consumers

undergo a cognitive evaluation of available options during the consideration stage. They weigh the perceived benefits against each alternative's costs, risks, and potential gains, guiding their ultimate purchase decisions (Sharma et al., 2023).

1.3.3. The Purchase Stage: Transitioning Intent into Action

The culmination of the customer journey's initial stages culminates at the purchase stage, marking a significant leap from contemplation to action. This pivotal touchpoint is not merely the final step but the culmination of a complex decision-making journey that leads consumers to commit to a transaction (Bulleri, 2023). Research in consumer psychology emphasizes that the act of making a purchase is not solely a rational decision but is often influenced by emotional triggers. To illustrate, 95% of purchasing decisions are driven by subconscious emotional reactions. Therefore, brands leveraging emotional connections at this stage can significantly impact consumer choices and foster brand loyalty (Kalaganis et al., 2021).

The role of convenience and frictionless experiences cannot be overstated during the purchase stage. A survey by Baymard Institute found that 28% of consumers abandon their cart during the checkout process due to a complicated or lengthy process. Simplifying the purchase process, offering multiple payment options, and providing transparent pricing significantly influence the completion of transactions (Bell et al., 2020). Moreover, social proof and urgency play a pivotal role in the purchase stage. Social proof influences 70% of consumers' purchase decisions, such as user-generated content or testimonials. Incorporating scarcity or limited time offers creates a sense of urgency, prompting 60% of consumers to make impulse purchases (Pan, 2019). In the digital era, the influence of mobile shopping has skyrocketed. Data from Statista shows that 73% of e-commerce sales are expected to come from mobile devices by 2021. Brands optimizing their platforms for mobile shopping experiences are better positioned to capitalize on consumers' preferences for convenience and on-the-go transactions (Bubanja & Vidas-Bubanja, 2022).

Furthermore, the post-purchase experience intertwines with the purchase stage, influencing consumers' perceptions after the transaction. Research by PwC indicates that 32% of consumers would stop doing business with a brand they loved after just one bad experience. Therefore, ensuring a seamless transition from purchase to product delivery and post-purchase support is imperative in maintaining consumer satisfaction and loyalty

(Marcus, 2021). In essence, the purchase stage represents the culmination of consumers' decision-making journey, guided by emotional triggers, convenience, social proof, and a seamless transactional experience. It signifies the transition from evaluation to action and the initiation of a brand-consumer relationship post-purchase.

1.3.4. The Post-Purchase Experience: Nurturing Long-Term Relationships

Moving beyond the transaction, the post-purchase stage emerges as a pivotal yet often overlooked segment of the customer journey (Gelhever, 2022). It extends beyond the mere completion of a transaction, encapsulating a realm where consumer satisfaction, support, and engagement come to the forefront (Sharkasi & Agag, 2024). Research underscores that the post-purchase experience profoundly influences brand perceptions and shapes future interactions and purchases (Smith et al., 2023). Studies conducted by Salesforce reveal that 84% of consumers consider their experience with a business to be as crucial as its goods and services. Thus, ensuring a seamless post-purchase journey is crucial in fostering lasting relationships and brand advocacy (Gordon et al., 1997). Consumer satisfaction within this stage is influenced by the product's performance and the level of customer service provided. Research from Zendesk suggests that 62% of consumers have switched brands due to poor customer service experiences. This highlights the significance of prompt and efficient post-purchase support in retaining customers and mitigating churn rates (Lee et al., 2019).

Moreover, the power of positive post-purchase experiences cannot be overstated. Research from Deloitte indicates that satisfied customers are likely to share their positive experiences with an average of 11 people. These positive word-of-mouth interactions act as potent drivers for brand reputation and can significantly influence prospective customers' decisions (DiPietro et al., 2012). Additionally, the era of social media has transformed post-purchase interactions into public forums (Chopra et al., 2020). Online platforms serve as avenues where consumers share their positive and negative experiences (Zhang et al., 2018). A study by Sprout Social highlights that 55% of consumers call out brands on social media to share positive experiences, while 45% do so to express dissatisfaction (Sprout Social, 2024). This public nature necessitates brands to be vigilant and responsive in addressing customer concerns (Mazhar et al., 2022).

Feedback sharing within this stage allows brands to address issues and gather valuable insights for improvement. To illustrate, 93% of consumers say online reviews impact their

purchasing decisions. Encouraging and responding to feedback effectively can enhance brand credibility and consumer trust (Vallurupalli & Bose, 2020). The post-purchase stage is a critical juncture that goes beyond product delivery, encompassing consumer satisfaction, support, and engagement. Brands investing in post-purchase experiences not only foster long-term relationships but also wield the potential to influence brand advocacy, reputation, and future purchase behaviors.

1.4. Delving into Impactful Touchpoints

1.4.1. Online Touchpoints: Driving Consumer Engagement in the Digital Era

In the present landscape, digital platforms are indispensable touchpoints in shaping the modern customer journey (Deursen, 2024). Websites, social media platforms, email communications, and mobile applications constitute the primary channels facilitating consumer engagement (Dolan et al., 2019). These touchpoints serve as critical junctions where brands interact with consumers, impacting their perceptions and decision-making processes (Kranzbühler et al., 2018). Research from GlobalWebIndex highlights the exponential rise in digital media consumption, revealing that nearly 54% of the global population uses social media, marking a 13% increase over the past five years. This data underscores the pervasive influence of social platforms in shaping consumer behavior and preferences (Noonan & Piatt, 2015).

Websites, acting as digital storefronts, play a paramount role. Research by Stanford Web Credibility Project indicates that 75% of consumers judge a business's credibility based on website design. This substantiates website aesthetics and functionality's profound impact on consumer perceptions and trust towards a brand (Lowry et al., 2013). Moreover, the influence of email communications remains substantial. Research by Statista indicates that the number of global email users is expected to reach 4.6 billion by 2025. Email marketing, when personalized and tailored effectively, yields significant returns, with DMA reporting an average \$42 return on every \$1 spent on email marketing campaigns (Tastsidou, 2023).

Mobile applications have also become central to the digital customer journey. Statista forecasted that app downloads would surpass 352 billion by 2021. The ease of access, personalized experiences, and convenience offered by mobile apps significantly contribute to consumer engagement and loyalty (Ceci, 2023). Additionally, these online touchpoints' influence on purchase decisions cannot be overstated. Research by PwC

suggests that social media reviews and recommendations influence 45% of consumers, while 52% of online shoppers claim that Facebook has influenced their purchases (Carter & CHU-MAY YEO, 2018).

Furthermore, the interconnectedness of touchpoints forms an ecosystem where consumers expect seamless transitions between platforms. Data from Salesforce indicates that 75% of consumers expect consistent experiences across multiple channels (Jap, 2001). Online touchpoints might be said to play a pivotal role in shaping consumer engagement, perceptions, and decision-making processes. They represent the digital gateway through which brands connect and influence consumers, highlighting the importance of optimizing these channels for a cohesive and impactful customer journey.

1.4.2. Offline Touchpoints

While online interactions dominate contemporary consumer engagement, offline touchpoints retain significant relevance in shaping tangible and immersive experiences. Physical store visits, in-store experiences, events, customer service calls, and traditional advertising contribute to a diverse spectrum of consumer engagements, leaving lasting impressions that resonate beyond the digital realm (Berberović et al., 2022). According to research by Accenture, 85% of consumers prefer shopping in physical stores as it allows them to experience products firsthand. This highlights the enduring significance of brick-and-mortar stores in fostering consumer trust and confidence in the goods or services offered (Pritchard & Jeffers, 2021).

In-store experiences play a pivotal role in creating memorable encounters. 78% of consumers have left a store due to poor ambiance, emphasizing the impact of the in-store environment on consumer perceptions and behavior. Such elements as store layout, ambiance, and interactive displays significantly influence consumer experiences and purchase decisions (Tengström et al., 2015). Events and experiential marketing also hold sway in consumer engagement. Research from Eventbrite reveals that 72% of consumers say they positively perceive brands that provide quality event experiences. This underlines the potential of events to foster brand-consumer connections and to build lasting impressions (Candidate et al., 2022).

Moreover, customer service calls remain a crucial touchpoint. Research by Microsoft suggests that 96% of consumers view customer service as an important factor in their choice of loyalty to a brand (Overland, 2016). The quality of interactions during

customer service calls directly impacts consumer satisfaction and long-term relationships with the brand. Traditional advertising, though evolving, retains its impact. Data from Statista indicates that over 90% of adults still listen to AM/FM radio weekly. Additionally, 68% of consumers trust newspaper ads, emphasizing the enduring influence of traditional advertising channels in reaching diverse consumer demographics (Gordon, 2019). These offline touchpoints collectively contribute to a more holistic and comprehensive brand-consumer relationship. They offer tangible interactions, allowing consumers to engage physically and emotionally with the brand, creating memorable experiences that often linger in their consciousness. While digital interactions dominate, offline touchpoints foster tangible connections between brands and consumers. They play a substantial role in shaping consumer perceptions, influencing purchase decisions, and contributing to the holistic customer journey experience.

1.5. Significance of the Customer Journey in Tailoring Exceptional Experiences

Understanding the intricacies of the customer journey is a cornerstone for businesses aiming to craft exceptional consumer experiences. Research by Deloitte highlights that 60% of consumers are willing to pay more for a better experience (Torres et al., 2018). Therefore, equipping businesses with insights from the customer journey becomes imperative to cater to evolving consumer expectations. Tailoring strategies, content, and interactions to align seamlessly with consumer expectations at every journey stage is vital. Research by Gartner reveals that 89% of businesses now compete primarily based on customer experience. This underscores the importance of delivering personalized and relevant experiences throughout the customer journey (Rodríguez et al., 2016).

Recognizing the significance of each touchpoint within the customer journey enables businesses to create cohesive and personalized experiences. According to research by Epsilon, 80% of consumers are more likely to make a purchase when brands offer personalized experiences. This substantiates the impact of tailored interactions in fostering consumer engagement and conversion (Qizi et al., 2022). Furthermore, the customer journey is a treasure trove of invaluable insights into consumer behaviors, preferences, and motivations. Data-driven analysis empowers businesses to refine their offerings and service delivery. Research from McKinsey & Business reveals that

businesses systematically analyzing customer journey data can expect to reduce service costs by up to 20% and increase revenue by up to 15% (Anderl et al., 2016).

A thorough analysis of the mentioned insights enables businesses to anticipate and exceed evolving consumer expectations, fostering loyalty and advocacy. According to Temkin Group, 86% of consumers are willing to pay more for a better customer experience, showcasing the direct correlation between exceptional experiences and consumer loyalty (FasterCapital, 2023). Moreover, adapting strategies based on customer journey insights fosters enduring relationships with the customer base. Harvard Business Review suggests that increasing customer retention rates by just 5% can increase profits by 25-95%. This emphasizes the long-term value of nurturing customer relationships through an optimized customer journey (Rust & Zahorik, 2019). Thus, the customer journey might be described as a compass guiding business towards creating meaningful and impactful experiences (Herbach, 2024). Leveraging insights from the customer journey enables businesses to meet and exceed customer expectations, ultimately fostering loyalty, advocacy, and sustainable growth (Amajuoyi et al., 2024).

1.6. Enhancing Customer Experience Through AI

1.6.1. Artificial Intelligence (AI): A Comprehensive Overview

AI, often abbreviated as AI, refers to the simulation of human intelligence in machines programmed to think, learn, and perform tasks that typically require human intelligence. It encompasses various technologies, algorithms, and methodologies that enable machines to mimic cognitive functions such as problem-solving, learning, perception, reasoning, and decision-making (Spector & Ma, 2019).

1.6.2. Types of AI

AI operates within two fundamental categories: Narrow AI (Weak AI) and General AI (Strong AI). Narrow AI, designed explicitly for distinct tasks within confined contexts, demonstrates its proficiency in virtual assistants (e.g., Siri and Alexa), chatbots for customer service, recommendation systems in e-commerce platforms, and the development of autonomous vehicles. While excelling within predefined domains, these systems lack the extensive cognitive capabilities akin to human intelligence. In contrast, General AI represents an ambitious pursuit to replicate human-like cognitive abilities

across diverse tasks. However, the realization of General AI remains a theoretical endeavor, subject to continuous research and development (Fjelland, 2020).

1.6.3. AI Applications in Various Industries

AI's applications span industries, revolutionizing processes and introducing innovative solutions (Glikson & Woolley, 2020). AI aids in disease diagnosis, drug discovery, personalized medicine, and remote patient monitoring through machine learning algorithms analyzing medical data in the healthcare sector (Huang & Rust, 2020). The financial sector leverages AI for fraud detection, algorithmic trading, credit scoring, and customer service chatbots, enhancing efficiency and risk management (Mahalakshmi et al., 2021). Automotive advancements utilize AI for autonomous vehicles, enhancing safety and navigation. Retail experiences AI-driven recommendation systems, personalized shopping, and inventory management, optimizing customer engagement and efficiency. Manufacturing industries benefit from AI-enabled robots, predictive maintenance, and analytics, reducing downtime and enhancing resource allocation. Education employs AI-driven adaptive learning platforms, personalized tools, and intelligent tutoring systems to optimize student outcomes (Hossain et al., 2022). Beyond these, AI powers recommendation engines in e-commerce, assists in telecommunications, entertainment, agriculture, and energy sectors, optimizing processes and outcomes. AI's evolution continues to redefine industries, offering unprecedented opportunities for innovation, efficiency, and problem-solving. As technology advances and AI capabilities mature, its impact across sectors will grow, reshaping businesses and transforming facets of daily lives, signaling an era of substantial change and progression (Allioui & Mourdi, 2023).

1.6.4. The Interplay between AI and the Customer Journey

AI stands at the forefront of reshaping the customer journey, fundamentally altering how businesses engage and interact with their audience. In the contemporary business landscape, AI has emerged as a pivotal force, catalyzing a profound transformation in the traditional trajectory of the journey. As businesses navigate the dynamic and competitive landscape, integrating AI technologies has become more than a strategic choice; it is a fundamental necessity for staying relevant and responsive to the evolving needs of the consumer base (Aldoseri et al., 2024). The interplay between AI and the customer journey extends beyond a mere integration of technologies; it represents

a paradigm shift in how businesses understand, connect with, and cater to their audiences. By harnessing the power of AI, businesses can not only enhance the efficiency of their operations but also unlock unprecedented opportunities for personalized engagement and customer-centric strategies (Vetrivel et al., 2024).

At its core, the relationship between AI and the customer journey is akin to a synergistic dance, where advanced algorithms, machine learning, and data analytics take center stage. This transformative journey unfolds across multiple stages, reshaping the landscape of personalized marketing, elevating customer service experiences, and ultimately redefining the benchmarks for overall consumer satisfaction. As we explore the intricate dynamics of this interplay, it becomes evident that AI is not merely a tool but a strategic partner in deciphering and responding to the intricate nuances of customer behavior. From the initial stages of awareness to the culmination of advocacy, each stage of the customer journey becomes a canvas for AI-driven innovation, paving the way for a more intuitive, responsive, and satisfying customer experience (Sun et al., 2023).

In this era of data abundance, AI acts as a beacon, illuminating patterns and insights that might elude traditional analytical approaches. It enables businesses to transcend the limitations of conventional strategies, offering a real-time, data-driven compass to navigate the complexities of the modern customer journey. As a result, the impact of AI is not confined to discrete touchpoints but resonates throughout the entire customer lifecycle, influencing decision-making, shaping perceptions, and fostering lasting relationships (Pissanidis & Demertzis, 2024). Moreover, the infusion of AI into the customer journey introduces an element of anticipation and adaptability. Predictive analytics, behavioral analysis, and real-time decision-making become instrumental tools in deciphering customers' ever-evolving expectations. This adaptability, in turn, positions businesses not just as reactive entities but as proactive architects of experiences, ready to tailor their offerings in response to the shifting tides of consumer preferences. This dynamic interplay between AI and the customer journey spans various stages, demonstrating profound impacts on personalized marketing, customer service experiences, and overall consumer satisfaction (Pontes, 2022).

1.6.5. Personalized Marketing

AI plays a pivotal role in the era of personalized marketing. Businesses can analyze vast datasets through advanced analytics and machine learning algorithms to

understand individual preferences, behaviors, and purchasing patterns. This enables the tailoring of marketing strategies that resonate with specific customer segments. Personalized product recommendations, targeted advertisements, and adaptive content delivery are outcomes of AI-driven insights (Chen et al., 2018). The ability of AI to decipher complex patterns enhances the efficacy of marketing efforts and contributes to higher engagement levels.

1.6.6. Customer Service Experiences

In the realm of customer service, AI introduces transformative elements. Powered by AI, Chatbots provide instantaneous responses to customer queries, offering a round-the-clock support system. Natural Language Processing (NLP) capabilities enable chatbots to comprehend and respond contextually to diverse customer interactions. This enhances the efficiency of issue resolution and contributes to a seamless and responsive customer service experience (Li et al., 2020). Additionally, AI-driven sentiment analysis aids in gauging customer emotions, allowing businesses to address concerns and improve service quality proactively (Ahmed et al., 2022).

1.6.7. Overall Consumer Satisfaction

The overarching impact of AI on the customer journey is reflected in enhanced consumer satisfaction. AI systems continually learn and adapt from customer interactions, contributing to a more personalized and streamlined customer experience. Predictive analytics employed by AI assists businesses in anticipating customer needs, thereby reducing friction points in the customer journey. The result is a more intuitive, user-centric approach that fosters satisfaction and strengthens brand loyalty (Verhoef et al., 2017). The ability of AI to enhance the overall journey, from awareness to post-purchase engagement, underscores its transformative influence on customer satisfaction metrics.

The intersection of AI and the customer journey represents a paradigm shift in how businesses understand, engage, and serve their audience. As AI technologies continue to evolve, their role in shaping seamless, data-driven customer journeys is poised to become increasingly central to the strategies of forward-thinking businesses.

1.6.7.1. Awareness Stage

The commencement of the customer journey and awareness stage witness AI's influence on targeted marketing strategies (Gao & Liu, 2023). Businesses leverage AI-

driven analytics to curate personalized campaigns by scrutinizing consumer behavior, preferences, and interactions across multiple touchpoints (Mueller, 2023). This personalized approach heightens brand visibility, delivering tailored content that resonates with potential customers, thus enhancing brand recognition and recall (Rane et al., 2023).

1.6.7.2. Consideration Stage

AI continues to be a transformative force as consumers progress to the consideration stage (Towers & Towers, 2022). Personalization remains a cornerstone, with AI-powered recommendation engines significantly shaping purchase decisions (Raji et al., 2024). Fueled by machine learning algorithms, these engines analyze extensive consumer data to offer product suggestions that align with individual preferences (Rane et al., 2024). Additionally, AI-driven chatbots equipped with NLP capabilities facilitate real-time assistance, aiding consumers in their decision-making process and fostering engagement (Abiagom & Ijomah, 2024).

1.6.7.3. Purchase Stage

During the purchase stage, AI optimizes interactions and customizes experiences (Gao & Liu, 2023). Dynamic pricing strategies, orchestrated by AI algorithms, respond to real-time market dynamics and consumer behavior, ensuring competitive pricing strategies (Salluh, 2024). Moreover, AI-driven virtual assistants streamline transactions, offering personalized suggestions at checkout, enhancing user experience and expediting purchasing (Hanif et al., 2024).

