

## REAL-TIME CUSTOMER COMMUNICATION IN E-COMMERCE: IMPROVING CUSTOMER EXPERIENCE, SATISFACTION AND LOYALTY

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**Abstract.** In the era of business digital transformation, real-time customer communication has attracted a lot of attention. The purpose of the research is to investigate how real-time customer communication affects the success of e-commerce businesses, with an emphasis on how prompt and efficient communication can raise customer satisfaction, lower cancellation rates and make companies accomplish a competitive advantage. The research is focused on examining various real-time communication channels including social media, Chatbots, live chat, etc. Additionally, the study also goes over the advantages of using an Omnichannel communication strategy in e-commerce, emphasizing the value of a cohesive communication strategy and the difficulties in integrating various communication channels. The research methodology includes an analysis of existing research on the given topic and a survey distributed among e-commerce business owners/managers. This study intends to contribute to the field by giving new insights into the impact of real-time customer communication on e-commerce growth, which would be beneficial for policymakers, researchers, and industry practitioners.

**Keywords:** digital economy, e-commerce, real-time customer communication, communication channel, customer satisfaction.

**JEL Classification:** O3.

### 1. Introduction

It is vital for e-commerce companies to stay up-to-date with the latest trends in the sector; their success in this highly competitive area depends on a number of factors. One of them is efficient communication between e-commerce firms and their customers; how well a business communicates with consumers is crucial in the context of delivering a good customer experience, since modern customers always wait for an immediate response. Due to the use of ICTs information can now be transmitted instantly across huge geographical spaces. So, real-time customer communication – that is online communication allowing users to interact and exchange information in the real-time mode – is now becoming key to achieve a competitive advantage.

Keeping the customer informed throughout the entire purchasing process is a significant challenge in today's world of online shopping, where businesses are constantly growing due to the internet. There is not enough of understanding about how real-time communication

channels affect customer experience, satisfaction, and loyalty in e-commerce environments. Previous studies have provided limited empirical evidence on this relationship, emphasizing its significance of systematic research. For the same reason, an online buyer who finds fulfilment in a physical purchase becomes restless until the product is delivered. Businesses that inform their clients from the point of sale to the point of delivery can gain the trust and confidence of their clients. In e-commerce, real-time communication is essential because it enables companies to react quickly to user needs and issues, increasing customer satisfaction and loyalty (Li et al., 2023).

Similar to e-commerce, no product is physically in front of the customer; instead, the purchase is made based only on the product's specifications and the information provided on the platform. If the customer has any questions, the business will promptly get in touch with them. The likelihood of the buyer rejecting the project or service is high if the quick responses are not provided. Businesses can adjust and enhance their strategies by using real-time e-commerce analytics to make quicker

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decisions based on customer behavior and trends (Husar, 2022).

Thus, in order to boost business growth and product or service conversion, it is significant that businesses enable real-time customer communication. It also helps personalized interactions, as customer service agents can tailor responses to specific customer profiles and preferences (Mallari, 2024). In view of the above, the purpose of the study is to examine how real-time customer communication affects the success of e-commerce businesses, with a principal focus on how prompt and efficient communication can raise customer satisfaction, lower cancellation rates, and make companies stand out from the competition. This study takes a structured approach to examining the role of real-time customer communication channels in e-commerce environments. While there is a wealth of research on the importance of customer communication in e-commerce, few studies have thoroughly examined the relationship between real-time communication channels and customer attitudes and behaviors.

While these studies have generated valuable insights, they often suffer from limitations in providing comprehensive data on usage patterns, effectiveness, and the perceived impact of real-time communication channels. Moreover, there exists a notable scarcity of research that specifically targets the Pakistani e-commerce market, underscoring a substantial gap in the existing literature. This study seeks to fill this gap by providing empirical evidence on how timely and personalized interactions via real-time communication channels can influence buyer experiences, satisfaction levels, and, ultimately, customer loyalty in the e-commerce sector. Data is collected using quantitative methods from a sample of 50 Pakistani e-commerce businesses. On February 2, 2024, a structured questionnaire was distributed online through Google Docs to collect quantitative data on real-time customer communication modes and their expected impact on customer experience, satisfaction, and loyalty. Previous research in the field of e-commerce has commonly employed qualitative methods to explore the significance of customer communication channels.

