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THE EVOLUTION OF E-COMMERCE: FROM CLICKS TO BRICKS AND BEYOND

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Summary. *The landscape of e-commerce has undergone a remarkable transformation, evolving from simple online storefronts to complex, integrated omnichannel experiences. This article traces the journey of e-commerce from its early days to its current state and looks ahead to future trends. Initially, e-commerce emerged as a novel way to shop, with pioneers like Amazon and eBay introducing the concept of buying goods online. Despite early challenges such as limited internet access and consumer skepticism, these platforms laid the groundwork for a burgeoning industry. The turn of the millennium witnessed a significant boom in e-commerce, driven by technological advancements like broadband internet and secure payment systems. This era saw the rise of major e-commerce players and the establishment of standards that would shape the future of online retail. The increased use of smartphones in the late 2000s further revolutionized the industry, giving rise to mobile commerce. Consumers increasingly shopped on-the-go, prompting businesses to optimize their websites for mobile devices and develop dedicated apps.*

As the industry matured, the integration of online and offline experiences became critical. Omnichannel retail strategies emerged, blending digital and physical shopping experiences to meet evolving consumer expectations. Technologies such as artificial intelligence, augmented reality, and virtual reality began to play a pivotal role in enhancing the e-commerce experience, offering personalized and immersive shopping options. Consumer behavior and expectations have also evolved, with demands for personalized experiences, fast delivery, and robust security becoming standard. Social media platforms have emerged as powerful e-commerce hubs, leveraging influencers and user-generated content to drive sales. Additionally, sustainability has become a key focus, with businesses adopting eco-friendly practices to meet growing consumer demand for responsible commerce.

This article explores these developments, examining how businesses can navigate the opportunities and challenges of the evolving e-commerce landscape to stay competitive and meet the needs of today's discerning consumers.

Key words: *e-commerce, in person sales, omnichannel integration, traditional commerce, digitalization.*

Introduction. In the digital age, the concept of commerce has undergone a revolutionary metamorphosis, transcended physical limitations and embraced the virtual realm. E-commerce, once a novelty confined to the realms of imagination, now stands as a cornerstone of modern retail, reshaping the way we browse, purchase, and consume goods and services. E-commerce, short for electronic commerce, refers to the buying and selling of goods and services over the internet. This broad term encompasses a variety of online business activities and transactions, including online retailing, e-markets and online banking. The journey of e-commerce is a narrative woven with innovation, adaptation, and relentless progression, tracing its roots from rudimentary online storefronts to sophisticated omnichannel experiences that seamlessly blend the digital and physical worlds [1; 2].

From its nascent stages in the early days of the internet, in which electronic shopping was regard-

ed with trepidation and skepticism, to nowadays, where e-commerce commands an important portion of global retail sales, the evolution of it has been nothing short of extraordinary. E-commerce — a new era of commerce initially started by USA retail companies Amazon and eBay. However, this vision was not without its challenges; technological limitations, security concerns, and logistical hurdles posed formidable obstacles along the path to e-commerce prominence [3].

Yet, as the internet proliferated and technology advanced, so did the capabilities and reach of e-commerce. The advent of broadband internet, coupled with secure payment systems, heralded a new era of growth and innovation, propelling e-commerce into mainstream consciousness. With each passing year, the boundaries of what was possible in the digital marketplace expanded, giving rise to mobile commerce, artificial intelligence-driven personalization,

and immersive shopping experiences powered by augmented and virtual reality technologies.

As e-commerce evolved, so did consumer expectations. Today's shoppers demand seamless, personalized experiences that transcend traditional boundaries, blurring the lines between online and offline retail. Businesses are tasked with the formidable challenge of not only meeting these expectations but also anticipating and adapting to the ever-changing landscape of e-commerce. The integration of online and offline shopping experiences, once considered a luxury, has become a necessity for companies seeking to remain competitive in an increasingly crowded marketplace [5].

Literature review. For many years, scientists analyzed various kinds of surveys on the matter of omnichannel strategies.

Yang Li, Jie Fang, Shuai Yuan, and Zhao Cai aimed to investigate how customer trust is influenced by the congruence and incongruence between customers' perceptions of two types of omnichannel integration: perceived transactional integration (PTI) and perceived relational integration (PRI). The study also considered the perceived effectiveness of e-commerce institutional mechanisms (PEEIM) as a boundary condition affecting the impact of omnichannel integration. The researchers employed a response surface analysis to empirically examine their research model. They collected survey data from 311 omnichannel customers to investigate the relationships between PTI, PRI, and customer trust. The findings revealed that customer trust is higher when PTI and PRI are congruent, with high levels of both PTI and PRI leading to greater trust in brands compared to low levels of PTI and PRI [6].

