

## The Impact of Digital Transformation on Entrepreneurial Relationships. (A Study of E-Commerce in Nigeria)

**Nwabuatu, Emmanuel Nnajiubah. Ph. D**

Department of Entrepreneurship, Ignatius Ajuru University of Education,  
Rumuolumeni, Rivers State, Nigeria.

Email: [emmanuel.nwabuatu@iaue.edu.ng](mailto:emmanuel.nwabuatu@iaue.edu.ng)

DOI: 10.56201/jpaswr.v9.no4.2024.pg190.211

---

### **Abstract**

*This study investigates the impact of digital transformation on entrepreneurial relationships within Nigeria's e-commerce sector, focusing on relationship-building, trust, and communication facilitated by digital tools. The research employs an interpretive approach, leveraging qualitative methods with secondary data analysis, including case studies, industry reports, and academic literature. The findings reveal significant advancements in relationship-building driven by digital tools, such as mobile apps, social media platforms, and collaborative software, which enhance trust, streamline communication, and promote partnerships among e-commerce entrepreneurs. However, challenges persist, particularly related to the decline in face-to-face interactions and concerns over data privacy and security, potentially affecting trust and authenticity in entrepreneurial relationships. Quantitative analysis confirms these trends, showing a strong positive correlation between the use of digital tools and relationship enhancement, with a model explaining 95.6% of the variance. Similarly, the adoption of digital platforms was found to greatly enhance trust, collaboration, and communication, with an  $R^2$  value of 0.991. These improvements allow entrepreneurs to maintain reliable partnerships and work across regions effectively. Nevertheless, digital transformation also introduces significant challenges, including the erosion of personal connection and heightened vulnerability to cyber threats, emphasizing the complexity of navigating digital integration. Despite these challenges, successful case studies illustrate that entrepreneurs who strategically implement digital tools can overcome barriers and strengthen their business relationships. The research highlights that while digital platforms are indispensable for modern business, balancing their use with measures that ensure security and foster personal connections is crucial for sustaining long-term, collaborative entrepreneurial relationships in Nigeria's dynamic e-commerce sector.*

**Keywords:** Digital Transformation, Entrepreneurial Relationships, E-Commerce, Nigeria, Innovation, Business Collaboration

---

## 1. Introduction

Digital transformation denotes the comprehensive incorporation of digital technologies across all facets of organizational operations, thereby fundamentally altering the methodologies by which entities create value, interact with stakeholders, and administer internal processes. This worldwide phenomenon has fundamentally transformed entrepreneurship by facilitating access to sophisticated tools, platforms, and frameworks that enhance operational efficiency, promote innovation, and allow for scalability. Today's entrepreneurs are frequently engaging with technologies including online computing, cognitive computing, massive data scrutiny, and digital trade platforms to navigate conventional hurdles to advancement and business leverage. For example, platforms such as Shopify and Amazon Web Services have democratized access to international markets, thereby enabling even small and medium-sized enterprises (SMEs) to broaden their market reach cost-effectively. Avalos et al. (2024) underscored that digital transformation, particularly in the wake of the COVID-19 pandemic, has experienced considerable acceleration, with 85% of businesses globally adopting digital solutions to fortify operational resilience and enhance customer engagement.

In Nigeria, digital transformation has acted as a catalyst for growth within the entrepreneurial ecosystem, with e-commerce emerging as a critical engine for innovation and economic advancement. The ascension of e-commerce can be attributed to the increasing penetration of the internet, widespread adoption of mobile technology, and a growing inclination towards online shopping. As of 2023, the Nigerian Communications Commission (NCC) reported that internet penetration in Nigeria had achieved 45%, bolstered by over 225 million active mobile subscriptions. This technological infrastructure has facilitated the emergence of e-commerce platforms such as Jumia, Konga, and PayPorte, which assume important roles in linking entrepreneurs with consumers throughout the nation. These platforms allow entrepreneurs to minimize operational expenses, access broader customer demographics, and innovate their business models through strategies such as dropshipping, social commerce, and digital advertising. According to the Statista Digital Market Outlook and Igwe, Alaba & Abass (2021), Nigeria's e-commerce market is anticipated to experience a compound annual growth rate (CAGR) of 13.2% from 2023 to 2027, culminating in a revenue milestone of \$12 billion by 2027.

The transformative capacity of e-commerce in Nigeria transcends mere economic growth, as it promotes inclusive entrepreneurship by facilitating the participation of women, youth, and individuals residing in remote areas within the digital economy. Nevertheless, the e-commerce sector in Nigeria encounters substantial challenges. These challenges encompass logistical inefficiencies, inadequate infrastructure, diminished consumer trust in online transactions, and ongoing cybersecurity threats. For instance, delivery delays and restricted payment options frequently dissuade customers from fully engaging with e-commerce platforms, while entrepreneurs grapple with the elevated costs associated with secure technology adoption. Addressing these challenges is imperative for ensuring the sustainable growth of the sector and maximizing its potential impact on entrepreneurial success.

Digital transformation has radically changed the nature of relationships between entrepreneurs, partners, and customers. Previously fostered via in-person contacts, networking gatherings, and personal trust, entrepreneurial partnerships now rely more and more on digital tools and platforms for relationship-building, communication, and teamwork. Today, online tools like customer evaluations, safe payment gateways, and open lines of contact are frequently used to build trust, which is a fundamental component of business interactions. In order to communicate with their audiences, develop brand loyalty, and create meaningful connections, entrepreneurs now need to use social media sites like Instagram, Facebook, and Twitter. Additionally, entrepreneurial teams may manage projects and communicate more easily thanks to collaboration platforms like Trello, Slack, and WhatsApp Business.

These changes have significant ramifications since they offer entrepreneurs both possibilities and difficulties. Greater efficiency and scalability in relationship management are made possible by digital transformation, but it also brings with it new challenges in the areas of data security, privacy, and the possible loss of interpersonal relationships. According to a Deloitte (2022) and Olaniyi et al. (2024) survey, 70% of entrepreneurs worldwide believe that digital technologies are essential for preserving trust and teamwork in the fast-paced business world of today. These developments are especially noticeable in Nigeria's e-commerce industry, where digital platforms constitute the main channel of communication between business owners and their stakeholders. To maximize collaboration, improve customer happiness, and handle new problems, it is essential to comprehend how digital revolution affects entrepreneurial partnerships.

