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THE NEED TO USE MOBILE APPLICATIONS TO IMPROVE THE QUALITY OF TRANSPORT SERVICES IN THE DIGITAL ECONOMY: APPLICATION IN BUKHARA BASED ON THE BUDAPEST EXPERIENCE

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Abstract. *This article highlights the importance of improving the efficiency of transport services in the context of the digital economy and creating a public transport system that provides quality services for tourists. It also discusses the advantages of the BKK mobile app in Budapest, Hungary, and demonstrates the necessity of digitalizing the transport services of Bukhara city and improving them through the UzTMyBus mobile app.*

Keywords. digital economy, mobile applications, quality of services, transport services

Аннотация. *В статье подчеркивается важность повышения эффективности транспортных услуг в контексте цифровой экономики и создания системы общественного транспорта, предоставляющей качественные услуги для туристов. В ней также обсуждаются преимущества мобильного приложения ВКК в Будапеште, Венгрия, и демонстрируется необходимость цифровизации транспортных услуг города Бухары и их улучшения с помощью мобильного приложения UzTMyBus.*

Ключевые слова: цифровая экономика, мобильные приложения, качество услуг, транспортные услуги

Introduction. In recent years, the transformation of the social and economic system has been closely linked to the development and implementation of the digital economy. Through digital economy tools, the improvement of transport service quality, the development of artificial intelligence, and digital technology industries have enhanced the efficiency of these processes and provided a boost in solving the country's internal problems. It is well known that in today's digital economy environment, local and foreign companies providing services in the transport service market play a significant role. Specifically, in Hungary, located in Central Europe, the profitability of companies involved in transport services in the service market is influenced by an efficient market economy, with service operations being linked to convenient fuel and labor costs. Large companies can achieve macroeconomic indicators by providing comprehensive transport services, while local and regional

companies can compete at the micro level by offering services within their respective areas.

Main part. Scholars have presented the following opinions regarding the necessity and opportunities of developing mobile apps to improve the quality of transport services. They argue that mobile apps play a crucial role in enhancing transport services and, by providing users with real-time information and route planning options, they increase the efficiency and attractiveness of public transport [4]. Moreover, mobile apps ease transport problems, increase the number of users, and lead to higher satisfaction [5]. Additionally, mobile apps in the transport sector can provide alternative solutions for public transportation and enhance competitive advantage through factors such as system, information, user impact, and advertising.

According to statistical data, in terms of time spent on mobile applications, people aged 18-24 globally spend the most time, with an average of 11.6 hours per month. Following them, people aged 25-34 spend 102.4 hours, and those aged 35-44 spend 93.6 hours using mobile applications. In terms of mobile app downloads, China is clearly leading with 98.3 billion downloads. It is followed by India with 26.6 billion and the USA with 12.1 billion downloads. Chinese mobile app users open apps an average of 67 times per day and spend around 7.56 hours on apps daily, using an average of 7 apps per day [2]. This indicates the growing necessity for mobile applications in the digitalization of transport services.

In recent years, Hungary has continued to develop in the service sector, with the service sector accounting for 57.56% of the Gross Domestic Product in 2023[6], of which transport services make up 6-7% [7].

Every year, the world's most popular company that publishes travel guides and itineraries for tourists, Lonely Planet, has included Budapest in its list of the top 10 cities to visit in 2025. According to official Budapest info, 6.03 million tourists visited Budapest in 2024, which is a 24% increase compared to the previous year[3]. Additionally, foreign tourists make up a large portion of those using public transport in Budapest, which indicates the efficiency of the well-established transport system. According to information from BKK (Budapesti Közlekedési Központ), the organization responsible for managing Budapest's public transport services, 1.5 billion people use the public transport services annually to reach their destinations.

Modes of Public transport in Budapest [1]

Table 1

•Buses	•Trolleybuses	•Trams	•Metro trainsets	•MOL Bubi public bicycles
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As part of the digitalization of the city's transport services, millions of passengers use the public transport system daily through an electronic ticketing system. In addition, foreign tourists can purchase mobile tickets through the BKK app, and they can also use bank cards, smartphones, or smartwatches, such as Mastercard, Maestro, Visa, or VPay debit, credit, or prepaid cards, and virtual cards registered in digital wallets (e.g., GooglePay, ApplePay, SamsungPay, and other mobile apps).

Furthermore, passengers can use the BKK mobile app to track routes, check arrival times in real-time, and access other interactive features.

Based on the effective services offered by the BKK mobile app, the need has arisen to develop the UzTmyBus digital mobile app for offering public transport services in Bukhara. The following images 1 and 2 show the interface of the BKK mobile app and the UzTmyBus mobile app.

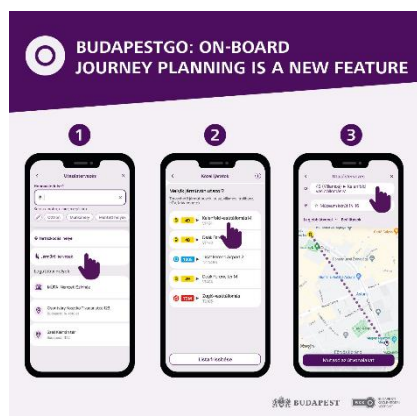


Image 1: BKK mobile app

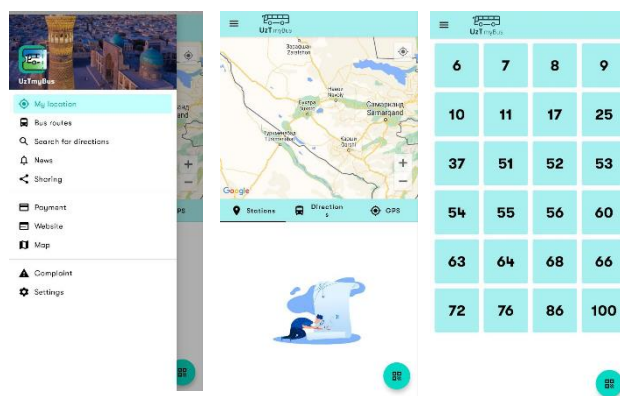


Image 2: UzTmyBus mobile app

The UzTmyBus mobile app offers real-time arrival times for public transport in Bukhara, a public transport map, online payment options, and services for creating new routes. This app is available in 3 languages, making it user-friendly for both foreign and local tourists. Additionally, each bus stop is equipped with a QR code that provides information about bus routes through the mobile app.

Conclusions. Based on the above points, the development of the "UzTmyBus" mobile app and its implementation in several stages is of great importance. In this case, implementing the initial stage of the app in Bukhara city, testing its effectiveness, and gathering experience will lead to its integration on a larger scale across other regions of Uzbekistan. This will not only contribute to the development of both international and domestic tourism, but also improve the living standards of the local population. Furthermore, by supporting the digital economy and innovative technologies, this mobile app will play a crucial role in achieving the Sustainable Development Goals.

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