Rise of Cross-Border E-Commerce: A Systematic Literature Review

Ömer Faruk Derindağ

Abstract

E-Commerce is trending almost everywhere globally. However, the new trends in E-Commerce further transformed it into Cross-Border trade, leading to extensive benefits at every level of social and commercial life. Considering the rise of Cross-Border online shopping, this study has extensively highlighted how the Cross-Border E-Commerce phenomenon is reflected in the literature. The researcher applied a systematic review approach and selected n= 45 research papers published between 2010 to 2022. Analysis indicated that Cross-Border E-Commerce had taken the globe by storm due to its rapid growth and unprecedented COVID-19 emergence. With the introduction of the ICT and Internet, it has become increasingly prevalent and simple to become a global seller and reap the benefits of international trade by the means of E-Commerce. Besides, the rise of E-Commerce drives new economic growth and triggers innovation among retailers by encouraging them to differentiate their products and provide an engaging user experience. On the other hand, digital payment patterns such as cryptocurrencies further add to the adoption, adding improved payment trends in Cross-Border E-Commerce. Thus, it is concluded that advanced technology, strategic policies, increased demand, and all others played a potential role in the success of Cross-Border E-Commerce today. However, traders face many challenges that need to be resolved to attain greater opportunities. Finally, the researcher emphasized the study's limitations and recommended future studies.

Keywords: International Trade, Cross-Border E-Commerce, International Marketing, Digital Payments, Systematic Literature Review

JEL Codes: F19, L81, P45
Derleme Makale

Sınır Ötesi E-Ticaretin Yükselişi: Sistematik Bir Literatür Taraması

Ömer Faruk Derindağ

Öz


Anahtar Kelimeler: Uluslararası Ticaret, Sınır Ötesi E-Ticaret, Uluslararası Pazarlama, Dijital Ödeme, Sistematik Literatür Taraması

JEL Kodları: F19, L81, P45

1 Dr. Öğr. Üyesi, İnönü Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, Uluslararası Ticaret ve İşletmecilik Bölümü, Malatya/Türkiye, omer.derindag@inonu.edu.tr, ORCID ID: https://orcid.org/0000-0002-6693-0628
1. Introduction

The rise of internet technology has transformed our life. From social, economic, political, and other perspectives, the Internet has brought great transformation across the globe. Talking particularly about the role of the Internet in the economic arena, (Svatosova, 2020) considers as further contributing to the traditional commerce approaches. More specifically, the rise of E-Commerce is one of the remarkable contributions of digitalization today. As noted by (Jain et al., 2021), increased communication and information gathering through digital platforms have further improved the existing trade patterns. Today, with increased access and ease of use, E-Commerce has become even more common regardless of the potential barriers and differences. The importance of E-Commerce can be determined by the fact that; the global E-Commerce trade is expected to cross over 5.55$ billion by the end of 2022 (Statista, 2022). This figure is further estimated to grow significantly in the upcoming years, indicating it as providing potentially profitable opportunities for online retailers worldwide. However, back in 2019, there were only 17.9% of total sales recorded in the E-Commerce sector. But today, the growth is even increased and is expected to reach 24.5% by the end of 2025 (Statista, 2022). On the other, (Farooq et al., 2019) also consider an increased E-Commerce dependency and preference due to retailers' utmost concern towards improved services, products, and effective customer-centric approaches. Consequently, these considerations lead to customer loyalty and a stronger trust in the online retailers and service providers.

Besides, Covid-19 further increased E-Commerce due to lockdown and an increased dependency on online platforms (Hudák et al., 2017). According to (Valarezo et al., 2018), online merchants, especially in the United States, China, Russia, and the United Kingdom, experienced record growth in E-Commerce during and after the Covid-19 outbreak (Abudureheman & Nilupaer, 2021). As a result, we consider E-Commerce as a part of our economic crisis management system. Besides, it also magnifies the importance of E-Commerce as facilitating our accessibility to products that were unimaginable earlier. As e-E-Commerce is facilitated by different factors, accessibility, and commerce beyond the border, also known as "Cross-Border E-Commerce," is a remarkable phenomenon (T. Chen et al., 2022). (Ma et al., 2018), in this regard, consider Cross-Border E-Commerce a pathway to create and sustain global sales and growth. Besides, it also provided potential economic opportunities to all the involved parties, including logistics and distributors (when involved). For instance, despite many retailers leading E-Commerce today, the recent records in sales and growth indicate Amazon as the world's largest E-Commerce platform regarding its record sales, access, Crowdsourcing, and revenue generation through Cross-Border E-Commerce (Y. Wang et al., 2017). As noted by (Hamed Taherdoost & 2, 2021), merging E-Commerce with Cross-Border trade has provided the global economies with a remarkable opportunity to improve their economy. Additionally, attraction towards global products further fuels customers' urge to purchase the products regardless of the geographical barriers. Consequently, today's E-Commerce trade facilitates customers individually and collectively, further highlighting the importance of Cross-Border E-Commerce in various ways.

