

Regional e-Commerce Development in a Multi-channel Retail Environment

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Abstract: E-commerce is an important area of trade development because in many countries it generates revenues, promotes service development, small and medium-sized businesses, and increases employment. Multi-channel retailing encompasses e-commerce as one area of trade in goods and services to meet customer needs. Each country has its own history of trade development, which has evolved over many centuries and even millennia. In this regard, Kazakhstan has its advantages, since the caravan routes of the "Great Silk Road" passed through its territory and this was reflected in the economic development of the region. The purpose of this study was to identify the prospects of multi-channel retailing, its importance and role in the economy of Kazakhstan and the global community. The purpose determines the relevance of the research topic, which is currently unquestionable. The idea of the scientific article is to present the possibilities of multichannel retailing for the development of economies of countries and regions, including small and medium-sized businesses.

1 INTRODUCTION

The relevance of the research topic lies in the features of multi-channel retail development in the regions of Kazakhstan, particularly in Almaty, which is the largest city in the country, as well as the center of education, culture, business and other aspects of modern society.

Modern retail has more expanded opportunities due to informatization and digitalization, as well as a well-developed transportation and logistics system. The retail business is developing in the direction of online commerce, online retail, fulfillment, as well as last-mile express delivery and other sales methods, as the experience of recent years has shown, especially during the lockdown period.

In 2020, the volume of the e-retail commerce market increased by 82% compared to 2019 and grew from 327 billion tenge to 596 billion tenge. The number of online transactions for the year increased by 20%, while the average check on such purchases increased by 52% (Vidyanova, 2021).

The purpose of the study is to identify the prospects for the development of multi-channel

retailing, its importance and role in the economy of Kazakhstan and the world community.


The hypothesis of the study is the assumption that multi-channel retailing can contribute to the development of national and regional economies, including small and medium-sized businesses.


2 RESEARCH METHODS

The methodology is based on the theoretical and practical consideration of the subject and object of research, which in this paper are research and methodological provisions and methodical tools of multi-channel retailing (Mikhaylyuk, 2019).

The main task in using research methods was to ensure the achievement of the goal set in this article, which is related to the topic of the study, as multi-channel retailing in theory has not been studied enough (Mikhaylyuk, 2019).

In connection with the requirements of research methodology system and factor analysis, synthesis, logical clustering and assumptions were made, based on which conclusions were made about the further

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development of e-commerce and multi-channel retailing. This is due to the specifics of retail in the current environment, especially in a pandemic, as shown by the situation in 2020, which resulted from the coronavirus.

In the course of the study, the analysis was based on official materials, information from research and educational and methodological literature, as well as publications of international and Kazakh organizations in the open press and on the Internet.

Statistical analysis and cause-and-effect studies were conducted on data from government agencies, and world economic relations were determined.

3 RESEARCH RESULTS

Multi-channel retailing is the use of multiple fulfillment channels, including offline and online through stores, mobile apps and other ways to optimize the shopping experience in a consumer-friendly way. Single-channel retailing, which existed in the recent past in the retail industry, involved selling only through retail outlets where customers could purchase items from available stock. With the advent of the Internet and mobile communication, the possibilities of commerce have expanded, and shoppers themselves determine the form of shopping to be able to consume goods at a convenient time and place (New Retail, 2021).

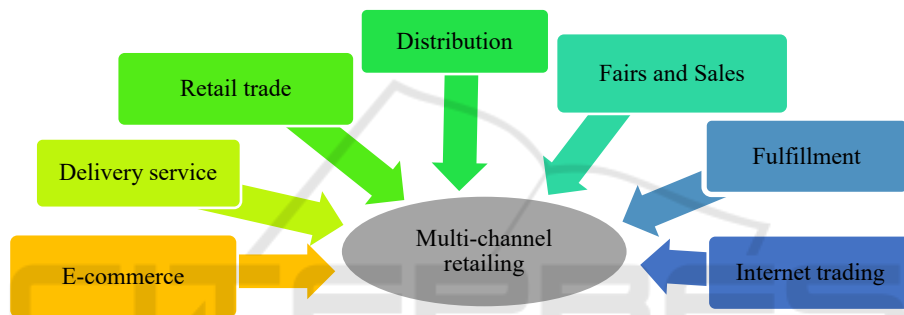


Figure 1. Multi-channel retailing pathways.

Compiled by the author according to the source (New Retail, 2021).

