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<https://doi.org/10.61796/jaide.v1i10.1058>**INNOVATIVE BANKING SERVICES IN WORLD
COUNTRIES ACCORDING TO INCOME****Makhmudova Mukhlisa Kodirjon kizi**

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Abstract: Objective: This study analyzes the development trends of innovative banking services, with a focus on the implementation of digital banking across countries categorized by income level. The research aims to examine the disparity in digital banking service advancements between high-income, upper-middle-income, and lower-middle-income countries, identifying underlying causes and opportunities for improvement. **Methods:** The study employs methods such as induction, deduction, and synthesis, supported by official statistical data from the World Bank and International Monetary Fund. The analysis covers the period from 2014 to 2021, focusing on specific years within this timeframe, and evaluates the global economy, high-income countries (HIC), upper-middle-income countries (UMC), and lower-middle-income countries (LMC). **Results:** The findings indicate that high-income countries have made substantial progress in digital banking, with nations such as Sweden, Norway, and the Netherlands nearing a cashless economy. Upper-middle-income countries show significant improvement in recent years, while lower-middle-income countries face challenges due to a strong informal economy, limited scientific development, and high corruption levels. **Novelty:** This study highlights the correlation between economic classification and digital banking adoption. It emphasizes the untapped potential in middle-income countries, suggesting opportunities for expanding digital banking services despite structural challenges, thus providing actionable insights for stakeholders in digital banking innovation.

Keywords: banking services, innovative banking services, middle income countries, digital payments, online banking

This is an open-access article under the [CC-BY 4.0](https://creativecommons.org/licenses/by/4.0/) license**Introduction**

The essence of innovation can be traced back to ancient economic perspectives. With the changing times, the role of innovation in the financial market and the economy as a whole has increased. In scientific literature, there are various interpretations of the term "innovation." In several sources, it is described as an investment made in the practical development of a new product, service, or process. Innovation (from the Latin word "novation") is understood as a novelty that did not previously exist (for example, scientific discoveries, inventions in various fields, and new methods of meeting social needs).

In economic literature, there is no single definition of the term "innovation." However, the most widespread approach is to distinguish between two perspectives in understanding this term: narrow and broad. The first approach defines innovation through its technical presentation and industrial production (new technologies, etc.). The second approach interprets innovation as a new product or service, a method of production, and innovations in financial, organizational, scientific,

technical, and other fields. From the standpoint of the object of this study, we will adopt the broader approach.

Among economists, there is a prevailing view that innovations arise from the desire of individuals and companies to maximize their benefits. In other words, the desire to become wealthy through the implementation of innovations can be extremely beneficial for the entire economy. We can conclude that changes in economic conditions (whether negative or positive) may encourage the search for innovations that can be advantageous.

Some researchers link the emergence of innovations to two main reasons. The first is referred to as "technological impetus," where the source of innovation is the internal laws of production; the second is the "demand" that stimulates the creation of innovations. Additionally, the main sources of innovation include the limited opportunities for meeting growing needs and the accumulated scientific and intellectual potential of society.

Literature Review. One of the first researchers to explore the essence of innovations is N.D. Kondratiev, who introduced the concept of long waves or large cycles, which are characterized by flows of innovations that form after inventions. N.D. Kondratiev identified significant changes in societal conditions preceding the onset of the upward phase of a large cycle, which is manifested in noticeable alterations in exchange and production technologies.

The ideas of systemic development in the economy proposed by N. Kondratiev were later applied by the Austrian economist J.A. Schumpeter, who ultimately shaped the concept of "innovation." The Austrian scholar was the first to use the term "innovation" in 1930, referring to changes aimed at introducing and utilizing new goods and services. He described various combinations of innovations and elucidated the characteristics of the innovation process. Schumpeter defined innovation as a combination of diverse resources that are non-standardly integrated by business entities in their activities, resulting in innovations.

According to J.A. Schumpeter, capitalism is a system that cannot tolerate stagnation or regularity and will never remain stagnant. He developed a theory that establishes a consistent link between innovation and economic growth. His theory of economic cycles serves as an inspiration for all economists and policymakers who regard technological progress as a solution to the ailments of capitalism, such as unemployment, social inequality, and inflation.

