В то же время для изучения языка Kotlin с нуля, образовательных ресурсов недостаточно, поэтому в дальнейшем, мы планируем разработать мобильное приложение по изучению языка программирования Kotlin с помощью Kotlin.

### Список использованных источников

1. Гузь Н.А. Тренды цифровизации высшего образования// Мир науки, культуры, образования. - №2. - 2020. Электронный ресурс <u>https://cyberleninka.ru/article/n/trendy-tsifrovizatsii-vysshego-</u> <u>obrazovaniya</u>

2. Романова Г.В. Цифровизация высшего образования: новые тренды и опыт внедрения// Гуманитарные науки. - №4. -2020. Электронный ресурс <u>https://cyberleninka.ru/article/n/tsifrovizatsiya-vysshego-obrazovaniya-novye-trendy-i-opyt-vnedreniya</u>

3. 13 онлайн-платформ для обучения программированию// https://devby.io/news/13-saitov-dlya-obucheniya-programmirovaniu

4. 20 лучших сайтов для изучения программирования// https://ultahost.com/blog/ru/20-lutsih-saitov-viuciti-progromirovanie/

5. Лучшие курсы по Kotlin. https://vc.ru/u/1870206kursfinder/702933-10-luchshih-kursov-po-kotlin-besplatnoe-i-platnoeobuchenie-s-nulya

УДК 004.896

### **Z.D. Sayakulova, Ye.A. Spirina, A.M. Bakenova** Buketov Karaganda State University Karaganda, Kazakhstan

## FEATURES OF IOS APPLICATION DEVELOPMENT FOR E-COMMERCE IN KAZAKHSTAN

**Abstract.** This article examines the possibility of creating an iOS application for e-commerce in Kazakhstan, given the growing demand for online shopping and local market conditions. Factors contributing to the development of marketplaces and requirements for the development of a mobile application for e-commerce are identified.

З.Д. Саякулова, Е.А. Спирина, А.М. Бакенова

Карагандинский государственный университет имени Е.А. Букетова Караганда, Казахстан

### ОСОБЕННОСТИ РАЗРАБОТКИ IOS ПРИЛОЖЕНИЯ ДЛЯ ЭЛЕКТРОННОЙ КОММЕРЦИИ КАЗАХСТАНА

Аннотация. В статье рассматривается возможность создания IOS приложения для электронной коммерции в Казахстане, учитывая растущий спрос на онлайн-покупки и условия местного рынка. Выделены факторы, способствующие развитию маркетплейсов, требования к разработке мобильного приложения для электронной коммерции.

In the modern world, e-commerce has become an integral part of business processes, and mobile applications have emerged as the primary tool for interaction between buyers and sellers. The development of mobile applications for e-commerce on the iOS platform is especially relevant due to the popularity of Apple devices, such as the iPhone and iPad, which have a substantial global user base. This has created a high demand for quality mobile e-commerce applications on this platform.

Effective app monetization strategies are also crucial for commercial success. App developers and entrepreneurs need to devise efficient monetization strategies, including sales models, advertising, and microtransactions. Research in this field can help optimize monetization strategies and increase revenue, a key objective for businesses.

Moreover, in the competitive e-commerce market, developing innovative iOS applications for a marketplace can provide companies with a competitive advantage. This research aims to create an innovative iOS ecommerce application, which, when combined with the right monetization strategy, can generate significant revenue and enhance the company's competitiveness in the market. As such, it is highly relevant for businesses and developers, contributing to the advancement of modern technology and supporting the dynamic business landscape.

*The Current State of the E-commerce Market in Kazakhstan.* Ecommerce in Kazakhstan has experienced significant growth in recent years, estimated to be worth billions of Kazakhstani tenge and demonstrating steady growth. Key players in the market include prominent Russian marketplaces like Wildberries, Lamoda, Ozon, as well as local projects like Kaspi.kz.

Sales of goods on online platforms, including individual websites and marketplaces, reached 1.9 trillion Kazakhstani tenge by the end of 2022, accounting for 12.5% of the total retail trade volume. In comparison, e-commerce (excluding marketplaces) in 2021 constituted 481.9 billion Kazakhstani tenge, or 3.6% of the total retail trade volume (Compiled based on data from the BNS ASPR RK) [1].

The growth and significance of the e-commerce market in Kazakhstan underscore opportunities for businesses and developers to explore innovative solutions, such as iOS applications for marketplaces, to tap into this expanding sector. As the market continues to evolve, embracing technology and developing effective monetization strategies will be essential for companies looking to establish a strong presence in the digital marketplace.

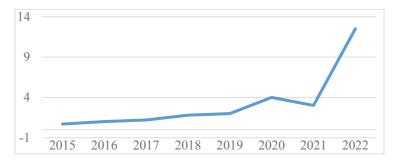


Fig. 1 - Share of e-commerce in the total volume of retail trade (goods) (%)

According to data from the Kazakh E-commerce Association in 2021, the e-commerce market in Kazakhstan continues to exhibit stable growth and attracts the attention of both major marketplaces and local projects [2].