1.6.7.4. Post-Purchase Experience

The post-purchase stage transforms AI-driven initiatives. Customer service interactions, facilitated by AI-powered chatbots and virtual assistants, ensure prompt query resolution and assistance (Oladele, 2023). Furthermore, AI-driven sentiment analysis tools monitor feedback across diverse channels, enabling businesses to gauge customer satisfaction levels and promptly address concerns. This proactive approach nurtures lasting relationships and fosters brand loyalty (Rane, 2023).

1.7. Personalization and Predictive Analytics

Personalization and predictive analytics are at the core of AI's impact on the customer journey. Companies employing AI for personalization witness up to a 10%

increase in revenue, showcasing the importance of tailored experiences. Personalization, facilitated by AI, transcends one-size-fits-all approaches, allowing businesses to dynamically adjust their offerings based on individual customer characteristics and behaviors. This creates a more compelling and relevant customer experience and establishes a deeper connection between the consumer and the brand (Chen et al., 2018).

Predictive analytics, enabled by AI algorithms, empower businesses to forecast consumer behavior, anticipate needs, and craft personalized interactions aligning with individual preferences and expectations. By analyzing historical data and identifying patterns, AI can predict the likelihood of specific customer actions, enabling proactive decision-making in inventory management, product recommendations, and targeted marketing campaigns (De la Croix de Castries, 2017). This forward-looking approach ensures that businesses are well-positioned to meet customer expectations and demands.

The synergy between personalization and predictive analytics amplifies the overall impact of AI on the customer journey. As AI continues to refine its understanding of individual customer journeys, businesses can leverage these insights to optimize their strategies at every stage – from creating awareness to post-purchase engagement (Moorthy & Atul Parvatiyar, 2023). The result is a customer-centric approach that not only meets but anticipates customer needs, fostering loyalty and sustained satisfaction (Rane et al., 2023). As businesses navigate the evolving landscape of customer expectations, the integration of AI-driven personalization and predictive analytics emerges as a strategic imperative for those seeking to deliver exceptional and forward-thinking customer experiences (Ajiga et al., 2024).

1.7.1. Personalization through AI

AI's prowess in personalization stands as a cornerstone in revolutionizing Customer Experience (CX), delivering bespoke interactions that align seamlessly with individual preferences. An exemplary showcase of this is seen in Netflix, where AI algorithms meticulously analyze viewing history, behavioral patterns, and user preferences to generate personalized content recommendations. This tailored approach is a significant influencer, driving a personalized content suggestion and reflecting the profound impact of AI-driven personalization on user engagement and satisfaction (Betia et al., 2023). Similarly, Spotify harnesses AI-driven algorithms' potential to curate playlists catering to users' music tastes and preferences. These personalized playlists

significantly elevate user engagement, boasting a remarkable 31% higher engagement rate than non-personalized playlists. The AI-powered music recommendations exemplify how personalization enhances user experiences, fostering a deeper connection between the user and the platform, and ultimately amplifying satisfaction and retention rates (Wu et al., 2019). The successful implementations by Netflix and Spotify underscore the transformative capabilities of AI-driven personalization, offering users curated content aligned with their preferences. This tailored approach enhances user satisfaction and establishes a sense of affinity and loyalty toward the platform, positioning AI-based personalization as a pivotal tool in shaping the modern landscape of CX.

1.7.2. Predictive Analytics for Enhanced Customer Experience

Fueled by AI, predictive analytics stands as a game-changer in understanding and anticipating consumer behavior, enabling businesses to take proactive measures that significantly enhance CX. Amazon, a pioneer in leveraging AI for CX optimization, employs predictive shipping powered by AI algorithms that anticipate customers' orders based on browsing history, wish lists, and previous purchases. This innovative approach allows Amazon to expedite product delivery before customers finalize their purchases, resulting in improved satisfaction and remarkably reduced delivery times (Loftis, 2021). Research conducted by MIT's Initiative on the digital economy highlights the impact of predictive shipping on CX, revealing that expedited deliveries based on predictive analytics led to a 24% increase in customer satisfaction rates (Dwivedi, Ismagilova, et al., 2021). Amazon's seamless anticipation of customer needs showcases how predictive analytics, when integrated with AI, optimizes logistics and significantly enhances CX by meeting consumer expectations even before they make a formal request (Gupta & Khandelwal, 2022).

Similarly, Uber harnesses predictive analytics to estimate ride fares and arrival times, substantially refining user experiences and satisfaction levels. Predictive algorithms enable Uber to forecast and display accurate fare estimates and arrival times to users before they book a ride. This preemptive information empowers users, allowing them to make informed decisions and plan their travel effectively, enhancing their overall service experience (Battifarano & Qian, 2019). Research by Harvard Business Review indicates that integrating predictive analytics in ride-hailing services like Uber led to an approximate 28% increase in user satisfaction, primarily attributed to the accurate

estimations provided before booking rides. The predictive capabilities embedded in Uber's service optimize operational efficiency and contribute significantly to elevating user satisfaction levels by offering transparent and reliable information (Kumar et al., 2022). The successful implementations by Amazon and Uber underscore the transformative impact of AI-driven predictive analytics on CX. Anticipating and fulfilling consumer needs before formal requests increase satisfaction and strengthen brand loyalty (Towers & Towers, 2022). Such proactive measures exemplify how predictive analytics, integrated with AI technologies, reshapes the CX landscape by anticipating consumer behavior and delivering optimized experiences (Amajuoyi, et al., 2024).

1.7.3. AI-driven Chatbots Revolutionizing Support

AI-driven chatbots have emerged as pivotal tools revolutionizing CX by offering instantaneous, 24/7 support. Sephora, a frontrunner in deploying AI chatbots, employs these conversational agents to provide personalized beauty advice to its customers (Ghesh et al., 2023). This strategic implementation has yielded exceptional results, showcasing a tenfold increase in customer engagement compared to conventional channels. Research by Forrester supports this, revealing that businesses integrating chatbots into their CX strategies witness a substantial 25% reduction in customer service costs, demonstrating the efficiency and effectiveness of AI-powered chatbots (Lin et al., 2023). Bank of America's AI-driven chatbot, Erica, is another prominent example illustrating the transformative impact of chatbots on CX. Erica handles an impressive 50 million interactions annually, offering rapid financial advice and facilitating speedy issue resolution for customers (Saffer, 2010). The success of Erica underscores the significant role of AI-driven chatbots in enhancing CX and streamlining complex processes, leading to higher customer satisfaction rates.

Research conducted by IBM on the deployment of chatbots reveals that businesses integrating these AI-driven solutions witness an approximate 35% increase in customer satisfaction rates. Moreover, when used effectively, chatbots can resolve up to 80% of routine queries, freeing human agents to focus on more complex issues. This scalability and efficiency significantly improve CX metrics, ensuring prompt and effective resolution of customer queries (Valentine, 2022). The implementations by Sephora and Bank of America highlight the transformative impact of AI-driven chatbots on CX, emphasizing the exponential increase in engagement, rapid issue resolution, and

substantial cost reductions. These examples underscore how leveraging chatbots in customer interactions augments efficiency and significantly elevates the overall quality of CX, ensuring swift, personalized, and accessible support for consumers (Ooi et al., 2023).

1.7.4. Dynamic Pricing and Customer Experience Optimization

AI's involvement in dynamic pricing optimization has emerged as a pivotal strategy that profoundly impacts CX. For instance, airlines have effectively leveraged AI algorithms to adjust ticket prices dynamically based on market demand, timing, and other factors. This dynamic pricing strategy has contributed to airlines' revenue optimization and has provided customers with cost-effective options, aligning pricing with their preferences and purchasing behaviors (Tirkkonen, 2021). According to research conducted by McKinsey, the strategic implementation of dynamic pricing through AI algorithms in the airline industry has led to an estimated 4-6% increase in revenue. Moreover, this personalized pricing strategy has resulted in a significant 15-20% increase in customer engagement and loyalty, showcasing the direct correlation between dynamic pricing and enhanced CX (Phillips, 2021).

Similarly, e-commerce giants like Amazon harness AI for dynamic pricing strategies, tailoring discounts and promotions based on individual user preferences and behaviors. Through AI-driven algorithms, Amazon customizes pricing, offering personalized discounts and deals to customers, thereby enhancing CX by providing tailored pricing options that resonate with individual preferences. Research by Deloitte indicates that nearly 36% of consumers are likely to engage with retailers offering personalized pricing or promotions. Additionally, around 48% of consumers believe tailored discounts significantly impact their purchasing decisions. These statistics underscore the immense influence of AI-enabled dynamic pricing strategies on CX, demonstrating that personalized pricing significantly influences consumer behaviors and purchasing decisions (Victor, 2019).

The implementations in the airline industry and e-commerce platforms highlight the transformative impact of AI-driven dynamic pricing on CX. This personalized pricing approach optimizes revenue for businesses and plays a crucial role in customer engagement and loyalty by aligning pricing strategies with individual preferences. Integrating AI in dynamic pricing strategies has become instrumental in delivering

tailored, customer-centric pricing options, ultimately elevating CX and fostering stronger customer relationships.

1.7.5. AI-Powered Virtual Assistants

AI-powered virtual assistants represent a transformative force in enhancing CX by providing seamless and intuitive interactions across various platforms. Google Assistant and Apple's Siri, among others, exemplify this technological innovation. These virtual assistants streamline tasks like setting reminders and answering queries and offer a myriad of functionalities that significantly enrich user experiences through unparalleled convenience and accessibility (Bilgeri, 2020). Research conducted by Statista reveals the widespread adoption of virtual assistants, indicating that 57% of global smartphone users use voice assistants at least once a month (Statista, 2024). Moreover, the rapid integration of AI-driven virtual assistants into smart home devices and automobiles further amplifies their impact on CX, ensuring consistent and efficient interactions across various touchpoints (Zhang et al., 2018).

Besides Siri and Google Assistant, AI-powered virtual assistants have diversified across industries. For instance, in healthcare, Amazon's Alexa assists in medication reminders and health-related queries, offering users personalized healthcare support. Additionally, in banking, Capital One employs a virtual assistant named Eno, utilizing AI to provide real-time account information and assist in managing finances (ANDREI, 2018). According to research by Accenture, 75% of consumers believe that utilizing virtual assistants helps them save time and makes their lives easier. Moreover, 74% of surveyed businesses report improved customer satisfaction by integrating virtual assistants, emphasizing the tangible benefits and positive impact on CX. The continuous advancements in NLP and machine learning algorithms have empowered virtual assistants to understand user intents more accurately and provide contextually relevant responses. As a result, users experience more natural and conversational interactions, contributing significantly to elevated CX standards across industries. The widespread adoption and evolution of AI-powered virtual assistants across various domains underscore their unparalleled impact on CX. With their ability to simplify tasks, offer personalized support, and enhance accessibility, these virtual assistants have become integral in shaping modern consumer interactions, setting new benchmarks for seamless and intuitive user experiences (Kunal, 2016).

1.8. Case Studies Showcasing AI's CX Impact

Starbucks and Hilton exemplify how AI innovations significantly impact CX in the service industry. Starbucks' implementation of predictive ordering through its app leverages AI algorithms to anticipate and prepare customer orders in advance, thereby reducing wait times by an average of 10-15 minutes per order. This predictive ordering feature has streamlined operations and enhanced CX by offering customers a more efficient and time-saving experience. Similarly, Hilton's AI-powered concierge service, Connie, personalized guest experiences by providing tailored recommendations and local information, resulting in a 90% satisfaction rate among guests (Diamandis & Kotler, 2020). Beyond these examples, the broader hospitality industry has witnessed diversified AI implementations (Chopra et al., 2024). Research indicates growing acceptance, with 62% of hotel guests willing to engage with AI-driven services and 82% of hoteliers acknowledging AI's positive impact on guest experiences (Gupta & Jain, 2023). Starbucks and Hilton are prime illustrations of how AI-driven solutions redefine service delivery, optimizing operations while creating personalized, convenient, and memorable experiences that set new benchmarks for customer-centric services in the hospitality sector (Freedman et al., 2024).

1.8.1. Optimizing Business Performance with AI

AI revolutionizes operational efficiency through automation and optimization strategies. For instance, in manufacturing, AI's predictive maintenance systems constantly monitor equipment health in real-time, proactively identifying issues and reducing unplanned downtime by up to 30%. Additionally, AI-driven supply chain management tools optimize inventory levels, foresee demand patterns, and adjust stock levels dynamically, potentially reducing carrying costs by 20-30%. These applications streamline operations and ensure resource optimization, enhancing overall operational effectiveness (Elbegzaya, 2020).

AI's influence on revenue is significant across industries. In retail, AI-powered recommendation engines fuel substantial sales growth, reporting a 10-30% increase in revenue. Moreover, AI's role in e-commerce through dynamic pricing strategies ensures tailored pricing models that adapt to market fluctuations, maximizing revenue potential. By providing personalized experiences and optimizing pricing strategies, AI becomes a key driver in business revenue growth, creating avenues for increased profitability.

(Ahmad et al., 2022). AI-driven automation initiatives lead to substantial reductions in operational costs (Adeyeri, 2024). In customer service, AI-powered chatbots effectively handle routine inquiries, reducing support costs by up to 30% (Ramki et al., 2024). Furthermore, AI's application in predictive analytics for fraud detection within finance minimizes financial losses, safeguarding companies against significant economic impact (Bello & Olufemi, 2024). These cost-saving measures demonstrate AI's role in driving efficiency and reducing overheads across different business sectors.

The economic impact of AI is far-reaching. PricewaterhouseCoopers (PwC) research estimates that AI's contribution to the global economy could reach \$15.7 trillion by 2030. The World Economic Forum (WEF) also projects AI technologies creating over 133 million new jobs by 2022, fostering considerable economic growth. This substantiates AI's transformative potential, enhancing business performance and driving substantial economic development globally. Integrating AI technologies into business operations is reshaping industries by optimizing processes, driving revenue growth, reducing costs, and promoting data-driven decision-making. As AI continues to evolve, its pervasive impact is poised to catalyze innovation, enhance productivity, and foster unprecedented economic growth on a global scale (Allioui & Mourdi, 2023).

AI facilitates data-driven decision-making by employing advanced analytics, enabling businesses to gain deeper insights into consumer behavior and market trends (Okeleke et al., 2024). This empowerment enables organizations to make informed decisions, mitigating risks, and optimizing resource allocation (Challoumis, 2024). With AI's predictive capabilities and real-time analysis, businesses can proactively respond to market shifts, enhance operational efficiency, and capitalize on emerging opportunities, thereby maximizing their competitive advantage in dynamic market landscapes (Salluh, 2024). In the realm of E-commerce, Amazon harnesses the power of AI to propel its warehouse operations into a new era of efficiency (Tsou, 2024). The AI-driven warehouse automation system intricately manages inventory, optimizing processes from stock replenishment to order fulfillment (Shobhana, 2024). This meticulous orchestration ensures that a diverse array of products is consistently available for customers, contributing to reduced delivery times and an elevated overall satisfaction level.

Healthcare experiences a transformative impact through AI's prowess in diagnostic tools. Integrating AI algorithms into the analysis of medical imaging data

marks a significant leap forward (Najjar, 2024). This technological synergy enhances diagnostic accuracy, leading to improved patient outcomes. The early detection of diseases facilitated by AI allows for timely interventions and the formulation of personalized treatment plans, ultimately reducing healthcare costs and improving the quality of patient care (Gouripur, 2024). In the domain of Manufacturing, AI is a revolutionary force, particularly in the realm of predictive maintenance. AI can forecast potential equipment failures by scrutinizing data collected from sensors embedded in machinery (Jayashree et al., 2024). This predictive capability empowers manufacturers to execute proactive maintenance measures, minimizing downtime and optimizing operational continuity.

AI has emerged as a critical player in fraud detection within the finance sector. Machine learning algorithms accurately scrutinize transaction patterns, identifying and preventing fraudulent activities (Shoetan & FAMILONI, 2024). This enhances security for both businesses and consumers and showcases AI's adaptability in fortifying financial systems against evolving threats (Paramesha et al., 2024). These examples illustrate how AI, across diverse sectors, is not merely a technological tool but a transformative force, enhancing operational dynamics, improving outcomes, and fortifying systems against challenges.

PricewaterhouseCoopers (PwC) research estimates that AI could contribute up to \$15.7 trillion to the global economy by 2030. The World Economic Forum also suggests that AI technologies could create over 133 million new jobs by 2022, leading to substantial economic growth (Güner, 2021). Integrating AI technologies in business operations reshapes industries, optimizes processes, generates revenue, reduces costs, and fosters data-driven decision-making. As AI continues to evolve, its impact on business performance is expected further to catalyze innovation, productivity, and economic growth globally (Wamba-Taguimdje et al., 2020).

1.9. Ethical Considerations and Challenges in AI Integration

Integrating AI into the customer journey presents a myriad of ethical considerations and challenges, necessitating careful deliberation and proactive measures. Upholding stringent data privacy standards remains paramount. Research, such as the Pew Research Center's survey, reveals that 79% of Americans are concerned about how companies use their data. Addressing these concerns requires robust data governance

frameworks prioritizing user consent, data anonymization, and stringent security protocols to safeguard sensitive information. Algorithmic biases pose another significant ethical challenge. Research by MIT indicates how algorithms, if trained on biased datasets, can perpetuate existing biases, leading to discriminatory outcomes. Mitigating biases demands ongoing audits, diverse dataset representations, and algorithmic fairness checks to ensure equitable outcomes across demographics and avoid reinforcing societal prejudices (Raub, 2018).

Preserving a balance between automation and human touch points represents a delicate ethical consideration. While AI enhances efficiency and personalization, excessive reliance on automation can compromise human-centric aspects of customer interactions. Striking this balance involves incorporating human oversight and intervention, ensuring AI augments, rather than replaces, human empathy and nuanced decision-making in customer service interactions. Ensuring transparent data practices is critical. Research by PwC found that 85% of consumers will not do business with a business if they have concerns about its security practices. Transparency entails clear communication regarding data collection, processing, and usage, empowering consumers to make informed choices and fostering trust in AI-powered interactions. Ethical lapses in AI utilization have sparked public scrutiny. For instance, Amazon's AI-driven hiring tool exhibited bias against female applicants, reflecting the biases inherent in the training data. Addressing this, Amazon discontinued the tool and committed to refining its AI practices to avoid discriminatory outcomes (Chen, 2023).

Google's facial recognition AI faced backlash for exhibiting racial biases, prompting a reassessment of the technology and a commitment to enhancing fairness and accuracy in facial recognition models (Kranzbühler et al., 2018). While AI's integration across the customer journey unlocks unprecedented opportunities, it comes with ethical responsibilities (Herbach, 2024). Upholding data privacy, mitigating biases, maintaining a human-centric approach, and ensuring transparency are imperative for ethical AI deployment (Gao & Liu, 2023). Businesses that navigate these ethical considerations effectively can harness AI's capabilities to revolutionize the customer journey, delivering personalized, seamless experiences while fostering enduring relationships built on trust and integrity (Oladele, 2023).

1.10. Future Trends in AI and Customer Experience

The future trajectory of AI in customer experience encompasses several transformative trends poised to reshape interactions between businesses and consumers. Firstly, AI is poised to advance towards hyper-personalization, delving deeper into vast datasets and utilizing enhanced algorithms to offer exceedingly tailored experiences. Through this evolution, businesses will deliver interactions meticulously designed to align with customers' preferences and behaviors. Secondly, the integration of voice and visual search technologies is set to become more pervasive in customer experiences. The continued enhancement of NLP and image recognition capabilities will foster a more intuitive interaction between customers and brands. This integration simplifies search and purchase processes, enabling customers to engage more seamlessly and efficiently (Olsson et al., 2011). Thirdly, AI's predictive insights will evolve further, equipping businesses with actionable foresight. Enhanced predictive analytics will empower businesses to take proactive measures, foreseeing customer needs before they arise. This predictive capability will allow real-time optimization of services and products, ensuring they are aligned precisely with evolving customer preferences (A. Bunsch et al., 2023).