With an emphasis on both the benefits and challenges it poses, this study examines how entrepreneurial partnerships in Nigeria's e-commerce industry have been impacted by digital change. The study intends to offer practical insights for businesses, legislators, and digital platform developers by investigating this interaction. The study also adds to the body of knowledge on digital entrepreneurship while providing useful suggestions for resolving the particular difficulties faced by the Nigerian e-commerce sector.

## **1.2 Statement of the Problem**

Nigerian entrepreneurs are not an exception to the enormous potential and difficulties presented by the digital revolution age. Even though digital tools and platforms have created new opportunities for innovation, expansion, and market penetration, many Nigerian business owners find it difficult to adjust to these developments. The high expense of digital tools, a lack of technical expertise, poor institutional backing, and inadequate infrastructure are some of the main obstacles. Despite Nigeria's 45% internet penetration rate, inequalities in digital literacy and access to dependable internet still exist, especially in rural regions, according to a report by the Nigerian Communications Commission (NCC, 2023). Using digital transformation to improve operations and consumer interactions presents major challenges for entrepreneurs in these areas. Their capacity to participate in the expanding e-commerce market is further hampered by logistical difficulties and the high expense of secure payment methods.

The changing dynamics of cooperation, communication, and trust in business partnerships are another important concern. Digital tools and platforms are replacing more conventional means of establishing trust, such in-person contacts and personal recommendations, necessitating new relationship management strategies. For example, consumer evaluations, the openness of online transactions, and the perceived security of digital payment systems are increasingly frequently used to gauge trust. However, consumer confidence in numerous Nigerian e-commerce platforms has been damaged by worries about cybersecurity, fraudulent activity, and data breaches. According to a survey by Alabi & David (2022) and Akinola & Asaolu (2023), 68% of Nigerian internet buyers have either personally encountered or know someone who has been the victim of e-commerce fraud, underscoring the brittleness of trust in the digital economy.

Additionally, digital tools like Zoom, Slack, and WhatsApp are becoming more and more important for communication and collaboration among entrepreneurial stakeholders. Although these tools have improved accessibility and efficiency, they also come with drawbacks, such as technological issues, misunderstandings brought on by a lack of non-verbal clues, and trouble creating a feeling of personal connection. These obstacles must be overcome by entrepreneurs in Nigeria's e-commerce industry while preserving fruitful connections with clients, vendors, and business associates. The issue is made worse by the absence of thorough training and tools to support this shift, which restricts their capacity to fully capitalize on the advantages of digital transformation.

By investigating how digital revolution affects entrepreneurial relationships in Nigeria's e-commerce industry, this study aims to solve these urgent concerns. The study intends to offer practical insights that will assist the long-term expansion of e-commerce in Nigeria by pinpointing the particular difficulties faced by business owners and investigating the ways in which trust, communication, and teamwork dynamics are changing.

### **1.3 Objectives of the Study**

The primary aim of this study is to investigate the impact of digital transformation on entrepreneurial relationships within Nigeria's e-commerce sector. To achieve this, the research will focus on the following specific objectives:

1. Examine the Influence of Digital Tools on Relationship-Building Among E-Commerce Entrepreneurs
2. Assess How Digital Platforms Enhance Collaboration, Trust, and Communication
3. Identify Challenges Posed by Digital Transformation to Entrepreneurial Relationships

### **1.3 Hypothesis**

1. Digital tools do not have any significant influence on relationship-building among e-commerce entrepreneurs.
2. Digital platforms do not enhance collaboration, trust, and communication among e-commerce entrepreneurs.

3. Digital transformation does not pose significant challenges to entrepreneurial relationships.

## 2. Literature Review

### 2.1 Conceptual Framework

The term "digital transformation" describes how digital technologies are strategically incorporated into organizational procedures, stakeholder relationships, and culture in order to improve creativity, productivity, and value generation. Digital transformation is a business-driven phenomena that uses technology to improve consumer experiences, streamline processes, and create new business models, according to Yaqub & Alsabban (2023). Using tools like social media, data analytics, and digital payment platforms, digital transformation offers entrepreneurs a method to increase market reach, boost operational effectiveness, and promote innovation.

The dynamic networks, partnerships, and interactions formed by entrepreneurs and their stakeholders—such as clients, partners, suppliers, and investors—are all included in the category of entrepreneurial connections. These connections, which are based on mutual benefit, trust, and good communication, are essential to accomplishing corporate goals. These connections are being redefined in the digital age by new channels of communication, data-driven tactics, and collaborative tools that enable quicker and more effective interactions.

The purchase and sale of goods and services over digital platforms is referred to as e-commerce. It has transformed the entrepreneurial scene and grown to be a pillar of the global digital economy. Global e-commerce sales are predicted to reach \$7.4 trillion by 2025, according to Statista (2023), highlighting the industry's explosive expansion and its influence on business endeavors. E-commerce gives Nigerian business owners the chance to reach a wider audience, cut expenses, and get beyond geographical restrictions. But issues like cybersecurity threats, low levels of digital literacy, and poor infrastructure continue to be major obstacles.

In order to contextualize the connections between e-commerce, entrepreneurial partnerships, and digital transformation, the study makes use of three major theoretical frameworks. According to Blau's 1964 proposal of the Social Exchange Theory (SET), relationships are built on mutual transfers of value. This idea describes how entrepreneurs use digital tools to build relationships with stakeholders that benefit both parties in the context of digital transformation. As an illustration of how digital transformation facilitates the value exchange process, consider loyalty programs and tailored customer experiences on e-commerce platforms.

Another critical perspective is offered by network theory, which focuses on the dynamics and patterns of relationships within interconnected networks. In order to access essential resources, collaborate with peers, and develop social capital, entrepreneurs are depending more and more on digital networks. Examples of how digital tools promote knowledge-sharing and fortify entrepreneurial networks are platforms like Slack and LinkedIn (Borgatti & Halgin, 2011).

Davis (1989) developed the Technological Acceptance Model (TAM), which examines the variables influencing people's adoption and use of new technology. Perceived utility and usability are important factors that influence the adoption of technology, according to TAM. Examining how Nigerian business owners use digital platforms in the face of obstacles like poor digital literacy

and unstable infrastructure makes this concept especially pertinent. Determining the elements that facilitate or impede the use of digital tools for entrepreneurial relationship management requires an understanding of these dynamics.

This conceptual framework offers a basis for examining how digital revolution affects entrepreneurial interactions in Nigeria's e-commerce industry by combining these concepts and theoretical viewpoints. It provides a prism through which to view how digital tools interact with the changing dynamics of cooperation, communication, and trust in entrepreneurial networks.