Consumer behavior is also changing, with Kazakhstani citizens showing increasing interest in online shopping. This shift is attributed to the rising internet penetration and the widespread availability of smartphones. E-commerce is becoming the preferred method for many consumers to make purchases.

Potential for Creating a Marketplace in Kazakhstan: The modern era of information technology and online commerce offers unique opportunities for the development of online businesses, including the creation of marketplaces. Kazakhstan, with its rapidly growing economy and increasing interest in online shopping, has significant potential for establishing its own marketplace.

Key factors contributing to the development of marketplaces in Kazakhstan include:

- Increasing Online Purchases: There is a growing internet penetration and changing consumer behavior. Kazakhstani consumers are increasingly opting for online purchases, creating a favorable environment for marketplaces.

– Support for Small and Medium-sized Businesses: Marketplaces provide a platform for small and medium-sized enterprises, enabling them to expand their businesses and reach new customers. This is particularly important for entrepreneurship in Kazakhstan.

- Technological Infrastructure: With the development of technological infrastructure and payment systems in Kazakhstan, creating and managing a marketplace becomes more accessible.

– Potential for a Variety of Goods and Services: Kazakhstan is a multicultural country, offering opportunities for a marketplace with a diverse range of products, from clothing and footwear to food and services.

- Competitive Advantages: A Kazakhstani marketplace can establish competitive advantages, such as more flexible terms for sellers and innovative solutions for buyers.

Considering these factors, establishing a marketplace in Kazakhstan appears to be a promising and essential direction for the growth of online commerce and support for local entrepreneurship. Marketplaces can contribute to increased access to diverse goods and services while fostering the development of small and medium-sized businesses, thereby promoting economic growth and innovation in the country.

Comparison with Wildberries in Russia and Kaspi.kz in Kazakhstan:

- Wildberries is one of the largest marketplaces in Russia, serving millions of active customers. It spans several countries and regions, providing a wide range of products and services. Its primary revenue comes from sales commissions and various advertising models on its platform.

- On the other hand, Kaspi.kz is a Kazakhstani marketplace that is actively growing within Kazakhstan. It also has a large and expanding user base but is associated with a specific geographical area. Kaspi.kz monetizes through sales commissions and its proprietary payment system. It stands out for having its own payment system, making online payments easier for customers and sellers.

– In Kazakhstan, there are challenges related to logistics and the delivery of goods, especially in remote regions. Kaspi.kz also faces financial risks associated with processing payments and managing customer financial transactions. Failures in this area can affect customer trust.

Based on the analysis conducted and the shortcomings of existing marketplaces, there is an intention to develop a mobile e-commerce application specifically tailored to Kazakhstan. This application will address the main drawbacks of existing marketplaces and offer new opportunities for both customers and sellers.

Let's consider the key requirements for the development of a mobile e-commerce application:

– Local Presence and Adaptation: The application will be fully adapted to local needs through partnerships with local courier services and postal operators to ensure reliable and fast delivery. This will enhance the shopping experience and meet the specific needs of customers in Kazakhstan.

– Innovation and Differentiation: The application will incorporate innovations and unique features to make it more appealing to users. An improved user interface, customer support, and other unique features will be provided.

- Support for Local Businesses: The application will support local small and medium-sized enterprises by offering them a platform to sell their products and services. This will help support and develop local entrepreneurship, which is crucial for the country's economy.

– Marketing Campaigns: Within the scope of this research, marketing campaigns will be developed that take into account local characteristics and cultural events. Effective local promotion can significantly increase brand recognition among Kazakhstani consumers.

It is important to understand that the success of a marketplace depends on various factors, and the development and implementation of the application is a long-term process. The aim is to create an application that will grow and evolve, with a clear vision and innovative ideas to provide value to customers. The goal is to provide a platform that makes online shopping more convenient and accessible for Kazakhstani consumers, supports local entrepreneurs, and becomes a significant player in the ecommerce market in Kazakhstan.

#### References

1. Electronic commerce in Kazakhstan: trends and prospects, 2023. URL: https://kz.kursiv.media/2023-07-20/print994-rmch-e-com/ (access date: 10/12/2023).

2. The E-commerce Market in Kazakhstan: Trends and Prospects (Source: Kazakh E-commerce Association, 2021)

УДК 004.896

Ye.A. Spirina, D. Temirtas, I.A. Samoylova Karaganda Buketov University Karaganda, Kazakhstan

# USING MACHINE LEARNING ALGORITHMS TO DEVELOP A WEB APPLICATION FOR PREDICTING PRICES ON THE STOCK MARKET