The ideas regarding economic growth based solely on developed technologies, as proposed by Schumpeter and his followers, are optimistic. To understand why technology alone cannot ensure economic growth, it is essential to distinguish between technological possibilities and the reality of their utilization.

Based on Schumpeter's approach, the Organisation for Economic Co-operation and Development (OECD) proposed its own framework for categorizing innovations into various groups, including: innovative products, innovative processes, innovative marketing, and innovative organizational methods. New developments in these categories are recognized as innovations if they are accepted by implementing entities as novelties (innovations), which implies that these solutions might already be known and utilized by other organizations.

According to A. Rogers, an innovation is an idea that is considered new by a specific individual. Moreover, the key factor is not the novelty of the discovery itself but rather the importance of the novelty from the individual's perspective. In this case, our interest in innovations should primarily focus not on functions and possibilities but on how they are perceived by individual users. This leads to the conclusion that products and services are not innovations.

In our opinion, the aforementioned statement is quite debatable; however, from a practical standpoint, consumers are interested in final products or services that carry specific functions (possibilities) for them, and therefore, they can embody these functions and possibilities.

Despite the emphasized positions on the categorization of innovations, fundamental disagreements among researchers arise regarding the final outcome and the process. In many foreign and local scientific works, innovation is viewed as the process of creating and implementing new products or services that have a specific final outcome.

Methods

In conducting scientific research, methods such as induction, deduction, and synthesis were utilized. Additionally, official statistical data from the World Bank and the International Monetary Fund were used to analyze the development of digital banking services.

In this scientific research, we will discuss the level of development of the banking system in countries around the world based on their income, as well as the extent to which the population is covered by banking services. The analysis includes the situation in the global economy (WLD), high-income countries (HIC), middle-income countries (MIC), upper-middle-income countries (UMC), and lower-middle-income countries (LMC). The analysis covers the years 2014 to 2021, focusing on specific years during this period.

Results and Discussion

Over the last two hundred years, the traditional banking system has played a significant role in the development of economies. It has become an integral part of the economy by collecting idle funds from the population, providing financial resources to the economy, ensuring a stable payment system, effectively managing the circulation of paper money, and addressing various other issues. However, by the 21st century, the banking system faced a major challenge: the ability of financial technologies to perform banking functions in easier, faster, and more convenient ways. Consequently, in recent years, commercial banks have been undertaking practical measures to implement digital technologies in the services they provide to customers.

In the initial phase of our research, it is appropriate to analyze the state of the population's use of banking services in countries around the world based on income, specifically focusing on the situation of having bank accounts. While the primary goal of commercial banks is profit generation, the impact of their operations on the economy and the social activities of the population is significant. In particular, conducting payments through bank accounts and creating convenient conditions for customers in commercial banks help reduce cash circulation in the economy and thus prevent the strengthening of the underground economy.

According to the analysis, in 2014, an average of 62% of the world's population held bank accounts in commercial banks. By 2017, this figure had increased to 68%, and in 2021, it reached 76%, indicating a continuous growing interest in banking services.



Figure 1. The Status of Bank Account Ownership Among the Population by Income Level in World Countries

The situation in developed countries is significantly better than the global average. In developed countries, a large portion of the population, approximately 95%, has opened bank accounts and widely utilizes banking services. This indicates a high level of trust in commercial banks in these countries, as well as the impact of changes in the banking system on various social strata.

Considering that the level of development of countries is determined by GDP per capita, middle-income countries are divided into three groups: upper-middle-income, middle-income, and lower-middle-income countries. Given that upper-middle-income countries are approaching the level of high-income countries, the rate of bank service coverage among the population in these countries is also quite high. Specifically, in upper-middle-income countries, 71% of the population had bank accounts in commercial banks in 2014, which increased to 84% by 2021.

In the group of middle-income countries, the level of bank account ownership is below the global average. According to statistical data, in middle-income countries, 57% of the population had bank accounts in commercial banks in 2014, rising to 72% by 2021. Additionally, in lower-middle-income countries, we cannot say that the population's use of banking services is at a sufficiently good level. For instance, in 2014, 44% of the population in lower-middle-income countries had bank accounts, which increased to 58% in 2018 and reached 62% by 2021.

