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THE MAIN FEATURES OF E-COMMERCE DYNAMICS IN WORLD COUNTRIES

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Аннотация

The paper explores the transformative impact of e-commerce on the global market, driven by advancements in digital technologies like the internet and mobile devices. Using a descriptive-analytical approach, the paper examines key drivers of e-commerce growth, such as digital payment systems, logistics innovations, and government policies. It emphasizes the role of secure digital payments, efficient logistics, and supportive regulations in enhancing e-commerce. The study also highlights the importance of data protection and cross-border cooperation in ensuring the continued expansion of online markets.

Keywords

E-commerce, Digital Technology, Global Market, Digital Payment Systems, Logistics and Supply Chain Management, Government Policies, Data Protection.

Introduction

E-commerce has interfered with the current global market environment, leading to significant changes in business operations and consumer participation in markets. The world's perspective on e-commerce changed as a result of the quick development of digital technology and the widespread availability of Internet services. The rapid advancement of digital technologies and the widespread availability of Internet services have accelerated this shift. Consumers now benefit from the convenience of shopping online, driven by enhanced access to mobile devices, secure digital payments, and improved logistics systems. This shift is particularly evident in developed countries, where internet access is more widespread.

Literature review

The literature review examines the dynamic growth of e-commerce, emphasizing the rise of digital payments and its impact on the market (Consultancy.uk, 2024; Capgemini, 2024). Insights from ECB and BIS data reveal regional differences in digital transaction volumes and adoption rates (ECB Statistical Data Warehouse, 2024; BIS Statistics Explorer, 2024). The rapid growth of e-commerce has been closely linked to the development of digital technologies, such as the internet, mobile

devices, and secure online payment systems. Studies highlight how the rise of smartphones and improvements in broadband infrastructure have enabled consumers to access online shopping more conveniently. The European Central Bank (2024) and BIS Statistics Explorer (2024) provide data showcasing regional differences in digital transaction volumes, with the Asia-Pacific region surpassing Europe and North America in non-cash transactions.

Methodology

The paper utilizes a descriptive-analytical approach, supported by statistical data and visual representations. It reviews current literature and data sources to outline the major trends and drivers behind the growth of e-commerce. Key aspects include:

Data Collection: Gathering data from industry reports, market studies, and regulatory documents to provide a comprehensive view of the e-commerce landscape.

Trend Analysis: Identifying and analyzing emerging trends in digital payments, logistics, and government policies.

Comparative Analysis: Comparing e-commerce growth and regulatory environments across different regions, including Europe, North America, APAC, Latin America, and the Middle East and Africa.

Analysis and results

E-commerce origins are rooted in the development of digital technologies, including the internet, mobile devices, and a means of safe online payment. The increasing development of smartphones has resulted in a much-enhanced ability to access and comfortably shop online, supported by improvements in the broadband infrastructure. E-commerce really changed the way consumers behave. The convenience of being able to shop anywhere and at any time, on top of greater product availability, has made consumers move from traditional retail towards online shopping. This is even more marked in developed countries where access to the internet is greater.

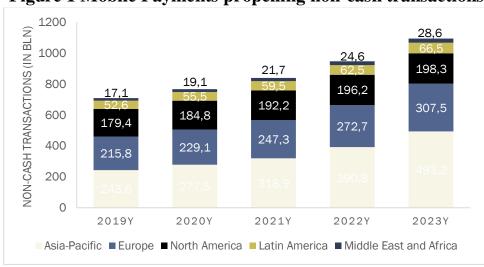


Figure 1 Mobile Payments propelling non-cash transactions. 1

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¹ Global market size of digital payments industry soares. Accessed to 06.07.2024, Available at https://www.consultancy.uk/news/25975/global-market-size-of-digital-payments-industry-soares

Sources: CFSA², ECBSDW³, BISSE⁴, CBAR⁵

Key Drivers of E-Commerce Growth.

Digital Payment Systems. Digital payment systems provide the realistic impetus to the growth of e-commerce due to their easy availability and security. Online payment gateways, digital wallets, and the emergence of cryptocurrencies guarantee smoother transactions, making consumers shop online more frequently.