Thus, by considering the potential importance and prospects offered by Cross-Border E-Commerce, this article is focused on analyzing the relevant literature specifically on Cross-Border E-Commerce (overall importance, role in the economic enhancements, and new payment approaches). The researcher adopted a systematic review approach and used the PRISMA method.
for the data gathering purposes. This article is formally divided into four sections, including an introduction, methods, review of literature, and conclusion, which is further followed by the practical implications and limitations.

2. Research Methods

2.1 Research questions

By keeping in view, the study context, the questions are aimed at examining the importance of Cross-Border E-Commerce and innovative payments. In this regard, this study addressed three primary questions:

R1: What is the importance of Cross-Border E-Commerce today?

R2: How does E-Commerce contribute to the economy of different countries worldwide?

R3: How does cryptocurrency transform and facilitate Cross-Border E-Commerce?

2.2 Study Design

The researchers applied the overview approach rather than the synthesis technique to conduct the systematic review on the selected topic. The aim is to analyze the studies addressing different aspects concerning Cross-Border E-Commerce (Elbasir et al., 2021). Notably, an overview of the systemic review-based research helps to assess the quality of methods used in the selected literature, summarize findings, and examine certain areas of the evidence. Besides, it also helps to strengthen the ideas behind Cross-Border E-Commerce and its benefits and trends in the better possible way.

2.3 Eligibility Criteria and selection of the Studies

We custom-designed a data extraction table for this study, and two reviewers reviewed all the studies. The searched articles were screened for the relevance of data according to the eligibility criteria (See Table 1). We included all studies that examine Cross-Border and E-Commerce.

<table>
<thead>
<tr>
<th>Inclusion Criteria</th>
<th>Exclusion Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature regarding the Cross-Border E-Commerce</td>
<td>Literature regarding E-Commerce in general</td>
</tr>
<tr>
<td>Articles indexed in the Web of Science and Scopus</td>
<td>Journals that are not indexed in the Web of Science and Scopus</td>
</tr>
<tr>
<td>Literature addressing E-Commerce and international trade</td>
<td>Literature addressing commerce and trade in general</td>
</tr>
</tbody>
</table>

2.4 Data Sources and Search Strategies

The researchers searched and selected the literature addressing and highlighting Cross-Border E-Commerce (Hu & Luo, 2018; L. Liu et al., 2018; Ma et al., 2018). For the current systematic review, we searched for the literature to identify the published articles that reported on Cross-Border and E-Commerce. The researchers conducted a systematic literature search on the
Google Scholar database published by January 2022. The search was according to the PRISMA 2020 checklist criteria. The keywords used for the search were as follows: "Cross-Border", "E-Commerce", "Cross Border" and "E-Commerce". The search terms were kept broad to encompass all possibilities for functional studies. After removing the duplicates, the investigator independently reviewed all abstracts, and the full texts of articles regarded as eligible for consideration were selected for further analysis. We also excluded articles published more than 06 years from publication. This criterion ensured that we did not analyze outdated material. Therefore, after analyzing the 977 articles in general, the research shortlisted and selected a total of \( n = 45 \) articles fulfilling the selection criteria of the current research under the PRISMA method as suggested by (Training, 2019).

**Figure 1. PRISMA Flowchart for the Literature Review**

Identification of Studies via Systematic Literature Review

- Records identified from: Databases (n= 1,027)
- Records removed before the screening: Duplicate records removed (n= 18), Records removed for other reasons (n= 32)
- Records screened (n= 977)
- Reports sought for retrieval. (n= 971)
- Reports excluded: Irrelevant articles (n= 882)
- Reports assessed for eligibility (n= 912)
- Records excluded (n= 6)
- Reports not retrieved (n= 59)
- Studies included in the review. (n= 45)
2.5 Data Extraction Process and Quality Assessment

The one investigator independently extracted data and input them into Microsoft Excel. We extracted the following data items: Title, Author, Year of study, Country, Publisher/Journal, and Reference. Quality assessment was done using version 2 of the Cochrane risk-of-bias tool for randomized trials (RoB-2) (Chandler, 2013). One independent reviewer assessed all domains, including bias arising from the randomization process, bias due to deviations from intended interventions, bias due to missing outcome data, bias in the measurement of the outcome, and bias in the selection of the reported result. Each risk of bias point obtains either "low," "some concerns," or "high" risk of bias (Cai & Zhu, 2020).

2.6 Strengths and Limitations

The strength identified during this review was the number of high-quality studies in the included studies. According to the quality assessment, all studies were considered high quality (Wells & Littell, 2009). The only limitation of this review is that it is a broad perspective of E-Commerce, and Cross-Border does not focus on a specific area.