This study seeks to fill these knowledge gaps by using a quantitative research approach to collect systematic data on the use and impact of real-time communication channels in the Pakistani e-commerce landscape.

By analyzing responses from a diverse sample of e-commerce businesses, this study hopes to provide nuanced insights into the effectiveness of various communication channels and their implications for customer satisfaction and loyalty.

## 2. Related work and literature review

Real-time customer communication is becoming increasingly important in the rapidly changing e-commerce landscape. Real-time communication improves customer satisfaction by delivering quick and efficient solutions to

problems (Clover Dynamics, 2024). Customers expect proactive and timely communication from e-commerce brands, particularly throughout their buying experience and until the product or service is delivered to their door. Customers expect businesses to be available through various types of channels, including websites, social media, email, and phone. An Omnichannel approach unifies customer touchpoints to ensure consistent engagement throughout their purchasing journey (Patel, 2024). The shift to online purchasing, strengthened by the global pandemic and the rise of remote work, has created a greater need for Omnichannel engagement and real-time communication to meet the escalating demands of customers across various digital channels. To keep customers informed and engaged, advanced communication tools such as chatbots, live tracking, and open and active chat interfaces must be implemented.

Furthermore, the demand for contextual communications has increased, with customers expecting personalized and transparent interactions across multiple channels. Several scientific articles, journals, and academic databases emphasize the value of real-time communication in e-commerce. Costa and Castro (2021) found that real-time communication enhances customer experience and satisfaction in e-commerce. The study emphasizes the importance of businesses implementing advanced communication tools such as chatbots and live chat to provide timely and personalized support to customers. The study also emphasizes the value of real-time communication in lowering customer frustration and increasing customer loyalty. Furthermore, (Li et al., 2023) found that real-time communication significantly improves customer engagement and satisfaction in e-commerce. The study emphasizes the importance of businesses using advanced communication tools such as chatbots and live chat to provide personalized and contextual support to customers. The study also emphasizes the value of real-time communication in increasing customer loyalty and lowering churn rates.

Another study by Ullal et al. (2021) revealed that online product reviews significantly influence customer purchasing decisions in e-commerce. The study emphasizes the significance of online reviews in shaping customer attitudes and their impact on e-commerce sales.

Social media platforms are an important channel for customer service, from which customers expect quick and interactive communication. Social media interactions like likes, comments, direct messages, reviews, shares, and tagging provide opportunities for companies to use for timely communication with their customers (Lauron, 2023). Besides, Social media engagement has a significant impact on customer satisfaction, loyalty, and company reputation. By responding to customer complaints and information in a timely and positive manner, businesses can further improve their brand perception and customer retention (Monae, 2023).

Chatbots are designed to automate customer service interactions, provide instant assistance, and are used

by businesses to offer 24-hour support, reduce reaction times, and streamline detailed inquiries (Barron, 2023). In addition, chatbots can help customers with routine service issues, provide automated answers to frequently asked questions, and provide personalized product recommendations (Borowski, 2024).

Live chat is very important in real-time customer communication. Live chat software allows businesses to field customer inquiries, provide instant support, and communicate in a timely manner. Using live chat and chatbots to provide immediate assistance, communicate with customers in real-time, and resolve issues efficiently. (Wilson, 2019) Integrate chatbots that can provide instant answers to customer questions and offer personalized support across multiple channels. Live chat allows you to connect with customers instantly and multitask by handling multiple conversations at the same time (Moore, 2024). This quick response improves customer loyalty and satisfaction, as the buyer wants to get answers to their queries in a timely and immediate manner (Micheli, 2023). (HelpLama, 2023) said provides consistent service across all channels to ensure that customers have a seamless experience. Adapt to customer preferences and engage with them using their preferred communication channels.

Likewise, real-time order tracking improves the overall buyer journey, keeping customers informed about their orders and increasing satisfaction rates. A satisfied buyer is more likely to become a loyal customer. Which favors repeat purchases from the same brand, which is essential for the long-term success of an e-commerce business. Such buyers are more likely to leave positive reviews and share their positive experiences with others, encouraging other buyers (Fox, 2023).