Zhihui Yang and Dongbin Hu aimed to measure the current state of research on digital technology's role in empowering omnichannel integration. Therefore, this study sought to review the existing scholarship and propose directions for future research. The authors conducted a three-stage bibliometric analysis on 764 articles published between 2000 and 2023, sourced from the Web of Science database. This approach included performance and thematic analyses to evaluate the contributions and themes within the field of digital technology-empowered omnichannel integration. The study identified the most prolific contributors and influential articles in the domain. Four primary themes emerged from the analysis: service quality, online-to-offline (O2O) commerce, omnichannel retailing, and digital transformation. These themes represent the core areas of focus and development within the research on digital technology and omnichannel integration [7].

Fernandes, Lima and Serralvo aimed to determine the presence of omnichannel consumption behavior in credit cooperatives and to compare this behavior with that observed in Brazilian retail. Additionally, they sought to analyze the strategic implications for channel integration within these cooperatives. The research-

ers employed a case study approach with theoretical, descriptive, and econometric analyses. They collected data from 529 members of a credit cooperative between July and September 2022 to investigate omnichannel consumption behavior. The findings indicate that omnichannel consumption behavior is present in credit cooperatives. However, significant differences were found when comparing the omnichannel consumer patterns in credit cooperatives with those in retail. These results provide new insights into the specific dynamics of omnichannel behavior in the financial sector [8].

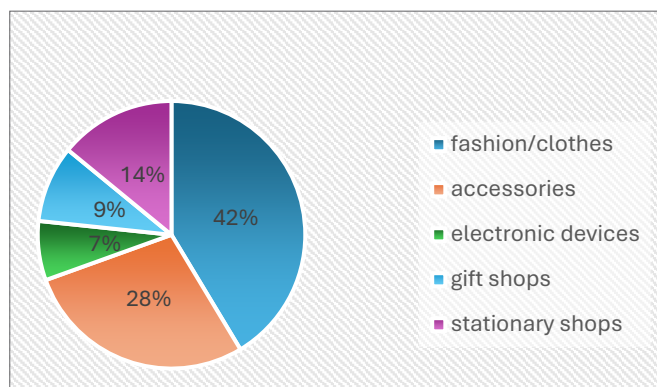
The article written by Shukla and Taneja investigates the improving adoption of omnichannel retail strategies by merchants to efficiently target customers and to secure a significant market share. It aims to identify the critical components that contribute to the success of omnichannel strategies, focusing on customer behavior and preferences. The authors utilize case studies and industry best practices to provide practical insights into developing flexible omnichannel frameworks across various retail industries. This study emphasizes the importance of technology, data analytics, and personalized marketing in enhancing customer experiences. The article highlights the importance of integrating advanced technologies and data analytics to create personalized shopping experiences that meet individual customer preferences. Ultimately, the chapter underscores the need for a holistic approach to omnichannel retail to build strong connections with target customers and achieve a competitive market share in a challenging retail environment [9].

The study by Aparna Joshi, Agnivesh Pani, Prasanta K. Sahu et al. aimed to identify the determinants of omnichannel shopping behaviors, specifically the choices between "Buy-Online-Pickup-In-Store" (BOPIS) and "Buy-In-Store-Ship-Direct" (BSSD). The research focused on the Indian market, exploring how gender and generational differences influence these decisions and their strategic implications for channel integration. The authors conducted an online survey to collect data from 311 Indian consumers. Using econometric analysis, they examined various factors that influence the adoption of BOPIS and BSSD. The study found that key factors such as a quick purchase process, elimination of delivery delays, shipping costs, ease of receiving products, retail system reliability, and trust in the retailer significantly influence the adoption of omnichannel strategies. For both BOPIS and BSSD, a quick purchase process and elimination of delivery delays were crucial. However, payment security had no significant effect, and purchase returnability was only weakly associated with BOPIS [10].

Reviewing the literature analysis above, we may come to conclusion that empirical studies usually focused on e-commerce integration from customers' side. However, many businesses are struggling with applying omnichannel strategies and integrating online and offline shopping processes together all around the world.

There are several reasons why businesses struggle applying omnichannel strategies to their businesses. Therefore, this article's main objective is to investigate the main challenges business owners face when integrating omnichannel strategies to their businesses.