Until 2017, Europe was leading the game in terms of digital payments, while North America caught up. In 2018, Asia-Pacific became visible in digital payments and just edged ahead of Europe as the leading market for non-cash transactions. By the previous year, Asia-Pacific was considerably ahead, beating Europe by 30 billion in transaction volume. Outside of these core markets, Latin America recorded a healthy 50 billion-plus digital transactions last year, while Middle East and Africa were among the fastest growing digital payments markets last year – booking an 18% jump from 2018. That said, the volume of digital transactions in these markets is still low; with only about 17 billion total transactions in both these markets. In terms of growth, too, APAC leads the rest of the world. The growth witnessed in Europe has not been without vitality. The region crossed the 200 billion milestone in digital payments last year, with a growth of more than 12% as compared to the previous year, 2018. On the other hand, the Asia Pacific witnessed growth of nearly 25%. (Figure 1)

E-commerce Retail Logistics Conventional Retail Logistics Suppliers Suppliers Regional Distribution < Storage (Backend) Center E-Retailer-Store Deliveries Orders Retrieval and packaging (Frontend) Retailer Online Parcel Delivery (In-store Company inventory) Home Deliveries B2C Deliveries Travel to (Home, work or store collection point) Customers EFC: E-fulfillment center Customers

Figure 2. Retail logistics and e-commerce6

Logistics and Supply Chain Management. The functionality of logistics and supply chain management lends considerable value to online ventures. The ability to

² Capgemini financial services analysis, Accessed to 02.09.2024, Available at https://www.capgemini.com/insights/researchlibrary/top-trends-in-financial-services-2023/f

³ ECB Statistical Data warehouse Accessed to 02.08.2024, Available at https://data.ecb.europa.eu/

⁴ BIS Statistics Explorer Accessed to 02.09.2024, Available at https://data.bis.org/

⁵ Countries central bank annual reports (2019-2023)

⁶ Retail Logistics and E-commerce | The Geography of Transport Systems. (2023, July 4). The Geography of Transport Systems | the Spatial Organization of Transportation and Mobility. Accessed to 05.09.2024, Available at https://transportgeography.org/contents/chapter7/logistics-freight-distribution/retail-logistics-ecommerce/

deliver products on time and at regular intervals has developed into a strong advantage for e-commerce companies. Driven by ongoing innovation with drone delivery systems, the autonomous automobile will likely continue to make some breathtaking changes in this area.

The figure below compares the logistics processes in conventional retail and e-commerce.

In traditional retail logistics, products move from manufacturers to regional distribution centers (RDCs) and then are shipped to physical stores. Here, the inventory is managed at the store level, where bulk shipments, or B2B, are delivered to retail outlets, which customers would visit to make purchases. Several other advantages come with e-commerce delivery. This is convenient for the customer since they can shop from anywhere and have their products shipped to their homes. The process is also far quicker, hence, orders are processed and deliveries are affected quicker, backed by tracking in real-time. Also, minimal requirements for physical retail spaces reduce the cost of operation, thereby making electronic commerce an affordable option for both retailers and consumers. (Figure 2.)7

Government Policies and Regulations. The general policy and regulatory environment by the government impacts e-commerce dynamics: good policies, such as tax incentives and protection of consumers' data, could be a contributing factor to its growth; stringent regulations are an incentive to development, with high import duties and red tape in compliance matters being examples of this.

Table 3 Overview of Government Policies and Regulations in E-Commerce

| Policy/Regulation | Description | Impact | Examples |
|------------------------|----------------------------|---------------------|--|
| Data Protection | Protects personal data and | Enhances consumer | GDPR (EU) ⁸ , CCPA |
| | privacy. | trust. | (California, USA) ⁹ |
| Consumer | Safeguards against fraud | Builds consumer | Federal Trade Commission |
| Protection | and unfair practices. | confidence. | (FTC) regulations (USA) ¹⁰ |
| E-Commerce | Governs online sales | Affects pricing and | VAT (EU), Sales tax |
| Taxation | taxation. | cross-border trade. | $(USA)^{11}$ |
| IP Rights | Protects copyrights, | Safeguards | Digital Millennium |
| | trademarks, patents. | innovation. | Copyright Act (DMCA) (USA) ¹² |

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⁷ Retail Logistics and E-commerce | The Geography of Transport Systems. (2023, July 4). The Geography of Transport Systems | the Spatial Organization of Transportation and Mobility. Accessed to 05.09.2024, Available at https://transportgeography.org/contents/chapter7/logistics-freight-distribution/retail-logistics-ecommerce/

⁸ General Data Protection Regulation (GDPR) Compliance Guidelines. (2019, February 19). GDPR.eu. Accessed to 05.09.2024, Available at https://gdpr.eu/

⁹ California Consumer Privacy Act (CCPA). (2024, March 13). State of California - Department of Justice - Office of the Attorney General. Accessed to 05.09.2024, Available at https://oag.ca.gov/privacy/ccpa

¹⁰ Privacy and Security. (2024, May 23). Federal Trade Commission. Accessed to 05.09.2024, Available at https://www.ftc.gov/tips-advice/business-center/privacy-and-security

¹¹ Taxation and Customs Union. (2024b, August 8). Taxation and Customs Union. Accessed to 05.09.2024, Available at https://taxation-customs.ec.europa.eu/index_en