To ensure a smooth and satisfying customer journey, map out buyer touchpoints, identify pain points, and remove barriers. Understanding the customer journey helps to provide personalized interactions and address specific needs (Nandbox, 2023).

Personalized recommendations significantly increase customer engagement and sales by providing tailored recommendations that match each customer unique needs and preferences (AIContentfy team, 2023) and (Mehta, 2023). By analyzing customer data, businesses can better understand customer behavior and gain valuable insights, and preferences, which create a more personalized experience (Odubajo, 2023). Likewise, create a personalized shopping experience by tailoring packaging, reviews, ratings, loyalty programs, pricing, user interface, and follow-up messaging (Perado, 2023).

In today's digital marketing era, it's crucial for businesses to use advance marketing tools to know the customer buying attitude as per the study, the swift advancement of information and communication technologies (ICT) has increased the opportunities for marketing communication. To increase business

competitiveness and carry out effective marketing activities, it has become necessary to learn about e-consumers and identify significant factors that shape their virtual attitude and influence their purchasing decision (Sabaitytė et al., 2019).

Similarly, Social media has become a valuable business tool, allowing for quick and targeted communication with current and potential customers (Davidavičienė & Davidavičius, 2022). Likewise, the rise of e-commerce and smartphones has led to an increase in the number of shopping modes used by consumers. These newest techniques offer significant benefits over traditional in-store shopping methods (Redondo & Charron, 2023).

A strong brand needs to align its communication strategy with its brand image, identity, and values. Similarly, by defining brand identity, aligning your communication channels, engaging with customers, and demonstrating your social responsibility, a positive brand image can be created that resonates with your target audience and drives business success (Sela, 2023).

### 3. Methodology and research design

In accordance with the main goal of the research – to investigate how real-time customer communication impacts the success of e-commerce companies – the following supporting objectives were developed:

- To examine various real-time communication channels, and how they facilitate customer interaction with order updates, personalized recommendations, and immediate support
- To discuss the advantages of using an Omnichannel communication strategy in e-commerce, highlighting the importance of a cohesive communication strategy for an e-commerce business.

The *object* of the study is real-time communication in e-commerce, and the *subject* of the study is digital channels employed for real-time customer communication.

The following *research question* is addressed: “How does real-time customer communication affect customer experience, satisfaction, and loyalty in e-commerce?”

The data was collected through a survey among e-commerce business owners/managers. An original questionnaire was developed by the authors based on a thorough analysis of existing research on the given topic. Current works and specialized literature dedicated to the use of digital channels employed for real-time customer communication were reviewed.

The purpose of the literature review was to familiarize the readers with the issue under research.

Thus, the methodology includes the following:

- studying and interpreting secondary data: theoretical literature and research papers;
- conducting a survey distributed among e-commerce business owners/managers;
- for testing the hypotheses, IBM SPSS 26<sup>th</sup> version have used.

## 4. Empirical research results and data analysis

### 4.1. Empirical research design

The survey targeted 50 e-commerce businesses from Pakistan, with connections established through WhatsApp and Facebook Messenger. A structured questionnaire was distributed online via Google Docs on 2<sup>nd</sup> of February 2024, in order to gather quantitative data on real-time customer communication modes and their expected impact on customer experience, satisfaction, and loyalty. The survey technique employed a quantitative research approach, allowing for systematic data analysis to reveal insights into the explaining behaviour. In general, out of the 50 e-commerce companies contacted, 15 received responses, for a response percentage of 30%. Summary of the survey information is presented in Table 1.

Table 1. Survey information: summary

Survey information	Details
Survey Target	50 e-commerce businesses from Pakistan
Survey Connection Platforms	WhatsApp and Facebook Messenger
Distribution Method	Online distribution via Google Docs
Survey Date	2 February 2024
Response Rate	15 responses out of 50 contacted (30%)
Research Approach	Quantitative
Key Focus	Real-time customer communication in e-commerce and its impact on customer experience, satisfaction, and loyalty

In Figure 1, is presented information about the respondents.