Lastly, ethical AI adoption will take center stage in the future of AI-powered customer experiences. As AI becomes more deeply entrenched in customer interactions, businesses are poised to prioritize responsible AI practices. This emphasis on ethical standards aims to uphold integrity and positively impact customer relationships. Upholding transparency, fairness, and compliance with data privacy regulations will be pivotal to building and maintaining customer trust. The convergence of these trends signifies a transformative shift in customer experiences, where AI's role becomes increasingly pronounced. As businesses navigate this landscape, the ethical use of AI, coupled with hyper-personalization, predictive insights, and intuitive search integrations, will pave the way for a more engaging, tailored, and ethical customer-brand interaction paradigm (Bubanja & Vidas-Bubanja, 2022). Transparency will be a cornerstone of ethical AI adoption. Companies will strive to elucidate AI's role in customer interactions, clarifying how AI influences decision-making processes. By being transparent about AI algorithms and their implications, businesses aim to build trust and reassure customers about the fairness and accountability of AI-driven processes (Makki & Jawad, 2023).

Fairness in AI applications will become paramount. Mitigating algorithm biases and ensuring equitable treatment across diverse customer segments will be critical. Rigorous testing and continuous monitoring of AI models will be undertaken to minimize biases and ensure fairness in outcomes. Compliance with data privacy regulations will be a non-negotiable aspect. As data becomes the bedrock of AI-driven insights, businesses will uphold stringent compliance with data protection laws and regulations. Protecting customer data privacy will be a foundational principle, ensuring customer information is handled responsibly and ethically. Moreover, businesses will seek to collaborate with regulatory bodies, industry peers, and AI ethics boards to establish ethical guidelines and frameworks. This collaborative approach aims to develop industry-wide standards that prioritize ethical AI adoption and foster a culture of responsible AI use (Wright & Schultz, 2018).

The future of AI in customer experiences hinges on the ethical deployment of these technologies (Ejjami, 2024). Upholding transparency, fairness, and compliance with data privacy regulations will build and maintain customer trust and ensure the sustainable and ethical use of AI, fostering an environment conducive to positive customer interactions and long-term relationships (Nadir & Farah, 2023). As businesses navigate this trajectory, ethical AI adoption will serve as a cornerstone in shaping a more customer-centric and ethically conscious AI landscape (Sagar, 2023). Integrating AI with augmented reality (AR) marks a significant evolution in customer experiences. As AI intertwines with AR technology, it will usher in a new era of immersive and highly personalized customer interactions (Ejjami, 2024). This integration will enable businesses to offer dynamic, context-aware experiences, allowing customers to engage innovatively with goods and services (Nadir & Farah, 2023). Through AI-enhanced AR, customers can anticipate more intuitive and tailored engagements, creating unprecedented interactivity and connection between consumers and brands. This transformative fusion has the potential to redefine not just how customers perceive products and services but also how they interact and make informed decisions, ultimately shaping a more engaging and experiential landscape for customer-brand interactions (Pucihar & Coulton, 2015).

The amalgamation of AI and the customer journey marks a paradigm shift in how businesses engage with their clientele. AI's pervasive influence across various customer journey stages reshapes marketing strategies, sales processes, and service interactions. It

fosters an environment where businesses not only react but anticipate and cater to customer demands, bolstering loyalty and advocacy. AI is pivotal in enhancing customer experiences through personalization, predictive analytics, and streamlined interactions. Moreover, it optimizes business performance by driving revenue growth, reducing costs, and fostering data-driven decision-making. However, ethical considerations and the responsible deployment of AI remain crucial to maintaining customer trust and satisfaction (Rane, 2023). Looking ahead, the future of AI in customer experience holds promise in hyper-personalization, advanced predictive insights, ethical adoption, and the integration of AI with emerging technologies like AR. As businesses navigate these future trends, the ethical and customer-centric use of AI will be instrumental in shaping the next stage of customer experience, fostering a landscape of enhanced interactions and sustainable growth.

CHAPTER 2

2. RESEARCH METHODOLOGY

This chapter justifies the research methodology used to investigate the impact of AI-integrated customer journey (CJ) dimensions on customer experience (CX). Accordingly, a quantitative research design was adopted. This section describes in detail the procedures, data collection methods, sampling techniques, and data analysis employed in the study.

2.1. Research Objectives

1. To identify the role of AI in enhancing customer experience about customer awareness in the customer journey.
2. To investigate the role of AI in enhancing customer experience about customer consideration in customer journey.
3. To explore the role of AI in enhancing customer experience regarding customer purchases in the customer journey.
4. To examine the role of AI in enhancing customer experience about customer post-purchase in customer journey.
5. To find out if there are any differences in the role of AI in improving customer experience during the customer journey based on gender and other demographic factors (e.g. age, income, education level, etc.).

2.2. Research Questions

1. How do the roles of AI impact customer experience about the customer awareness stage in the customer journey?
2. How do the roles of AI impact customer experience regarding the customer consideration stage in the customer journey?
3. How do AI's roles impact customer experience at the customer purchase stage in the customer journey?
4. How do the roles of AI impact customer experience in the post-purchase stage of the customer journey?

5. Are there any differences in the role of AI in improving customer experience during the customer journey based on gender and other demographic factors (e.g. age, income, education level, etc.)?

2.3. Purpose of the Study

This study examines how AI improves customer experience throughout the customer journey, including customer awareness, consideration, purchase, and post-purchase. AI is increasingly used to improve customer interactions, but there is little empirical evidence to support its efficacy across these stages. This study examines how AI affects customer experience at each point to understand its impact on the customer journey better. This study examines how AI raises customer awareness. AI technologies like machine learning algorithms, recommendation engines, and predictive analytics are increasingly used to engage customers in the awareness stage. However, it is unclear how much these technologies improve initial customer interactions. By comprehending AI's role in this stage, businesses can better optimize their marketing strategies to attract attention.

The study also examines AI's role in customer consideration when consumers compare brands and products. AI helps personalize recommendations, guide customer choices, and predict. This study examines how AI-driven interventions improve customer experience during evaluation. Businesses can improve customer conversion by improving personalization. For businesses looking to boost sales and improve the buying experience, assessing how AI affects the purchase stage is crucial. AI-powered dynamic pricing algorithms, personalized product recommendations, and fraud detection have transformed customer shopping. This study will examine whether AI-driven purchase systems improve customer experience or if customers prefer human-driven approaches. Businesses using automation must understand this balance to satisfy customers.

This study also examines the post-purchase experience, which builds customer loyalty. AI tools like automated customer support, personalized follow-up emails, and loyalty programs help retain customers. The study examines how AI-driven post-purchase strategies affect customer loyalty and satisfaction. Explore this area to improve post-purchase engagements and customer retention and loyalty. This study aims to give businesses actionable insights into how AI improves customer experience at each stage

of the customer journey, taking gender into account. This study can help businesses improve AI-driven strategies, customer satisfaction, and customer loyalty.

2.4. Importance of the Study

The research on AI's impact on improving customer experience across the customer journey is crucial for multiple stakeholders, including customers, businesses, governments, employees, and society. The study examines AI's influence across stages, including awareness, consideration, purchase, and post-purchase, offering actionable insights that can advantage these groups in various manners. The study is also crucial for customers as it elucidates how AI can enhance their overall experience and satisfaction. AI technologies (e.g., recommendation systems, chatbots, and personalized interactions) can facilitate seamless and customized experiences. Comprehending AI's function in improving customer interactions ensures that customers obtain more pertinent product recommendations, expedited service, and tailored experiences, enhancing convenience and satisfaction. The study also examines whether customers of varying gender backgrounds perceive the role of AI differently, enabling businesses to customize experiences more inclusively.

This study is essential for businesses to enhance customer engagement and loyalty. AI tools are extensively utilized in marketing activities; however, comprehending their influence on customer experience throughout various journey stages enables companies to make informed decisions. Findings from the study will assist businesses in refining their AI strategies to enhance sales and customer satisfaction. Moreover, recognizing potential gender disparities in customer perceptions can help businesses in preventing the alienation of particular customer segments and promote a more equitable approach to AI integration. The study's findings can assist businesses in fostering robust customer relationships, improving retention rates, and augmenting profitability.

Furthermore, governments can gain advantages from the insights offered by this study, especially in domains like consumer protection, digital literacy, and regulatory frameworks. As AI increasingly influences customer experiences, governments must comprehend its implications for consumer rights and data privacy. The research can guide policymakers regarding the necessity of regulations that safeguard consumers while fostering innovation in AI technologies. Furthermore, as AI transforms the economy, governments can leverage these insights to develop initiatives that foster equitable

competition and enable businesses of all sizes to implement AI without fostering monopolistic tendencies. The study's significance for society is its potential to promote more inclusive and accessible digital experiences. As AI becomes increasingly integrated into daily life, comprehending its impact on various customer demographics ensures that technological progress benefits all individuals. Enhanced awareness of AI's impact on customer experience among businesses and governments can lead to more efficient, personalized, and accessible services for society.

Furthermore, emphasizing the necessity for more equitable technological solutions. Employees, especially those in customer-facing positions and technology development, can acquire significant insights from this study. As enterprises progressively integrate AI, employees may apprehend that automation will supplant human positions. Nonetheless, the study may demonstrate how AI can augment human endeavors instead of supplanting them, enabling employees to concentrate on more intricate and value-enhancing responsibilities. Furthermore, understanding AI's efficacy in customer service can facilitate employees' adaptation to new technologies, thereby improving their Job performance and fostering opportunities for skill enhancement.

2.5. Assumptions of the Study

The current study has been conducted with several assumptions. The assumptions are essential for guaranteeing the validity and reliability of the study investigating the role of AI in improving customer experience throughout different stages of the customer journey. The present study's population comprises individuals from Turkey, with a sample of 352 participants aged 18 and older, representing the broader population of AI users in Turkey, thereby ensuring the generalizability of the findings. This sample is deemed diverse, encompassing individuals from various industries where AI interactions are evident. Furthermore, all participants are presumed to be familiar with AI technologies and have recent, pertinent experiences throughout the customer journey stages of awareness, consideration, purchase, and post-purchase. Moreover, it is presumed that the Turkish context mirrors broader global trends, rendering the findings relevant to other regions with analogous technological landscapes.

Additionally, it is presumed that the data will demonstrate a normal distribution, thereby facilitating the application of descriptive statistics, regression, and correlation analyses via IBM SPSS. There exists an assumption of linearity and independence

between the independent variable (AI-integrated stages) and the dependent variables (customer experience). This assumption is crucial for the precision of regression analysis. Furthermore, it is presumed that a sample size of 352 participants is sufficient, according to item response theory, to ascertain statistically significant relationships (Reeve, 2023). Moreover, the assumption of homogeneity of variance is critical across various groups, particularly when examining gender disparities in AI perception, to guarantee robust statistical outcomes. The validity and reliability of the data collection instrument, the "Artificial Intelligence (AI) and the Customer Journey: Enhancing the Customer Experience" questionnaire, are presumed, ensuring precise assessments of customer perceptions.

Furthermore, it is presumed that participants will offer truthful and impartial responses, devoid of bias while recounting their experiences with AI technologies. The study posits that the quantitative data and statistical analyses conducted will facilitate extensive generalizations regarding AI's contribution to improving customer experience, yielding insights relevant to analogous contexts beyond Türkiye. Moreover, it is assumed that AI substantially influences customer experiences across all four stages of the journey—awareness, consideration, purchase, and post-purchase. It is presumed that external market or socio-economic factors will not significantly distort participant perceptions, thereby ensuring the study concentrates on the specific role of AI. These assumptions are essential for executing the research and deriving significant, precise conclusions regarding the role of AI in improving customer experience.

2.6. The Nature of the Quantitative Research and the Unit of Analysis

The research will encompass descriptive, exploratory, and causal-comparative methodologies. Descriptive research focuses on analyzing the characteristics of participants, whereas exploratory research aims to investigate variables with limited available data (Field, 2013). A causal dissertation investigates the impact of one variable on another (Sekaran, 2017). The dissertation will gather data from Turkish customers who are actively involved with the brand. The objective is to employ descriptive analysis to examine customers' behavioral patterns in different regions. The study is both descriptive and causal. A descriptive analysis will be used to identify the characteristics of the respondents (Heo et al., 2015). Correlation analysis evaluated the impact of customer journey (CJ) dimensions on customer experience (CX). The unit of analysis refers to the

specific entity or subject being studied and from which research data is gathered (Kumar & Alok, 2014). Examples include countries, departments, individuals, organizations, and industries. This study aims to gather data from customers who use the product in the selected country. Therefore, this study will examine individuals.

2.6.1. Research Design

The study utilized a quantitative research design to investigate the influence of AI-integrated customer journeys (i.e., customer awareness, customer consideration, customer purchase and post-purchase experiences) on customer experience. Quantitative research involves the analysis of data and the comparison of this data with surveys or other data sets to understand connections and differences (Yu & Yu, 2023). It involves collecting numerical data and establishing statistical relationships (Field, 2013). This design is chosen because it enables efficient data collection, primarily through a self-developed questionnaire called AI and the Customer Journey: Enhancing the Customer Experience (APPENDIX-A). This design is relevant to the study because it allows for effective data collection. The analysis will be quantitatively using a Five-point Likert Scale with six dimensions evident from figure 2.1. The researcher developed the following research model for the present study.

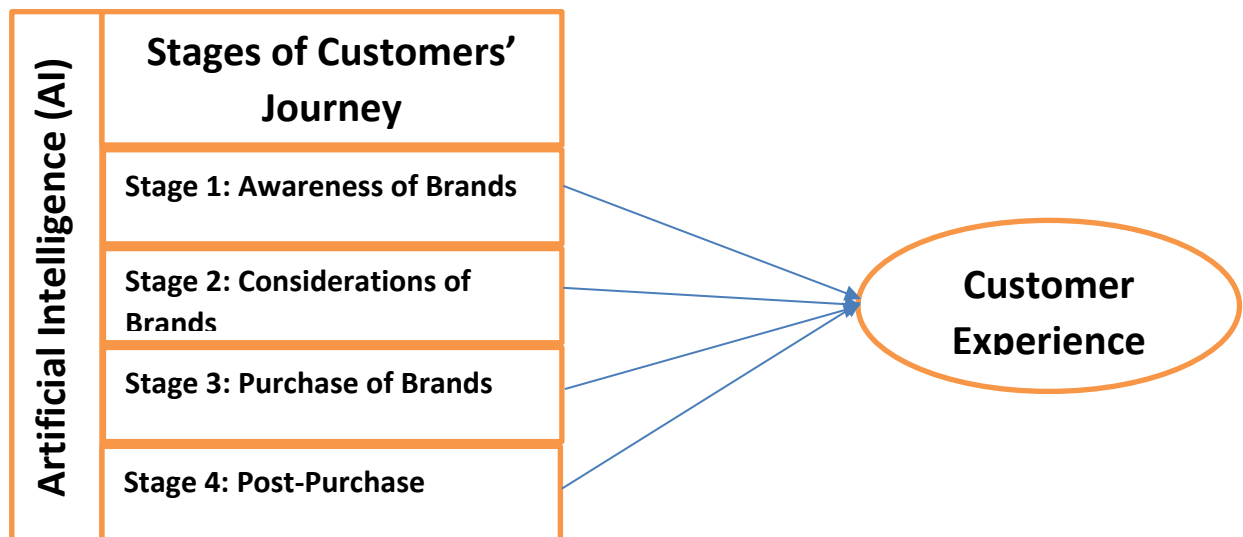


Figure 2.1. Research Model

Five hypotheses are formulated to guide the quantitative investigation to explore the role of AI in four dimensions of customer experience. Specifically, the first four hypotheses are related to the relationship between AI-integrated customer journey and customer experience. The last hypothesis scrutinizes the variations in customer experience across genders. Statistical analysis will evaluate all five hypotheses at a significance level of 5%. Accordingly, statistical quantitative analysis (IBM SPSS software) will be utilized to test the developed hypotheses at a significance level of 5%. Research hypotheses are given below:

1. **H1:** The roles of AI positively impact customer experience at the customer awareness stage of the customer journey.
2. **H2:** The roles of AI positively impact customer experience at the customer consideration stage of the customer journey.
3. **H3:** The roles of AI significantly impact customer experience at the customer purchase stage of the customer journey.
4. **H4:** The roles of AI significantly impact customer experience at the customer post-purchase stage of the customer journey.
5. **H5:** There are significant differences in the perception of the roles of AI in enhancing customer experience based on gender, age, marital status, employment status, and income. H5 can be break down into:
 - A. H5(a): There are significant differences in the perception of the roles of AI in enhancing customer experience based on gender.
 - B. H5(b): There are significant differences in the perception of the roles of AI in enhancing customer experience based on age.
 - C. H5(c): There are significant differences in the perception of the roles of AI in enhancing customer experience based on marital status.
 - D. H5(d): There are significant differences in the perception of the roles of AI in enhancing customer experience based on employment status.
 - E. H5(e): There are significant differences in the perception of the roles of AI in enhancing customer experience based on income.

2.6.2. Population

The study population consists of every customer with whom the investigation is carried out (Shukla, 2020). The participants selected for this research will consist of customers aged 18 and above, encompassing both male and female customers in Türkiye, who are the most prominent clients in diverse sectors utilizing AI touchpoints.

2.6.3. Sampling Technique and Sample Size

This study employed a convenience sampling technique for collecting data. The population comprises customers who are at least 18 years old, encompassing both male and female customers. Choosing an appropriate sample size is essential for enhancing the reliability and validity of the research variables. The literature provides information on research techniques and methods for selecting sample sizes. Item response theory offers guidelines for an appropriate sample size (Hambleton et al., 2016). The number of participants was determined based on the variables included in the correlation analysis. A quantitative study offers the benefit of accurately representing the majority's perception with a smaller sample size than the entire population (Kumar & Alok, 2014).

This study involves one independent variable, four dimensions of the customer journey (CJ), and one dependent variable, customer experience (CX). The sample size was determined based on the following reasoning: Employing item response theory is an optimal method for determining the sample size in quantitative research (Hambleton et al., 2016). According to this theory, the appropriate sample size for quantitative and statistical methods should be determined based on the number of items in the questionnaire (Kumar & Alok, 2014). In this case, a total of 26 items will be used. According to item response theory, the sample size of 352 (30 times 10 equals 300) respondents will be chosen (Reeve, 2023). Thus, a sample size 352 will be used for a quantitative analysis. The sample size was sufficient for the research design and fulfilled the dissertation requirements. Increasing the number of participants would undeniably enhance the feasibility of the research. However, the data exhibited a normal distribution well before reaching the target of 352 participants.

2.6.4. Measurement variables

The independent variables are the factors that will be evaluated for their influence on the dependent variable (Saadat pour & Albert, 2016). The dependent variables will be assessed regarding their impact (Saunders et al., 2009). Categorical variables are those that require responses to be classified into unique groups. The variables examined in the study are classified as independent, dependent, and control variables. The factors of customer awareness, customer consideration, customer purchase, and post-purchase are postulated to influence the primary dependent variable, consumer experience. By accounting for age, gender, income, and country, the study attempts to account for data variability and ensure that these socioeconomic and demographic variables do not confound the effect on consumer engagement.