¹² 17 U.S. Code Chapter 5 - COPYRIGHT INFRINGEMENT AND REMEDIES. (n.d.). LII / Legal Information Institute. Accessed to 05.09.2024, Available at https://www.law.cornell.edu/uscode/text/17/chapter-5

| Electronic Contracts | Validity of online agreements. | Ensures binding transactions. | Uniform Electronic Transactions Act (UETA) (USA) ¹³ |
|-----------------------------|---------------------------------------|--------------------------------|--|
| Cross-Border Regulations | Governs international transactions. | Affects global trade. | Customs regulations, international trade agreements ¹⁴ |
| Cybersecurity | Protects against cyber threats. | Reduces risk of attacks. | NIST Cybersecurity Framework (USA) ¹⁵ |
| Accessibility Standards | Ensures platforms are accessible. | Expands market reach. | WCAG (Web Content Accessibility Guidelines) ¹⁶ |
| AML | Prevents money laundering. | Ensures transaction integrity. | Bank Secrecy Act (BSA) (USA) ¹⁷ |
| Spam Regulations | Regulates unsolicited communications. | Reduces spam. | CAN-SPAM Act (USA) ¹⁸ , GDPR (EU) ¹⁹ |

This table given shows the legislative landscape on consumer data privacy, including how many bills were pending consideration or had been enacted into law. The jurisdictions represent a range from comprehensive standards and geographical privacy to narrower issues, including biometric privacy and consumer profiling. There indeed seems to be a trend in the data: consumer profiling and third-party data sale have the most legislative actions and thus increasing concerns and regulatory focus, while general standards and location privacy have few, which may indicate maturity or lower priority. In all, the graph underlines the rising concern for consumer data protection, in particular in sale of personal data and data profiling sectors, reflecting the change in the regulatory landscape of the protection of privacy in the digital era. (Table 3)20

Suggestions and Recommendations

E-commerce has dramatically altered the global market environment, driven by rapid advancements in digital technology and the increasing availability of Internet services. According to the short analyses, we can give some suggestions and recommendations below:

Enhancing Digital Payment Infrastructure: Since digital payments are a key driver of e-commerce growth, governments and companies should invest in improving

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 $^{^{13}\} Community\ Home\ -\ Uniform\ Law\ Commission.\ (n.d.).\ Higher\ Logic,\ LLC.\ Accessed\ to\ 05.09.2024,\ Available\ at\ https://www.uniformlaws.org/community-home?CommunityKey=4e92ff2b-d278-4638-aacc-459e00ecb41b$

WTO | Technical Barriers to Trade. (n.d.). Accessed to 05.09.2024, Available a https://www.wto.org/english/tratop_e/tbt_e/tbt_e.htm

¹⁵ Cybersecurity Framework | NIST. (2024, August 28). NIST. Accessed to 29.08.2024, Available a https://www.nist.gov/cyberframework

How to Meet WCAG (Quickref Reference). (n.d.-b). Accessed to 05.09.2024, Available at https://www.w3.org/WAI/WCAG21/quickref/

¹⁷ Resources | FinCEN.gov. (n.d.). Accessed to 05.09.2024, Available at https://www.fincen.gov/resources

¹⁸ CAN-SPAM Act: A Compliance Guide for Business. (2024, January 17). Federal Trade Commission. Accessed to 05.09.2024, Available at https://www.ftc.gov/business-guidance/resources/can-spam-act-compliance-guide-business

¹⁹ General Data Protection Regulation (GDPR) Compliance Guidelines. (2019b, February 19). GDPR.eu. Accessed to 05.09.2024, Available at https://gdpr.eu/

²⁰ Ecommerce Laws and Regulations to Know for Selling Online. (2022, September 1). Shopify. Accessed to 11.09.2024, Available at https://www.shopify.com/blog/ecommerce-laws

payment gateways, mobile payment systems, and digital wallets to ensure secure and seamless transactions.

Adopting Advanced Logistics Solutions: E-commerce companies should prioritize innovative logistics technologies such as drone delivery and real-time tracking systems. These advancements will not only speed up delivery times but also reduce operational costs, making the e-commerce experience more efficient and affordable for consumers.

Strengthening Data Protection and Consumer Privacy Laws: Governments should introduce and enforce stringent data protection regulations, similar to GDPR and CCPA, to safeguard personal information and build consumer trust.

Fostering International Cooperation for E-Commerce Regulations: Countries should work together to streamline cross-border regulations, which would facilitate smoother international trade and enhance e-commerce growth. Simplifying customs procedures and harmonizing electronic contract laws can boost global transactions and remove unnecessary barriers for businesses.

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