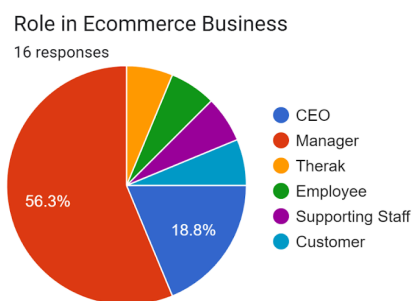


Figure 1. Respondents' details

### 4.2. Testing research hypotheses

The following hypotheses were formulated.

- *Hypothesis H1*: Real-time communication doesn't improve the buyer experience & correlates with better levels of satisfaction in e-commerce.
- *Hypothesis H2*: Real-time communication initiatives don't result in higher levels of customer satisfaction, which correlates with improved customer loyalty to e-commerce business.

- *Alternate Hypothesis*: Real-time communication improves the buyer experience and correlates with better levels of satisfaction in e-commerce, so real time communication improves customer satisfaction and loyalty.

In Table 1, Shapiro-Wilk S-W and Kolmogorov-Smirnov K-S test results are presented.

Table 2. Assumption test of normality

Variable	Test	Statistic	df	Sig.
SocialMedia_LiveChat_Experience	S-W	0.911	15	0.138
	K-S	0.248	15	0.013
Omni Channel Communication	S-W	0.928	15	0.251
	K-S	0.199	15	0.113
Customer Satisfaction_Loyalty	S-W	0.912	15	0.144
	K-S	0.214	15	0.062

In Table 2, based on the Shapiro-Wilk (S-W) test, the following conclusions can be made:

- There is evidence to reject the null hypothesis of normality for the SocialMedia\_LiveChat\_Experience variable Significance level (Sig. = .138 < .05). The null hypothesis of normality is a statistical assumption that a data set follows a normal distribution.
- In such case, the null hypothesis of normality is being tested for three variables; SocialMedia\_LiveChat\_Experience, OmniChannelCommunication, and CustomerSatisfaction\_Loyalty.
- The authors failed to reject the null hypothesis of normality for both OmniChannelCommunication (Sig. = .251) and CustomerSatisfaction\_Loyalty (Sig. = .144) variables (Sig. > .05). A common significance level is (0.05), meaning that if the p-value associated with the test statistics is less than 0.05, the null hypothesis is rejected.
- The Kolmogorov-Smirnov (K-S) test shows a significant result (Sig. = .013) for SocialMedia\_LiveChat\_Experience, suggesting non-normality. However, due to its sensitivity to sample size and non-normality in the tails of the distribution, the Kolmogorov-Smirnov K-S test is generally considered less reliable than the Shapiro-Wilk S-W test for small samples (n < 50). In this case, with n = 15, the S-W test is likely a more accurate indicator of normality.
- Therefore, based on the S-W test results, the data for the SocialMedia\_LiveChat\_Experience variable can be considered non-normally distributed, while the data for both OmniChannelCommunication and CustomerSatisfaction\_Loyalty can be considered potentially normal. In summary, the analysis suggests that, while the data for SocialMedia\_LiveChat\_Experience is non-normally distributed, the data for the other two variables might follow a normal distribution, although they need further confirmation.

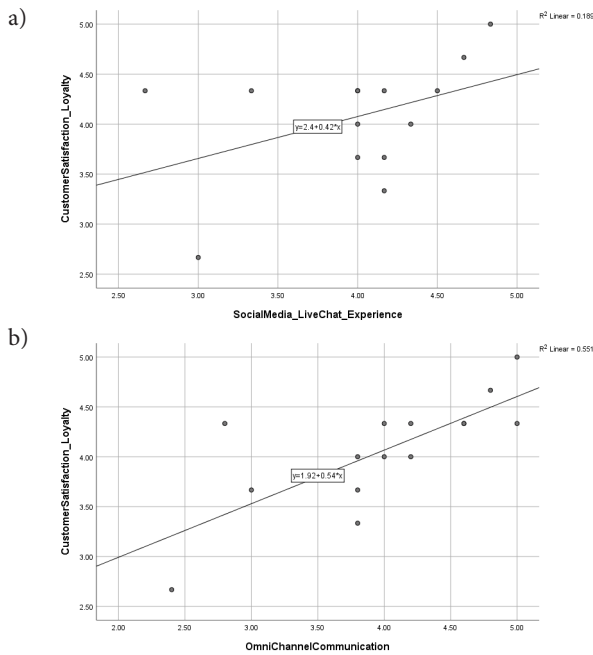


Figure 2. a – assumption test of linearity;  
b – assumption test of linearity

– These insights are crucial for choosing appropriate statistical methods and interpreting the results accurately in future analysis.

