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## **The Future of Retail: Omnichannel Strategies for a Seamless Customer Journey**

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***Abstract:***

*This study explores the relationships between Omnichannel Strategy, Customer Engagement, Technology Adoption, and Customer Satisfaction within the context of Tokopedia users. Utilizing a quantitative research design, data was collected from 100 Tokopedia users in Medan through an online survey and analyzed using SmartPLS. The findings reveal that Omnichannel Strategy and Customer Engagement independently have a significant positive impact on Customer Satisfaction, while Technology Adoption also contributes substantially to enhancing Customer Satisfaction. Notably, the interaction between Omnichannel Strategy and Technology Adoption significantly amplifies Customer Satisfaction, highlighting the importance of integrating advanced technologies into omnichannel approaches. Conversely, the interaction between Omnichannel Strategy and Customer Engagement shows an insignificant effect on Customer Satisfaction, suggesting challenges in coordinating engagement efforts across multiple channels. These results emphasize the need for businesses to strategically combine omnichannel approaches with technology adoption to maximize customer satisfaction, while carefully managing engagement strategies across platforms.*

**Keywords:** *Omnichannel Strategy, Technology Adoption, Customer Engagement, And Customer Satisfaction*

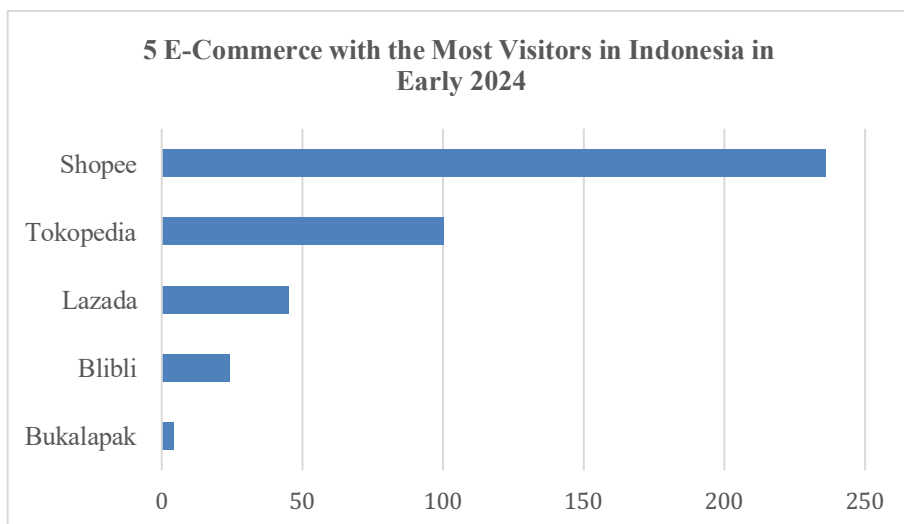
### **1. Introduction**

In the rapidly evolving retail landscape, the integration of omnichannel strategies has emerged as a critical approach for delivering a seamless customer journey (Hollebeek et al., 2022). As consumers increasingly demand consistency across both online and offline experiences, businesses must adapt to a retail environment where digital and physical channels converge (Gao & Huang, 2021). This convergence is reshaping how retailers engage with customers, emphasizing the importance of aligning touchpoints to create a unified and satisfying shopping experience. By leveraging technological advancements and enhancing customer engagement, retailers can address the challenges and opportunities presented by this new era of retail (M. W. Li et al., 2020).

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When applied to Tokopedia, one of Indonesia's leading e-commerce platforms, these concepts become particularly pertinent (de Oliveira Santini et al., 2020). The platform's omnichannel strategy involves integrating various sales channels, including its website, mobile app, and physical stores of its merchants, to ensure a cohesive shopping experience. Tokopedia's approach to omnichannel retail focuses on harmonizing customer interactions across these channels, enhancing customer satisfaction by providing a consistent and seamless journey (Barari et al., 2021). The dependent variable, Customer Satisfaction, is influenced by the effectiveness of Tokopedia's Omnichannel Strategy, which aims to synchronize online and offline touchpoints. Moderating variables such as Technology Adoption and Customer Engagement play a crucial role in this dynamic (Dissanayake et al., 2022). Technology Adoption refers to the extent to which Tokopedia implements and utilizes advanced technologies to streamline the shopping process, while Customer Engagement measures how actively customers interact with the platform across different channels. Both variables significantly impact the success of the omnichannel strategy by affecting how well Tokopedia can deliver a unified and satisfying customer experience (O. Ali et al., 2021). Thus, understanding these variables helps in assessing how effectively Tokopedia's omnichannel approach meets consumer expectations and adapts to the evolving retail environment.