Since the 1990s, commercial banks have expanded the use of plastic cards to increase their customer base and, consequently, their revenue sources. This has led to a reduction in the share of cash transactions as a social goal. The widespread adoption of plastic cards in our country was initially hampered by the insufficient performance of the cash function associated with these cards. However, starting in 2017, reforms in the banking system led to a surge in the use of plastic cards.

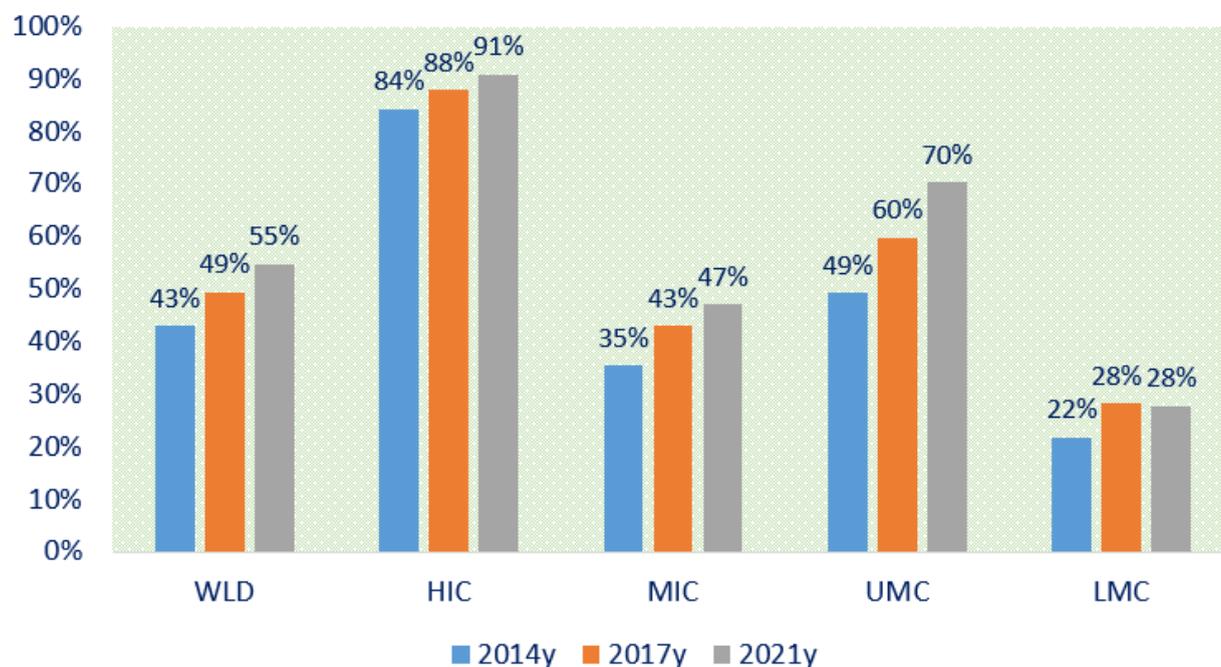


Figure 2. The Availability of Debit and Credit Plastic Cards Among the Population by Income Level in World Countries

According to the analysis, in 2014, an average of 43% of the world's population had debit or credit cards, and this figure rose to 49% in 2014 and 55% by 2021. In high-income countries, this figure is significantly higher, remaining around 90%.

In upper-middle-income countries, 49% of the population had debit or credit cards in 2014, increasing to 70% by 2021. In addition, in middle-income countries, 35% of the population had debit or credit cards in 2014, which increased to 47% by 2021. This suggests that more than half of the global population still does not have access to debit or credit cards.

The situation is not as favorable in lower-middle-income countries. Specifically, in these countries, only 22% of the population had debit or credit cards in 2014, and by 2021, this figure marginally increased to 28%. According to global experts, the pandemic compelled people to transact without cash. However, even during the pandemic, there was insufficient impetus to develop cashless transactions in lower-middle-income countries.