In Figure 2a, linear relationship between customer satisfaction loyalty with Omnichannel communication and social media live chat.

From both of the scatter dot plot in figures 2a and 2b, one can see there is a linear relationship between customer satisfaction loyalty with Omnichannel communication and social media live chat.

In Table 3, variables social media Live Chat Experience, Omni-Channel Communication, and Customer Satisfaction Loyalty.

Correlations among the variables social media Live Chat Experience, Omni-Channel Communication, and Customer Satisfaction Loyalty were examined using Pearson correlation coefficients.

The correlation between Social Media Live Chat Experience and Omni-Channel Communication was significant,  $r(15) = .711, p = .003$ . Similarly, a significant correlation was found between Omni-Channel Communication and Customer Satisfaction Loyalty,  $r(15) = .742, p = .002$ . However, the correlation between Social Media Live Chat Experience and Customer Satisfaction

Table 3. Pearson's correlation

Correlations				
		SocialMedia_Live-Chat_Experience	Omnichannel-Communication	CustomerSatisfaction_Loyalty
SocialMedia_LiveChat_Experience	Pearson Correlation	1	.711**	.434
	Sig. (2-tailed)		.003	.106
	N	15	15	15
OmnichannelCommunication	Pearson Correlation	.711**	1	.742**
	Sig. (2-tailed)	.003		.002
	N	15	15	15
CustomerSatisfaction_Loyalty	Pearson Correlation	.434	.742**	1
	Sig. (2-tailed)	.106	.002	
	N	15	15	15

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed).

Table 4. Non-parametric correlation

Correlations					
			SocialMedia_LiveChat_Experience	Omnichannel-Communication	Customer-Satisfaction_Loyalty
Spearman's rho	SocialMedia_LiveChat_Experience	Correlation Coefficient	1.000	.540*	.359
		Sig. (2-tailed)	.	.038	.188
		N	15	15	15
	Omni-Channel-Communication	Correlation Coefficient	.540*	1.000	.761**
		Sig. (2-tailed)	.038	.	.001
		N	15	15	15
	Customer-Satisfaction_Loyalty	Correlation Coefficient	.359	.761**	1.000
		Sig. (2-tailed)	.188	.001	.
		N	15	15	15

Notes: \*. Correlation is significant at the 0.05 level (2-tailed). \*\*. Correlation is significant at the 0.01 level (2-tailed).

Loyalty was not statistically significant,  $r(15) = .434$ ,  $p = .106$ .

The above findings indicate a strong positive relationship between social media Live Chat Experience and Omni-Channel Communication, as well as between Omni-Channel Communication and Customer Satisfaction Loyalty. However, the relationship between social media Live Chat Experience and Customer Satisfaction Loyalty did not reach statistical significance at the .01 level.

Correlations among the variables social media Live Chat Experience, Omni-Channel Communication, and Customer Satisfaction Loyalty were analyzed using Spearman's rho correlation coefficients (Table 4).

For social media Live Chat Experience, significant positive correlations were observed with Omni-Channel Communication ( $\rho = .540$ ,  $p = .038$ ) and Customer Satisfaction Loyalty ( $\rho = .359$ ,  $p = .188$ ), although the latter did not reach conventional levels of statistical significance.

Similarly, Omnichannel Communication exhibited significant positive correlations with both social media Live Chat Experience ( $\rho = .540$ ,  $p = .038$ ) and Customer Satisfaction Loyalty ( $\rho = .761$ ,  $p = .001$ ).

Additionally, Customer Satisfaction Loyalty demonstrated a significant positive correlation with Omnichannel Communication ( $\rho = .761$ ,  $p = .001$ ), suggesting a strong relationship between these variables.