**Figure 1. 5 E-Commerce with the Most Visitors in Indonesia in Early 2024**

The graph illustrates the visitor statistics for the top five e-commerce platforms in Indonesia at the beginning of 2024, highlighting Tokopedia's position as a significant player in the market. With approximately 100.3 million visitors, Tokopedia ranks second, trailing behind Shopee, which leads with the highest number of visitors. Despite not surpassing Shopee, Tokopedia maintains a competitive edge over other platforms such as Lazada, which records around 45.03 million visitors. This data underscores Tokopedia's substantial presence in the Indonesian e-commerce sector, yet it also points to a critical issue: the need for Tokopedia to enhance its

omnichannel strategy to bridge the gap with Shopee. The observed visitor statistics reflect a broader phenomenon affecting Tokopedia's market positioning. The challenge lies in optimizing Tokopedia's Omnichannel Strategy to further enhance Customer Satisfaction. This issue is crucial because, despite Tokopedia's strong visitor numbers, its current strategy may not be fully effective in delivering a seamless and integrated customer experience across all touchpoints. The role of Technology Adoption is particularly relevant here; Tokopedia's ability to implement and utilize advanced technological solutions can significantly influence how well it aligns its online and offline channels (Zolas et al., 2021). Additionally, Customer Engagement, which encompasses how actively users interact with Tokopedia across different platforms, also plays a vital role. The effectiveness of Tokopedia's omnichannel approach in meeting consumer expectations and improving their overall experience is directly linked to these moderating variables. Thus, this situation highlights the need to explore and address how Tokopedia can refine its omnichannel strategies to boost customer satisfaction and better compete in the dynamic e-commerce landscape (N. Khan et al., 2022).

Despite Tokopedia's impressive position as the second most visited e-commerce platform in Indonesia, trailing only behind Shopee, there is a critical research gap concerning its omnichannel strategy's effectiveness in enhancing customer satisfaction. While Tokopedia's substantial visitor count of approximately 100.3 million underscores its market influence, recent studies reveal that achieving a seamless omnichannel experience remains a significant challenge. For instance, research by (Dube et al., 2020) highlights the importance of integrating online and offline channels to meet rising consumer expectations for a cohesive shopping journey. Similarly, (van Dun & Kumar, 2023) emphasize that effective Technology Adoption is essential for optimizing omnichannel strategies, a crucial factor for Tokopedia to address. Furthermore, (Zhi et al., 2023) discuss how Customer Engagement impacts overall customer satisfaction and loyalty, which is vital for Tokopedia's competitive positioning. Despite Tokopedia's substantial engagement numbers, gaps in understanding how these variables interact and influence each other persist. Studies by (Skare & Riberio Soriano, 2021) and (Saghafian et al., 2021) underscore the need for e-commerce platforms to continually adapt their strategies in response to evolving customer behaviors and technological advancements. The research by (Neves et al., 2022) and (Alfayad, 2021) points out that while many platforms excel in digital integration, there is often a lag in effectively harmonizing the omnichannel experience. Moreover, (Paiola et al., 2023) and (Z. Li et al., 2023) highlight that increased investment in omnichannel technology can significantly enhance customer satisfaction, a factor Tokopedia must consider. This body of literature indicates a pressing need for further investigation into how Tokopedia can refine its omnichannel approach to bridge the gap between its current performance and its potential for delivering a truly integrated customer experience.

The objective of this research is to investigate how Tokopedia can optimize its omnichannel strategy to enhance customer satisfaction and strengthen its competitive

position within the Indonesian e-commerce market. By examining the effectiveness of Tokopedia's current integration of online and offline channels, this study aims to identify key areas for improvement in delivering a seamless and cohesive customer experience. Additionally, the research seeks to analyze the impact of Technology Adoption and Customer Engagement on the success of Tokopedia's omnichannel approach. The goal is to provide actionable insights and recommendations that will help Tokopedia bridge the gap between its current performance and its potential to achieve a superior customer journey, thereby improving overall customer satisfaction and increasing its market share.