2.6.5. Data Collection Methods

The current research was conducted in Türkiye using a representative sample of many customers. Qualtrics created and distributed the standardized survey to the appropriate participants. Considering the minimum requirement of 352 participants and the assumption of an 80% response rate, a minimum of 450 individuals was contacted. The primary data was gathered by administering a structured questionnaire to 450 respondents out of which 352 were received. In addition to disseminating the URL among various industrial customer groups, touchpoints featured Google Form links for data collection from respondents.

2.6.7. Instruments

AI (AI) and the Customer Journey: Enhancing the Customer Experience (AICJECE) Questionnaire for customers (AICJECE) (Appendix A), a self-developed questionnaire, was used for this study. The six components of the AICJECE are demographic, customer awareness, customer consideration, customer purchase, customer post-purchase, and customer experience. There are 21 items in the AICJECE using five-point Likert scales: Strongly Disagree (SDA), Disagree (DA), Unsure (US), Agree (A), and Strongly Agree (SA). SA, 1, A, 2, US, 3, DA, 4, SDA, and 5 will be the data scores during data analysis. The instrument division utilized in this study is displayed in Table 2.1. For the data collection, the survey technique was used; the survey comprised six

sections, each compiled via a singular hyperlink distributed to the participants via Google Forms. The Likert scale is designed to quantify the feelings and emotions of users, as opposed to requiring them to express them verbally. Using a quantifiable measurement, correlations can thus be established. This study's questionnaire will be constructed using four determinants developed to assess CX about CJ. To assess the influence of AI-integrated CJ on CX, this research requires a measurement model to examine the interrelationships among numerous observed metrics. The study employed regression analysis as a measurement model to ascertain the applicability of previously utilized questionnaires regarding construct validity and reliability. The following tests will need to be done as part of the data analysis: a Cronbach alpha test for each construct, as well as the Exploratory Factor Analysis (EFA) was used to ascertain the validity structure of the scale. These tests check the accuracy of the measurements taken from the survey dataset (Taber, 2018). Descriptive and inferential statistics were employed to address the research inquiries.

Table 2.1.

Division of items in AICJECE

Questionnaire	No of items
Customer awareness	6
Customer consideration	5
Customer purchase	4
Customer post-purchase	3
Customer Journey	3
TOTAL ITEMS	21

2.6.8. Data Analysis Software and Methods

IBM SPSS 24.0 was utilized to analyze the quantitative dataset. Several assessments were necessary throughout the data analysis stage of this study. Descriptive statistics, correlation, and multiple regression analyses were implemented to examine the research hypotheses. Descriptive statistics, regression analysis, and correlation play a critical role in empirical research as they enable the interpretation of relationships between variables and the summarization of data trends. These analyses are commonly conducted using statistical software like SPSS (Field, 2013). To facilitate the understanding of initial data and the development of hypotheses, descriptive statistics offer a concise overview of the dataset, revealing information regarding the shape of

distributions, central tendencies, and dispersion of variables (Kumar, & Alok, 2014). Descriptive statistics serve as the cornerstone of data interpretation by facilitating the transformation of raw data into comprehensible information and establishing the framework for further statistical examination (Saadat pour, & Albert, 2016).

Regression and correlation analyses investigate the relationships between variables in depth (Janse, et al., 2021). Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences is the most critical work in the field. It thoroughly explains correlation analysis and how it can be used to find the strength and direction of an association between two or more variables (Schober et al., 2020). It is necessary to identify potential predictors within a given dataset. Regression analysis examines the cause-and-effect relationship between a dependent variable and one or more independent variables (Turner et al., 2020). It is a robust statistical method for modeling and analyzing the quantity and influence of numerous factors. This method works well in empirical studies that try to find causal or predictive links across many fields, such as business research and the social sciences, because it can test theoretical frameworks and control factors that make the results unclear.

2.6.9. Data Collection Procedure

This research examines the impact of AI on the customer experience throughout the customer journey. The researcher visited multiple customer touchpoints and obtained consent before collecting data. The questionnaires were distributed via self-administered drop-and-pick and Google Forms, with participants receiving one week to complete them. Access to the Google Forms utilized for data collection was restricted. Two reminder prompts were incorporated into the data collection procedure for one month. The primary tool used to collect data from key stakeholders, specifically well-known clients, was an AICJECE (Self-administered Questionnaire), which operates on self-administration principles. The data collected provided insights into how customers perceive the potential impacts of AI on their overall experience. To examine customers' perspectives on AI and identify any discrepancies, relevant factors such as demographic information, the influence of AI on customer experience, challenges posed by AI on customer experience, and potential applications of AI were also assessed. The collected data was subjected to quantitative analysis utilizing a five-point Likert scale.

2.6.9. Data Analysis Procedure

A methodical procedure was implemented using the statistical software SPSS 24 on the collected data. A preliminary assessment of the questionnaire's dependability was conducted after the accurate input of data into the SPSS software. Then, descriptive statistics and data interpretation were conducted using frequencies, means, and standard deviation. Furthermore, the analysis of the study concerning gender was performed utilizing an independent t-test.

2.6.10. Pilot Study

According to Yu and Yu (2023), pilot testing reveals unanticipated complications associated with developing a questionnaire. The pilot study included 60 respondents. Cronbach's Alpha was used to assess overall reliability, and the score was 0.916, indicating excellent internal consistency across all measurement items. The reliability figure emphasizes the instrument's coherence, implying that the items accurately capture the intended dimensions. The descriptive analysis revealed that respondents had a moderate level of understanding, with an average score of 3.65 (SD = 0.71). The result indicates that participants generally recognized AI's positive impact on the customer experience. In terms of customer consideration, respondents scored an average of 3.54 (SD = 0.79), indicating a moderate willingness to consider AI-driven recommendations. The mean score for the customer purchase stage was 3.59 (SD = 0.74), indicating respondents' confidence in AI-supported purchasing experiences. Respondents gave an average score of 3.56 (SD = 0.73) for post-purchase interactions, indicating moderate satisfaction with AI-driven assistance.

An independent sample t-test was used in inferential analysis to compare gender differences across the customer journey dimensions. There were no statistically significant gender differences in any dimensions, as evidenced by p-values greater than 0.05 in all areas. However, some trends emerged: female respondents scored higher on customer awareness (M = 3.70, SD = 0.64) than male respondents (M = 3.59, SD = 0.81). Furthermore, multiple regression analysis revealed that customer post-purchase interactions are the strongest predictor of customer experience, with a standardized coefficient of 0.423 ($p = .000$). This suggests that post-purchase AI support improves respondents' overall experience. The pilot study provided valuable insights that allowed the questionnaire to be refined. This refinement aims to increase the reliability and

precision of data collection for the main study. The findings show that the instrument is well-suited to capturing critical aspects of AI's impact on the customer experience.

2.6.11. Ethical Considerations

The researcher adhered to ethical considerations throughout the study. Participants were free to withdraw from the survey at any point without being required to provide an explanation or face any form of penalty. Consequently, consent was obtained to secure the participants' participation. Ethical considerations dictate that the language employed in the survey must be devoid of bias and emotional nuances. The survey was conducted with the utmost brevity, employing straightforward language while adhering to ethical standards. Participants could discontinue their participation in the study at any time if it caused them discomfort. The survey had closed-ended questions regarding both positive and negative gratifications. Randomizing the questions about the four independent dimensions prevented respondents from exhibiting positive or negative biases.

To safeguard the privacy of the respondents, their personal information was maintained in strict confidence. At no point were the participants' names, phone numbers, and other personally identifiable information disclosed. The confidentiality of the participants was guaranteed. After participant data collection was completed, codes were allocated to every survey obtained from the respondents. This coding procedure contributed to the protection of the participant's privacy. The researcher did not pressure the participants to get the desired responses. As a result, the respondent's participation in the current study was voluntary. The presence of researcher bias was prevented. This ethical consideration guaranteed that participants would be at liberty to respond based on their perceptions and that no coerced responses would be obtained. The responses to the survey were utilized exclusively for scholarly objectives and disposed of after the publication of the dissertation.

The protection and well-being of research participants are fundamentally dependent on the implementation of ethical research practices. To ensure the study's moral integrity, the researcher emphasized informed consent, anonymity, confidentiality, volunteer participation, and the lack of financial promises. By safeguarding the participants' identities and personal information, anonymity and privacy were maintained, fostering an atmosphere that encouraged candid responses. The researcher also

acknowledged the importance of volunteer involvement since individuals contributed to our study voluntarily and without coercion. Finally, the researcher vowed to refrain from making any financial commitments to ensure that participants' support for the study's goals was solely based on their sincere interest. It is crucial to uphold these ethical principles to safeguard the rights and dignity of our participants, thereby augmenting the credibility and influence of the results of our study. Consequently, each of the considerations above is considered before data collection from participants.



CHAPTER 3

3. DATA ANALYSIS

3.1. Introduction

This chapter thoroughly analyzes the results of the study after data analysis using IBM SPSS 24 after concluding the pilot study and making necessary changes in the instrument, commencing with the factor loading analysis performed through multiple iterations. It delineates the commonalities of diverse items in the factor analysis and scrutinizes item representation within the structure. The reliability of the questionnaire is thoroughly explained using Cronbach's Alpha, illustrating the scale's internal consistency. The chapter concludes with a discussion on demographic analysis, descriptive statistics using mean and standard deviation, and percentage of the responses received, and inferential statistical methods, such as Independent Sample T-tests and Multiple Regression Analysis, to substantiate the research hypotheses.

3.2. Exploratory Factor Analysis (EFA)

The assessment of scale's construct validity underwent through the Kaiser-Meyer-Olkin (KMO) coefficient and the Bartlett Sphericity test, determining the need for factor analysis. (Hair et al., 2019). The Exploratory Factor Analysis (EFA) was used to ascertain the validity structure of the scale. During the execution of Exploratory Factor Analysis (EFA), various methods can be employed for factor extraction. The most commonly utilized approach is Principal Component Analysis (PCA), as indicated by Hair et al. (2019). PCA functions primarily as a dimensionality reduction method, converting the initial variables into a reduced set of uncorrelated variables referred to as principal components. This process aids in streamlining the data structure and uncovering the fundamental factors, as highlighted by Abdi and Williams (2010). In addition to factor extraction, factor rotation is used in EFA to determine the grouping of variables. One commonly utilized rotation method is Varimax rotation. Varimax rotation is classified as an orthogonal rotation technique, with the primary goal of maximizing the variance of squared loadings within each factor. Simultaneously, it strives to maintain distinct loadings for each variable, as described by Tabachnick, Fidell, and Ullman in 2007. The PCA employed basic components analysis and varimax vertical rotation to eliminate items with factor loading values below .30, as well as items with loading values across

different factors, as outlined by Abdi and Williams (2010). Hence, 5 items were excluded from the measurement since they had factor loading below .50.

The results in table (3.1) show that Customer Awareness, six items showed factor loadings between 0.545 and 0.705, with a total variance of 40.421%, a KMO of 0.776, and Bartlett's test $\chi^2 = 312.34$ ($p < 0.001$), indicating strong sampling adequacy. Customer Considerations had five items with loadings from 0.538 to 0.680, explaining 36.88% variance, a KMO of 0.690, and Bartlett's $\chi^2 = 127.82$ ($p < 0.001$), showing moderate acceptability. For Customers' Purchase, four items loaded between 0.548 and 0.727, with a total variance of 33.78%, a KMO of 0.652, and Bartlett's $\chi^2 = 96.28$ ($p < 0.001$). Customers' post-purchase had three items with loadings between 0.567 and 0.751, a variance of 45.04%, a KMO of 0.553, and Bartlett's $\chi^2 = 33.07$ ($p < 0.001$), reflecting moderate adequacy. Lastly, Customers' Experience comprised three items with loadings between 0.615 and 0.699, a variance of 44.23%, a KMO of 0.569, and Bartlett's $\chi^2 = 26.52$ ($p < 0.001$). Overall, the results validate the constructs, with moderate to high factor loadings and acceptable KMO values across variables.

Table 3.1

The Exploratory Factor Analysis (EFA)

Items	Factor Loadings	Total Variance (%)	KMO	Bartlett test value χ^2	Bartlett's test of p-value
Customer Awareness					
Item 1: Customers are aware of AI's role in enhancing their experiences.	0.636	40.421	0.776	312.34	0.001
Item 2: They recognize AI features on various business touchpoints.	0.705				
Item 3: They acknowledge AI's positive impact on product or service awareness.	0.643				
Item 4: They believe AI contributes to improving their brand awareness.	0.545				
Item 5: They recognize the influence of AI in shaping their perceptions about brands.	0.647				

Item 6: Customers are aware of AI's role in enhancing their experiences.	0.647				
Customer considerations					
Item 1: They value personalized recommendations from AI systems.	0.553				
Item 2: They prefer AI-driven suggestions over traditional methods.	0.680				
Item 3: They trust AI to present relevant options during the consideration stage.	0.581	36.88	0.690	127.82	0.001
Item 4: They prefer brands that offer AI-powered assistance during consideration.	0.585				
Item 5: They believe that AI contributes to a better understanding of their brand offering.	0.630				
Customers' Purchase					
Item 1: They feel more confident while making purchases with AI assistance.	0.727				
Item 2: They are likely to recommend brands offering AI-driven purchase support.	0.589				
Item 3: They prefer AI-driven solutions for purchase-related inquiries.	0.680	33.78	0.652	96.28	0.001
Item 4: The experience increased confidence in customers' purchase decisions with AI assistance.	0.548				
Customers' post-purchase					
Item 1: They find post-purchase interactions involving AI more satisfying.	0.683				
Item 2: They feel supported by AI-driven services after making a purchase.	0.751	45.04	0.553	33.07	0.001
Item 3: They feel a quick response to their queries after post purchase using AI assistance.	0.567				
Customers' Experience					
Item 1: Customers value and prefer personalized recommendations generated by AI	0.699	44.23	0.569	26.52	0.001

systems over more traditional methods.

Item 2: Customers place trust in AI to present relevant options and suggestions to them during the consideration stage of their journey.	0.679
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Item 3: Customers prefer brands that offer AI-powered assistance and support throughout their decision-making process and consideration stage.	0.615
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3.2. Reliability of the Instrument

The reliability analysis of the questionnaire, as presented in Table (3.2), demonstrates a high level of internal consistency across the various items designed to assess customer experiences with AI. Cronbach's Alpha, a statistical measure used to evaluate how closely related a set of items are as a group, is employed to gauge the reliability of each item and the overall questionnaire.

Cronbach's alpha is a measure of internal consistency commonly used to assess the reliability of a scale, with 0.70 or higher being the widely accepted threshold for adequate reliability; however, in the case of newly developed scales, especially in exploratory research, a lower threshold of 0.50 or above is often considered acceptable, as supported by, Hair et al. (2010), George and Mallery (2003), and Gliem and Gliem (2003).

The reliability analysis of the newly developed scales reveals that Cronbach's Alpha values for the individual variables are generally acceptable, given the exploratory nature of the research and the lower threshold of 0.50 commonly applied in such cases. The results in table (1) show that Customer Awareness (6 items) scored 0.707, Customer Considerations (5 items) scored 0.569, Customers' Purchase (4 items) scored 0.525, Customers' Post-Purchase (3 items) scored 0.584, and Customers' Experience (3 items) scored 0.502. The overall reliability for all 21 items combined achieved a robust Cronbach's Alpha of 0.864, indicating strong internal consistency for the composite scale.

Table. 3.2.

Reliability of the scales

Variables	Number of Items	Cronbach's Alpha
Customer Awareness	6	0.707
Customer considerations	5	0.569
Customers' Purchase	4	0.525
Customers' post-purchase	3	0.584
Customers' Experience	3	0.502
Overall	21	0.864

3.3. Demographic Analysis

Table 3.3 presents the distribution of respondents based on their age, revealing important insights into the composition of the sample population. The first age group, comprising individuals aged 20-25 years, accounts for 23% of the total respondents, with a frequency of 81 out of 352. This represents a significant portion of the sample, indicating that nearly one-quarter of the respondents are relatively young, possibly early in their professional or academic careers. Their perspectives may reflect the views and attitudes of the younger demographic, who are often more attuned to contemporary trends and technological advancements. The second age group, those aged 26-30 years, constitutes 31% of the respondents, with a frequency of 109. This is the second-largest segment, suggesting that a substantial proportion of the sample is in a transitional stage of life, potentially balancing the early stages of career development with personal growth. This group may offer valuable insights into the challenges and opportunities faced by individuals who are moving from early adulthood into more established roles within their respective fields.

Table 3.3.

Interpretation of Respondents on the basis of Age

Age	Frequency	Percent
20-25	81	23.0
26-30	109	31.0
31-35	162	46.0
Total	352	100.0

The largest age group represented is the 31-35 years category, which makes up 46% of the respondents, with a frequency of 162. This dominant segment indicates that nearly half of the sample is composed of individuals in their early to mid-thirties. This age group is likely to be more experienced, possibly holding significant responsibilities in their professional lives. Their responses might reflect a more mature perspective, informed by years of experience and a deeper understanding of their industry or area of interest.

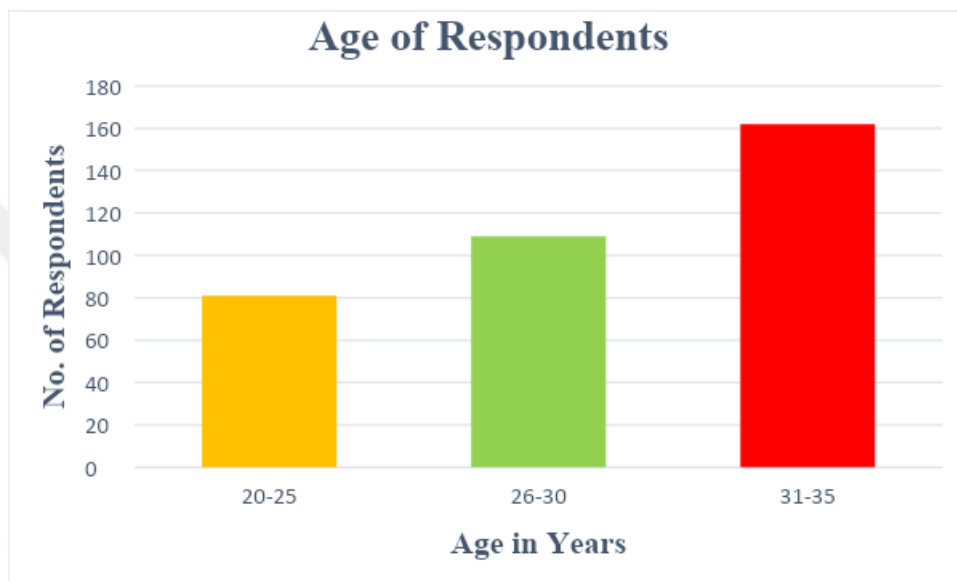


Figure 3.1. Age of Respondents

Table 3.4 provides an analysis of the respondents based on their gender, highlighting the gender distribution within the sample population. The majority of the respondents are male, with a frequency of 233 out of 352, accounting for 66.2% of the total sample. This indicates a significant male dominance in the respondent pool, which could suggest that the topic or context of the survey might be more relevant or appealing to men, or that there is a higher participation rate among males in the area being studied. This predominance of male respondents could influence the overall findings, as the perspectives and experiences reflected in the data may be more aligned with those of the male population.

Table 3.4.