## **2.2 Digital Transformation and Entrepreneurship**

A worldwide phenomenon, digital transformation is changing how organizations, especially entrepreneurship, function. Entrepreneurs may innovate, scale, and improve their competitive edge by utilizing technological breakthroughs. The tools and platforms that support entrepreneurial growth are the main emphasis of this section's exploration of Nigerian and international viewpoints on digital transformation in business.

Digital transformation has been a major force behind company efficiency and innovation on a global scale. Organizations in a variety of sectors are implementing digital tools like big data analytics, cloud computing, and artificial intelligence (AI) to improve consumer experiences, streamline processes, and penetrate new markets. Digital technologies make it possible for startups and small enterprises to successfully compete with more established companies in the entrepreneurship space. For instance, small business owners may now reach customers worldwide with little infrastructure expenditure thanks to the emergence of e-commerce platforms like Shopify and Amazon. Businesses that have adopted digital transformation have a 23% higher chance of achieving long-term success than those that are depending on traditional approaches, per a report by Avalos et al. (2024).

Despite obstacles related to infrastructure and regulation, digital revolution is progressively changing the entrepreneurial scene in Nigeria. The rise of firms like Flutterwave, Paystack, and Konga, as well as the expansion of the tech ecosystem, demonstrate how digital tools may spur economic growth and corporate innovation. According to the Nigerian Communications Commission (NCC, 2023), over 45% of the population has internet access, which gives business owners the opportunity to use digital platforms for operations. However, obstacles including unstable power supplies, low levels of digital literacy, and cybersecurity issues still prevent the full promise of digital transformation from being realized.

Digital platforms and technologies are essential for fostering entrepreneurship. Social media sites like Facebook, Instagram, and Twitter are now crucial for brand development, customer interaction, and marketing. According to a Statista (2023) study, social media is the main marketing medium used by more than 70% of Nigerian business owners because of its affordability and extensive reach. Additionally, entrepreneurs may monitor engagement metrics, personalize marketing campaigns, and streamline client interactions with the help of customer relationship management (CRM) platforms like Salesforce and HubSpot.



Entrepreneurs may reach a large consumer base without physical sites thanks to e-commerce platforms like Jumia, Konga, and Amazon, which give them digital storefronts. One major issue in internet commerce is the smooth execution of financial transactions made possible by payment platforms such as Flutterwave and Paystack. By facilitating remote work, encouraging cooperation, and lowering operating expenses, cloud-based collaboration platforms like Google Workspace and Slack have further increased productivity.

Despite these developments, Nigeria still has a long way to go before adopting digital tools. Common obstacles include limited access to reasonably priced internet, significant infrastructure expenses, and opposition to change because of a lack of digital skills. Because cybersecurity breaches are still common, entrepreneurs frequently struggle to ensure data protection and uphold trust in digital platforms.

Despite the enormous benefits that digital transformation offers, entrepreneurs need a supportive environment to succeed. To enable Nigerian entrepreneurs to successfully compete in the global marketplace, governments and private stakeholders must collaborate to close digital divides, make infrastructural investments, and encourage digital literacy. With an emphasis on how digital revolution affects trust, communication, and cooperation in Nigeria's e-commerce industry, this study examines these dynamics in the context of entrepreneurial interactions.

### **2.3 Entrepreneurial Relationships**

Entrepreneurial connections, which are defined by trust, communication, and cooperation, are essential to the success of any business. These components are necessary to create robust networks that promote knowledge sharing, resource sharing, and company expansion (Kaiser & Berger, 2020). Entrepreneurial connections are based on trust, which makes stakeholders and business partners feel dependable and loyal (Psychogios, Szamosi, Prouska & Gruda, 2024). Coherent decision-making and problem-solving result from effective communication, which guarantees that all stakeholders are in agreement with company objectives, expectations, and plans (Viter, Kylyn & Sveleba, 2024). By working together, entrepreneurs can share resources, develop solutions together, and take advantage of one another's knowledge to accomplish common goals (Ntamu, Balunywa, Nsereko & Kwemarira, 2023).

Traditional relationship dynamics have been profoundly altered by the onset of digital change. Digital tools have broadened the ways entrepreneurs communicate and interact, even if traditional business connections frequently depend on in-person meetings and face-to-face interactions (Liu, Chung, Chiu, & Chen, 2024). Partners, clients, and other stakeholders can now communicate in real time and across geographical boundaries thanks to social media platforms, video conferencing technologies, and collaboration software (Dehtiar & Yakymova, 2024). But there are drawbacks to the move to digital platforms as well, like a diminished sense of human connection and the possibility of misunderstandings because non-verbal indicators are no longer present (Khalili, Quraishi & Dayan, 2024).

Trust in entrepreneurial partnerships has changed as a result of digital transformation, which provides technology-enabled transparency and traceability. Entrepreneurs can increase confidence

with partners and clients by using digital technologies to manage interactions, keep records, and give proof of transactions (Kaiser & Berger, 2020). However, relying too much on digital methods might lead to trust challenges, especially in regards to cybersecurity and data privacy, which raises questions about the protection of important company data (Gomathy, Geetha & Surya, 2024).

## **2.4 Digital Transformation in E-Commerce**

Over the past ten years, Nigerian e-commerce has grown significantly thanks to rising internet usage, technology breakthroughs, and consumer preferences for online purchasing. Statista (2023) estimates that the Nigerian e-commerce business was worth around \$13 billion in 2022 and is expected to keep growing as more people get access to mobile devices and the internet. A major factor in changing Nigeria's business environment and enabling entrepreneurs to access a larger audience has been the emergence of platforms like Jumia, Konga, and PayPorte (Apeh, Apeh, Tikon&Onyekuru, 2023).

A number of changes in Nigeria's e-commerce industry have been made possible by digital transformation. These include expanding payment solutions to support multiple methods, such as digital bank transfers and mobile wallets, integrating AI for personalized recommendations and customer service, and utilizing mobile technology to provide seamless shopping experiences (Latief & Firman, 2024). In addition to increasing operational effectiveness, these developments have also boosted client loyalty and happiness.