## **2. Theoretical Background**

### **Customer Satisfaction**

Customer Satisfaction is a crucial metric that reflects how well a company's products or services meet or exceed customer expectations. It encompasses various aspects of the customer experience, including product quality, service efficiency, and overall shopping experience (Pereira et al., 2023). High levels of customer satisfaction indicate that a company is effectively addressing the needs and preferences of its customers, which can lead to increased loyalty, positive word-of-mouth, and repeat business. In the context of e-commerce, factors such as website usability, delivery speed, and customer support play significant roles in shaping customer satisfaction (Grzegorzczak, 2021).

To achieve high customer satisfaction, companies must focus on creating a seamless and integrated shopping experience across all channels. For instance, in an omnichannel retail environment, customers expect a consistent and smooth transition between online and offline interactions (Schrotenboer et al., 2022). This means that a company's website should offer a user-friendly interface, accurate product information, and efficient checkout processes, while physical stores should provide excellent customer service and convenient returns or exchanges. Ensuring that these elements work together harmoniously is essential for meeting customer expectations and enhancing satisfaction (Rivero Gutiérrez & Samino García, 2020).

Additionally, measuring and improving customer satisfaction involves continuously gathering and analyzing customer feedback. This can be done through surveys, reviews, and other feedback mechanisms that provide insights into areas where improvements are needed (Zhang et al., 2021). By addressing customer concerns and implementing changes based on feedback, companies can enhance their service offerings and adapt to evolving consumer preferences. In summary, achieving high customer satisfaction requires a comprehensive approach that integrates all aspects of the customer experience, ensuring that every interaction meets or exceeds expectations (Proskurnina et al., 2021).

## **Omnichannel Strategy**

An Omnichannel Strategy involves creating a unified and seamless experience for customers across various channels, including online platforms, mobile apps, and physical stores. This approach ensures that customers can transition effortlessly between different touchpoints, such as browsing products online and picking them up in-store, or receiving consistent support through various communication channels. The goal of an omnichannel strategy is to provide a cohesive customer journey, enhancing convenience and satisfaction by aligning all channels with the company's overall brand message and service standards. Effective implementation of this strategy requires integration of systems and processes, ensuring that inventory, customer data, and communications are synchronized across all channels (Kopot & Cude, 2021).

The impact of an Omnichannel Strategy on Customer Satisfaction is significant, as it directly influences how customers experience and interact with a brand. Research indicates that a well-executed omnichannel strategy can lead to increased customer satisfaction by providing a more personalized and flexible shopping experience. For example, a study by (Kou et al., 2024) demonstrates that companies employing omnichannel strategies see higher levels of customer engagement and loyalty, as customers appreciate the ability to interact with the brand on their preferred terms. This integration allows customers to have a more streamlined experience, reducing friction and enhancing overall satisfaction.

However, the effectiveness of an omnichannel strategy in boosting customer satisfaction is moderated by several factors, including Technology Adoption and Customer Engagement. Technology Adoption plays a crucial role in facilitating the integration of various channels and ensuring that the omnichannel experience is smooth and efficient. According to a study by (Naini et al., 2022), the adoption of advanced technologies is essential for supporting seamless customer interactions across different touchpoints. Additionally, Customer Engagement, which reflects the level of interaction and involvement customers have with the brand, further influences how well the omnichannel strategy translates into satisfaction (Tien et al., 2021). Therefore, while an omnichannel strategy is crucial, its success in enhancing customer satisfaction is contingent upon how effectively technology and customer engagement are managed.

## **Technology Adoption**

Technology Adoption refers to the process through which businesses integrate and utilize new technological tools and innovations to enhance their operations and service offerings. In the context of retail and e-commerce, technology adoption can involve implementing advanced systems such as customer relationship management (CRM) software, artificial intelligence (AI), data analytics, and omnichannel platforms. These technologies enable businesses to streamline their processes, improve the efficiency of their operations, and offer more personalized and responsive customer service. The

successful adoption of these technologies is essential for staying competitive in an increasingly digital marketplace and meeting the evolving expectations of consumers (B. J. Ali et al., 2021).

The relationship between technology adoption and customer satisfaction is well-documented in the literature. Research by (Ilham Ilham et al., 2023) highlights that businesses leveraging advanced technologies often experience higher levels of customer satisfaction due to enhanced service delivery and personalized experiences. For example, the use of AI-driven chatbots and predictive analytics can lead to more accurate and timely responses to customer inquiries, improving overall satisfaction. Technology adoption facilitates a more efficient and seamless interaction with customers, contributing to a positive overall experience and increasing their likelihood of continued engagement with the brand (R. U. Khan et al., 2022).