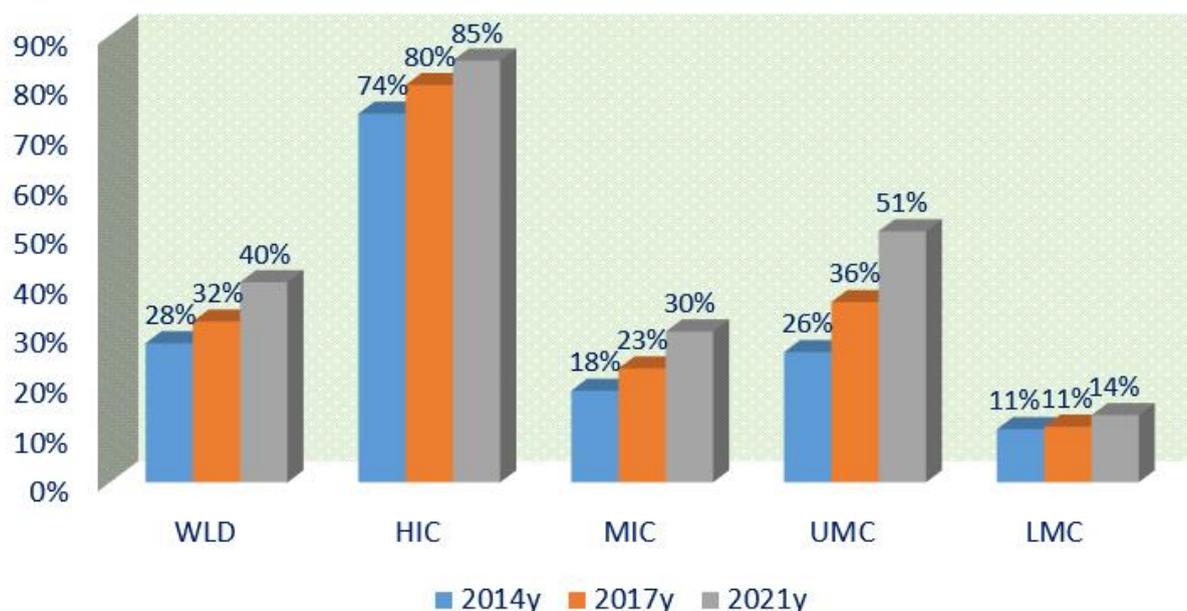


Figure 3. The Level of Usage of Debit and Credit Plastic Cards Among the Population by Income Level in World Countries

Life experience shows that the number of plastic cards held by the population does not always match the number of individuals actively using them. The data from the two figures above illustrate this point. Specifically, globally in 2014, 43% of the population had debit or credit plastic cards, with 28% being active users; by 2021, these figures rose to 55% and 40%, respectively.

In high-income countries, a significant portion of the population actively uses plastic cards. For instance, in 2014, 84% of the population in high-income countries had debit or credit plastic cards, with 74% being active users. By 2021, these figures increased to 91% and 85%, respectively.

However, the situation is different in middle-income and lower-middle-income countries. Specifically, in middle-income countries, 35% of the population had debit or credit cards in 2014, with only 18% being active. This means that nearly 50% of the plastic cards held by the population were not in active use. By 2021, these figures had improved slightly, with 30% of the 47% of existing plastic cards being active. This situation can also be observed in upper-middle-income countries.

In lower-middle-income countries, there are significant challenges in widely implementing cashless transactions. For instance, in 2014, only 22% of the population had debit or credit cards, and only 11% were actively using them. By 2021, the usage of plastic cards had improved somewhat, with 28% of the population having plastic cards, of which 14% were active.

Despite the widespread adoption of plastic card transactions, there are still problematic aspects for the population. For example, there may not be sufficient access to terminals, ATMs, or info kiosks in all areas. In these cases, to create more conveniences for the population and to enhance their revenues, banks have significantly developed digital banking services over the last decade. This has also created considerable competition for the traditional banking model.