The above findings demonstrate that Omni-Channel Communication may play a crucial role in influencing both social media Live Chat Experience and Customer Satisfaction Loyalty. However, the relationship between Social Media Live Chat Experience and Customer Satisfaction Loyalty may be influenced by other factors not captured in this analysis.

Based on the correlations the following was observed. Social Media Live Chat Experience showed a significant positive correlation with Omnichannel Communication (both Pearson and Spearman's rho).

Omnichannel communication exhibited significant positive correlations with both Social Media Live Chat Experience and Customer Satisfaction Loyalty.

Customer Satisfaction Loyalty demonstrated a significant positive correlation with Omni-Channel Communication.

The alternate hypothesis is supported by the correlation analysis findings. The significant positive correlations observed between real-time communication initiatives (represented by both Social Media Live Chat Experience and Omni-Channel Communication) and Customer Satisfaction Loyalty indicate that real-time communication does indeed correlate with better levels of satisfaction in e-commerce, as well as improved customer satisfaction and loyalty.

In summary, based on the correlation analysis, the alternate hypothesis is supported, suggesting that real-time communication initiatives are associated with enhanced buyer experiences, increased customer satisfaction, and improved customer loyalty in e-commerce contexts.

## 5. Conclusions

The study has given interesting insights into how real-time customer communication influences consumer attitudes and conduct.

Real-time customer communication is critical in e-commerce, and businesses need to set up advanced communication tools to meet the growing demands of customers across multiple digital platforms. The discussed studies have shed light on the importance of real-time communication in e-commerce, emphasizing the need for businesses to implement advanced communication tools and strategies to improve customer experience, satisfaction, and loyalty.

Key findings of the research indicate that prompt and personalized interactions improve buyer experiences, resulting in higher satisfaction, loyalty, and a stronger commitment to e-commerce companies. Furthermore, the analysis performed in the paper has revealed certain communication tactics and channels that were most effective with clients, guiding targeted marketing and engagement campaigns.

The findings emphasize the importance of real-time customer communication in clarifying the e-commerce landscape, as well as its potential for producing positive outcomes across multiple dimensions of the purchasing experience. From enhanced responsiveness to speedier resolution of buyer queries, real-time communication channels prove to be beneficial assets for online commerce businesses looking to differentiate themselves in a highly competitive environment.

This study also highlights the necessity for deliberate investments in technology and training to improve real-time communication methods and develop long-term customer connections.

Among the findings was the evident realization that prompt customer communication plays a major role in the company's growth and reputation. While some businesses use cutting-edge AI, others have turned to social media as a quick way to communicate with their customers. Customers who appreciate prompt communication return to the same platform, which is highly beneficial for repeat business and customer retention. The study's reliance on quantitative methods may limit the depth of insight compared to qualitative approaches.

The sample size of 50 Pakistani e-commerce businesses may not fully represent the broader e-commerce landscape, which could affect the ability to generalize. Future research may use mixed-methods approaches to supplement quantitative data with qualitative insights. Increasing the sample size and diversity of e-commerce businesses, as well as conducting comparative studies across multiple regions, would improve generalizability.

## Disclosure statement

The authors do not have any competing financial, professional, or personal interests from other parties.