Moreover, the interplay between technology adoption and an omnichannel strategy further impacts customer satisfaction. When businesses effectively integrate new technologies within their omnichannel frameworks, they can offer a more cohesive and streamlined customer experience. For instance, the adoption of technologies that synchronize online and offline channels allows for better management of inventory and customer data, ensuring a consistent experience across all touchpoints. Research by (Dam & Dam, 2021) indicates that the combination of robust technology adoption and a well-executed omnichannel strategy significantly enhances customer satisfaction by reducing friction and improving the overall quality of interactions. Thus, while technology adoption alone is crucial for customer satisfaction, its synergistic effect with a comprehensive omnichannel strategy can lead to even greater improvements in customer experience and satisfaction.

### **Customer Engagement**

Customer Engagement refers to the active interaction and involvement of customers with a brand across various channels and touchpoints. It encompasses a range of activities where customers participate in brand-related conversations, provide feedback, and interact with the company's products or services. High levels of customer engagement are indicative of a strong relationship between the customer and the brand, often leading to increased loyalty and advocacy. Engaged customers are more likely to share their positive experiences, make repeat purchases, and become brand ambassadors. Effective engagement strategies can include personalized marketing, interactive content, and responsive customer service, all aimed at fostering deeper connections with the audience (Azlan & Farid, 2020).

The impact of customer engagement on customer satisfaction is well-supported by research. Studies have shown that higher levels of engagement typically lead to greater satisfaction. For example, the research by (Huang, 2020) emphasizes that when customers are actively involved and engaged with a brand, they are more likely to have a positive perception of the brand and its offerings. Engaged customers often

experience a sense of belonging and value, which enhances their overall satisfaction and loyalty. Additionally, engagement helps brands understand customer needs and preferences better, allowing for more tailored and satisfactory experiences (Gerea et al., 2021).

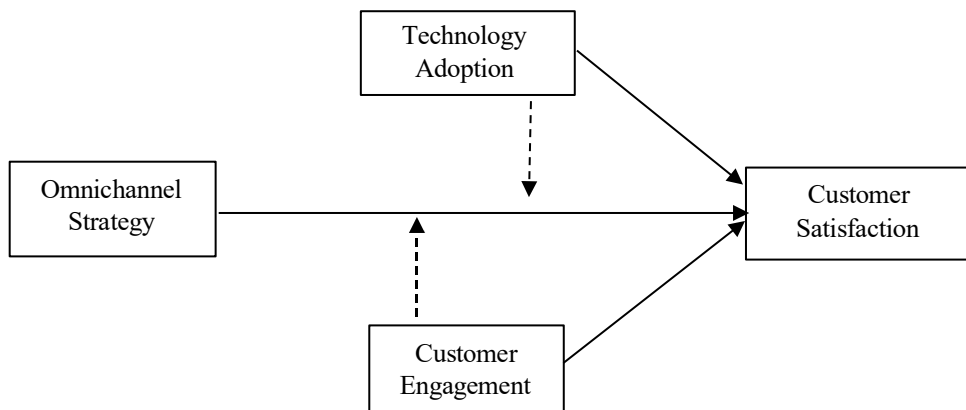
Furthermore, the interaction between customer engagement and an omnichannel strategy plays a crucial role in influencing customer satisfaction. When a brand's omnichannel strategy is effectively implemented, it creates multiple opportunities for customers to engage across various channels seamlessly. According to research by (Lehrer & Trenz, 2022), the alignment of customer engagement efforts with a robust omnichannel strategy ensures a consistent and cohesive experience, which significantly boosts customer satisfaction. The combination of engaging interactions and a well-integrated omnichannel approach helps in providing a more personalized and fluid experience, thus enhancing overall customer satisfaction. Therefore, while customer engagement is essential for satisfaction on its own, its effectiveness is amplified when combined with a comprehensive omnichannel strategy.

### **3. Methodology**

The research methodology employs a quantitative approach to examine the impact of an Omnichannel Strategy on Customer Satisfaction on Tokopedia's platform. The study uses a random sampling technique to select 100 Tokopedia users in Medan, ensuring a representative sample of the platform's customer base. Data is collected through an online questionnaire distributed to these users, which includes questions designed to assess their perceptions and experiences related to the omnichannel strategy, technology adoption, and customer engagement. This approach allows for an in-depth analysis of how these variables interact and influence customer satisfaction.