E-commerce is part of multichannel retailing and includes financial transactions, product flows, business processes and all types of electronic and digital transactions.

The main areas of e-commerce are shown in figure 2 (Gringard, 2016).

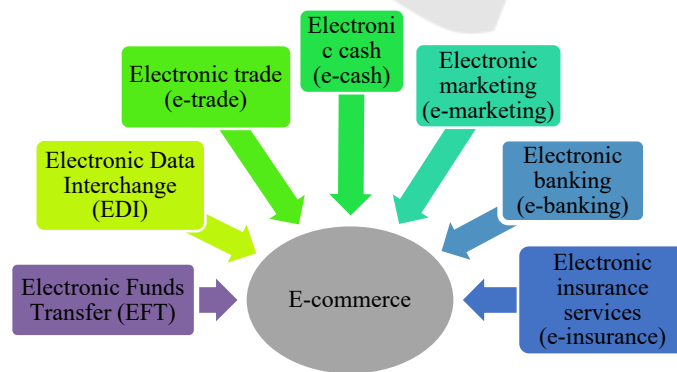


Figure 2. E-commerce pathways.

Note: compiled by the author according to the source (Gringard, 2016).

The retail transformation strategy is to rethink the business model and move towards Retail 4.0, the foundation of

which is the use of combined technology, information, analytics, media, mobile applications, cloud storage and

artificial intelligence (AI). These factors combine technology with operational and organizational capabilities to summarize purchasing priorities and can be grouped as follows (MyRetailStrategy, 2018):

- Customer experience;
- Rethinking and creating a business model;

- Processes and supply chain integration;
- Managing multi-channel categories.

The components of these factors are generally presented in Figure 3, but this list can be expanded and detailed as necessary, depending on the specifics of the retail business.

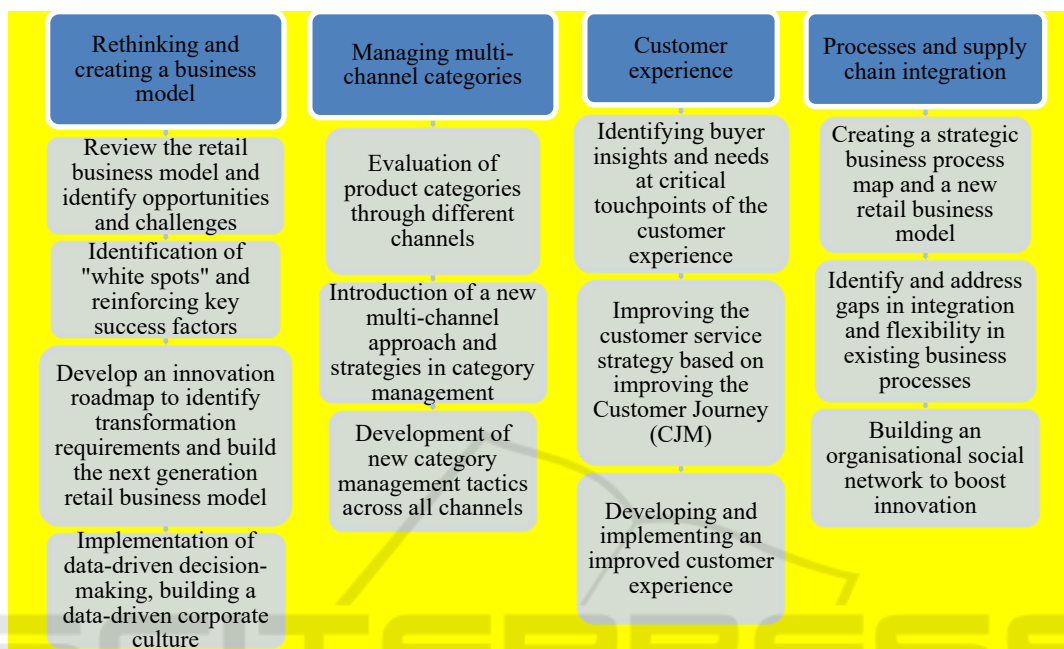


Figure 3. Main directions of e-commerce.

Note: compiled by the author according to the source (MyRetailStrategy, 2018).

In addition to multi-channel retailing, Omni-channel retailing, which is characterized by consumer

integration of a product or service using all available channels, is developing rapidly (Okorokov, 2016).