2.7 Articles by Year, Methods, and Paradigm Models

The researchers calculated the selected article according to their publication years, paradigm models, and study designs. As shown in Table 2, most articles (n= 23 or 51.1%) were published from 2021 to 2022, followed by n= 20 or 44.4% of articles published between 2016 to 2020, n= 02 or 4.4% of articles published from 2011 to 2015. Further, according to the paradigm models, n= 32 or 71.1% of articles were based on the quantitative approaches, n= 09 or 20.0% were based on the qualitative approaches, and the remaining (n= 03 or 6.6%) were based on the mixed-method techniques. Finally, the calculation of the cited articles as per their research designs revealed that most of the articles (n= 37 or 82.2%) were based on a cross-sectional design, n= 7 or 15.5% were based on research essays or perspectives, while n= 01 (2.2%) article, was based on the qualitative approach.

Table 2. Frequency of Articles by Year of Publication

<table>
<thead>
<tr>
<th>Variables</th>
<th>Constructs</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2011-2015</td>
<td>02</td>
<td>4.4%</td>
</tr>
<tr>
<td></td>
<td>2016-2020</td>
<td>20</td>
<td>44.4%</td>
</tr>
<tr>
<td></td>
<td>2021-2022</td>
<td>23</td>
<td>51.1%</td>
</tr>
<tr>
<td>Paradigm Model</td>
<td>Quantitative</td>
<td>32</td>
<td>71.1%</td>
</tr>
<tr>
<td></td>
<td>Qualitative</td>
<td>09</td>
<td>20.0%</td>
</tr>
<tr>
<td></td>
<td>Mixed-Method</td>
<td>03</td>
<td>6.6%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>01</td>
<td>2.2%</td>
</tr>
<tr>
<td>Study Design</td>
<td>Cross-sectional</td>
<td>37</td>
<td>82.2%</td>
</tr>
<tr>
<td></td>
<td>Longitudinal</td>
<td>01</td>
<td>2.2%</td>
</tr>
<tr>
<td></td>
<td>Perspective/Essay</td>
<td>07</td>
<td>15.5%</td>
</tr>
</tbody>
</table>
3. Review of Selected Literature

3.1 Importance of Cross Border E-Commerce

Cross-Border E-Commerce is the practice of conducting online commerce across national or continental borders. It may occur between a business and a consumer (B2C), two businesses (B2B), or two private parties (P2P) (C2C) (Rusachenko, 2020). Although Cross-Border E-Commerce has progressed over the past two and a half decades, it has acquired tremendous momentum over the past two years as customers' shopping habits have shifted. The majority of clients prefer purchasing goods from abroad. There are numerous explanations for this. One of the largest is that it is less expensive to purchase a thing straight from its source of origin (Shi et al., 2020). Over the past few years, Cross-Border E-Commerce has expanded dramatically, taking the world by storm. To make their businesses stronger, more successful, and more lucrative, merchants are now spreading their markets outside national borders (Y. Wang et al., 2020). According to (Du & Yu, 2021), the Internet and technology have facilitated consumers’ access to the websites of international businesses they find appealing. The benefits of Cross-Border E-Commerce make up their mind on the merits of Cross-Border E-Commerce if they are concerned about whether or not to leave their comfort zone and reach out to potential clients worldwide.

For example, Bloomberg estimated that the value of China's international online retail market is $60 billion. And as disposable income rises, so does the desire for imported items. In recent years, Cross-Border shopping has also expanded rapidly in France. Almost half of all French shoppers now purchase from foreign retailers (He et al., 2021). There has been no recent uptick in online shopping that spans international borders. This industry has grown quickly thanks to the rising popularity of purchasing things online and the emergence of new E-Commerce platforms. Even though sophisticated selling choices are now available on sites like Amazon and eBay, the most effective way to expand into international markets is to create more marketplaces within current ones (Hong Hong, 2021).

Another example can be cited from Amazon, which has expanded to a few more nations and is likely still adding more. Recent interviews conducted by Statista with American consumers revealed that 27 percent of respondents purchase domestically and internationally, whereas 71 percent of Austrian consumers do so. The statistics indicate that both brands and sellers have an opportunity to offer their items on the worldwide market (Al-Fawwaz, 2022).