Interpretation of Respondents on the basis of Gender

Gender	Frequency	Percent
Male	233	66.2
Female	119	33.8
Total	352	100.0

On the other hand, female respondents represent 33.8% of the total sample, with a frequency of 119. While this is a smaller proportion compared to their male counterparts, it still constitutes a substantial segment of the population. The presence of female respondents ensures that their views are also represented, albeit to a lesser extent. The difference in gender distribution might reflect broader societal or industry trends where male participation is more pronounced, or it could indicate potential barriers to female participation that warrant further exploration.

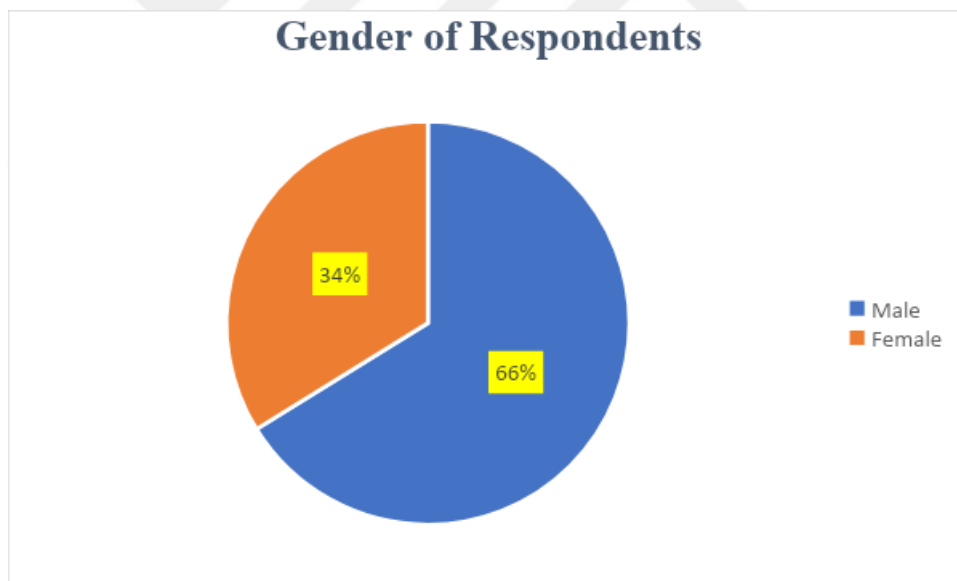
**Figure 3.2.** Gender of Respondents

Table (3.5) highlights an interpretation of the respondents based on their marital status, revealing insights into the social composition of the sample population. The largest group within the sample is those who are married, with a frequency of 250 out of 352 respondents, accounting for 71% of the total. This dominant proportion suggests that the majority of the respondents are likely to have family responsibilities and might be at a stage in life where stability and long-term commitments are more prevalent. The high

percentage of married respondents could influence the overall perspectives and priorities reflected in the data, possibly emphasizing factors such as family, financial security, and work-life balance.

Table 3.4.

Interpretation of Respondents on the basis of Marital Status

Marital Status	Frequency	Percent
Single	95	27.0
Married	250	71.0
Divorced	7	2.0
Total	352	100.0

The second-largest group consists of single respondents, with a frequency of 95, making up 27% of the total sample. This significant portion of the population represents individuals who may be more focused on personal growth, career development, or education. The views and attitudes of this group might differ from those of married respondents, as they might prioritize different aspects of life, such as career advancement, travel, or personal freedom. The inclusion of this group adds a valuable dimension to the analysis, providing a broader understanding of the varying perspectives within the population. A small minority of respondents, 7 out of 352, are divorced, representing just 2% of the total sample. While this is a relatively small percentage, it is important to recognize the unique experiences and challenges that divorced individuals might bring to the study. Their perspectives could highlight different priorities or concerns, such as rebuilding after a major life change, managing single parenthood, or seeking new opportunities for personal growth. Including this group ensures that the study captures a wide range of life experiences, even if they are less common within the sample.

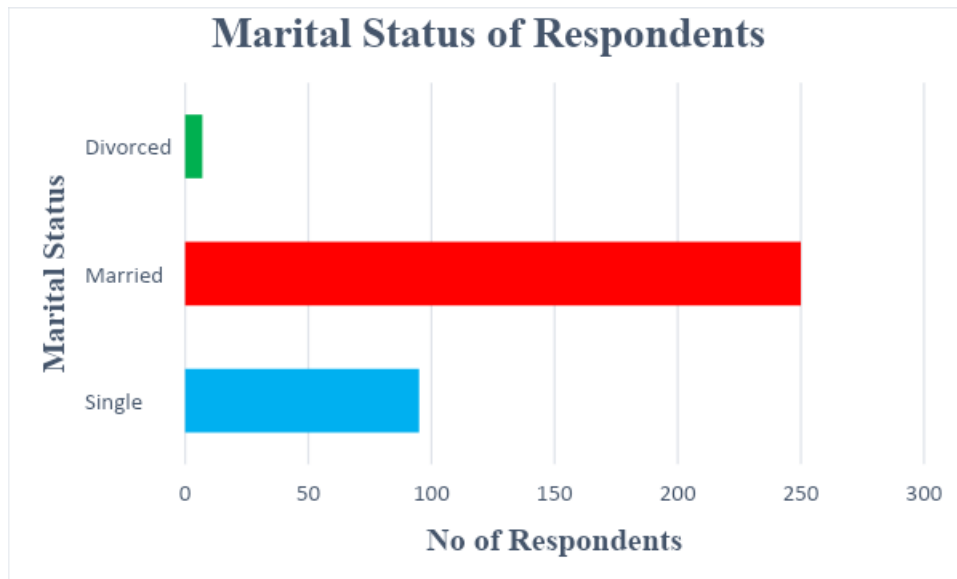


Figure 3.3. Marital Status of Respondents

Table 3.6 provides insights into the employment status of the respondents, offering a glimpse into their work-life dynamics and economic participation. The majority of respondents are engaged in part-time employment, with a frequency of 224 out of 352, representing 63.6% of the total sample. This significant proportion suggests that a large number of individuals in the study balance work with other commitments, such as education, caregiving, or other personal responsibilities. Part-time employment might reflect flexibility in managing multiple roles, or it could indicate a preference or necessity for part-time work due to market conditions or personal choice. The prevalence of part-time workers highlights the importance of understanding the motivations and challenges faced by this group, which may differ significantly from those in full-time positions.

Table 3.6.

Interpretation of Respondents on the basis of Employment Status

Employment Status	Frequency	Percent
Unemployed	28	8.0
Part Time	224	63.6
Full Time	100	28.4
Total	352	100.0

The second-largest group consists of respondents who are employed full-time, with a frequency of 100, making up 28.4% of the total. These individuals likely

experience more stability in their employment and possibly greater financial security compared to their part-time counterparts. Full-time employment often comes with additional benefits, such as health insurance, retirement plans, and career advancement opportunities, which could influence the priorities and perspectives of this group. Their views may reflect concerns about job satisfaction, work-life balance, and long-term career goals.

A smaller segment of the respondents, 28 out of 352, are unemployed, representing 8% of the total sample. Although this is the smallest group, it is essential to consider the unique challenges and perspectives of those who are not currently employed. Unemployment may be due to various factors, such as economic conditions, personal health, or transitions between jobs. The experiences of this group could highlight issues related to job search difficulties, financial stress, and the impact of unemployment on mental health and overall well-being. Including this group in the analysis provides a comprehensive understanding of the employment landscape within the sample.

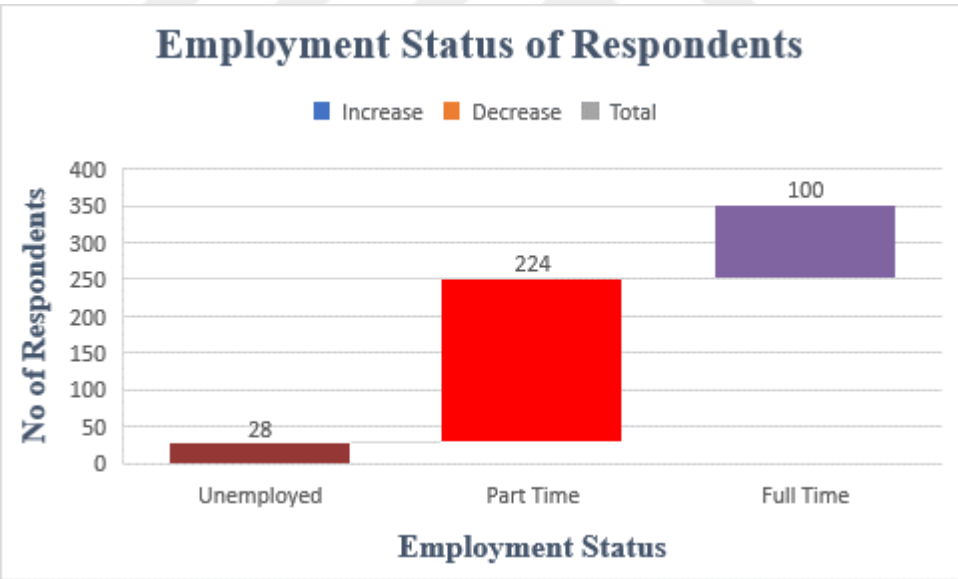


Figure 3.4. Employment Status of Respondents

Table 3.7 provides an analysis of respondents based on their income ranges, offering valuable insights into the financial diversity within the sample population. The income distribution among the 352 surveyed individuals highlights a significant difference in economic levels within the group. A total of 138 respondents, representing

39.2% of the sample, reported an annual income of less than 50,000 TRY, suggesting a substantial proportion of individuals with lower income levels.

Table 3.7.

Interpretation of Respondents on the basis of Income Ranges

Income Ranges	Frequency	Percent
Below 50.000 ₺	138	39.2
Above 50.000 ₺	214	60.8
Total	352	100.0

On the other hand, a majority of 214 respondents, accounting for 60.8% of the sample, indicated earning 50,000 ₺ or more annually. This demonstrates that the larger segment of the population falls into the higher income bracket. The data illustrates a clear division, with the majority earning above the threshold, potentially reflecting broader economic patterns or disparities within the studied population.

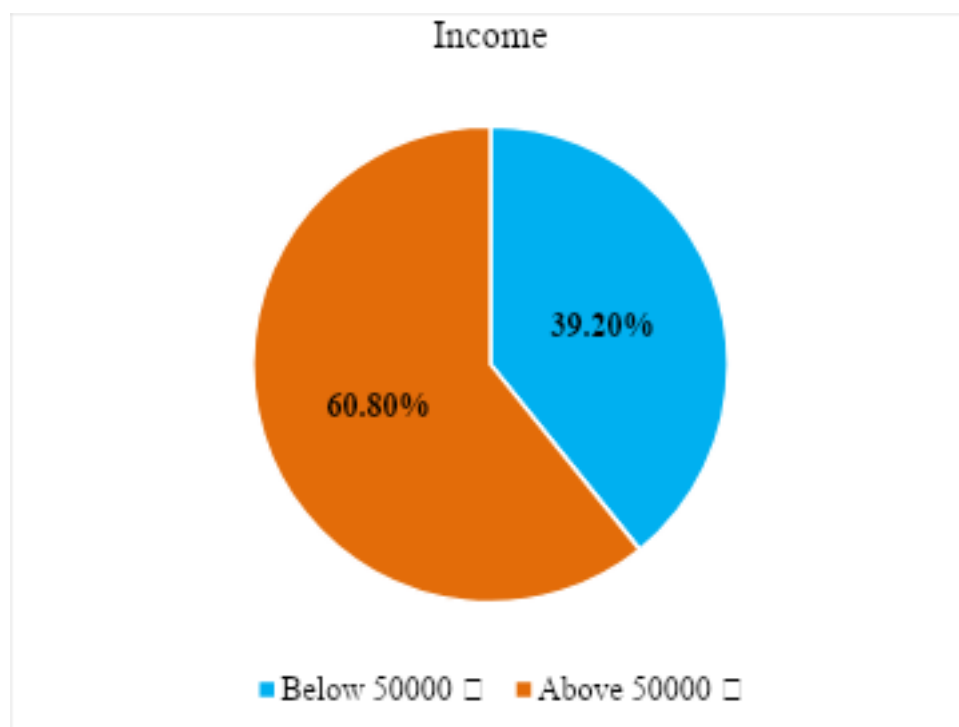


Figure 3.5. Income of Respondents

5.4. Findings of the Study

5.4.1. Descriptive Statistics Analysis

The data in Table 3.8 depicted an insightful analysis of customer awareness regarding the role of AI in enhancing their experiences throughout the customer journey. The first aspect analyzed is the customers' awareness of AI's role in enhancing their experiences. A significant majority of respondents acknowledge this role, with 32% agreeing and 43% strongly agreeing, resulting in a high mean score of 4.08. This indicates that most customers perceive AI as a positive force in improving their interactions with brands. The low percentage of respondents who disagree (2% strongly disagree and 8% disagree) suggests that the awareness of AI's benefits is widespread. The standard deviation of 1.02, though moderate, points to some variability in customer experiences, indicating that while the general sentiment is positive, there may be differences in how AI's role is perceived across different customer segments or industries.

The second statement reflects customer recognition of AI features at various business touchpoints. With 41% of respondents agreeing and 33% strongly agreeing, the mean score of 3.98 highlights that a substantial number of customers are aware of AI's integration into their interactions with businesses. The relatively low standard deviation of 0.97 suggests consistent recognition among customers, indicating that AI's presence is becoming increasingly evident and accepted across different platforms and services. However, the 3% of respondents who strongly disagree may represent a segment that either lacks exposure to AI-driven touchpoints or is less aware of the underlying technology.

When it comes to AI's impact on product or service awareness, 36% of respondents agree, and 34% strongly agree, leading to a mean score of 3.90. This suggests that the majority of customers recognize AI's role in enhancing their awareness of products and services. However, the slightly higher standard deviation of 1.07 indicates that there is more variability in how customers perceive this impact. Some customers may experience a more direct and noticeable influence of AI on their awareness, while others may not see as clear a connection, possibly due to differences in the sophistication or visibility of AI applications in their interactions.

The belief that AI contributes to improving brand awareness is supported by 39% of respondents who agree and 28% who strongly agree, resulting in a mean score of 3.82.

While this reflects a generally positive view, the lower mean score compared to other aspects suggests that customers may be less certain about AI's role in brand awareness. The standard deviation of 1.00 indicates moderate variability, with a quarter of respondents (25%) remaining neutral, which could imply that the impact of AI on brand awareness is not as universally recognized or that it varies significantly depending on the brand or industry in question.

In terms of AI's influence on brand perception, 37% of respondents agree, and 33% strongly agree, yielding a mean score of 3.90. This data indicates that most customers recognize AI's role in shaping their perceptions of brands. The standard deviation of 1.04 points to some variability in responses, suggesting that while the overall sentiment is positive, there may be differences in how strongly customers feel AI influences their brand perceptions. This could be due to varying levels of AI sophistication in marketing efforts or differences in how AI-driven content resonates with different customer segments.

Finally, 47% of respondents agree that AI helps them better understand brand offerings, with 27% strongly agreeing, resulting in a mean score of 3.91. This finding suggests a strong belief among customers that AI enhances their comprehension of what brands offer, with a low standard deviation of 0.95 indicating consistent agreement across the sample. This consistency may reflect the effectiveness of AI in clarifying and presenting brand offerings in a way that resonates with a wide audience, highlighting the potential of AI to simplify and enhance the customer journey.

When considering overall customer awareness of AI's role in the customer journey, the mean score across all items is 3.93, indicating a generally high level of awareness and positive sentiment towards AI's contributions. The overall standard deviation of 1.01 suggests moderate consistency in responses, with the majority of customers recognizing AI's significant impact on their experiences, awareness, and perceptions throughout their interactions with businesses. This data underscores the growing importance of AI in shaping the modern customer journey, highlighting its role in enhancing experiences, improving awareness, and influencing brand perceptions.

Table 3.8.

Interpretation of Customer Awareness on Customer Journey

SR No	Customer Awareness	SDA %	DA %	US %	A %	SA %	SD	M
1	Customers are aware of AI's role in enhancing their experiences.	2	8	15	32	43	1.02	4.08
2	They recognize AI features on various business touchpoints.	3	3	19	41	33	0.97	3.98
3	They acknowledge AI's positive impact on product or service awareness.	4	5	20	36	34	1.07	3.90
4	They believe AI contributes to improving their brand awareness.	3	6	25	39	28	1.00	3.82
5	They recognize the influence of AI in shaping their perceptions about brands.	3	6	20	37	33	1.04	3.90
6	Believe AI contributes to better understanding of brand offerings.	3	6	17	47	27	0.95	3.91
Overall		3	6	20	39	33	1.01	3.93

The data in Table 3.9 showed an interpretation of customer consideration on the customer journey. The first statement reflects the extent to which customers value personalized recommendations from AI systems. A significant portion of respondents, 38% agreeing and 32% strongly agreeing, results in a relatively high mean score of 3.88. This suggests that most customers appreciate the personalized touch that AI systems can offer. The lower standard deviation of 1.05 indicates more consistent agreement among customers, reflecting a general appreciation for AI's ability to tailor recommendations to individual preferences, which likely enhances the overall customer experience.

Regarding the preference for AI-driven suggestions over traditional methods, 40% of respondents agree and 28% strongly agree, leading to a mean score of 3.83. This indicates a favorable attitude toward AI-driven suggestions, with a preference for these modern methods over more traditional approaches. The standard deviation of 1.02, relatively low, points to consistent opinions among customers, suggesting that AI-driven suggestions are becoming increasingly accepted and preferred across different customer groups.

The third statement assesses the level of trust customers place in AI to present relevant options during the consideration stage. With 39% agreeing and 33% strongly agreeing, the mean score of 3.91 reflects a strong trust in AI's ability to provide relevant options. The standard deviation of 1.04 shows moderate variability, indicating that while

most customers trust AI, some may have reservations, possibly due to concerns about accuracy, relevance, or the underlying algorithms used by AI systems.

Customers' preference for brands that offer AI-powered assistance during the consideration stage is evident, with 38% agreeing and 33% strongly agreeing, resulting in a mean score of 3.89. This suggests that AI-powered assistance is a valuable feature for many customers, influencing their brand preferences. The standard deviation of 1.05 indicates a fair amount of consistency in responses, underscoring the importance of AI in modern customer service strategies and its potential to sway customer decisions.

Lastly, the belief that AI contributes to a better understanding of brand offerings is supported by 41% of respondents agreeing and 28% strongly agreeing, leading to a mean score of 3.81. This indicates that many customers see AI as a useful tool in clarifying and enhancing their understanding of what brands have to offer. The standard deviation of 1.05 suggests consistent opinions, though with some variability, reflecting differences in how effectively AI systems communicate brand offerings across different contexts or industries.

Overall, the data shows that customers generally hold a positive view of AI's role in the consideration stage of the customer journey, with a mean score across all statements of 3.86. The standard deviation of 1.04 suggests moderate consistency in responses, indicating that while most customers appreciate and trust AI-driven elements, there are variations in how these technologies are perceived and valued. This variability could be attributed to differences in individual experiences with AI, the quality of AI systems, or the specific contexts in which AI is applied.

Table 3.9.