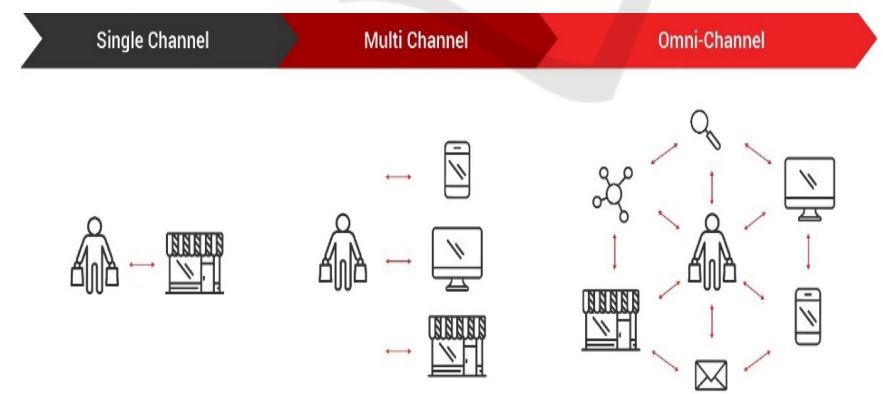


Figure 4. Retail transformation in single-channel, multi-channel and Omni-channel systems.

Note: compiled by the author according to the source (Okorokov, 2016).

Figure 4 illustrates the difference between single-channel, multi-channel and Omni-channel retailing, which demonstrate the transformation of the interaction between seller and customer and further extend the «customer is always right» principle. All

means are used to identify the real needs of customers, from surveys and questionnaires, to studying their preferences on search engines.

In Kazakhstan, since 2017, work has started on the implementation of the government strategy «Digital

Kazakhstan», or the third modernization, the basis of which is digitalization (Postanovleniye Pravitel'stva Respubliki Kazakhstan № 827, 2017). Earlier, the Law of the Republic of Kazakhstan No. 418-V of 24 November 2015 «About informatization» was approved, which at the legislative level enshrined the government's strategy (Zakon Respubliki Kazakhstan № 418-V, 2015).

The main purpose of informatization and digitalization is to ensure that the country's economy, science and technology develop at an accelerated

pace, and to improve the quality and ease of life of people with digital technology (Tsifrovaya povestka Respubliki Kazakhstan, 2018).

The «Digital Kazakhstan» strategy is planned to be implemented in the short, medium and long term, during which the digital infrastructure and economy will be progressively developed.

The implementation of the "Digital Kazakhstan" strategy is monitored by the state at the level of relevant ministries and statistical authorities (Table 1).

Table 1: Results of the governmental strategy «Digital Kazakhstan» for 2018 – 2019.

Indicators	Unit of measure	2018	2019	2020
Share of e-commerce in total retail trade	%	1,4	1,8	1,9
Share of Internet users	%	81,3	84,2	88,2
Level of digital literacy of the population	%	79,6	82,1	84,1
Growth of online retail orders (by 2016)	%	56,8	68,4	71,5
Home broadband Internet penetration rate	%	83,9	86,8	90,6

Note: compiled by the author according to the source

The level of digital literacy in Kazakhstan is more than 82.1%, more than 83.7% of public services are provided online and about 7,000 IT companies are registered.

Kazakhstan is one of the world leaders in Internet accessibility and this data shows the country's readiness to develop e-commerce in various Internet-based options (Table 2).

Table 2: Main indicators of internet accessibility on 25.06.2020

Country	Internet cost per 1 GB	Internet access
Kazakhstan	\$0,49	84,2%
Ukraine	\$0,51	62,5%
China	\$9,89	61,2%
The USA	\$12,37	87,3%

Note: compiled by the author according to the source

In 2017, online commerce accounted for about 1-1.5% of total retail sales in Kazakhstan, but the e-commerce market is growing by 30% annually. According to Satu.kz, Kazakhstan's leading online retailer, Kazakhstanis bought 20.144 billion tenge worth of goods on the marketplace in 2017, and the average bill per online purchase was 3,4742 tenge.

Health and beauty products, household and garden products, medical products, household appliances and electronics and children's appliances are the most commonly bought goods online in

Kazakhstan, which make up the TOP 5 most popular categories of goods by number of orders.

In the context of pandemic and quarantine, online purchasing of food, beverages, sanitary and health products has increased. A promising trend is the online purchase of test and measurement equipment and tools.