Cross-Border E-Commerce has taken the globe by storm due to its explosive growth and unprecedented COVID-19 emergence. The merchants can now sell their products to buyers in different countries. With the introduction of the Internet, it has become increasingly simple to become a global seller and reap the benefits of international E-Commerce (Giuffrida et al., 2021). Due to international E-Commerce, online shoppers continue to rise daily. Consequently, the following are some of the advantages of Cross-Border E-Commerce that can assist one's firm in reaching potential customers worldwide (Tang, 2021). Advances in technology make it easier to interact with customers in previously inaccessible markets. There are more international payment options, it is feasible to buy from a store kilometer away using a mobile device, and shipping and logistics advancements considerably increase the likelihood of rapid, secure deliveries (Elia et al., 2021).
Table 3. Summary of Studies about Cross-Border E-Commerce

<table>
<thead>
<tr>
<th>Authors</th>
<th>Methods/Design</th>
<th>Source/Repository</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Du &amp; Yu, 2021)</td>
<td>An experimental approach, survey approach</td>
<td>Security and Communication Networks</td>
<td>The benefits of Cross-Border E-Commerce make up their mind on the merits of Cross-Border E-Commerce if they are concerned about whether or not to leave their comfort zone and reach out to potential clients worldwide.</td>
</tr>
<tr>
<td>(Giuffrida et al., 2021)</td>
<td>Review approach</td>
<td>International Journal of Logistics Management</td>
<td>The merchants can now sell their products to buyers in different countries. With the introduction of the Internet, it has become increasingly simple to become a global seller and reap the benefits of international E-Commerce.</td>
</tr>
<tr>
<td>(Tang, 2021)</td>
<td>Cross-sectional design, Survey method</td>
<td>Journal of Physics: Conference Series</td>
<td>Due to international E-Commerce, online shoppers continue to rise daily. Consequently, the following are some of the advantages of Cross-Border E-Commerce that can assist one's firm in reaching potential customers worldwide.</td>
</tr>
<tr>
<td>(X. Wang et al., 2021)</td>
<td>Case study, survey method</td>
<td>Industrial Marketing Management</td>
<td>Everyone wins when businesses like retailers and brands can expand into new markets with a growing economy. This is especially true in the case of Cross-Border E-Commerce. Domestic E-Commerce websites can grow their customer base and market share. They are given a chance to sell their goods all over the world.</td>
</tr>
<tr>
<td>(He et al., 2021)</td>
<td>Case study, survey method</td>
<td>Sustainability (Switzerland)</td>
<td>Bloomberg estimated that the value of China's international online retail market is $60 billion. And as disposable income rises, so does the desire for imported items. In recent years, Cross-Border shopping has also expanded rapidly in France. Almost half of all French shoppers now make purchases from foreign retailers.</td>
</tr>
<tr>
<td>(Al-Fawwaz, 2022)</td>
<td>Case study, survey method</td>
<td>Journal of Legal, Ethical and Regulatory Issues</td>
<td>Recent interviews conducted by Statista with American consumers revealed that 27 percent of respondents purchase domestically and internationally, whereas 71 percent of Austrian consumers do so.</td>
</tr>
</tbody>
</table>

It is argued (N. Wang, 2021) that, by taking payments from customers in different countries, Cross-Border E-Commerce paves the way for businesses to grow, discover new opportunities, and reach a broader audience. When going global, it's important to keep an eye out for a few specific things. A business may have things that sell poorly in the native market but are extremely popular elsewhere. This can improve the chances of transferring stale inventory and shed light on what customers in regions where one hopes to expand value chains value most. The information from this analysis can then be used to shape future stock levels.

Everyone wins when businesses like retailers and brands can expand into new markets with a growing economy. This is especially true in the case of Cross-Border E-Commerce. Domestic E-Commerce websites can grow their customer base and market share. They are given a chance to
sell their goods all over the world (X. Wang et al., 2021). Because of the increased exposure to their brand in foreign markets, Cross-Border E-Commerce is advantageous to merchants. By catering to your target market's specific wants and needs, you'll be well on your way to building a globally recognized brand. The flexibility of E-Commerce to span international borders also makes it easier to tailor products to specific regional markets (Peng, 2021). E-Commerce has made it simple for consumers to shop anytime, anywhere, and on any device, regardless of store hours or location. Consumers have access to an almost limitless selection of items and goods and can readily compare pricing, features, brands, and companies (Goldman et al., 2021). This accessibility has made customers more tech-savvy, connected, and involved. A heightened emphasis on the customer experience resulted in expectations and rules for more accessibility online and the development of an online community of customers who frequently visit their website or online store (Yu et al., 2021).

3.2 Cross-Border E-Commerce in Economic Growth and Development

According to (Goldman et al., 2021), the world is becoming increasingly digital. This presents both opportunities and challenges, necessitating the modification of existing rules and the implementation of new policies in numerous sectors. Many nations are ill-prepared. The expansion of E-Commerce is one of the most noticeable effects of digitalization on the economy. According to the United Nations Conference on Trade and Development's most recent estimates, worldwide E-Commerce sales in 2018 totaled $25.6 trillion, an increase of 8 percent over 2017. A growing proportion of E-Commerce comprises foreign transactions and contributes to international trade. For instance, the proportion of the 1.45 billion global internet customers who made Cross-Border transactions increased from 17% in 2016 to 23% in 2018. The COVID-19 dilemma has increased the value of E-Commerce and contactless payments, compelling governments to take action (Peng, 2021).