Interpretation of Customer Consideration on Customer Journey

SR No	Customer Consideration	SD A %	DA %	US %	A %	SA %	SD	M
1	They value personalized recommendations from AI systems.	3	7	19	38	32	1.05	3.88
2	They prefer AI-driven suggestions over traditional methods.	3	6	22	40	28	1.02	3.83
3	They trust AI to present relevant options during the consideration stage.	4	5	19	39	33	1.04	3.91
4	They prefer brands that offer AI-powered assistance during consideration.	4	7	19	38	33	1.05	3.89

5	They believe that AI contributes to a better understanding of their brand offering.	4	7	20	41	28	1.05	3.81
Overall		4	6	20	39	31	1.04	3.86

The data in Table 3.10 ascertained an interpretation of customer purchase behavior during the customer journey. The first statement examines whether customers feel more confident while making purchases with AI assistance. A significant portion of respondents, 42% agreeing and 28% strongly agreeing, leads to a relatively high mean score of 3.84. This indicates that AI plays a crucial role in boosting customer confidence during purchasing decisions. The lower standard deviation of 1.03 suggests more consistent responses, reflecting a broad acceptance of AI's ability to provide reliable support that enhances customer confidence.

Regarding the likelihood of recommending brands that offer AI-driven purchase support, 35% of respondents agree and 36% strongly agree, resulting in a mean score of 3.94. This shows a strong inclination among customers to recommend brands that integrate AI into their purchase processes. The standard deviation of 1.06, while slightly higher, indicates that this sentiment is widely shared but not without some variability. The presence of AI-driven support appears to be a significant factor in brand advocacy, underscoring the importance of AI in customer satisfaction and loyalty.

The third statement focuses on customer preference for AI-driven solutions when addressing purchase-related inquiries. With 40% of respondents agreeing and 39% strongly agreeing, the mean score of 4.07 is the highest in this table, indicating a strong preference for AI over traditional methods. The low standard deviation of 0.97 suggests a high level of agreement among respondents, signaling that AI's efficiency and responsiveness make it a preferred option for resolving purchase-related questions and concerns. Lastly, the statement on increased confidence in purchase decisions due to AI assistance shows that 34% of respondents agree and 29% strongly agree, resulting in a mean score of 3.76. This suggests that AI not only assists customers during their purchase journey but also enhances their confidence in the decisions they make. The standard deviation of 1.10 indicates moderate variability, implying that while AI generally boosts confidence, some customers may still have reservations or encounter inconsistencies in AI-driven support.

Overall, the data reveals a generally positive attitude toward AI's role in the purchase journey, with a mean score across all items of 3.90. The standard deviation of 1.04 suggests moderate consistency in responses, indicating that while AI is widely appreciated for its role in facilitating purchases, there is some variability in how customers experience and perceive this assistance. This variability could stem from differences in the quality of AI systems, the extent of their integration into the purchasing process, or the varying levels of customer familiarity with AI technology.

Table 3.10.

Interpretation of Customer Purchase on Customer Journey

SR No	Customers' Purchase	SD A %	DA %	US %	A %	SA %	SD	M
1	They feel more confident while making purchases with AI assistance.	3	8	19	42	28	1.03	3.84
2	They are likely to recommend brands offering AI-driven purchase support.	3	7	18	35	36	1.06	3.94
3	They prefer AI-driven solutions for purchase-related inquiries.	2	6	13	40	39	0.97	4.07
4	The experience increased confidence in customers' purchase decisions with AI assistance.	4	9	24	34	29	1.10	3.76
Overall		3	8	19	38	33	1.04	3.90

The data in Table 3.11 highlights an interpretation of customer experiences in the post-purchase stage of the customer journey. The first statement explores whether customers find post-purchase interactions involving AI more satisfying. A strong majority, with 38% agreeing and another 38% strongly agreeing, results in a high mean score of 4.06. This suggests that AI-driven interactions significantly enhance customer satisfaction in the post-purchase stage. The low standard deviation of 0.96 indicates consistent responses across the sample, reflecting widespread appreciation for the role of AI in improving post-purchase experiences. The near absence of strong disagreement (only 1%) further emphasizes the positive reception of AI in this context.

When it comes to feeling supported by AI-driven services after making a purchase, 39% of respondents agree and 36% strongly agree, leading to a mean score of 4.01. This indicates that the majority of customers feel well-supported by AI post-purchase, with the AI providing effective follow-up services. The standard deviation of 1.00 suggests moderate consistency, with most customers sharing a positive view but still some

variability, likely reflecting differences in the quality or availability of AI-driven support across different brands or industries.

The fourth statement assesses whether customers feel they receive a quick response to their queries after a purchase through AI assistance. With 36% agreeing and another 36% strongly agreeing, the mean score of 3.96 indicates that AI is generally perceived as effective in providing timely responses post-purchase. The standard deviation of 1.03, while slightly higher than in the previous statements, still suggests a good level of consistency in responses. The relatively low percentages of disagreement (2% strongly disagree and 8% disagree) highlight that most customers experience prompt and efficient AI-driven assistance after their purchase.

Overall, the data reveals a positive sentiment toward AI's role in the post-purchase stage, with a mean score across all items of 4.01. The standard deviation of 1.00 indicates moderate consistency in responses, suggesting that while AI is generally well-regarded for enhancing post-purchase interactions, there is some variability in how customers perceive and experience these AI-driven features. This variability could be attributed to differences in the sophistication of AI systems, the specific post-purchase services offered, or individual customer expectations and familiarity with AI technology.

Table 3.11.

Interpretation of Customer Post-Purchase on Customer Journey

SR No	Customers' Post Purchase	SD A %	DA %	US %	A %	SA %	SD	M
1	They find post-purchase interactions involving AI more satisfying.	1	7	16	38	38	0.96	4.06
2	They feel supported by AI-driven services after making a purchase.	3	5	17	39	36	1.00	4.01
3	They feel a quick response to their queries after post purchase using AI assistance.	2	8	17	36	36	1.03	3.96
Overall		2	7	17	38	37	1.00	4.01

The data in Table 3.12 determined an interpretation of customer experiences on their journey, specifically focusing on how AI-driven recommendations, suggestions, and support influence their interactions with brands. The first statement reveals that customers generally value and prefer personalized recommendations generated by AI systems over

more traditional methods. A significant majority, with 38% agreeing and 37% strongly agreeing, results in a high mean score of 4.00. This suggests that AI personalization is highly appreciated by customers and is considered superior to traditional methods. The low standard deviation of 1.02 indicates consistent responses, reflecting widespread acceptance and preference for AI-driven personalization in the customer journey.

The second statement assesses the level of trust customers place in AI to present relevant options and suggestions during the consideration stage of their journey. With 40% agreeing and 30% strongly agreeing, the mean score of 3.87 reflects a strong trust in AI's capabilities in this aspect of the customer journey. The standard deviation of 1.05 shows moderate variability, indicating that while the majority of customers trust AI, there are some differences in how strongly this trust is held, possibly due to varying experiences or the perceived accuracy of AI recommendations.

The third statement indicates that customers prefer brands that offer AI-powered assistance and support throughout their decision-making process and consideration stage. With 39% agreeing and 30% strongly agreeing, the mean score of 3.86 suggests that AI-powered assistance is a valuable and preferred feature for many customers. The standard deviation of 1.03 suggests a fair amount of consistency in responses, underscoring the importance of AI in enhancing the customer decision-making process and its potential to influence brand preference.

Overall, the data shows that customers generally have a positive experience with AI in their journey, with a mean score across all items of 3.91. The standard deviation of 1.03 suggests moderate consistency in responses, indicating that while AI is widely appreciated for enhancing the customer experience, there is some variability in how customers perceive and value AI-driven features. This variability could be due to differences in the effectiveness of AI implementations, the specific needs or preferences of individual customers, or the particular stage of the customer journey.

Table 3.12.

Interpretation of Customer Experience on Customer Journey

SR No	Customers' Experience	SD A %	DA %	US %	A %	SA %	SD	M
1	Customers value and prefer personalized recommendations generated by AI systems over more traditional methods.	3	6	16	38	37	1.02	4.00
2	Customers place trust in AI to present relevant options and suggestions to them during the consideration stage of their journey.	5	3	21	40	30	1.05	3.87
3	Customers prefer brands that offer AI-powered assistance and support throughout their decision-making process and consideration stage.	3	7	21	39	30	1.03	3.86
Overall		4	5	19	39	32	1.03	3.91

The data in Table 3.13 provides a comprehensive interpretation of the overall findings of the study, summarizing key dimensions of the customer journey: Customer Awareness, Customer Consideration, Customers' Purchase, Customers' Post-Purchase, and Customers' Experience. Each dimension is analyzed using a five-point Likert scale, with statistical measures such as Standard Deviation (SD) and Mean (M) providing insights into the consistency and central tendencies of customer responses.

The results provide a detailed overview of customer-related dimensions, highlighting key areas of strength and consistency in customer perceptions. Starting with Customer Awareness, 72% of respondents expressed agreement or strong agreement (A = 39%, SA = 33%), reflecting that customers are well-informed and aware of the offerings. The mean score of 3.93, coupled with a standard deviation (SD) of 1.01, shows a strong overall consensus and limited variability in responses, indicating a generally positive perception in this area.

Customer Consideration shows similar positive feedback, with 70% of respondents agreeing or strongly agreeing (A = 39%, SA = 31%). This dimension, which focuses on the factors influencing customer decision-making processes, achieved a mean score of 3.86 and an SD of 1.04, suggesting slight variation but still reflecting favorable customer attitudes.

In terms of Customers' Purchase, 71% of participants agreed or strongly agreed (A = 38%, SA = 33%), indicating that customers feel supported and confident during the

purchasing process. This dimension achieved a mean score of 3.90 and an SD of 1.04, reinforcing the idea that the purchasing experience is largely satisfactory.

The strongest performance is observed in Customers' Post Purchase, with 75% agreement or strong agreement (A = 38%, SA = 37%). This dimension, which assesses customer satisfaction and loyalty after making a purchase, achieved the highest mean score of 4.01 and the lowest SD of 1.00. This indicates that customers are particularly satisfied with the after-sales support and their overall post-purchase experiences.

Finally, Customers' Experience, encompassing broader interactions and perceptions, showed positive results, with 71% agreement or strong agreement (A = 39%, SA = 32%). With a mean score of 3.91 and an SD of 1.03, this dimension highlights a generally positive customer journey, though some variability in responses exists.

Overall, the aggregated results reveal that 72% of respondents expressed positive perceptions across all dimensions, with an overall mean score of 3.93 and an SD of 1.02. These findings suggest a well-rounded and generally favorable customer experience, with particular strength in the post-purchase phase, reflecting high levels of satisfaction and engagement. The consistency in agreement percentages and mean scores across dimensions demonstrates a strong alignment between customer expectations and the organization's performance.

Table 3.13.

Interpretation of Overall findings of the Study

SR No	Dimensions	SDA %	DA %	US %	A %	S A %	SD	M
1	Customer Awareness	3	6	20	39	33	1.01	3.93
2	Customer Consideration	4	6	20	39	31	1.04	3.86
3	Customers' Purchase	3	8	19	38	33	1.04	3.90
4	Customers' Post Purchase	2	7	17	38	37	1.00	4.01
5	Customers' Experience	4	5	19	39	32	1.03	3.91
Overall		3	6	19	39	33	1.02	3.93

3.4.2. Inferential Statistics Analysis

The table 3.14 shows the interpretation of the Independent Sample T-Test on gender across various customer-related variables reveals no statistically significant differences between male and female respondents. For Customer Awareness, males (M = 3.939, SD = 0.572) and females (M = 3.922, SD = 0.762) show similar means, with a t-

value of 0.240 (df = 350, p = 0.811), indicating no significant difference. In Customer Consideration, males (M = 3.945, SD = 0.622) and females (M = 3.823, SD = 0.747) also display no significant difference (t = 1.631, df = 350, p = 0.104). For Customer Purchase, males (M = 4.023, SD = 0.671) and females (M = 3.989, SD = 0.659) again show no significant difference (t = 0.454, df = 350, p = 0.650). Customer post-purchase behavior shows similar results with males (M = 3.901, SD = 0.575) and females (M = 3.793, SD = 0.728), having a t-value of 1.520 (df = 350, p = 0.129). Lastly, Customer Experience shows no significant difference, with males (M = 3.956, SD = 0.635) and females (M = 3.826, SD = 0.774), t-value of 1.676 (df = 350, p = 0.095). Overall, the p-values across all variables exceed 0.05, indicating that gender does not significantly affect customer-related variables in this sample.

Table 3.14.

Interpretation of Independent Sample T-Test on Gender

Sr No.	Variables	Gender	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig.
1	Customer Awareness	Male	233	3.939	0.572	0.037	0.24	350	0.811
		Female	119	3.922	0.762	0.070	0	0	1
2	Customer Consideration	Male	233	3.945	0.622	0.041	1.63	350	0.104
		Female	119	3.823	0.747	0.068	1	0	4
3	Customer Purchase	Male	233	4.023	0.671	0.044	0.45	350	0.650
		Female	119	3.989	0.659	0.060	4	0	0
4	Customer post-purchase	Male	233	3.901	0.575	0.038	1.52	350	0.129
		Female	119	3.793	0.728	0.067	0	0	9
5	Customer Experience	Male	233	3.956	0.635	0.042	1.67	350	0.095
		Female	119	3.826	0.774	0.071	6	0	5

The table (3.15) shows that one-way ANOVA was conducted to compare the means of five customer-related variables across three age groups: 20-25 years, 26-30 years, and 31-35 years. There was no significant difference in customer awareness between the age groups, $F(2, 351) = 0.358$, $p = 0.699$. The mean scores for customer awareness were: 20-25 years ($M = 3.952$, $SD = 0.702$), 26-30 years ($M = 3.964$, $SD = 0.543$), and 31-35 years ($M = 3.902$, $SD = 0.678$). Similarly, no significant difference was found in customer consideration across the age groups, $F(2, 351) = 0.177$, $p = 0.838$. The mean scores for customer consideration were: 20-25 years ($M = 3.880$, $SD = 0.750$), 26-30 years ($M = 3.933$, $SD = 0.633$), and 31-35 years ($M = 3.894$, $SD = 0.656$).

For customer purchases the one-way ANOVA did not show a significant difference between the age groups, $F(2, 351) = 0.311$, $p = 0.733$. The mean scores were: 20-25 years ($M = 4.058$, $SD = 0.628$), 26-30 years ($M = 3.980$, $SD = 0.704$), and 31-35 years ($M = 4.012$, $SD = 0.658$). In terms of customer post-purchase behavior, no significant difference was detected among the age groups, $F(2, 351) = 0.913$, $p = 0.402$. The mean scores were: 20-25 years ($M = 3.824$, $SD = 0.686$), 26-30 years ($M = 3.929$, $SD = 0.601$), and 31-35 years ($M = 3.837$, $SD = 0.628$).

Lastly, for customer experience, the ANOVA revealed no significant difference across the age groups, $F(2, 351) = 0.538$, $p = 0.585$. The mean scores were: 20-25 years ($M = 3.876$, $SD = 0.684$), 26-30 years ($M = 3.966$, $SD = 0.579$), and 31-35 years ($M = 3.890$, $SD = 0.757$). These results suggest that age does not significantly affect customer awareness, consideration, purchase, post-purchase behavior, or experience.

Table 3.15.

One-way ANOVA analysis compared five customer-related variables across three age groups

Sr No.	Variables	Age	N	Mean	Std. Deviation	Std. Error Mean	F	df	Sig.
1	Customer Awareness	20-25 years	75	3.952	0.702	0.081	0.358	2	0.699
		26-30 years	116	3.964	0.543	0.050			
		31-35 years	161	3.902	0.678	0.053			
2	Customer Consideration	20-25 years	75	3.880	0.750	0.087	0.177	2	0.838

		26-30 years	116	3.933	0.633	0.059			
		31-35 years	161	3.894	0.656	0.052			
		20-25 years	75	4.058	0.628	0.073			
		26-30 years	116	3.980	0.704	0.065	0.311	2	0.733
3	Customer Purchase	31-35 years	161	4.012	0.658	0.052			
		20-25 years	75	3.824	0.686	0.079			
		26-30 years	116	3.929	0.601	0.056	0.913	2	0.402
		31-35 years	161	3.837	0.628	0.049			
4	Customer post-purchase	20-25 years	75	3.876	0.684	0.079			
		26-30 years	116	3.966	0.579	0.054	0.538	2	0.585
		31-35 years	161	3.890	0.757	0.060			
5	Customer Experience								

The table (3.16) A one-way ANOVA was conducted to compare five customer-related variables across different marital statuses. For Customer Awareness, the results showed no significant differences among single ($M = 3.959$, $SD = 0.705$), married ($M = 3.926$, $SD = 0.601$), and divorced ($M = 3.833$, $SD = 1.106$) participants, $F(2, 349) = 0.174$, $p = 0.841$. Similarly, Customer Consideration revealed no significant differences for single ($M = 3.874$, $SD = 0.761$), married ($M = 3.916$, $SD = 0.620$), and divorced ($M = 3.893$, $SD = 1.029$) individuals, $F(2, 349) = 0.136$, $p = 0.873$. The analysis for Customer Purchase indicated no significant differences among single ($M = 4.032$, $SD = 0.674$), married ($M = 4.016$, $SD = 0.657$), and divorced ($M = 3.571$, $SD = 0.833$) groups, $F(2, 349) = 1.582$, $p = 0.207$. For Customer Post-Purchase, no significant differences were found between single ($M = 3.800$, $SD = 0.698$), married ($M = 3.894$, $SD = 0.596$), and divorced ($M = 3.714$, $SD = 0.930$) participants, $F(2, 349) = 0.958$, $p = 0.385$. Lastly, Customer Experience showed no significant differences among single ($M = 3.881$, $SD = 0.724$), married ($M = 3.940$, $SD = 0.653$), and divorced ($M = 3.333$, $SD = 1.106$) individuals, $F(2, 349) = 2.823$, $p = 0.061$. These results suggest that marital status does not significantly impact customer-related variables.

Table 3.16.

One-way ANOVA analysis compared five customer-related variables across Marital status

Sr N o.	Variables	Marital status	N	Mea n	Std. Deviati on	Std. Erro r Mea n	F	df	Sig.
1	Customer Awareness	Single	95	3.95 9	0.705	0.07 2	0.17 4	2	0.84 1
		Married	25 0	3.92 6	0.601	0.03 8			
		Divorced	7	3.83 3	1.106	0.41 8			
2	Customer Consideration	Single	95	3.87 4	0.761	0.07 8	0.13 6	2	0.87 3
		Married	25 0	3.91 6	0.620	0.03 9			
		Divorced	7	3.89 3	1.029	0.38 9			
3	Customer Purchase	Single	95	4.03 2	0.674	0.06 9	1.58 2	2	0.20 7
		Married	25 0	4.01 6	0.657	0.04 2			
		Divorced	7	3.57 1	0.833	0.31 5			
4	Customer post- purchase	Single	95	3.80 0	0.698	0.07 2	0.95 8	2	0.38 5
		Married	25 0	3.89 4	0.596	0.03 8			
		Divorced	7	3.71 4	0.930	0.35 1			
5	Customer Experience	Single	95	3.88 1	0.724	0.07 4	2.82 3	2	0.06 1
		Married	25 0	3.94 0	0.653	0.04 1			
		Divorced	7	3.33 3	1.106	0.41 8			

Table (3.17) shows A one-way ANOVA was conducted to compare five customer-related variables across employment status categories: Unemployed, Full Time, and Part Time. The variables examined included Customer Awareness, Customer

Consideration, Customer Purchase, Customer Post-Purchase, and Customer Experience. For Customer Awareness, there was no significant difference in the scores among Unemployed ($M = 3.958$, $SD = 0.677$), Full Time ($M = 3.939$, $SD = 0.680$), and Part Time ($M = 3.927$, $SD = 0.621$); $F(2, 349) = 0.036$, $p = 0.965$. Similarly, no significant differences were found for Customer Consideration [Unemployed ($M = 3.935$, $SD = 0.644$), Full Time ($M = 3.910$, $SD = 0.700$), Part Time ($M = 3.897$, $SD = 0.659$); $F(2, 349) = 0.044$, $p = 0.957$], Customer Purchase [Unemployed ($M = 4.226$, $SD = 0.506$), Full Time ($M = 3.967$, $SD = 0.756$), Part Time ($M = 4.005$, $SD = 0.638$); $F(2, 349) = 1.700$, $p = 0.184$], Customer Post-Purchase [Unemployed ($M = 3.907$, $SD = 0.580$), Full Time ($M = 3.846$, $SD = 0.645$), Part Time ($M = 3.868$, $SD = 0.634$); $F(2, 349) = 0.0109$, $p = 0.897$], and Customer Experience [Unemployed ($M = 3.917$, $SD = 0.671$), Full Time ($M = 3.893$, $SD = 0.706$), Part Time ($M = 3.920$, $SD = 0.683$); $F(2, 349) = 0.051$, $p = 0.950$]. These results indicate that employment status does not significantly impact the five customer-related variables.