Problem Statement. Despite the rapid growth of e-commerce, many businesses struggle to adapt the changing landscape and integrate online and offline shopping experiences effectively. As evidence, we may take a brief look to a Western Asian country — Azerbaijan. Despite the rapid growth of e-commerce globally, many businesses in Azerbaijan face significant challenges in keeping up with the changing landscape and integrating online and offline shopping experiences effectively. While the capital city, Baku, has seen considerable advancements in e-commerce infrastructure and consumer adoption, other cities and regions across the country, particularly in the south-east, lag behind in development. In cities outside of Baku, such as Ganja, Sumgayit, and Lankaran, the e-commerce ecosystem remains underdeveloped, with limited access to online shopping platforms, sparse logistics networks, and a lack of consumer awareness and trust in online transactions. As a result, businesses in these regions struggle to tap into the potential of e-commerce, hampering their growth and competitiveness in the digital marketplace.



Graph 1. Business sector of stores

Source: compiled by the author

For the objective of this article, the focus will be on the south-east region of Azerbaijan, where the opportunities and challenges of e-commerce adoption are particularly pronounced. By analyzing the e-commerce landscape in cities like Shirvan, Salyan and Neftchala, we will take a brief look at what challenges and difficulties businesspeople face in applying e-commerce trends to their brick-and-mortar stores.

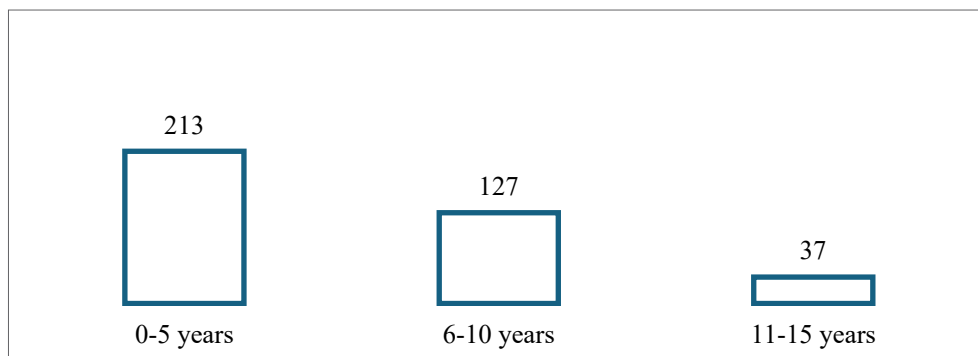
Data and methodology. In order to analyze major challenges that business owners face to integrate omnichannel strategies into their businesses, we have conducted three different surveys in three different cities. These cities are located in the southeast of the Republic of Azerbaijan. In Neftchala city 137, in Shirvan city 145 and in Salyan city 95 business owners have participated in face-to-face interviews. The questionnaire was totally the same for all cities. The following paragraphs showcase the survey questions and data in more detail:

1. Business Type and Duration. The majority of businesses surveyed are in the fashion/clothing sector (156 respondents), followed by accessories (106), stationery shops (53), gift shops (35), and electronic devices (27). Most business owners have been operating for 0–5 years (213 respondents), with fewer in the 6–10 years (127) and 11–15 years (37) categories.

2. Customer Visits and Sales. Daily customer visits vary, with a significant portion of businesses receiving 101–150 customers per day (117 respondents). Other common ranges include 151–200 customers (97), 0–50 customers (64), 51–100 customers (63), and over 200 customers (36). In terms of daily sales, most businesses make 0–25 sales (179 respondents), while others fall into the 26–50 sales (97), 51–75 sales (58), 76–100 sales (29), and over 100 sales (14) categories.

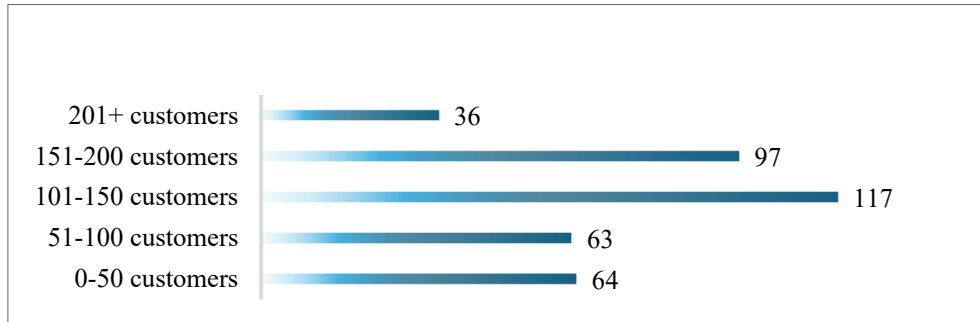
3. E-commerce Utilization

A notable number of businesses do not use e-commerce platforms (245 respondents). The primary reasons for not using e-commerce include a lack of knowledge about e-commerce (141), limited payment options (88), logistics problems (74), and internet access shortage (17). Only 57 businesses currently utilize e-commerce platforms.