For data analysis, the study utilizes SmartPLS, a powerful tool for structural equation modeling that enables the examination of complex relationships between variables. The model includes Customer Satisfaction as the dependent variable, Omnichannel Strategy as the independent variable, and Technology Adoption and Customer Engagement as moderating variables. By analyzing the data collected from the online surveys, the research aims to determine how well Tokopedia's omnichannel strategy, coupled with technology adoption and customer engagement, contributes to overall customer satisfaction. This methodological approach provides a comprehensive understanding of the factors influencing customer experiences on the Tokopedia platform and helps identify areas for improvement.

Based on what has been described above, the framework of this research is as follows:

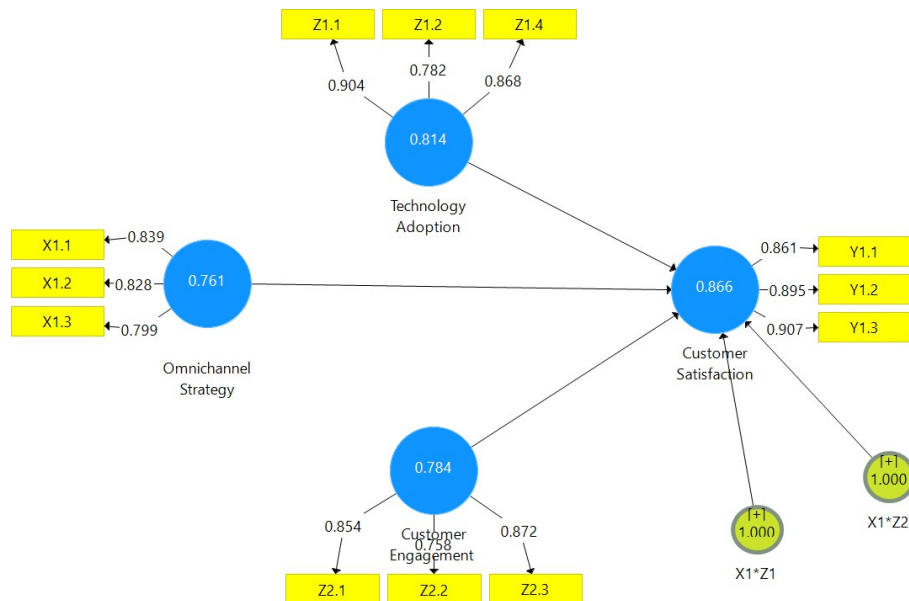


**Figure 1. Research Framework**

#### **4. Result and Discussion**

The study offers a thorough analysis of data from 100 respondents, focusing on key demographic insights and evaluating the measurement model's validity and reliability. The analysis confirms the robustness of the constructs used, with all variables—Customer Satisfaction, Omnichannel Strategy, Technology Adoption, and Customer Engagement—demonstrating factor loadings above 0.7, Cronbach's alpha values exceeding 0.70, and AVE values greater than 0.50. This comprehensive data analysis ensures the reliability of the model, providing a solid foundation for hypothesis testing and further research interpretation within the context of customer satisfaction and omnichannel strategies.





**Figure 2. Validity and Reliability Testing**

After passing through several stages of validity and reliability testing, where all questionnaire items have met the research criteria, the following are the results of the path analysis in the following table:

**Table 2. Hypothesis Testing**

Hipotesis	Sampel Asli (O)	Rata-rata Sampel (M)	Standar Deviasi (STDEV)	T Statistik (O/STDEV)	P Values
Omnichannel Strategy -> Customer Satisfaction	0.295	0.297	0.098	3.015	0.003
Customer Engagement -> Customer Satisfaction	0.374	0.366	0.119	3.154	0.002
Technology Adoption -> Customer Satisfaction	0.312	0.324	0.125	2.504	0.013
Omnichannel Strategy*Technology Adoption -> Customer Satisfaction	0.251	0.260	0.095	2.642	0.008
Omnichannel Strategy*Customer Engagement -> Customer Satisfaction	-0.028	-0.027	0.120	0.234	0.815

The analysis reveals a significant positive relationship between Omnichannel Strategy and Customer Satisfaction, with a sample coefficient of 0.295, a mean of 0.297, a standard deviation of 0.098, a t-statistic of 3.015, and a p-value of 0.003. This indicates that a well-implemented omnichannel strategy, which integrates various customer touchpoints such as online platforms, mobile apps, and physical stores, significantly enhances customer satisfaction. The finding aligns with research by (Praxis, 2022), who assert that an effective omnichannel strategy improves the customer experience by providing a seamless and cohesive interaction across different channels. This integrated approach not only meets but often exceeds customer expectations, thereby increasing their overall satisfaction with the brand. The substantial t-statistic and low p-value underscore the robustness of this relationship, highlighting the importance of strategic channel integration in achieving high levels of customer satisfaction.