Table 3.17.

Sr No.	Variables	Employment status	N	Mean	Std. Deviation	Std. Error Mean	F	df	Sig.
1	Customer Awareness	Unemployed	28	3.958	0.677	0.128	0.036	2	0.965
		Full Time	100	3.939	0.680	0.068			
		Part Time	224	3.927	0.621	0.042			
2	Customer Consideration	Unemployed	28	3.935	0.644	0.122	0.044	2	0.957
		Full Time	100	3.910	0.700	0.070			
		Part Time	224	3.897	0.659	0.044			
3	Customer Purchase	Unemployed	28	4.226	0.506	0.096	1.700	2	0.184
		Full Time	100	3.967	0.756	0.076			
		Part Time	224	4.005	0.638	0.043			
4	Customer post-purchase	Unemployed	28	3.907	0.580	0.110	.0109	2	0.897
		Full Time	100	3.846	0.645	0.065			
		Part Time	224	3.868	0.634	0.042			
5	Customer Experience	Unemployed	28	3.917	0.671	0.127	0.051	2	0.950
		Full Time	100	3.893	0.706	0.071			
		Part Time	224	3.920	0.683	0.046			

An independent-samples t-test was conducted to compare customer awareness, consideration, purchase, post-purchase, and experience between two income groups: below 50,000 ₺ and above 50,000 ₺. The results in table (3.18) show that there was no significant difference in customer awareness between the below 50,000 ₺ group ($M = 3.901$, $SD = 0.705$) and above 50,000 ₺ group ($M = 3.954$, $SD = 0.597$); $t(350) = -0.751$, $p = 0.452$. Similarly, customer consideration showed no significant difference between the below 50,000 ₺ group ($M = 3.858$, $SD = 0.726$) and above 50,000 ₺ group ($M = 3.934$, $SD = 0.628$); $t(350) = -1.045$, $p = 0.296$. For customer purchase, the below 50,000 ₺ group ($M = 4.044$, $SD = 0.659$) and above 50,000 ₺ group ($M = 3.991$, $SD = 0.671$) did not differ significantly; $t(350) = 0.726$, $p = 0.468$. No significant difference was found in customer post-purchase between the below 50,000 ₺ group ($M = 3.881$, $SD = 0.676$) and above 50,000 ₺ group ($M = 3.854$, $SD = 0.603$); $t(350) = 0.390$, $p = 0.697$. Lastly, customer experience scores were similar for the below 50,000 ₺ group ($M = 3.918$, $SD = 0.694$) and above 50,000 ₺ group ($M = 3.908$, $SD = 0.683$); $t(350) = 0.130$, $p = 0.897$. These results suggest that income level does not significantly affect customer awareness, consideration, purchase, post-purchase, or experience.

Table 3.18.

Interpretation of Independent Sample T-Test on income

Sr No.	Variables	Income	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig.
1	Customer Awareness	Below 50000 ₺	13 8	3.90 1	0.705	0.06 0	- 0.75 1	35 0	0.45 2
		Above 50000 ₺	21 4	3.95 4	0.597	0.04 1			
2	Customer Consideration	Below 50000 ₺	13 8	3.85 8	0.726	0.06 2	- 1.04 5	35 0	0.29 6
		above 50000 ₺	21 4	3.93 4	0.628	0.04 3			
3	Customer Purchase	Below 50000 ₺	13 8	4.04 4	0.659	0.05 6	0.72 6	35 0	0.46 8
		Above 50000 ₺	21 4	3.99 1	0.671	0.04 6			

4	Customer post-purchase	Below 50000 ₺	138	3.881	0.676	0.058	0.390	350	0.697
		Above 50000 ₺	214	3.854	0.603	0.041	0	0	7
5	Customer Experience	Below 50000 ₺	138	3.918	0.694	0.059	0.130	350	0.897
		Above 50000 ₺	214	3.908	0.683	0.047	0	0	7

Multiple Regression Analysis

Multicollinearity

Hair et al., 2019 express multicollinearity as a correlation among more than two independent variables. Multicollinearity occurs when there is a high correlation between any independent variable and the other set of independent variables (Tabachnick, Fidell and Ullman, 2007). The current study examined multicollinearity for the independent variables using the Variance Inflation Factor (VIF). Normally, multicollinearity does not exist when the predictor variable's VIF is below 10, and the tolerance value is larger than 0.1 (Pallant, 2020). The VIF recommendation of 10 corresponds to the tolerance recommendation of .10 (i.e., $1/0.10=10$). The data in Table (3.19) confirms that there is no indication of multicollinearity problems.

Table 3.19.

Variance Inflation Factor (VIF) and Test of Multicollinearity

Variables	Tolerance	VIF
Customer Awareness	0.437	2.286
Customer Consideration	0.533	1.875
Customer Purchase	0.702	1.425
Customer post-purchase	0.492	2.034

The results of the multiple regression analysis provide insight into the relationship between the independent variables (Customer Awareness, Customer Consideration, Customer Purchase, and Customer Post-purchase) and the dependent variable. The F-

statistic of 73.603, with a significant p-value, confirms that the model as a whole is statistically significant, meaning that at least one of the independent variables significantly predicts the dependent variable.

The correlation coefficient r of 0.678 indicates a moderately strong positive linear relationship between the predictors and the outcome. This means that as the values of the independent variables increase, the dependent variable tends to increase as well. The r^2 value of 0.459 shows that 45.9% of the variation in the dependent variable is explained by the independent variables, while the remaining 54.1% is due to other factors not included in the model or random variation. Each independent variable contributes differently to the model:

The analysis indicates that customer awareness has a strong and statistically significant positive impact on the outcome, as reflected by the standardized coefficient (Beta = 0.383) and a highly significant t-value ($t(19) = 6.42, p < .001$). This suggests that as customer awareness increases, the outcome also increases substantially. Similarly, customer consideration significantly contributes to the outcome (Beta = 0.214, $t(19) = 3.80, p < .001$), implying that higher levels of customer consideration are associated with better outcomes.

On the other hand, customer purchase did not show a significant effect (Beta = 0.097, $t(19) = 1.79, p = .075$), indicating that variations in customer purchase levels do not strongly predict changes in the outcome. Finally, customer post-purchase actions have weak a significant positive impact (Beta = 0.099, $t(19) = 2.09, p < .05$), suggesting that post-purchase behavior doesn't has a key role in influencing the outcome, though the effect size is smaller compared to awareness and consideration. This underscores the importance of focusing on customer awareness and consideration to improve the outcome, while also attending to post-purchase behaviors for sustained impact.

In summary, the analysis suggests that AI plays a crucial role in shaping the customer journey, with the most significant impacts at the awareness and consideration stages. Its influence is weaker at the post-purchase and purchase stages, possibly due to the complexity and variety of factors involved in decision-making at those points. The findings highlight the importance of strategically leveraging AI to optimize customer experience, particularly in the early and late stages of the customer journey.

Table 3.20.

Interpretation of Multiple Regression Analysis

Variables	Unstandardi zed Coefficients	Standardi zed Coefficient s	t	Sig.	F	r	r ²
Customer Awareness	0.410	0.383	6.420	0.001	73.603	0.678	0.459
Customer Consideration	0.233	0.214	3.803	0.001			
Customer Purchase	0.099	0.097	1.787	0.075			
Customer post-purchase	0.102	0.099	2.092	0.037			

Table 3.21 summarizes the outcomes of hypotheses examining the role of AI in enhancing customer experience across different stages of the customer journey. Hypothesis H1, concerning the customer awareness stage, was accepted due to the strongest positive effect (standardized coefficient 0.383) and significant statistics (t-value 6.420, $p = 0.001$). H2, focusing on the customer consideration stage, was also accepted, showing a moderate positive impact (standardized coefficient 0.214, t-value 3.803, $p = 0.001$). H3, related to the purchase stage, was rejected, as its effect was weaker (standardized coefficient 0.097) and not statistically significant (t-value 1.787, $p = 0.075$). H4, on the post-purchase stage was rejected, as its effect was weaker (standardized coefficient 0.099, t-value 2.092, $p = 0.037$). H5, there is no significant difference in the perception of the roles of AI in enhancing customer experience based on gender, age, marital status, employment status, or income. (p -values > 0.05).

Table 3.21.

Interpretation of Hypothesis Accepted or Rejected

Hypothesis	Result	Reason (Statistics)
H1: The roles of AI positively impact customer experience at the customer awareness stage of the customer journey.	Accepted	Overall mean score of 3.93 and (SD = 1.01) (Table 3.7), With a standardized coefficient of 0.383, this variable has the strongest effect on the dependent variable. The high t-value of 6.420 and a p-value of 0.001 indicate that this relationship is highly significant.
H2: The roles of AI positively impact customer experience at the customer consideration stage of the customer journey.	Accepted	Overall mean score of 3.86, and (SD = 1.04) (Table 3.8). The standardized coefficient of 0.214 shows a moderate positive effect. The t-value of 3.803 and a p-value of 0.001 confirm that this relationship is statistically significant.
H3: The roles of AI significantly impact customer experience at the customer purchase stage of the customer journey.	Rejected	Overall mean score of 3.90, and (SD = 1.04) (Table 3.9). With a smaller standardized coefficient of 0.097, this variable has a weaker effect. The t-value of 1.787 and a p-value of 0.075 suggest that this relationship is not statistically significant at the 0.05 level.
H4: The roles of AI significantly impact customer experience at the customer post-purchase stage of the customer journey.	Rejected	Overall mean score of 4.01, and (SD = 1.00) (Table 3.10). a standardized coefficient of 0.099, indicating this variable has a weaker effect. The t-value of 2.092 and a p-value of 0.037.
H5: There are significant differences in the perception of the roles of AI in enhancing customer experience based on gender, age, marital status, employment status, and income.	Rejected	There is no significant difference in the perception of the roles of AI in enhancing customer experience based on gender, age, marital status, employment status, or income.
H5(1): There are significant differences in the perception of the roles of AI in enhancing customer experience based on gender.	Rejected	There is no significant difference in the perception of the roles of AI in enhancing customer experience based on gender.
H5(2): There are significant differences in the perception of the roles of AI in enhancing customer experience based on age.	Rejected	There is no significant difference in the perception of the roles of AI in enhancing customer experience based on age.
H5(3): There are significant differences in the perception of the roles of AI in enhancing customer experience based on marital status.	Rejected	There is no significant difference in the perception of the roles of AI in enhancing customer experience based on marital status.

Hypothesis	Result	Reason (Statistics)
H5(4): There are significant differences in the perception of the roles of AI in enhancing customer experience based on employment status.	Rejected	There is no significant difference in the perception of the roles of AI in enhancing customer experience based on employment status.
H5(5): There are significant differences in the perception of the roles of AI in enhancing customer experience based on income.	Rejected	There is no significant difference in the perception of the roles of AI in enhancing customer experience based on income.



CHAPTER 4

4. DISCUSSION AND CONCLUSION

This chapter examines the comprehensive interpretation and analysis of the study's findings, concentrating on several critical elements of the customer journey affected by AI. The process commences with evaluating the survey instrument's reliability, which is succeeded by a demographic analysis of the respondents. The chapter subsequently analyzes the influence of AI on distinct stages of the customer journey, encompassing customer awareness, consideration, purchase, post-purchase behavior, and the overall customer experience. Moreover, it tackles gender-based disparities in comprehending AI's function. A comparison of the results with the existing literature is presented, emphasizing similarities and discrepancies. This text discusses the implications of these findings for businesses and educational institutions, along with recommendations for improving AI integration and customer education. Finally, the chapter concludes by encapsulating key findings, delineating contributions to the existing body of knowledge, acknowledging the study's limitations, and suggesting directions for future research.

The demographic analysis of respondents details their age, gender, marital status, employment status, and income. The largest age group in the sample is 31–35, at 46%, reflecting insights from early to mid-career professionals. The 26–30 age group makes up 31%, followed by 20–25 at 23%. Younger adults' high presence suggests early adulthood and career development strongly influence the study's findings. A gender imbalance exists in the sample, with 66.2% male and 33.8% female. Though female respondents are diverse, male respondents dominate the responses. Gender influences how respondents view employment and income.

Marital status affects financial stability and decision-making, as 71% of respondents are married. About 27% are single, and 2% are divorced. The high number of married people suggests a focus on stable family dynamics, while single and divorced people have different priorities and economic challenges. Employment data shows that 63.6% of respondents work part-time and 28.4% full-time. The remaining 8% are jobless. Many respondents juggle family and education due to the high number of part-time workers. Younger adults are still transitioning into full-time roles, which matches the age

distribution. Although rare, full-time workers provide valuable insights into stable employment trends; unemployed respondents add economic diversity to the data.

The results show that 39.2% of the sample, reported an annual income of less than 50,000 ₺, suggesting a substantial proportion of individuals with lower income levels. On the other hand, a majority of 214 respondents, accounting for 60.8% of the sample, indicated earning 50,000 ₺ or more annually.

The analysis of customer awareness regarding AI's role in enhancing their experiences throughout the customer journey reveals a generally positive perception, with most customers recognizing AI's impact on their interactions with brands. The majority of respondents acknowledge AI's contributions to improving experiences, awareness, and brand perceptions, with mean scores ranging from 3.82 to 4.08 across various touchpoints. While there is some variability in customer experiences, as indicated by moderate standard deviations, the overall sentiment is favorable, demonstrating that AI is increasingly recognized as a valuable tool in shaping the customer journey. This growing awareness underscores the importance of AI in modern business interactions.

The results reveal that customers generally have a positive view of AI's role in the consideration stage of the customer journey, as shown by high mean scores across all statements. A significant portion of respondents values personalized recommendations, prefers AI-driven suggestions over traditional methods, and trusts AI to present relevant options. AI-powered assistance also influences brand preferences, and many customers believe AI contributes to a better understanding of brand offerings. While the overall responses indicate appreciation for AI, the moderate standard deviations suggest some variability in customer experiences and perceptions, reflecting differences in how AI is utilized and its effectiveness in different contexts.

The results highlight a generally positive customer attitude toward AI's role in the purchase journey, with AI assistance enhancing customer confidence and satisfaction. A significant portion of respondents feels more confident in their purchasing decisions with AI support, and many are likely to recommend brands that offer AI-driven purchase assistance. Furthermore, customers show a strong preference for AI-driven solutions to resolve purchase-related inquiries. Despite some variability in responses, the overall trend indicates that AI plays a crucial role in boosting customer confidence, fostering brand loyalty, and improving the purchase experience. However, the variability suggests that

the quality and integration of AI systems, as well as customer familiarity, may influence the extent of these positive perceptions.

The results indicate a positive customer reception towards AI-driven interactions in the post-purchase stage, with high mean scores reflecting satisfaction, support, and timely responses. The majority of customers agree that AI enhances their post-purchase experience, with mean scores ranging from 3.96 to 4.06 and standard deviations between 0.96 and 1.03, suggesting moderate consistency in responses. While most customers report feeling well-supported and experiencing quick responses, some variability in perceptions may be due to differences in AI system sophistication, service quality, or customer expectations. Overall, AI appears to significantly improve post-purchase interactions, though with some variability in customer experiences.

The results highlight the positive impact of AI-driven recommendations, suggestions, and support on customer experiences throughout their journey. Customers highly value personalized AI recommendations, with a significant majority preferring them over traditional methods, as indicated by a high mean score and low variability. Trust in AI to provide relevant options is also strong, although there is moderate variability in how this trust is perceived. Additionally, AI-powered assistance is favored during decision-making stages, reflecting its importance in influencing brand preference. Overall, while there is some variability in customer perceptions, the data suggests that AI significantly enhances the customer experience, contributing to a more personalized and supportive journey.

The results generally favor customer perceptions across all key dimensions of the customer journey, including Customer Awareness, Consideration, Purchase, Post-Purchase, and Experience. Positive feedback was observed in all areas, with particularly strong satisfaction in the post-purchase phase, where 75% of respondents showed high levels of agreement. The results, with an overall mean score of 3.93 and a standard deviation of 1.02, indicate a consistent and favorable customer experience. Customers are well-informed, confident in their purchase decisions, and satisfied with after-sales support, reflecting a strong alignment between customer expectations and the organization's performance.

The results of the Independent Sample T-Test and one-way ANOVA analysis indicate that gender, age, marital status, employment status, and income level do not

significantly influence customer-related variables such as awareness, consideration, purchase, post-purchase behavior, or experience. This suggests that these demographic factors have little to no impact on the customer decision-making process or overall experience.

The multiple regression analysis reveals that customer awareness, customer consideration, and customer post-purchase actions have varying degrees of impact on the dependent variable, while customer purchase behavior does not appear to significantly influence the outcome. The overall model is statistically significant, as confirmed by the F-statistic of 73.603 and a significant p-value, indicating that at least one of the independent variables is a meaningful predictor. The correlation coefficient ($r = 0.678$) suggests a moderately strong positive linear relationship between the predictors and the outcome, meaning that as the independent variables increase, the dependent variable tends to increase as well. The r^2 value of 0.459 implies that 45.9% of the variation in the dependent variable is explained by the independent variables, while the remaining 54.1% is attributed to other factors not included in the model or random variation. Among the independent variables, customer awareness has the strongest positive impact, with a standardized coefficient (Beta = 0.383) and a highly significant t-value ($t(19) = 6.42$, $p < .001$), highlighting its substantial influence on the outcome. Customer consideration also significantly contributes to the model (Beta = 0.214, $t(19) = 3.80$, $p < .001$), indicating that higher levels of customer consideration are linked to better outcomes. On the other hand, customer purchase behavior did not show a significant effect (Beta = 0.097, $t(19) = 1.79$, $p = .075$), suggesting that it does not strongly predict changes in the outcome. Customer post-purchase actions, while contributing less than awareness and consideration, still have a meaningful positive impact (Beta = 0.099, $t(19) = 2.09$, $p < .05$), underlining the importance of addressing post-purchase behaviors for sustained customer engagement. The results suggest that AI has the most significant impact during the awareness and post-purchase stages, with a weaker effect on the consideration and purchase stages. This can be attributed to the complexity of decision-making processes at the consideration and purchase stages, where a wider range of factors influences customer behavior. These findings underscore the need to strategically implement AI in the early and late stages of the customer journey, focusing on improving awareness, consideration, and post-purchase experiences to optimize customer outcomes.