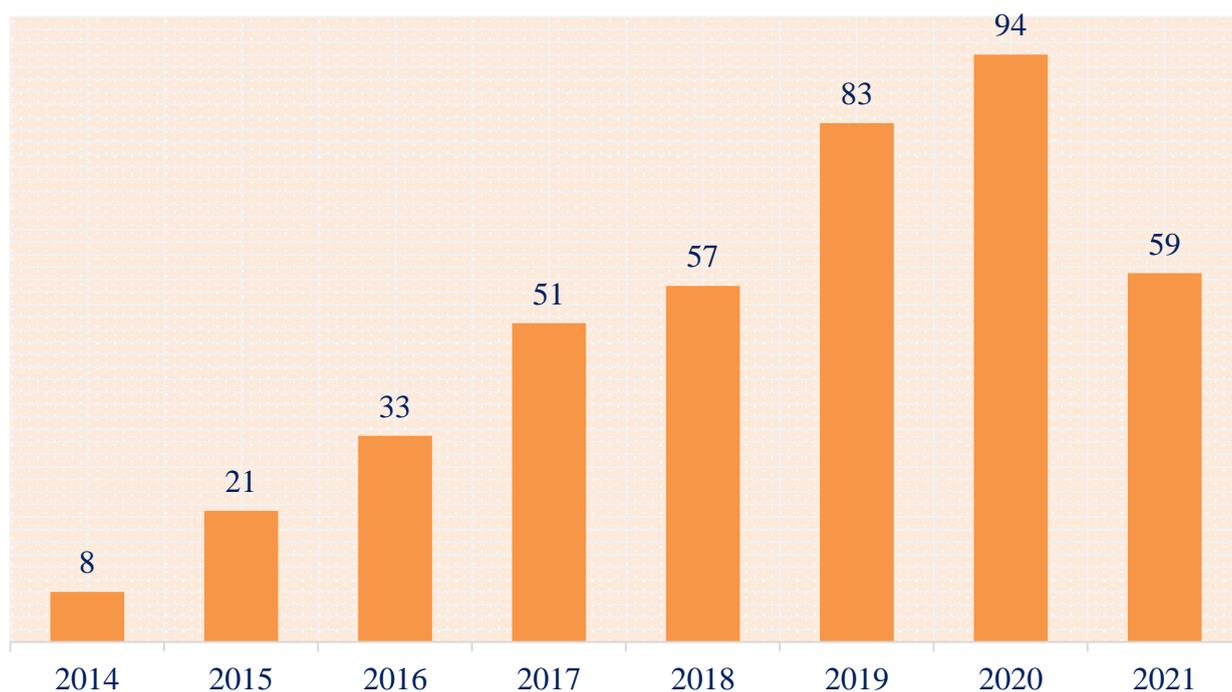


Figure 4 The Number of Newly Established Online Banks in the Global Economy

The trend of developing innovative banking services has advanced to such an extent that by 2024, the number of users of digital banking services is projected to exceed 2.5 billion. Furthermore, if traditional banks do not transition to offering digital banking services, their survival remains in question. The rise of digital technologies has led to the emergence of online banks within the banking system. Currently, more than 300 online banks have been established globally, creating significant competitive pressure in the market for traditional banks.