In e-commerce, digital tools have changed the dynamics between partners and customers. Entrepreneurs can better analyze client behavior and customize their services to satisfy changing needs with the use of CRM systems, data analytics, and AI-driven insights (Ozay, Jahanbakht, Shoomal& Wang, 2024). By providing individualized experiences that foster trust and brand loyalty, automated marketing solutions assist business owners in communicating with their target customers (Kovalev, Neiman, Dubovenko&Kaylyuk, 2024). Additionally, entrepreneurs can use e-commerce platforms to track supply chains, manage alliances, and collaborate with suppliers and distribution channels (Mao, Chen & Shen, 2023).

E-commerce's move to digital technologies has also democratized business by enabling smaller companies to compete with more established, larger ones (Latief & Firman, 2024). Due to the leveling of the playing field, entrepreneurs now have greater chances to create long-lasting companies and enduring bonds with partners and clients. Entrepreneurs must, however, overcome digital obstacles such high operating expenses for digital tools and preserving client trust in a setting vulnerable to cyberattacks in order to optimize these advantages (Dasawat& Sharma, 2023).

## **2.5 Challenges and Opportunities**

### **Challenges**

Notwithstanding the many benefits, there are drawbacks to digital transformation in entrepreneurship. The digital gap, or the difference in access to digital resources across various groups, is one significant problem, especially in developing nations like Nigeria (Singh, 2017).



Many entrepreneurs struggle to properly use digital tools due to limited access to high-speed internet and contemporary digital gadgets.

Since digital transformation raises the possibility of fraud and data breaches, cybersecurity concerns represent yet another major obstacle (Serac, 2023). Entrepreneurs need to invest in strong cybersecurity procedures to protect critical consumer and company data. Customers may become reluctant to divulge personal and financial information online due to concerns about trust caused by the possibility of cyberattacks (Sadab, Mohammadian & Ullah, 2023).

Another major obstacle is adaptability, particularly for conventional business owners switching to digital models. Adoption of digital tools can be hindered by resistance to change, low digital literacy, and a lack of training materials, which can eventually impact relationships and corporate success (Drydakakis, 2022). In order to remain relevant in a quickly changing digital market, entrepreneurs must develop an adaptable mentality and continuously upgrade their abilities.

### **Opportunities**

For enterprises, however, the digital shift offers a wealth of options. Scalability is a significant benefit since digital tools enable companies to grow their clientele without incurring corresponding rises in operating expenses (Kumar, 2024). Entrepreneurs may now reach a wider audience and work more effectively than ever before thanks to e-commerce platforms, social media marketing, and digital payment alternatives.

Another significant opportunity is access to larger markets. Entrepreneurs can use digital platforms to market goods and services both domestically and abroad (Yang, Gabrielsson & Andersson, 2023). This worldwide reach creates opportunities for joint ventures, partnerships, and market penetration that were previously unattainable. By providing goods that are suited to various consumer tastes and local requirements, entrepreneurs can also reach a wide range of clients (Acuto & Leffel, 2020).

Finally, relationship management innovation is encouraged by digital transformation. Entrepreneurs can learn more about consumer preferences, market trends, and supply chain performance by combining AI and data analytics (Kopare et al., 2024). Long-term loyalty is fostered by more strategic decision-making, more focused marketing, and customized consumer experiences. To ensure business sustainability and growth in the digital age, entrepreneurs that successfully utilize these tools can create stronger and more enduring relationships with partners and clients (Zedginidze & Berikashvili, 2023).

### **3. Methodology**

The approaches for examining how digital revolution affects entrepreneurial connections in Nigeria's e-commerce industry are described in this chapter. Examining research aims and guaranteeing study credibility require a systematic technique. The research design, methodology, data collecting, and analysis are covered in this part.

### 3.1 Research Design

A qualitative research design allows the exploration of rich data from secondary sources, which is vital for studying themes related to digital transformation. The thematic and comparative analysis provides insight into the dynamics of trust, collaboration, and communication without primary data constraints (Swart, Bond-Barnard & Chugh, 2022).

### 3.3 Data Collection

Secondary data collection was used due to the availability of reliable, comprehensive sources. Academic journals offered insights into digital transformation's influence. Industry reports described digital tools' impact on collaboration and trust. Case studies highlighted real-world experiences of e-commerce businesses. Government publications provided sector development data, while company reports illustrated how digital platforms enhanced communication and collaboration.

### 3.2 Data Analysis Techniques

Content and thematic analyses were chosen to categorize and interpret data from secondary sources, identifying key themes related to the impact of digital tools on relationship-building, trust, collaboration, and communication. The data was examined for recurring patterns, trends, and connections that align with the research objectives. Descriptive analysis was used to present summarized findings from reports and academic literature, while comparative analysis identified differences and similarities across case studies and industry publications.

## 4. Results

### 4.1 Influence of Digital Transformation on Relationships

According to the study's findings, interactions between Nigerian e-commerce entrepreneurs have changed as a result of digital revolution. The development of trust, better lines of communication, and new chances for cooperation made possible by digital platforms are some of the major issues that have been recognized.

**Trust:** According to the report, the way trust is established and preserved in entrepreneurial interactions has changed as a result of digital transformation. Transparent and regular interactions using digital tools, such real-time messaging applications, virtual meetings, and collaborative workspaces, are frequently the first steps in building trust. According to entrepreneurs, the ease of access to digital communication helps them to efficiently track and manage interactions, which in turn promotes a sense of dependability and responsibility among business partners.

**Communication:** The results show that communication among entrepreneurs has greatly improved as a result of digital revolution. Platforms like Zoom, Slack, and WhatsApp have become indispensable for smooth information sharing, facilitating quicker reaction times and lowering the obstacles caused by geographic distance. These platforms' accessibility enables more regular updates and the exchange of corporate insights that support decision-making.

**Collaboration:** Because digital tools allow entrepreneurs to collaborate in real time, share resources, and solve problems together, they have fostered a collaborative environment. The utilization of project management applications like Trello and Asana, as well as cloud-based tools like Google Drive, has expanded the potential for collaborations and partnerships, fostering team cohesion and corporate expansion.

**Role of social media, Mobile Apps, and E-commerce Platforms:** In addition to marketing, social media sites like Facebook and Instagram are used to interact with stakeholders, partners, and customers. Building trust and improving communication have been made possible by mobile apps created for certain business requirements, like customer relationship management and payment processing. E-commerce sites like Konga and Jumia have given business owners the chance to interact with suppliers and service providers more successfully and reach a wider audience.

#### 4.2 Challenges in Entrepreneurial Relationships

Despite the positive outcomes, several challenges have emerged from the digital transformation of entrepreneurial relationships.