The research found that AI significantly affects the customer journey. The study examined previous research on customer awareness, consideration, purchasing behavior, post-purchase interactions, and gender-based analysis. AI increases customer awareness, with a mean score of 3.93. Most participants (72%) agreed or strongly agreed. It supports Huang and Rust's (2021) claim that AI enables personalized and targeted marketing to raise customer awareness. The study confirms Parasuraman et al. (2019). AI-driven customer awareness boosts brand engagement and loyalty by providing timely and relevant information across multiple touchpoints. AI was unbeneficial to 9% of respondents. It shows AI ignorance or distrust. These respondents agree with Grewal et al. (2020), who found that industry secrecy often breeds AI skepticism. These findings suggest that while AI has raised customer awareness, brands must improve communication about its benefits to reduce skepticism.

AI increases customer consideration, with a mean score of 3.82. 68% thought AI-powered systems made good, personalized recommendations. Shankar (2022) agreed that data-driven AI-powered recommendation systems improve decision-making. The low standard deviation of 1.07 suggests consistent customer AI effectiveness perceptions. Zhang et al. (2021) found that consumer trust in AI depends on technology knowledge and experience. That is why 11% of respondents opposed AI during consideration. These results suggest that while AI is widely used for personalization, brands must improve AI's transparency and reliability to win over skeptical customers. AI-powered purchase assistance improves the buying experience, according to the study's mean score of 3.83 and lowest standard deviation of 1.07. Luo et al. (2022) found that personalized, real-time AI assistance boosts transaction confidence. The findings support Grewal et al. (2018), who found that AI reduces purchasing uncertainty and boosts satisfaction and conversion rates. 12% of Van Doorn et al. (2020) respondents disagreed or strongly disagreed with AI's role in purchasing. It suggests that some customers prefer human interaction in complex or high-stakes transactions. AI systems need human support to accommodate these preferences.

AI-facilitated post-purchase interactions were also praised. The study found that 72% of participants agreed or strongly agreed, with a mean score of 3.86. Lemon and Verhoef (2019) claimed that AI's fast and effective post-purchase support boosts satisfaction, particularly in query resolution and return management. The moderate

standard deviation of 1.08 shows that most customers value AI during this stage, but experiences vary. Mogilner et al. (2022) found that not all brands have fully integrated AI into post-purchase services. It could explain why 13% of respondents did not see AI's benefits. These findings suggest that AI affects post-purchase engagement. For maximum customer benefits, its application must be standardized across industries. With an average score of 3.80, AI-driven personalization and support improve customer experience. Davenport and Ronanki (2018) found that AI predicts customer needs and customize content. According to Grewal et al. (2021), AI effectiveness varies by industry. The level of integration and customer AI familiarity matter. The moderate consistency of responses (standard deviation 1.06) supports this finding. Some respondents doubt AI's benefits. Fosso Wamba et al. (2021) suggested that AI education and transparency increase trust. These findings suggest that brands must prioritize transparency and accessibility to maximize AI's capabilities.

The findings of this study have significant implications for various stakeholders. These include businesses, AI developers, marketers, and consumers. The findings highlight the critical role of AI at different stages of the customer journey. They also offer guidance on how each stakeholder uses AI more effectively. AI improves business engagement, especially in the early awareness and consideration stages. Customers value the customization and informed choices that AI systems provide. It makes AI crucial for creating engaging customer experiences. However, the study found that AI's effectiveness decreases in the later stages of the customer journey. It is particularly true in post-purchase engagements. Businesses must improve AI's function in after-sales services. Strengthening AI-powered post-purchase support fosters long-term customer relationships. It, in turn, increases brand loyalty, which is essential for continued success.

The findings suggest that AI developers should design more transparent and user-friendly systems. Although AI enhances customer experiences, some customers remain skeptical or uninformed about its benefits. Developers must create intuitive and easy-to-use AI systems. Improving AI systems during the post-purchase stage provides a chance to enhance the overall customer experience. Developers should focus on integrating advanced support features. These features better engage customers and improve their post-purchase interactions. Marketers are in a strategic position to increase customer trust in AI. While many customers appreciate AI's role, raising awareness of its benefits is still

necessary. Marketers must create campaigns that communicate the advantages of AI-driven personalization and recommendations. It will help customers understand how AI improves their experience.

Explicitly demonstrating AI's functionality reduces skepticism. It also increases acceptance among consumers. The gender disparities found in the study suggest that marketing strategies should be tailored to different demographics. Marketers create more precise communication strategies for both male and female consumers. These strategies should consider the differing perceptions of AI. The study shows that AI improves consumer experiences, particularly in personalized recommendations and decision-making. However, some customers remain unaware or hesitant about AI's role in their experience. Businesses and marketers must clarify AI's function in improving the customer journey. Companies build trust and confidence by informing consumers about AI's role at each engagement stage. Consumers who understand AI's capabilities are more likely to use AI-powered tools. It will help them benefit from improved personalization, efficiency, and support.

The study offers essential recommendations for businesses, AI developers, marketers, and other stakeholders. These recommendations focus on improving AI to enhance the customer experience. Businesses should prioritize integrating AI at all stages of the customer journey. It is essential in post-purchase engagements. AI has dramatically impacted the awareness, consideration, and purchasing stages. However, its use in post-purchase support is still lacking. Companies should invest resources in AI solutions that go beyond initial engagement. These solutions should provide ongoing assistance. Examples include automated follow-ups, tailored offers, and proactive customer service. Improving AI in post-purchase experiences builds long-term customer loyalty.

AI developers need to focus on transparency and usability. Many customers appreciate AI's personalization and recommendations. However, some remain skeptical or unaware of its benefits. AI systems should clearly explain recommendations and decision-making processes. It will help customers understand how AI enhances their experience. Developers should also create intuitive and adaptable AI interfaces. It will ensure that all users easily interact with AI-powered features.

Marketers play a crucial role in increasing customer awareness and trust in AI. The study shows that AI is valued, but not all customers understand its full impact.

Marketers should create campaigns that educate customers about AI's benefits. These campaigns should emphasize AI's ability to personalize services and offer assistance. Clear communication reduces customer skepticism and increases acceptance of AI tools. Marketers should also tailor their strategies to different customer segments. Gender differences in AI perception suggest that targeted communication improves engagement. It leads to better customer experiences for both men and women. Enterprises should use AI to offer more personalized customer experiences. Consumers value AI's ability to provide relevant recommendations and interactions. Businesses should implement AI-powered systems tailored to individual preferences. These systems might include personalized product recommendations and targeted marketing. Increased personalization improves customer satisfaction and strengthens relationships.

Lastly, businesses need to address the concerns of skeptical customers. Some customers still lack trust in AI-generated recommendations. To resolve this, businesses should combine AI with human interaction. It is essential for complex situations like post-purchase support. Offering customers the option to choose between AI tools and human assistance builds

trust. It also provides a more flexible experience that meets different needs. Businesses and stakeholders maximize the potential of AI by following these recommendations. It will lead to higher customer satisfaction and stronger brand loyalty.

The study found that AI is crucial throughout the customer journey. Customers appreciate AI's impact, especially regarding awareness and consideration. AI-driven technologies increase product and service awareness. They also make customized suggestions. These AI features help customers make better decisions and feel more guided. Many customers value these benefits. A minority doubts or is unaware of AI's impact. AI is helpful during purchasing. AI gives customers confidence when making decisions, they say. Customers feel safer with AI's purchase support. Technology helps with product comparisons, reviews, and detailed information, improving the buying experience. AI performed well in the purchasing stage, but the study shows that it improves in later stages.

AI struggles in post-purchase interactions. Fewer customers appreciate AI after buying. Many believe AI is underdeveloped in post-purchase services like customer support and returns. Earlier stages of the journey are more recognized than this one. More

companies could develop AI post-purchase assistance solutions. AI-enhanced post-purchase engagement improves customer satisfaction and loyalty. Customer AI familiarity is also stressed in the study. Technology trust varies by group. Some customers prefer AI-generated suggestions. They trust AI for accurate, timely, relevant information. Others prefer human representatives, especially in complex situations or personal transactions. This preference divide suggests a hybrid approach. Businesses should combine AI and human interaction to meet more customer needs.

Also, the findings show that AI shapes modern customer journeys across industries. AI has improved personalization, targeted marketing, and purchase assistance. However, more work is needed to keep AI evolving in areas with less impact, such as post-purchase services and complex human interactions.

The study advances knowledge significantly. It thoroughly examines AI's role throughout the customer journey. The research covers all stages of AI's impact. These stages are awareness, consideration, purchase, and post-purchase. This study looks at multiple customer touch points, unlike previous AI studies. This broad perspective shows AI's multifaceted impact. It also fills a literature gap. The study's detailed analysis of AI's impact on customer awareness and consideration is essential. According to research, AI-powered features like personalized suggestions and targeted information boost customer engagement. These features are handy early in the journey. The study enhances AI personalization knowledge by emphasizing customer awareness and consideration. AI boosts efficiency and personalized interactions. Businesses use AI strategically, according to the findings. It optimizes marketing and customer engagement.

The study also sheds light on customer AI trust and skepticism. Many customers value AI, but many are unaware of its potential. Some customers are wary of AI. Businesses implementing AI systems need this finding. When using AI, businesses should be transparent and reliable. Effectively communicating AI's role in improving customer experiences is crucial. AI system trust is stressed in the research. It is especially true for AI tools that influence customer choices. The research also illuminates AI's role in post-purchase interactions. This topic has received little research. The findings show that AI improves post-purchase customer support and engagement. Businesses satisfy customers beyond the initial transaction with it.

According to the study, AI's post-purchase use has limitations. During this stage, not all customers see AI's value. Research shows that customers are unaware of AI's role in post-purchase interactions. It allows businesses to enhance AI-driven systems. Customer loyalty can be improved by post-purchase support. The study reveals how AI improves post-purchase support. The study also adds to the literature on gender differences in AI adoption. Research shows that men and women view AI differently. AI-driven features appeal to men more. This understanding of gender differences encourages businesses to design inclusive AI systems. Study shows the need for strategies that address men's and women's diverse needs. These findings inform future research and improve AI solutions for diverse customer demographics.

A limitation of the study is its narrow geographical scope. The research was done only at Anadolu University in 2023–2024. This focus helps explain how AI affects customer journeys in this context. It restricts the findings' generalizability. Regional, industry, and cultural differences affect customers' AI perceptions. Thus, the study did not fully capture global views on AI's customer journey enhancement potential. Future studies broaden geography and demographics. Diverse regions and consumer groups would enhance insights. Another limitation is the study's focus on Anadolu University students and staff. It did not represent all consumer profiles. Academics are more or less familiar with AI. The sample cannot reflect the views of other age groups, professions, or education levels. This is especially true for those who are less tech-savvy or working in AI-less industries. AI affects consumer behavior across industries. Diverse samples improve future research. It would help understand AI's impact on different customer segments.

Additionally, the study emphasizes customer journeys. Awareness, consideration, purchase, and post-purchase are covered. These stages are crucial, but other aspects of customer experience were not examined. It includes satisfaction, loyalty, and retention. The study's exclusion of post-purchase behaviors limits its scope. AI's impact on long-term customer relationships has not been thoroughly examined. AI's impact can be better understood by studying these stages. Future research could examine how AI helps customers form long-term relationships. The study mainly relied on survey participants' self-reported data. It cannot be very objective. Responses overstate or underestimate AI knowledge and experience. Social desirability or personal preferences influence their

answers. While the survey provides valuable insights, objective data would strengthen its findings. It could be customer behavior or performance metrics. Lastly, the study ignored differences in industry-specific AI deployment and effectiveness. AI's effects on customer journeys vary by industry, such as retail, healthcare, and banking. Thus, the findings do not apply to all sectors. Future research could examine industry-specific effects. Businesses in different fields would receive more tailored recommendations.

Considering this study's findings and limitations, several future research recommendations will be made. Geographic expansion is crucial. Future research should include individuals from different cultures, regions, and socioeconomic backgrounds. This method would reveal how cultural and regional factors affect customers' AI perceptions and experiences. AI's impact could be compared across diverse customer segments. Comparing AI's customer journey improvements provide a more complete picture. Second, participants' demographics must be broadened. The study was academic, so it does not reflect other consumer demographics. Future studies should include people of different professions, ages, and technological abilities. Researchers examine how different population segments use AI technologies. It will help customize AI to meet group needs and expectations.

Third, future research should analyze the entire customer journey. This study examined customer awareness, consideration, purchase, and post-purchase experiences. It ignored crucial post-purchase factors like customer loyalty, satisfaction, and retention. Future research could examine AI's impact on long-term customer relationships. AI's role in loyalty programs, repeat transactions, and brand advocacy could be examined. AI's role in customer engagement would be better understood with this approach. Further research benefits from using both qualitative and quantitative methods. Qualitative methods like interviews, focus groups, and case studies enhance survey findings. These methods reveal customer AI preferences, attitudes, and emotions. A mixed-method approach reveals more nuanced insights into how customers perceive AI at different touchpoints.

Additionally, industry-specific analysis is beneficial. The customer journey varies greatly depending on AI's impact in retail, healthcare, banking, and entertainment. Future research should examine AI's adoption in various industries. It would provide business-specific AI application recommendations. Finally, AI in customer interactions should be studied for ethical and privacy issues. Data security and transparency concerns grow as

AI becomes more embedded in consumer experiences. AI-driven system trust is also crucial. Understanding how these issues affect customer behavior would be insightful. Companies implementing AI use these findings to ensure ethics. Future research in these areas will help us understand how AI improves customer experiences. They will give businesses and policymakers practical advice.



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APPENDICES

Appendix-A QUESTIONNAIRE

The impact of artificial intelligence (AI) integrated with customer journey on customers' experience

Dear Participant,

This survey has been prepared to collect data for the master's thesis titled "The Impact of Customer Journey -Integrated with (AI) on Customer Experience," conducted under the supervision of Asst.Prof. Dr.Rıdvan KOCAMAN. The study aims to examine the impact of customer journey -integrated with AI on customer experience. Your feedback is highly valuable and will contribute to the understanding of this important topic. Your responses will be kept confidential, and participation is entirely voluntary. By answering the survey, you agree to participate in this research.

Yasmin E.N.Alnabahin

PART-1 Demographics

PART 1: Demographics				
Age	Gender	Marital Status	Employment Status	Income Status (₺)
☐ 20-25	☐ Male	☐ Single	☐ Unemployed	☐ 1000-50.999
☐ 26-30	☐ Female	☐ Married	☐ Part time	☐ 51.000-70.999
☐ 31-35		☐ Divorced	☐ Full time	☐ 71.000 above

Please indicate your level of agreement with each statement on a scale from 1 to 5, where 1 is 'Strongly Disagree' and 5 is 'Strongly Agree'.

Part 2: Determinants of the impact of AI integrated with customer journey on customers Experience

No	PART 2: Customer Awareness	SDA	DA	U	A	SA
1	Customers are aware of AI's role in enhancing their experiences.					
2	They recognize AI features on various business touchpoints.					
3	They acknowledge AI's positive impact on product or service awareness.					
4	They believe AI contributes to improving their brand awareness.					
5	They recognize the influence of AI in shaping their perceptions about brands.					
6	Believe AI contributes to better understanding of brand offerings.					

No	PART 3: Customer considerations	SDA	DA	U	A	SA
1	Customers consider AI-driven recommendations during their experience					
2	They value personalized recommendations from AI systems.					
3	They prefer AI-driven suggestions over traditional methods.					
4	They trust AI to present relevant options during the consideration stage.					
5	They prefer brands that offer AI-powered assistance during consideration.					
6	They believe that AI contributes to a better understanding of their brand offering.					

No	PART 4: Customers' Purchase	SDA	DA	U	A	SA
1	Customers experience AI-driven assistance during their purchase journey.					
2	They feel more confident while making purchases with AI assistance.					
3	They are likely to recommend brands offering AI-driven purchase support.					
4	They prefer AI-driven solutions for purchase-related inquiries.					
5	The experience increased confidence in customers' purchase decisions with AI assistance.					

No	PART 5: Customers' Post-Purchase	SDA	DA	U	A	SA
1	Customers notice AI-driven features in post-purchase interactions.					
2	They find post-purchase interactions involving AI more satisfying.					
3	They feel supported by AI-driven services after making a purchase.					
4	They feel a quick response to their queries after post purchase using AI assistance.					

No	PART 6: Customers' Experience	SDA	DA	U	A	SA
1	Customers are likely to consider AI-driven recommendations and suggestions as part of their overall experience with a brand.					
2	Customers value and prefer personalized recommendations generated by AI systems over more traditional methods.					
3	Customers place trust in AI to present relevant options and suggestions to them during the consideration stage of their journey.					
4	Customers prefer brands that offer AI-powered assistance and support throughout their decision-making process and consideration stage.					
5	Customers value and prefer personalized recommendations generated by AI systems over more traditional methods.					

Appendix-B DEFINITION OF KEY TERMS

Artificial Intelligence (AI)

A branch of computer science that enables machines to mimic human intelligence through algorithms, data processing, and learning. AI is used in customer experience to enhance interactions by predicting behavior, personalizing recommendations, and automating responses.

Customer Journey

The complete experience a customer has with a brand, from the initial awareness stage through post-purchase interactions. It includes every touchpoint, both online and offline, and defines the relationship between the customer and the brand.

Machine Learning

A subset of AI that enables systems to learn and improve from data without being explicitly programmed. It is crucial in understanding customer preferences and behaviors by analyzing large datasets in real-time.

Touchpoints

The points of interaction between a customer and a business throughout the customer journey. Touchpoints can include advertisements, website visits, customer service interactions, and post-purchase communications.

Customer Experience (CX)

The overall perception a customer has of a brand based on their interactions across all touchpoints. Positive CX leads to increased satisfaction, loyalty, and advocacy.

Personalization

Tailoring services or products to meet individual customer preferences and needs, often achieved using AI to analyze behavior and preferences. Personalization is a key strategy in creating unique customer experiences.

Data-Driven Decision Making

The process of making business decisions based on data analysis and interpretation, as opposed to intuition or observation alone. In AI-driven customer experiences, it refers to using real-time data to optimize customer journeys.

Predictive Analytics

A form of data analysis that uses historical data and machine learning to predict future events or behaviors. In customer journey management, it helps businesses anticipate customer needs and behavior.

Customer Engagement

The process of building a relationship with customers through meaningful interactions across various touchpoints, often aimed at fostering loyalty and long-term commitment.

Customer Loyalty

The likelihood that a customer will repeatedly choose a particular brand or service due to positive experiences, satisfaction, and trust built over time.

Appendix-C Etik Kurul Kararı

Evrak Kayıt Tarihi: 16.09.2024

Protokol No: 784349

Tarih: 24.09.2024



ANADOLU ÜNİVERSİTESİ
SOSYAL VE BEŞERİ BİLİMLER BİLİMSEL ARAŞTIRMA VE YAYIN ETİĞİ KURULU
KARAR BELGESİ

ÇALIŞMANIN TÜRÜ:	Yüksek Lisans Tez Çalışması
KONU:	Sosyal Bilimler
BAŞLIK:	Yapay Zeka ile Entegre Edilmiş Müşteri Yolculuğunun Müşteri Deneyimi Üzerindeki Etkisi
PROJE/TEZ YÜRÜTÜCÜSÜ:	Dr. Öğr. Üyesi Rıdvan KOCAMAN
TEZ YAZARI:	Yasmin E.N AL NABAHIN
ALT KOMİSYON GÖRÜŞÜ:	-
KARAR:	Olumlu