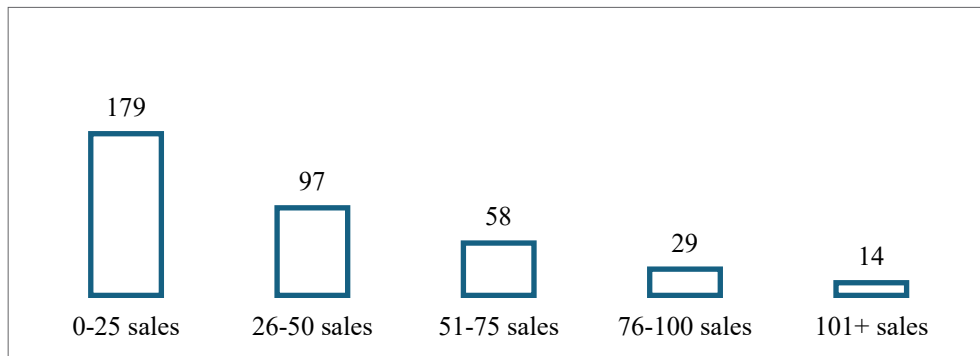


Graph 2. The number of years stores operate

Source: compiled by the author



Graph 3. The number of customers visiting stores daily
Source: compiled by the author



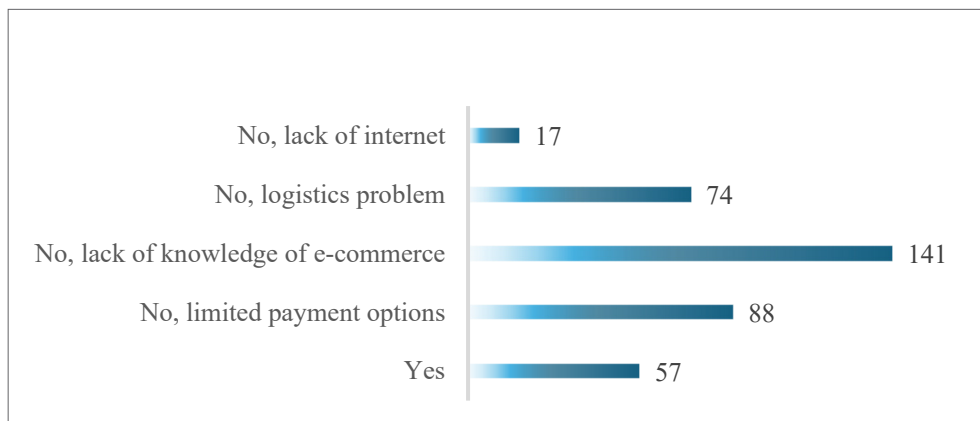
Graph 4. The number of sales per day
Source: compiled by the author

4. Awareness of E-commerce Benefits

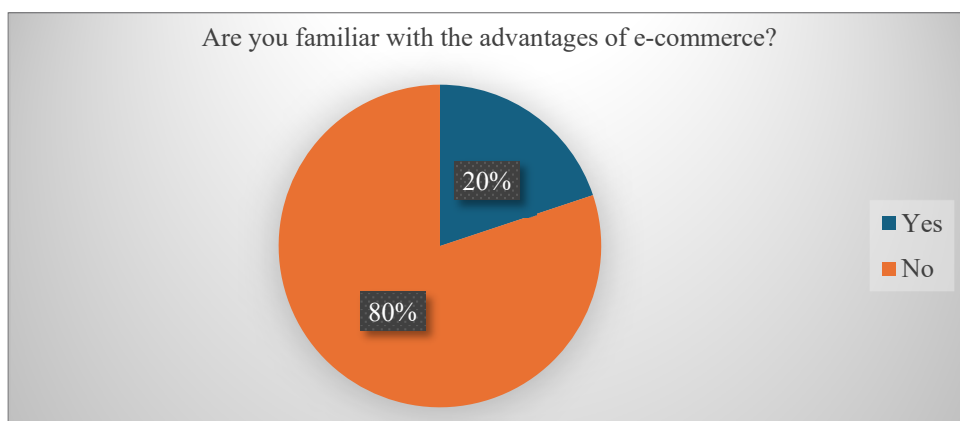
The majority of respondents (302) are not familiar with the advantages of using e-commerce platforms, indicating a significant gap in awareness and potential for education and training in this area. Only 75 respondents acknowledged awareness of these benefits.