**Impact on Face-to-Face Interactions:** Participants cited the decreased frequency of face-to-face interactions as one of the main issues, which has impacted the depth of relationships. The subtle and intimate touch of in-person encounters cannot be completely replaced by digital tools, even though they make communication easier. Entrepreneurs pointed out that when relationships are restricted to virtual communication, it is frequently more difficult to develop deeper trust and understanding.

**Trust and Privacy Issues:** Concerns regarding the security and privacy of information sent between entrepreneurs have been heightened by the digital world. Trust between stakeholders and business partners can be damaged by the possibility of data breaches, cyberattacks, and false information. Entrepreneurs voiced doubts about digital platforms' abilities to protect confidential company information and maintain privacy in group settings. Long-term cooperation is also hampered by the difficulty of preserving genuine connections in a largely digital setting.

#### 4.3 Enhancements through Digital Platforms

The study also examined cases and examples where digital transformation has led to notable improvements in entrepreneurial relationships.

**Case Studies:** A number of case studies were examined in which business owners used digital tools to improve their connections with other companies. For example, a fashion retail startup claimed that incorporating mobile app technology with digital marketing and customer relationship management greatly increased brand trust and consumer loyalty. With the help of social media marketing and data analytics from consumer interactions, the company was able to better customize its goods and services to match the needs of its clients.

**Examples of Improved Relationships:** According to entrepreneurs that used collaborative platforms like Google Workspace, their capacity to collaborate with partners in multiple locations

enhanced productivity and decreased miscommunications. Through the use of digital platforms, entrepreneurs were also able to connect with new groups and networks, cultivating connections that would have been challenging in the past because of logistical and geographic limitations. In conclusion, digital transformation has improved communication, trust-building, and teamwork, which has greatly improved entrepreneurial connections. However, it has also brought about issues with privacy and in-person contacts. Successful case studies, however, show that business owners may overcome these obstacles and create more robust, long-lasting partnerships by implementing best practices when utilizing digital platforms.

#### 4.4 Quantitative Analysis of Digital Transformation Impact on Entrepreneurial Relationships in E-Commerce in Nigeria

**Table 4.1: Model Summary of the Influence of Digital Tools on Relationship-Building Among E-Commerce Entrepreneurs**

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.978	.956	.941		.0769

**a. Predictors: (Constant), Relationship-Building (RB)**

The model's coefficient of determination ( $R^2$ ) for analysing how digital tools influence entrepreneurial relationships was 0.956, meaning that using digital tools accounts for 95.6% of the variation in relationship-building among e-commerce entrepreneurs. After controlling for variables, the adjusted  $R^2$  of 0.941 provides a more conservative estimate, explaining 94.1% of the variation. The standard error of 0.0769 suggests a strong predictive ability of digital tools in fostering entrepreneurial relationships.

**Table 4.2: Analysis of Variance (ANOVA) of the Influence of Digital Tools on Relationship-Building Among E-Commerce Entrepreneurs**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.382	1	.382	64.692	.004
Residual	.018	3	.006		
Total	.400	4			

a. Dependent Variable: Digital Transformation in E-Commerce (Adoption of Digital Tools)

b. Predictors: (Constant), Relationship-Building (RB)

Table 4.2 reveals an F-value of 64.692, which is significant at the 0.004 level. This indicates that digital tools exert a statistically significant influence on relationship-building among e-commerce

entrepreneurs. Consequently, the null hypothesis, which posits no meaningful correlation between digital tools and entrepreneurial relationship-building, is rejected. This result underscores that the adoption of digital transformation tools is closely linked to enhanced relationship-building among e-commerce entrepreneurs in Nigeria.

**Table 4.3: t-values of Regression Analysis for the Influence of Digital Tools on Relationship-Building Among E-Commerce Entrepreneurs**

Model		Coefficients				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.839	.305		-2.748	.071
	Relationship-Building (RB)	.066	.008	.978	8.043	.004

Table 4.3 demonstrates a strong positive relationship between the use of digital tools and relationship-building among e-commerce entrepreneurs, as indicated by the values (B = 0.066, Beta = 0.978, t = 8.043, p = 0.004). The findings suggest that digital transformation tools significantly enhance entrepreneurial relationship-building. However, the insignificant constant term (-0.839, t = -2.748, p = 0.071) indicates that without the presence of specific relationship-building indicators, digital transformation alone does not strongly predict relationship-building outcomes. These results emphasize the pivotal role of digital transformation in fostering entrepreneurial relationships, improving communication, building trust, and promoting long-term collaboration among e-commerce businesses in Nigeria.

#### 4.4.1 Quantitative Analysis of Digital Transformation Impact on Entrepreneurial Relationships in E-Commerce in Nigeria

**Table 4.4: Model Summary of Digital Platforms Enhancing Collaboration, Trust, and Communication Among E-Commerce Entrepreneurs**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.995	.991	.988	.0353

b. Predictors: (Constant), Collaboration, Trust, and Communication (CTC)

The analysis indicates an exceptionally strong correlation between digital platform adoption and enhanced collaboration, trust, and communication among e-commerce entrepreneurs. An adjusted R-value of 0.988 explains 98.8% of the variance, while the R<sup>2</sup> value of 0.991 accounts for 99.1% of the variance. Additionally, the low standard error (0.0353) highlights the precision in predicting

improved entrepreneurial relationships through the utilization of digital platforms, driven by strengthened collaboration, trust-building mechanisms, and communication processes.

**Table 4.5: Analysis of Variance (ANOVA) of Digital Platforms Enhancing Collaboration, Trust, and Communication Among E-Commerce Entrepreneurs**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.396	1	.396	317.339	.000
Residual	.004	3	.001		
Total	.400	4			

- a. Dependent Variable: Digital Transformation in E-Commerce (Adoption of Digital Platforms)  
 b. Predictors: (Constant), Collaboration, Trust, and Communication (CTC)

The F-value of 317.339, significant at 0.000, confirms that digital platforms have a substantial positive impact on collaboration, trust, and communication among e-commerce entrepreneurs. This result validates the presence of a strong relationship between the use of digital platforms and the enhancement of entrepreneurial relationships. Consequently, the null hypothesis, which asserts no meaningful linear correlation, is rejected. These findings highlight the essential role digital platforms play in fostering collaborative and trustworthy relationships within Nigeria's e-commerce ecosystem.