Africa is home to much of this digital innovation. Senegal's Ministry of Trade and Small and Medium Enterprises SMEs is working with the private sector to improve the country's infrastructure for E-Commerce, which would speed up the supply of necessities like food and medicine. The Ugandan government has requested digital solutions to aid health systems and public service delivery in the face of the COVID-19 pandemic (Nuruzzaman & Weber, 2020). In addition, platforms have been set up to facilitate the transportation of people from far-flung areas to market sellers and connect informal operators with established marketplaces. Central banks and regulators have taken measures like the Central Bank of West African States to lower the transaction costs of electronic payments, increasing the adoption of cashless e-government solutions, for instance, to facilitate the provision of monetary transfers to the most vulnerable groups (X. Wang et al., 2021).

Similarly, some organizations have persevered because of digital solutions that decrease the need for face-to-face contact, slowing the virus's transmission. Also, the crisis's extended physical separation and isolation have found pleasant relief in the virtual world. There will be far-reaching effects on commerce and progress from this acceleration of the digital transformation. It dramatically impacts how goods and services are created, delivered, and consumed by shaping the habits of consumers, workers, and policymakers alike (N. Wang, 2021). According to (Elia et al., 2021), sellers increasingly need to establish an online presence as more businesses and consumers search for things online. Otherwise, they disappear from the market. The country's Gross Domestic Product (GDP), a country with a high GDP is frequently an economy with a population that can afford to spend on a wide range of items (if a company is selling anything that's not regarded as
"necessary," the country probably won't receive much of a return from a country with a low GDP), the average consumer spends, the population, and the percentage of the population that lives in densely populated areas, which are more accessible to deliver to. With Cross-Border E-Commerce, the seller has the opportunity to enter the global market. Once the seller begins trading on the worldwide market, the brand gains greater awareness, increasing demand. Therefore, merchants can enhance their revenue on the global market (Panova & Hongsheng, 2019).

It is also indicated (Dieke et al., 2019) that, between January 2018 and January 2020, annual Cross-Border E-Commerce sales climbed by roughly 25% to over US$ 60 million. The increase in trades reached over half a million and was the primary factor. As a result, this increase can be traced back to a larger pool of willing buyers. A total of 208,000 Uruguayans, or 7.5% of the adult population, are estimated to have made purchases from international online retailers over the same period, an increase of almost 17.8% from the previous year. The new digital importers shopped for less expensive items than the regime's long-standing users. The consequence was a drop of 7.5% in the average purchase made by each buyer during the two years. Over 90% of these sales were made in the US, with over 40% coming from clothes and gadgets (Fan, 2019).

Table 4: Summary of Studies on Cross-Border E-Commerce

<table>
<thead>
<tr>
<th>Authors</th>
<th>Methods/Design</th>
<th>Source/Repository</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Qu &amp; Chen, 2014)</td>
<td>Case study, survey method</td>
<td>The Thirteenth Wuhan International Conference on e-Business</td>
<td>With a larger market share and lower obstacles to entry than conventional brick-and-mortar commerce, the present E-Commerce atmosphere encourages firms of all sizes to compete. This continual growth and activity increase the number of online experiences available to all clients.</td>
</tr>
<tr>
<td>(Anvari &amp; Norouzi, 2016)</td>
<td>Review approach</td>
<td>Procedia - Social and Behavioral Sciences</td>
<td>The direct-to-consumer business strategy is highly effective for many businesses, including new and established digital-native firms. By 2022, it's projected that DTC companies would have served a total of $103.4 million in clients.</td>
</tr>
<tr>
<td>(Sin et al., 2016)</td>
<td>Case study, survey method</td>
<td>Procedia Economics and Finance</td>
<td>In a market where brand loyalty is not assured, sustainable initiatives can help internet businesses win over customers and separate themselves from the competition. Whether updating their supply chains or packaging, online retailers are modernizing their companies to boost efficiency while reducing waste and lowering environmental effects.</td>
</tr>
<tr>
<td>(Peng, 2021)</td>
<td>Cross-sectional design, structured questionnaires</td>
<td>Proceedings - 2nd International Conference on E-Commerce and Internet Technology, ECIT 2021</td>
<td>The proportion of the 1.45 billion global internet customers who made Cross-Border transactions increased from 17% in 2016 to 23% in 2018. The present COVID-19 dilemma has increased the value of E-Commerce and contactless payments, compelling governments to take action.</td>
</tr>
</tbody>
</table>
E-Commerce, which may be loosely described as the use of the Internet as a medium for commercial transactions and the dissemination of market information, will become an increasingly vital factor in maintaining international economic expansion. The percentage of total goods traded on the Internet increased from 3% in 2005 to 12.1% in 2012, as reported by the McKinsey Global Institute (Mou et al., 2019). The online retail industry is projected to grow by 20.2% to $1.5 trillion in the United States alone in 2018. Global sales in 2017 are anticipated to exceed 2.3 trillion USD, representing an average annual growth rate of 17.4 percent from 2012 to 2017. For instance, E-Commerce markets in the Asia-Pacific area surpassed those in North America in 2014 for the first time, demonstrating the significant impact of E-Commerce on regional shifting roles in the global economy (Cui et al., 2019).