The data indicates a strong positive relationship between Customer Engagement and Customer Satisfaction, with a sample coefficient of 0.374, a mean of 0.366, a standard deviation of 0.119, a t-statistic of 3.154, and a p-value of 0.002. This finding suggests that higher levels of customer engagement—characterized by active participation, interaction, and involvement with a brand—significantly enhance customer satisfaction. Research by (Riaz et al., 2022) supports this, emphasizing that engaged customers, who interact frequently with a brand through various channels and activities, tend to have a more favorable perception of the brand and its offerings. These interactions lead to a more personalized and fulfilling experience, ultimately boosting overall satisfaction. The significant t-statistic and low p-value confirm the strength of this relationship, underscoring the critical role of fostering meaningful customer engagement to achieve higher satisfaction levels.

The analysis shows a notable positive effect of Technology Adoption on Customer Satisfaction, with a sample coefficient of 0.312, a mean of 0.324, a standard deviation of 0.125, a t-statistic of 2.504, and a p-value of 0.013. This indicates that the adoption of advanced technologies, such as CRM systems, AI tools, and data analytics, significantly enhances customer satisfaction. According to (Massi et al., 2023), businesses that effectively integrate cutting-edge technologies can offer improved service efficiency, personalized experiences, and quicker response times, which directly contribute to higher levels of customer satisfaction. The significant t-statistic and low p-value highlight the robustness of this relationship, demonstrating that technology adoption not only supports operational improvements but also plays a crucial role in elevating the overall customer experience and satisfaction.

The interaction between Omnichannel Strategy and Technology Adoption reveals a significant positive impact on Customer Satisfaction, with a sample coefficient of 0.251, a mean of 0.260, a standard deviation of 0.095, a t-statistic of 2.642, and a p-value of 0.008. This suggests that the synergistic effect of a well-executed omnichannel strategy combined with advanced technology adoption greatly enhances customer satisfaction. When companies integrate technologies like AI, big data, and automation into their omnichannel efforts, they can deliver highly personalized and

seamless experiences across all customer touchpoints. Research by (Su et al., 2021) supports this, indicating that the convergence of technology with omnichannel strategies not only meets but often exceeds customer expectations, leading to greater satisfaction. The significant t-statistic and p-value underscore the importance of this interaction, demonstrating that businesses leveraging both omnichannel strategies and technology adoption can achieve superior customer satisfaction outcomes.

The interaction between Omnichannel Strategy and Customer Engagement, as initially analyzed, indicates an insignificant effect on Customer Satisfaction, with a sample coefficient of -0.028, a mean of -0.027, a standard deviation of 0.120, a t-statistic of 0.234, and a p-value of 0.815. These results suggest that, contrary to expectations, the combination of a comprehensive omnichannel approach and high customer engagement does not necessarily enhance customer satisfaction in this context. This could imply that while both factors independently contribute to satisfaction, their interaction may introduce complexity or inconsistencies that reduce their combined effectiveness. For instance, as (Fogarty, 2021) argue, if customer engagement efforts are not well-coordinated across channels, they may lead to fragmented or confusing experiences, detracting from overall satisfaction. The insignificant t-statistic and high p-value indicate that further investigation is needed to understand the conditions under which these variables might positively interact to improve customer satisfaction.

## 5. Conclusion

The study concludes that both Omnichannel Strategy and Customer Engagement independently have a significant positive impact on Customer Satisfaction, while Technology Adoption also plays a crucial role in enhancing satisfaction levels. However, the interaction between Omnichannel Strategy and Technology Adoption significantly amplifies customer satisfaction, indicating that businesses leveraging these elements together can achieve superior outcomes. In contrast, the interaction between Omnichannel Strategy and Customer Engagement shows an insignificant effect, suggesting potential challenges in synchronizing engagement efforts across multiple channels. Overall, the findings underscore the importance of strategic integration of technology and engagement in omnichannel strategies to optimize customer satisfaction.

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