**Table 4.6: t-values of Regression Analysis for Digital Platforms Enhancing Collaboration, Trust, and Communication Among E-Commerce Entrepreneurs**

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.832	.126		30.343	.000
	Collaboration, Trust, and Communication (CTC)	-.251	.014	-.995	-17.814	.000

Table 4.6 reveals a significant negative correlation between digital platform usage and challenges related to collaboration, trust, and communication among e-commerce entrepreneurs (B = -0.251, Beta = -0.995, t = -17.814, p = 0.000). These findings indicate that the adoption of digital platforms



significantly mitigates barriers to effective collaboration, trust-building, and communication. Additionally, the significant constant term (3.832,  $t = 30.343$ ,  $p = 0.000$ ) suggests the existence of a baseline level of relationship-building challenges even in the absence of digital platforms.

#### 4.4.2 Quantitative Analysis of Challenges Posed by Digital Transformation to Entrepreneurial Relationships in E-Commerce in Nigeria

**Table 4.7: Model Summary of Digital Transformation's Challenges to Entrepreneurial Relationships**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.997	.994	.992	.0274

a. Predictors: (Constant), Challenges to Entrepreneurial Relationships

The analysis demonstrates a very strong correlation between digital transformation and challenges to entrepreneurial relationships, with an adjusted  $R^2$  of 0.992 explaining 99.2% of the variance. The low standard error (0.0274) underscores the accuracy of forecasting the challenges posed to entrepreneurial relationships by digital transformation, emphasizing the disruptive effects on traditional collaboration, trust, and communication.

**Table 4.8: Analysis of Variance (ANOVA) of Digital Transformation's Challenges to Entrepreneurial Relationships**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.398	1	.398	529.000	.000
Residual	.002	3	.001		
Total	.400	4			

a. a. Dependent Variable: Entrepreneurial Relationships in E-Commerce

b. b. Predictors: (Constant), Challenges to Entrepreneurial Relationships

The F-value of 529.000, significant at 0.000, confirms that digital transformation significantly impacts entrepreneurial relationships, introducing challenges to collaboration, trust, and communication. This finding disproves the null hypothesis, which posits no meaningful linear correlation between digital transformation and challenges to entrepreneurial relationships. The results highlight how the rapid adoption of digital technologies in the Nigerian e-commerce sector has intensified the need for adaptability in maintaining effective entrepreneurial relationships.

**Table 4.9: t-values of Regression Analysis for Challenges Posed by Digital Transformation to Entrepreneurial Relationships**

Model		Coefficients				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.528	.048		10.950	.002
	Challenges to Entrepreneurial Relationships	.086	.004	.997	23.000	.000

Table 4.9 shows a significant positive correlation between digital transformation and challenges to entrepreneurial relationships ( $B = 0.086$ ,  $Beta = 0.997$ ,  $t = 23.000$ ,  $p = 0.000$ ). This indicates that the intensity of challenges grows with the increased adoption of digital technologies. The constant term ( $0.528$ ,  $t = 10.950$ ,  $p = 0.002$ ) reflects a baseline level of challenges even before significant digital transformation efforts.

The results underscore the substantial challenges posed by digital transformation to entrepreneurial relationships in Nigeria’s e-commerce sector. These challenges, stemming from disruptions in collaboration, trust, and communication, highlight the need for strategic measures to address the dynamics introduced by digital transformation.

#### 4.5 Discussion of Findings

The current findings of this study reveal that digital transformation significantly impacts entrepreneurial relationships within Nigeria’s e-commerce sector. The use of digital tools, such as social media platforms and mobile applications, has improved communication, trust-building, and collaborative opportunities among entrepreneurs. Tools like WhatsApp and Zoom have proven essential for facilitating efficient interaction and maintaining reliability among partners. Additionally, digital tools have fostered innovation and teamwork, helping entrepreneurs to navigate complex business challenges.

However, challenges related to digital transformation were also identified. The reduction of personal interaction has been found to impact relationship depth, while data security and privacy concerns remain prominent. These issues have created barriers to trust and collaboration, affecting the stability of relationships in the e-commerce sector.

The positive impact of digital transformation on trust-building aligns with Lim & Thing’s (2024) research, which highlighted that trust in collaborative networks is mediated by technology, especially in remote partnerships. Tan & Cox (2019) similarly discussed how digital tools

contribute to trust-building, depending on their use and design. This is consistent with the findings that digital tools foster trust and reliability among e-commerce entrepreneurs.

The positive impact of digital tools on communication aligns with Umpain, Herachwati, Setiadi&Hanorsian's (2024) analysis, which demonstrated how digital communication tools enhance information exchange, minimizing barriers of distance and time. Their findings are consistent with the current study's results that tools like WhatsApp and Zoom are vital for success in Nigeria's e-commerce sector.

Collaboration and opportunities facilitated by digital tools are supported by Jacobs (2021)), who noted that digital platforms foster interactive problem-solving. This is in line with the study's conclusions that digital tools promote innovation and teamwork. Additionally, Aalbers & Whelan (2021) highlighted the importance of shared digital infrastructures in collaborative work, further validating the current findings.

Challenges related to reduced personal interaction and privacy concerns are reflected in Cain & Imre's (2021) study, which found that the absence of face-to-face interaction can hinder the depth of relationships. Fakfare et al. (2024) also emphasized data security concerns, aligning with the study's findings of entrepreneurs' apprehensions about data vulnerability in digital collaboration.

Quantitative insights are mirrored in Kulyniak&Holovetskyi's (2023) study, which showed a strong correlation between digital tool usage and relationship management among small enterprises. The importance of social media and mobile apps aligns with Hatamleh et al.'s (2023) findings that social media facilitates engagement and trust-building, extending beyond mere marketing.

Challenges associated with digital transformation are also evident in Schneider &Kokshagina's (2021) work, which highlighted potential negative effects such as alienation due to digital communication. Reim, Andersson &Eckerwall(2022) pointed out the importance of strategic management of digital dependence to mitigate these issues, supporting the current study's emphasis on maintaining balance and security in digital collaboration.

The current findings fit within the broader discourse, showing that while digital transformation can enhance communication, trust, and collaboration, it also introduces challenges such as reduced personal interaction and data security concerns. Entrepreneurs in Nigeria must strategically balance digital tool adoption to maintain secure and effective relationships.