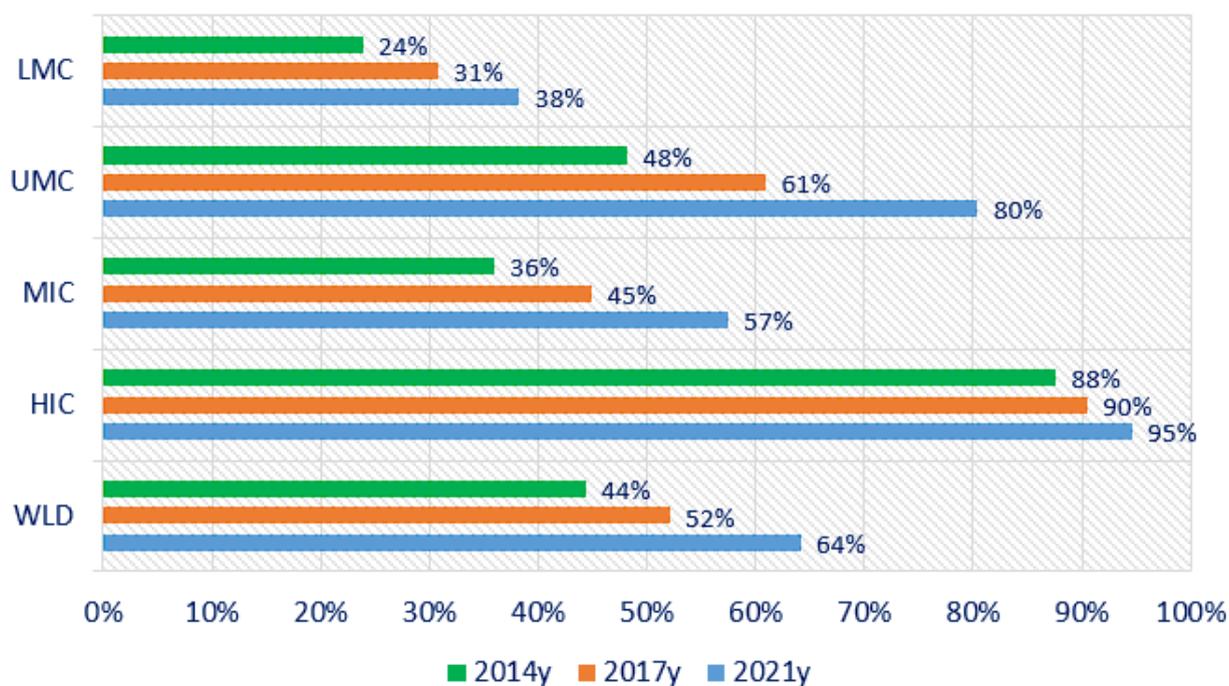


Figure 5. The Level of Digital Payment Usage Among Individuals by Country Income Level

In recent years, the development of digital technologies has significantly enhanced the use of convenient digital payment methods in the banking system. According to analysis results, in 2014, an average of 44% of the global population used digital payments, while by 2021, this figure had risen to 64%.

The level of development of countries reflects how extensively they utilize digital technologies. For instance, the establishment of a digital economy in developed countries is evidenced by the high level of their population's use of digital payments. Statistical data indicates that in high-income countries, the usage rate of digital payments is nearly 100%, largely due to the impact of the pandemic, which has also led to the emergence of new startups in these countries.

This trend can also be observed in developing countries, particularly in upper-middle-income nations. In these countries, the percentage of the population using digital payments rose from 61% in 2017 to 80% in 2021.

A distinguishing feature of digital technologies is that they do not require export costs. However, despite this advantage, establishing a digital economy remains somewhat challenging in middle-income and lower-middle-income countries. Specifically, between 2014 and 2021, the level of digital payment usage among the population in middle-income countries increased from 36% to 57%, while in lower-middle-income countries, it rose from 24% to 38%.

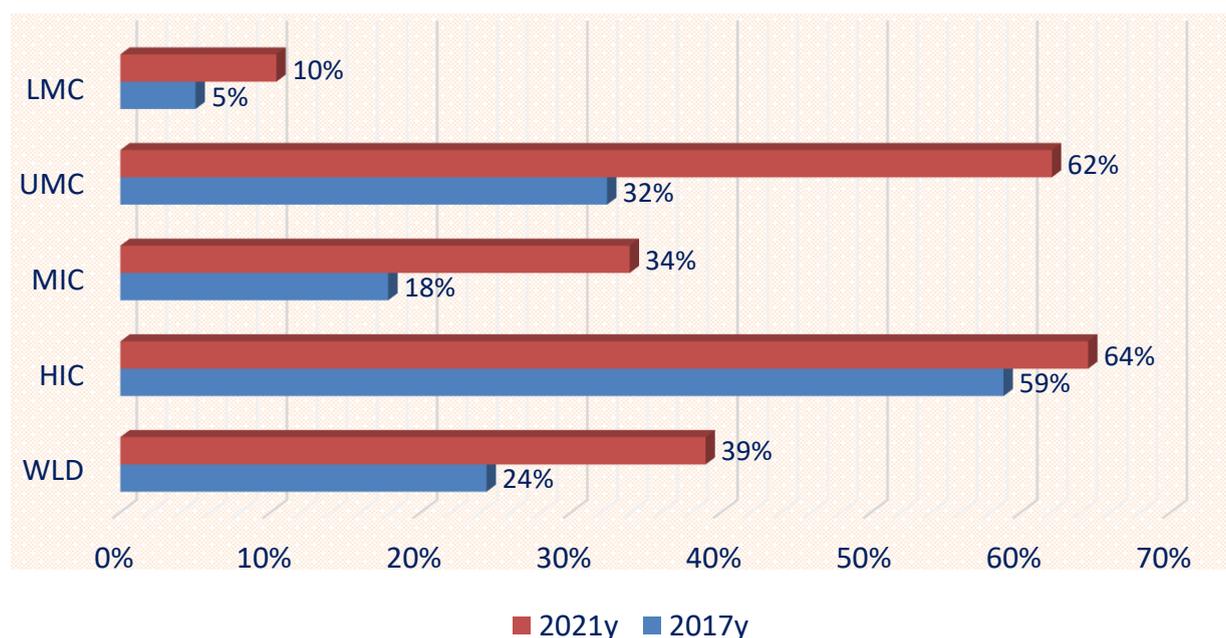


Figure 6. The Use of Mobile Connections or the Internet for Online Purchases Among Individuals by Country Income Level