Similarly, for business-to-business (B2B) vendors, E-Commerce has simplified much of the conventional buying cycle's complexity. By 2023, online business-to-business (B2B) sales in the United States are predicted to exceed $1.8 trillion. The expansion of business-to-business (B2B) E-Commerce and its associated technologies has also contributed to increased order volume, more efficient supply chains, and lower order management expenses for wholesalers, manufacturers, and distributors (Koroma et al., 2022). Furthermore, Business-to-consumer (B2C) transactions have significantly benefited from online shopping. The direct-to-consumer business strategy is highly effective for many businesses, including new and established digital-native firms. By 2022, it's projected that DTC companies will have served a total of $103.4 million in clients (Anvari & Norouzi, 2016). Before the recent changes in the business climate, having an online store was a nice-to-have. Now, it's a necessity for survival. As these platforms continue to expand, so will the number of available jobs in related industries, such as sales, marketing, design, web development, and information technology. Finally, E-Commerce has affected the market by changing how businesses maximize profits through the interaction of supply, demand, and production (Xianglian & Hua, 2013). According to (Qu & Chen, 2014), by the end of 2022, E-Commerce sales are expected to top $1 trillion. With a larger market share and lower obstacles to entry than conventional brick-and-mortar commerce, the present E-Commerce atmosphere encourages firms of all sizes to compete. This continual growth and activity increase the number of online experiences available to all clients.
Concerns regarding online shopping's influence on the environment are growing as its popularity continues to climb. Today's consumers demand that corporations be more transparent and environmentally conscious. Sellers realize that it is vital to enhance the sustainability of their business practices and operations, given that consumers today want to purchase from eco-friendly companies. As noted by (Sin et al., 2016), in a market where brand loyalty is not assured, sustainable initiatives can help internet businesses win over customers and separate themselves from the competition. Whether updating their supply chains or packaging, online retailers are modernizing their companies to boost efficiency while reducing waste and lowering environmental effects. This will allow E-Commerce to become greener, faster, and more sustainable in the long run.

It is further stated (Y. Wang et al., 2020) that E-Commerce has exploded in popularity due to its many advantages to shoppers. The rise of E-Commerce drives new economic growth and encourages innovation among retailers by encouraging them to differentiate their products and provide an engaging user experience. More people will shop online, which is good for business and the economy. Governments worldwide have identified E-Commerce as an engine of future economic growth. The government needs to create policies that will support the expansion of E-Commerce in their economies while maintaining compliance with necessary laws and regulations (Hong Hong, 2021). While there is little doubt that E-Commerce has far-reaching policy implications policymakers also have a rare chance to embrace new ways of conducting business and create regulatory and tax collection measures that will sustainably help E-Commerce flourish for their countries' economies (Ma et al., 2018).

3.3 Digital Currency in Cross Border E-Commerce

Due to differences in economics, culture, and system between nations, the credit ratings of Cross-Border E-Commerce firms differ in the context of international transactions. Currently, there is no open enterprise credit sharing platform between countries, making it difficult for enterprises of different countries to evaluate each other's credit effectively during Cross-Border transactions. Consequently, it creates difficulties for enterprises on both sides of the transaction to trust each other, resulting in adverse selection consequences for enterprises and a negative impact on the growth of Cross-Border E-Commerce as a whole (Mohdhar & Shaalan, 2021).

According to a study (Chun, 2019), the traceability function of logistics is widely realized; however, its Cross-Border E-Commerce logistics are unsatisfactory in many cases. Cross-Border trade is driven by the desire to export products with competitive advantages to other nations. (Koroma et al., 2022) further cited an example of comparative advantages of oil in the Middle East, machinery items in Europe, food in Central America, and manufacturing in Asia are all examples. Nonetheless, the asymmetry of knowledge between the importing and exporting countries frequently results in unfavorable selection in the transaction of such products. In addition, some domestic illicit companies transform local counterfeit and substandard goods into foreign goods by forging logistics information. These not only hurt the fundamental interests of consumers but also hinder the growth of international E-Commerce and potentially lead to international conflicts (C. Liu et al., 2019).
Table 5: Summary of Studies about Cross-Border E-Commerce