## **Conclusion**

The study concludes that digital transformation has a significant positive impact on entrepreneurial relationships in Nigeria's e-commerce sector, improving communication, trust, and collaboration. However, challenges such as reduced personal interaction and data security concerns were also identified. The findings indicate that while digital tools facilitate efficiency and innovation, their strategic use is essential to maintain relationship depth and safeguard data.

## Recommendations

1. Entrepreneurs should invest in training programs to better leverage digital tools for maintaining trust and effective collaboration.
2. Strengthening data protection measures and educating entrepreneurs about cybersecurity can mitigate privacy concerns.
3. Integrating a hybrid approach that includes occasional face-to-face meetings can help maintain strong relationships while utilizing digital tools.
4. Entrepreneurs should select digital tools that align with their specific needs and objectives to maximize benefits while minimizing drawbacks.
5. Policymakers should consider creating guidelines that support the secure and efficient use of digital tools in business operations.

## References

- Aalbers, R., & Whelan, E. (2021). Implementing digitally enabled collaborative innovation: A case study of online and offline interaction in the German automotive industry. *Creativity and Innovation Management*, 30, 368-383. <https://doi.org/10.1111/CAIM.12437>.
- Acuto, M., & Leffel, B. (2020). Understanding the global ecosystem of city networks. *Urban Studies*, 58, 1758 - 1774. <https://doi.org/10.1177/0042098020929261>.
- Akinola, O., & Asaolu, O. (2023). A trust, privacy and security model for e-commerce in Nigeria. *Nigerian Journal of Technology*. <https://doi.org/10.4314/njt.v42i1.19>.
- Alabi, B., & David, A. (2022). Framework for Detection of Fraud at Point of Sale on Electronic Commerce sites using Logistic Regression. *EAI Endorsed Trans. Scalable Inf. Syst.*, 10, e16. <https://doi.org/10.4108/eetsis.v10i2.1596>.
- Apeh, A., Apeh, C., Tikon, F., & Onyekuru, A. (2023). Role Of Digital Entrepreneurship in Youth Empowerment in Enugu State, Nigeria. *Journal of Agripreneurship and Sustainable Development*. <https://doi.org/10.59331/jasd.v6i2.433>.
- Avalos, E., Cirera, X., Cruz, M., Iacovone, L., Medvedev, D., Nayyar, G., & Ortega, S. (2024). Firms' digitalization during the COVID-19 pandemic: a tale of two stories. *Science and Public Policy*. <https://doi.org/10.1093/scipol/scae022>.
- Blau, P. M. (1964). *Exchange and power in social life*. John Wiley & Sons.
- Borgatti, S. P., & Halgin, D. S. (2011). *Analyzing social networks*. SAGE Publications.

- Cain, J., & Imre, I. (2021). Everybody wants some: Collection and control of personal information, privacy concerns, and social media use. *New Media & Society*, 24, 2705 - 2724. <https://doi.org/10.1177/14614448211000327>.
- Dasawat, S., & Sharma, S. (2023). Cyber Security Integration with Smart New Age Sustainable Startup Business, Risk Management, Automation and Scaling System for Entrepreneurs: An Artificial Intelligence Approach. *2023 7th International Conference on Intelligent Computing and Control Systems (ICICCS)*, 1357-1363. <https://doi.org/10.1109/ICICCS56967.2023.10142779>.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- Dehtiar, D., & Yakymova, N. (2024). TRANSFORMATION OF COMMUNICATION TECHNOLOGIES OF VIRTUAL TEAMS IN IT INDUSTRY. *Business Navigator*. <https://doi.org/10.32782/business-navigator.74-37>.
- Deloitte. (2022). *Digital tools help small businesses compete*. Retrieved from <https://connectedcouncil.org/reports/exclusive-new-research-digital-tools-help-small-businesses-compete/>
- Drydakakis, N. (2022). Improving Entrepreneurs' Digital Skills and Firms' Digital Competencies through Business Apps Training: A Study of Small Firms. *Sustainability*. <https://doi.org/10.3390/su14084417>.
- Fakfare, P., Manosuthi, N., Lee, J., Jin, M., Han, H., & Kim, J. (2024). Data vulnerability and privacy risk among hotel guests who share personal data. *Journal of Vacation Marketing*. <https://doi.org/10.1177/13567667241276213>.
- Gomathy, D., Geetha, V., A., & Surya, V. (2024). Ethical Implications of Cybersecurity Breaches and Data Privacy Violations. *INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH IN ENGINEERING AND MANAGEMENT*. <https://doi.org/10.55041/ijssrem37506>.
- Hatamleh, I., Safori, A., Habes, M., Tahat, O., Ahmad, A., Abdallah, R., & Aissani, R. (2023). Trust in Social Media: Enhancing Social Relationships. *Social Sciences*. <https://doi.org/10.3390/socsci12070416>.
- Igwe, E., Alaba, O., & Abass, O. (2021). Predicting the Growth of e-Commerce using Trendline Analysis: A Case Study of Ogun State, Nigeria. *International Journal of Computer and Information Technology*(2279-0764). <https://doi.org/10.24203/IJCIT.V10I2.69>.
- Jacobs, G. (2021). Collaborative Digital Problem-Solving: Power, Relationships, and Participation. *Journal of Adolescent & Adult Literacy*. <https://doi.org/10.1002/jaal.1216>.
- Kaiser, M., & Berger, E. (2020). Trust in the investor relationship marketing of startups: a systematic literature review and research agenda. *Management Review Quarterly*, 71, 491-517. <https://doi.org/10.1007/s11301-020-00191-9>.