Statistical analysis. Researchers used to conduct a T-test analysis to investigate if there are significant differences between the means of two given groups. It is usually used when comparing the means of two samples, and it helps to assess if any observed differences are statistically significant or if they might

have occurred by chance. For conducting a T-test, two hypotheses should be formulated. The first one is so called “Null Hypothesis (H_0)”. It assumes that there is no significant difference between the means of the two groups. The second one is so called “Alternative Hypothesis (H_1)”. It assumes that there is a significant difference between the means of the two groups. For the purpose of drawing conclusions, P-value should be checked. If the P-value of the data is less than the given significance level (commonly 0.05), we should reject the null hypothesis. This suggests that there is a statistically significant difference between the groups.



Graph 5. E-commerce usage
Source: compiled by the author



Graph 6. Being familiar with the pros of e-commerce
Source: compiled by the author

If the P-value of the data is greater than the significance level (0.05), we should fail to reject the null hypothesis, indicating insufficient evidence to conclude a significant difference. [11]

Findings. In order to compare the sales and customer visits between shops that use e-commerce and those that don't, we conducted the Independent (Two-sample) T-test. IBM SPSS Statistics software was used in order to analyze the collected data. The following table showcases the p-value of the Independent T-test (Table 1).

As it can be seen from the table above, the p-value (Sig. (2-tailed)) is less than 0.001. Thus, it is below the significance level of 0.05. That's why we should ignore null hypothesis and this indicates that there is a statistically significant difference in the mean number of customer visits between e-commerce users and physical sellers.

Conclusion. The transformation of the e-commerce landscape from mere online storefronts to sophisticated omnichannel experiences has revolutionized retail, presenting immense opportunities and challenges for businesses worldwide. Our analysis of the southeastern region of Azerbaijan underscores the significant technological underdevelopment in

this area, particularly outside the capital city, Baku. The survey results reveal a predominant reliance on traditional business methods, with only 15.1% of businesses utilizing e-commerce platforms. Major barriers include limited payment options, lack of knowledge, logistics issues, and insufficient internet access.

The statistical analysis confirms that businesses leveraging e-commerce platforms experience significantly higher sales and customer visits compared to those relying solely on physical stores. This underscores the critical need for local businesses to embrace digital transformation to enhance their competitive edge and meet evolving consumer demands.

It's crucial to motivate business owners to use e-commerce in this region to increase the number of daily visitors, as well as potential sales numbers and increasing sales revenue. Here are some recommendations for motivating business owners to apply e-commerce in their stores:

1. Educational Programs and Workshops. The objective of this recommendation is to address the knowledge gap regarding e-commerce benefits and operations. By organizing regular training sessions and workshops that cover e-commerce basics, platform

Table 1

Independent T-test results of the collected data

Independent Samples Test										
Levene's Test for Equality of Variances						T-test for Equality of Means				
						95% Confidence Interval of the Difference				
		F	Sig.	t	Df	Sig. (2-tailed)	Mean difference	Std. Error Difference	Lower	Upper
daily_visits	Equal variances assumed	39.377	<.001	-14.000	375	<.001	-1.99095	.14221	-2.27059	-1.71132
	Equal variances not assumed			-22.808	167.838	<.001	-1.99095	.08729	-2.16328	-1.81862

Source: compiled by the author

usage, digital marketing strategies, and success stories from local entrepreneurs, the knowledge gap will be removed.

2. Infrastructure Development. The objective of this recommendation is to improve internet access and payment systems in underdeveloped regions. Collaboration with government and private sectors to invest in high-speed internet infrastructure and integrate diverse payment gateways that are accessible and user-friendly is the crucial factor.

3. Logistics and Distribution Support. The objective of this recommendation is to overcome logistical challenges that hinder e-commerce operations. Developing partnerships with logistics companies to create efficient and affordable delivery networks would be helpful.

4. Incentives and Subsidies. The objective of this recommendation is to encourage small and medium-sized enterprises (SMEs) to transition to e-commerce. Offering financial incentives such as grants, tax breaks, or subsidies for businesses that adopt e-commerce platforms and providing low-interest loans specifically aimed at digital transformation projects would be game changing factors.

By implementing these strategies, we can bridge the technological gap and empower local businesses to thrive in the digital economy. Encouraging the adoption of e-commerce not only enhances business growth but also contributes to the overall economic development of the region. With concerted efforts and collaborative initiatives, we can pave the way for a prosperous and digitally integrated future for southeastern Azerbaijan.

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