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<td>(Jamra et al., 2020)</td>
<td>Cross-sectional design, survey method</td>
<td>Proceedings of the International Conference on Electrical Engineering and Informatics</td>
<td>Others believe that using cryptocurrency for making payments is advantageous since it eliminates the need for currency conversion, which can add time and money to international transactions. Like the early days of the Internet, when people rushed to buy domain names, trading and speculation were the first important use cases in cryptocurrencies. Yet, people are now witnessing the emergence of cryptocurrencies as a much more significant phenomenon.</td>
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<tr>
<td>(Mohdhar &amp; Shaalan, 2021)</td>
<td>Review approach</td>
<td>Studies in Systems, Decision, and Control</td>
<td>Currently, there is no open enterprise credit sharing platform between countries, making it difficult for enterprises of different countries to evaluate each other's credit effectively during Cross-Border transactions. Consequently, it creates difficulties for enterprises on both sides of the transaction to trust each other, resulting in adverse selection consequences for enterprises and a negative impact on the growth of Cross-Border E-Commerce as a whole.</td>
</tr>
<tr>
<td>(Treiblmaier &amp; Sillaber, 2021)</td>
<td>Case study method, survey method</td>
<td>Electronic Commerce Research and Applications</td>
<td>Due to the geographical location of Cross-Border E-Commerce and the different foreign exchange control policies of different countries, the current Cross-Border payment means cannot generally achieve real-time arrival, and the rapid change of exchange rate increases the risk of exchange rate fluctuation resulting from the enterprise's foreign exchange exposure in the payment process.</td>
</tr>
<tr>
<td>(Kim &amp; Kim, 2022)</td>
<td>Case study method, Mixed method approach</td>
<td>Journal of Ambient Intelligence and Humanized Computing</td>
<td>With the expansion of international E-Commerce, numerous inconsistencies have evolved. In 2017, there were 352 litigation-related issues, a 162.69 percent increase from the previous year. Contract and payment-related conflicts accounted for up to 64.31 percent of these cases.</td>
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</table>

Due to the geographical location of Cross-Border E-Commerce and the different foreign exchange control policies of different countries, the current Cross-Border payment means cannot generally achieve real-time arrival, and the rapid change of exchange rate increases the risk of exchange rate fluctuation resulting from the enterprise's foreign exchange exposure in the payment process. Moreover, today's Cross-Border E-Commerce transactions are typically handled via the
E-Commerce platform, which stores all transaction data (Treiblmaier & Sillaber, 2021). Therefore, it is impossible to eliminate all payment process security threats. Under the current system for international E-Commerce, the Cross-Border payment platform cannot restrict the Cross-Border E-Commerce platform efficiently. In addition, the inconsistency of global financial policies and regulations makes it difficult to supervise Cross-Border payments effectively. This absence of oversight necessitates enterprise self-discipline, which increases businesses' credit risk and transaction costs during the transaction process (Shamili & Muruganantham, 2022).

Other researchers (Jamra et al., 2020) believe that using cryptocurrency for making payments is advantageous since it eliminates the need for currency conversion, which can add time and money to international transactions. Like the early days of the Internet, when people rushed to buy domain names, trading and speculation were the first important use cases in cryptocurrencies. Yet, people are now witnessing the emergence of cryptocurrencies as a much more significant phenomenon. Cryptocurrency has been utilized as a means of exchange. Many businesses have recently prioritized accepting cryptocurrency as payment since its beginnings. For example, BitPay, a global leader in cryptocurrency payments, has highlighted the speed and minimal friction of bitcoin transactions as major advantages over more conventional methods of making international payments (Mendoza-Tello et al., 2018).

In 2019, Cross-Border E-Commerce transactions in China surpassed 10.5 trillion yuan, a 16.66 percent rise from the previous year. Due to the increase in overseas E-Commerce consumption, Cross-Border E-Commerce has become one of the primary engines driving trade growth. Parallel to the expansion of Cross-Border E-Commerce transactions, Cross-Border payment-related issues and controversies also expand (Mendoza-Tello et al., 2018). According to (Kim & Kim, 2022), numerous inconsistencies have evolved with international E-Commerce expansion. In 2017, there were 352 litigation-related issues, a 162.69 percent increase from the previous year. Contract and payment-related conflicts accounted for up to 64.31 percent of these cases. Common conflicts and problems in Cross-Border platform payments include tampering with transaction information, misappropriation of cash, leakage of consumer information, transaction credit risk, etc.

Because Cross-Border E-Commerce is a form of international trade, it is underpinning individual and business transactions, and its complexity is far greater than domestic E-Commerce. Due to the participation of customs, inspection and quarantine, logistics, and other subjects, a substantial amount of human resources and material costs are required for the review, reconciliation, customs clearance, and other processes (Adewole et al., 2020). Therefore, businesses participating in Cross-Border E-Commerce must not only deal with Cross-Border logistics, exchange rates, and other unpredictability issues but also traverse several networks, thereby increasing the economic and time costs. Thus, the current scenario for Blockchain technology in an international E-Commerce environment: record sharing and traceability between domains as multiparty participation and multiparty supervision technology, Blockchain can ensure that transaction records can be traced at any time, but it may be susceptible to security flaws such as artificial key leakage during propagation (L. C. Chen & Farkas, 2019).