## References

- AIContentfy team. (2023). *The role of personalized recommendations in customer acquisition*. <https://aicontentfy.com/en/blog/role-of-personalized-recommendations-in-customer-acquisition>
- Barron, S. B. (2023, September 20). 17 customer service chatbot examples (& How you should be using them). *Hubspot*. <https://blog.hubspot.com/service/customer-service-chatbots?uuid=856c91e8-f8bc-4ffb-bd6b-f06d118bbd6b>
- Borowski, C. (2024, January 26). *32 Best AI chatbots for customer service in 2024*. The CX Lead. <https://thecxlead.com/tools/best-ai-chatbot-for-customer-service/>
- Clover Dynamics. (2024). *Real-time communication in marketing and ecommerce*. <https://www.cloverdynamics.com/blogs/real-time-communication-in-marketing-and-e-commerce>
- Costa, J., & Castro, R. (2021). SMEs must go online – E-commerce as an escape hatch for resilience and survivability. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(7), 3043–3062. <https://doi.org/10.3390/jtaer16070166>
- Davidavičienė, V., & Davidavičius, S. (2022). Impact of activities in social networks on customer. *Journal of Logistics, Informatics and Service Science*, 9(2), 183–195. <https://www.aasmr.org/liss/Vol.9/No.2%202022/Vol.09.No.02.11.pdf>
- Fox, R. (2023). *Improve the post-purchase experience with order tracking*. ReturnGO. <https://returngo.ai/improve-post-purchase-with-order-tracking/>
- HelpLama. (2023). *7 best practices for effective ecommerce customer support*. <https://helplama.com/best-practices-for-effective-ecommerce-customer-support/>
- Husar, A. (2022). *How real-time ecommerce analytics impacts your business*. RTInsights. <https://www.rtinsights.com/how-real-time-ecommerce-analytics-impacts-your-business/>
- Lauron, S. (2023, July 18). 7 Types of social media interactions (and how to handle them). *Hootsuite*. <https://blog.hootsuite.com/social-media-interaction/>
- Li, L., Yuan, L., & Tian J. (2023). Influence of online E-commerce interaction on consumer satisfaction based on big data algorithm. *Heliyon*, 9(8). <https://doi.org/10.1016/j.heliyon.2023.e18322>
- Mallari, R. (2024). *Real-time connections: The power of live chat support in E-commerce*. Unity Communications. <https://unity-connect.com/our-resources/blog/e-commerce-live-chat-support/>
- Mehta, J. (2023, November 18). The impact of personalized recommendations on customer experience. *Abmatic AI*. <https://abmatic.ai/blog/impact-of-personalized-recommendations-on-customer-experience>
- Micheli, L. (2023, September 19). Live chat features: The top 10 essentials for your website. *Customerly*. <https://www.customerly.io/blog/live-chat-features/>
- Moore, K. (2024). *7 best practices for effective ecommerce customer service*. Help Scout. <https://www.helpscout.com/blog/ecommerce-customer-service/>
- Monae, A. (2023). *Here's why customer engagement on social media is important to your brand*. Entrepreneur. <https://www.entrepreneur.com/science-technology/the-importance-of-customer-engagement-on-social-media/449786>
- Nandbox. (2023, December 14). *Optimal customer service strategies for online retailers*. <https://nandbox.com/5-customer-service-best-practices-for-e-commerce-businesses/>
- Odubajo, A. (2023, August 24). *Role of personalization in customer engagement*. LinkedIn. <https://www.linkedin.com/pulse/role-personalization-customer-engagement-adeola-odubajo/>
- Patel, S. (2024, February 12). *9 best practices to build your E-commerce customer service*. REVE Chat. <https://www.revechat.com/blog/ecommerce-customer-service/>
- Persado. (2023). *How to achieve real-time personalization*. <https://www.persado.com/articles/real-time-personalization/>
- Redondo, I., & Charron, J.-P. (2023). Variety of shopping modes: Theoretical framework, pivotal factors, and managerial implications. *Journal of Business Economics and Management*, 24(5), 857–876. <https://doi.org/10.3846/jbem.2023.20438>
- Sabaitytė, S., Davidavičienė, V., Straková, J., & Raudeliūnienė, J. (2019). Decision tree modelling of E-consumers' preferences for internet marketing communication tools during browsing. *Information Management*, 22(1), 206–221. <https://doi.org/10.15240/tul/001/2019-1-014>
- Sela, R. (2023). *What is brand communication: A comprehensive guide*. <https://www.ronsela.com/brand-communication/>
- Ullal, M. S., Spulbar, C., Hawaldar, I. T., Popescu, V., & Birau, R. (2021). The impact of online reviews on e-commerce sales in India: A case study. *Economic Research-Ekonomiska Istrazivanja*, 34(1), 2408–2422. <https://doi.org/10.1080/1331677X.2020.1865179>
- Wilson, C. (2019, February 28). 30 chatbot tools that will revolutionize your customer service. *HubSpot*. <https://blog.hubspot.com/service/customer-service-bots>