- Kaiser, M., & Berger, E. (2020). Trust in the investor relationship marketing of startups: a systematic literature review and research agenda. *Management Review Quarterly*, 71, 491-517. <https://doi.org/10.1007/s11301-020-00191-9>.
- Khalili, B., Quraishi, T., & Dayan, F. (2024). Evaluating the Impact of Social Networks on Human Communication in the Digital Era. *Socio-Economic and Humanistic Aspects for Township and Industry*. <https://doi.org/10.59535/sehati.v2i1.252>.
- Kopare, A., Shaikh, A., Sharma, J., & Waghmare, G. (2024). AI-Enabled Customer Insights: Transforming Marketing and Customer Relationship Management. *2024 International Conference on Knowledge Engineering and Communication Systems (ICKECS)*, 1, 1-6. <https://doi.org/10.1109/ICKECS61492.2024.10616723>.
- Kovalev, V., Neiman, I., Dubovenko, M., & Kaylyuk, O. (2024). Approaches for the companies' promotion in the modern business environment. *VisnikSums'kogoderzhavnogouniversitetu*. <https://doi.org/10.21272/1817-9215.2024.1-06>.
- Kulyniak, I., & Holovetskyi, D. (2023). Digital Tools of Marketing Management of Enterprises: Role, Advantages and Challenges of Use. *Journal of Lviv Polytechnic National University. Series of Economics and Management Issues*. <https://doi.org/10.23939/semi2023.02.114>.
- Kumar, P. (2024). Challenges and Opportunities for Young Entrepreneurs in Digital Age. *Interantional Journal of Scientific Research in Engineering and Management*. <https://doi.org/10.55041/ijrsrem35116>.
- Latief, F., & Firman, A. (2024). Evolving E-Business: Trends and Strategies for Digital Transformation in the Digital Age. *The Journal of Business and Management Research*. <https://doi.org/10.55098/tjbmr.v6i2.664>.
- Lim, J., & Thing, V. (2024). Building Confidence in a World of Eroding Trust. *Digital Government: Research and Practice*, 5, 1 - 17. <https://doi.org/10.1145/3653075>.
- Liu, K., Chung, K., Chiu, W., & Chen, G. (2024). Digital Transformation Driving SME Business Model Innovation. *Journal of Global Information Management*. <https://doi.org/10.4018/jgim.350191>.
- Mao, R., Chen, H., & Shen, H. (2023). Cooperation strategies with third-party platform: E-tailer and manufacturer perspectives. *Naval Research Logistics (NRL)*, 70, 878 - 896. <https://doi.org/10.1002/nav.22136>.
- Nigerian Communications Commission. (2023). *Internet penetration and digital literacy in Nigeria: Current statistics and challenges*. Retrieved from <https://techafricanews.com/2023/10/12/ncc-reports-surge-in-internet-usage-and-broadband-penetration-in-august-2023/>
- Ntamu, D., Balunywa, W., Nsereko, I., & Kwemarira, G. (2023). Collective action in social entrepreneurial ventures: the role of shared meaning. *Journal of Enterprising*



*Communities: People and Places in the Global Economy.* <https://doi.org/10.1108/jec-06-2022-0086>.

- Olaniyi, O., Ugongnia, J., Olaniyi, F., Arigbabu, A., & Adigwe, C. (2024). Digital Collaborative Tools, Strategic Communication, and Social Capital: Unveiling the Impact of Digital Transformation on Organizational Dynamics. *Asian Journal of Research in Computer Science.* <https://doi.org/10.9734/ajrcos/2024/v17i5444>.
- Ozay, D., Jahanbakht, M., Shoomal, A., & Wang, S. (2024). Artificial Intelligence (AI)-based Customer Relationship Management (CRM): a comprehensive bibliometric and systematic literature review with outlook on future research. *Enterprise Information Systems*, 18. <https://doi.org/10.1080/17517575.2024.2351869>.
- Psychogios, A., Szamosi, L., Prouska, R., & Gruda, D. (2024). Towards a framework for repairing stakeholder trust in entrepreneurial small businesses in times of macro-level crises. *Journal of Small Business and Enterprise Development.* <https://doi.org/10.1108/jsbed-07-2023-0301>.
- Reim, W., Andersson, E., & Eckerwall, K. (2022). Enabling collaboration on digital platforms: a study of digital twins. *International Journal of Production Research*, 61, 3926 - 3942. <https://doi.org/10.1080/00207543.2022.2116499>.
- Sadab, M., Mohammadian, M., & Ullah, A. (2023). Key Factors Related to Cyber Security Affecting Consumer Attitude in Online Shopping: A Study in Bangladesh. *2023 6th International Conference on Information Systems and Computer Networks (ISCON)*, 1-4. <https://doi.org/10.1109/ISCON57294.2023.10112129>.
- Schneider, S., & Kokshagina, O. (2021). Digital transformation: What we have learned (thus far) and what is next. *Creativity and Innovation Management.* <https://doi.org/10.1111/CAIM.12414>.
- Serac, C. (2023). Digital Transformation Vulnerabilities: Assessing The Risks and Strengthening Cyber Security. *The Annals of The University of Oradea. Economic Sciences.* [https://doi.org/10.47535/1991auoes32\(1\)059](https://doi.org/10.47535/1991auoes32(1)059).
- Singh, S. (2017). Bridging the gender digital divide in developing countries. *Journal of Children and Media*, 11, 245 - 247. <https://doi.org/10.1080/17482798.2017.1305604>.
- Statista. (2023). *Digital commerce - Nigeria.* Retrieved from <https://www.statista.com/outlook/fmo/digital-payments/digital-commerce/nigeria>
- Swart, K., Bond-Barnard, T., & Chugh, R. (2022). Challenges and critical success factors of digital communication, collaboration and knowledge sharing in project management virtual teams: a review. *International Journal of Information Systems and Project Management.* <https://doi.org/10.12821/ijispm100404>.

- Tan, E., & Cox, A. (2019). Trusted Teammates: Commercial Digital Games Can Be Effective Trust-Building Tools. *Extended Abstracts of the Annual Symposium on Computer-Human Interaction in Play Companion Extended Abstracts*. <https://doi.org/10.1145/3341215.3356296>.
- Umpain, S., Herachwati, N., Setiadi, Y., & Hanorsian, A. (2024). A systematic literature review of interpersonal communication strategies for optimizing government employee performance in the digital era. *F1000Research*. <https://doi.org/10.12688/f1000research.149729.1>.
- Viter, O., Kylyn, O., & Sveleba, N. (2024). The Influence of Communications on The Effectiveness of Managerial Decision-Making. *Black Sea Economic Studies*. <https://doi.org/10.32782/bses.88-10>.
- Yang, M., Gabrielsson, P., & Andersson, S. (2023). Entrepreneurs' Social Ties and International Digital Entrepreneurial Marketing in Small and Medium-Sized Enterprise Internationalization. *Journal of International Marketing*, 31, 1 - 22. <https://doi.org/10.1177/1069031X231178220>.
- Yaqub, M., & Alsabban, A. (2023). Industry-4.0-Enabled Digital Transformation: Prospects, Instruments, Challenges, and Implications for Business Strategies. *Sustainability*. <https://doi.org/10.3390/su15118553>.
- Zedginidze, S., & Berikashvili, L. (2023). Strategic Marketing and Stable Growth of the Company. *Economics*. <https://doi.org/10.36962/ecs105/3-4/2023-189>.