4. Discussion

The conventional trends in commerce and trade dominated the industry for several years. However, the evolving internet technology benefitted the local traders and brought up new ideas
regarding trade and commerce (X. Wang et al., 2021). According to (Tang, 2021), the new trends in commerce, also known as E-Commerce, further acknowledged the potential of the Internet regarding ease of use, and greater accessibility further led to buyers and sellers across the globe. In simple words, today, buyers can select and purchase products with just a simple click. On the other hand, the wide variety of different payment methods further facilitates the buyers to pay and enjoy the best delivery services that are fast, efficient, effective, and offer different benefits to both the buyers and the sellers (Anvari & Norouzi, 2016).

The current article also focused on E-Commerce regarding its reach and accessibility to other geographical regions. As noted by (Mu, 2022), perhaps one of the most prominent reasons behind increased Cross-Border E-Commerce is that it provides a pathway for the sellers to generate big revenue. As Cross-Border E-Commerce has exponentially grown during the past three years, there can be many other benefits, such as improved brand recognition. On the other hand, (S. Liu, 2013) considers competitive advantage as an important factor that has accelerated Cross-Border E-Commerce. As argued, successful companies in Cross-Border –E-Commerce today strictly keep the competitive advantage under consideration. Today, when there are thousands of alternatives, people consider the same brand, and retailers indicate strategies that differentiate a particular brand from its rivals. (He et al., 2021) stated that competitive advantage in an increased competition further signifies gaining a first-mover advantage that ensures an increased and on-time brand awareness. With greater accessibility to the global marketplace, it is important to stay ahead of the competition, especially in Cross-Border E-Commerce.

The cited literature in current research also affirmed the importance of Cross-Border on both micro and macro levels. Besides, its importance in Business to Business (B2B) and Customer to Customer (C2C) also remained prominent in the cited literature (Igelstr, 2021). Further, it is also worthwhile to note that, during the past few years, international economic progress and development indicated an increasingly fierce competition. As a result, individuals looking for the most suitable business and investment opportunities also developed several small and medium-level enterprises worldwide. The wider presence and availability of internet technology further attracted these small and medium size enterprise owners, which also led the local government to keep Cross-Border E-Commerce under consideration. Through these business enterprises, the governments determined their financial stability. They provided them with a business-friendly environment, tax, and trade tariffs, further increasing the interest in Cross-Border E-Commerce (Treiblmaier & Sillaber, 2021).

Besides, new payment methods such as online transactions, wire transfers, and particular cryptocurrencies have further transformed Cross-Border E-Commerce. However, the rise of Decentralized Finance (DEFI) can be traced back to the early 1990s and 2000s, as the focus on E-Commerce was accompanied by all the potential methods to ensure maximum user satisfaction (Adewole et al., 2020). But today, the role of Decentralized Finance (DEFI) in Cross-Border E-Commerce is acknowledged for several reasons that are also cited in the literature. Here (Koroma et al., 2022) cited an example of a "plug and play option" that allows the traders to upload and showcase their products and package them as eNFT. Affiliates further play their role, and finally, the designated vendors handle the shipping matters and collect the payment. On the other hand, major platforms such as PayPal and Wise’s (formerly Transferwise) arrival into cryptocurrency further increase the value of digital assets in Cross-Border E-Commerce. Thus, this broader shift from traditional to digital currency indicates a transformation and an increased preference for Cross-Border E-Commerce shortly (Training, 2019).
5. Conclusion

Through the systemic review of the most recent research articles and reports, the importance of Cross-Border E-Commerce, its contribution to economic development, and the role of Blockchain in dealing with payment systems are extensively discussed. It is observed that advanced technology, strategic policies, increased demand, and others all played a potential role in the success of Cross-Border E-Commerce today. However, the evolving technology is still introducing new ways to improve the trends in Cross-Border E-Commerce. Also, traders face many challenges that need to be solved to attain greater opportunities. Finally, a strong need for international coordination between all the involved groups such as government, traders, suppliers, and providers should be considered.

6. Limitations and Recommendations for Future Studies

Despite an extensive systematic review of literature on Cross-Border E-Commerce, the current study has certain limitations. First, this study is not focused on any particular geographical location. Location, this study does not involve any quantitative or qualitative methodology. Instead, the focus remained on the review of the existing study. Finally, the third limitation involves a finite number of selected literature, further narrowing its scope. However, the review and conclusion made by this study also provide recommendations for future researchers. Specifically, technological modifications such as Artificial Intelligence in Cross-Border E-Commerce can further highlight the role and other aspects of the relevant phenomenon.
References


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