To investigate multi-channel retailing opportunities, online shoppers are analyzed by region, gender and age, by gadget used, and by day of the week and season.

The analysis shows that 54% of Kazakhstan consumers are women, which is 8% more than men (46%), mostly using smartphones (67%) and desktops (30%); the age of the most active buyers is 25-34 years. By region, residents of Almaty (44%) and Astana (21%) are the most active in online retailing, while in the remaining regions, Internet shoppers account for no more than 3-4%.

Kazakhstan people shop most often on weekdays (Monday to Thursday), with the most orders on Monday (17%) and the least on Saturday (10%). On Friday and weekends, activity drops, due to trips to the countryside, weekend getaways and offline shopping.

In turn, E-commerce is undergoing a transformation, evolving into m-commerce and ar-commerce, which is expanding the possibilities for multi-channel retailing. M-commerce is mobile-enabled, allowing consumers to make online purchases anywhere, anytime. Ar-commerce offers

augmented reality services that help consumers select products by size, color and various parameters using visualization.

4 RESULTS DISCUSSION

E-commerce offers a host of benefits when shopping online, as consumers can satisfy their desires and retailers can realise their goods without maintaining large storage facilities.

More and more people are using androids, tablets and mobile apps in a comfortable environment with easy navigation and visualization. Sales giants such as IKEA, which offers the IKEA Place app, are using virtual reality in sales, or AR-commerce. The IKEA Place augmented reality app can be used to virtually arrange furniture, create interior decorations or décor in a flat. Amazon has created a Dash Button, which, when clicked, can be used to place an order for a specific item with home delivery in one click.

In any industry where digital technology is used, knowledge of information and communications technology is essential, and therefore appropriate outreach is needed not only to staff but also to customers.

The digital economy requires educating the public about gadgets, mobile applications, Internet banking and the various available payment and purchasing methods. However, the current level of computer (digital) literacy is 76.2% and needs to increase in the coming years.

Digitalization is taking place not only in individual countries, but also in unions of states, as exemplified by the EU, which has adopted the EU Digital Single Market (DSM) Strategy, defining the European Commission's economic policy priorities in the following areas (Georgios Alaveras, 2015):

1. Expanding access to electronic goods and services in Europe;
2. Establishing uniform rules for digital networks and start-ups;
3. Developing the growth potential of the digital economy.

The EAEU is also developing the digital economy, which is planning a three-stage digitalization (Andreyev and Andreyeva, 2018):

1. From 2017 to 2019, it was planned to model the digital transformation processes, work through the first initiatives and launch the priority projects, which are almost complete.
2. From 2019 to 2022. The formation of digital economy institutions and digital assets as well

as the development of digital ecosystems are envisaged.

3. From 2022 to 2025. Digital ecosystems and cooperation projects will be implemented at global, regional, national and sectoral levels.

Regionally, the most interesting experience is that of China, which is part of many alliances and has adopted the practices of all major economies in e-commerce development, outstripping many countries in this respect (Kovalev, 2020).

Thus, digitalization in Kazakhstan is taking place in almost all areas of activity, including ensuring the comfort and safety of people and retailers.

5 CONCLUSIONS

The study presented the prospects for multi-channel retailing, its opportunities, importance and role for the global and Kazakhstan's economy.

E-commerce in the context of multi-channel retailing is not only developing, but also expanding, as new services, applications, technical and technological innovations appear.

Multi-channel retailing makes it possible to track the flow of goods and monetary transactions, which increases tax revenues for the budget, promotes individual entrepreneurship and provides employment for the population.

Kazakhstan is developing like any other country in the CIS, with a certain base, the main advantage of which is the educated population. The knowledge gained throughout the country's development history has made possible the achievements that set Kazakhstan apart in the Central Asian region. However, not resting on its laurels, the country trains future cadres, who are educated in the world's leading universities through government programs and grants. This is due to the global trend of knowledge accumulation, not just goods and products, which have become a trend of the digital economy and information society.

Thus, the topic of the study requires further investigation based on global and, already existing, Kazakhstan experience, in the following areas:

- The transformation of the supply chain in Kazakhstan's e-commerce market.
- Innovative digitalization and informatisation opportunities, including automation and robotisation in multi-channel retailing.
- The evolution of the transition from single-channel to multi-channel retailing.

- Improving the logistics supply chain in the regional e-commerce market in the multi-channel retail environment.
- Increasing the digital literacy of the population and the accumulation of knowledge.

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