In recent years, alongside digital payments, the use of mobile devices for QR code payments has also become widespread. It should be noted that the utilization of this new digital technology by banks and its impact on bank revenues has been tracked since 2017. According to statistical data, in 2017, an average of 24% of the global population used mobile connections or the internet for online purchases, while this figure rose to 39% by 2021. In high-income countries, this figure was 59% in 2017 and increased to 64% in 2021.

The analysis shows that in countries with upper-middle-income levels, the use of mobile connections or the internet for online purchases has significantly increased. Specifically, in upper-middle-income countries, the proportion of the population using mobile connections or the internet for online purchases rose from 32% in 2017 to 62% in 2021.

In contrast, the usage levels in middle-income and lower-middle-income countries are notably lower. For instance, in middle-income countries, only 18% of the population used mobile connections

or the internet for online purchases in 2017, which increased to 34% by 2021. The situation in lower-middle-income countries is particularly concerning, with this figure rising from just 5% in 2017 to 64% in 2021.

Conclusion

In conclusion, it can be stated that developed countries have made significant strides in building a digital economy. Additionally, nations with upper-middle incomes have also seen improvements in digital banking services in recent years. Countries such as Sweden, Norway, and the Netherlands, classified as high-income states, are planning to fully transition away from cash transactions while further developing their digital banking services.

However, in countries with middle or low incomes, digital banking services are not sufficiently developed. This can be attributed to the strength of the informal economy in these nations, leading to a higher demand for cash transactions. Furthermore, the lack of strong scientific foundations hinders the emergence of new startups that could implement these digital technologies, and higher levels of corruption in such countries also pose challenges.

According to World Bank standards, the level of development of countries is determined by GDP per capita, which should exceed \$12,535 for high-income countries. Middle-income countries are divided into two groups: upper-middle and lower-middle income. Countries with a GDP per capita between \$4,046 and \$12,535 fall into the upper-middle-income category, while those with a GDP per capita between \$1,036 and \$4,046 are classified as lower-middle-income. It is important to note that the population of middle-income countries constitutes 75% of the global population, with 62% of the world's poor living in these nations.

Experts believe that despite the above statistical conditions, there are significant opportunities to develop digital banking services in middle-income countries, and there is considerable interest from enterprises that support digital banking services. This is because middle-income countries are viewed as large markets and sources of high revenue.

Our scientific research, focused on innovative banking services, aims to highlight the development trends of digital banking services in middle and lower-middle-income countries. Our goal is for our country to be categorized alongside lower-middle-income states. We believe that this research topic demonstrates the potential to increase the popularity of banking services through the application of digital technologies in countries like ours.

References

- [1]. P. Das, R. Verburg, A. Verbraeck, and L. Bonebakker, "Barriers to Innovation Within Large Financial Services Firms: An In-Depth Study Into Disruptive and Radical Innovation Projects at a Bank," *European Journal of Innovation Management*, vol. 21, no. 1, pp. 96–112, 2017.
- [2]. J. A. Schumpeter, *Essays: On Entrepreneurs, Innovations, Business Cycles and the Evolution of Capitalism*. London, UK: Routledge, 2017.
- [3]. C. Uz Kurt, R. Kumar, H. Semih Kimzan, and G. Eminoğlu, "Role of Innovation in the Relationship Between Organizational Culture and Firm Performance: A Study of the Banking Sector in Turkey," *European Journal of Innovation Management*, vol. 16, no. 1, pp. 92–117, 2013.
- [4]. S. Fanelli and L. Straub, "A Theory of Foreign Exchange Interventions," *National Bureau of Economic Research, Working Paper No. w27872*, 2020.
- [5]. R. J. Rajapathirana and Y. Hui, "Relationship Between Innovation Capability, Innovation Type, and Firm Performance," *Journal of Innovation & Knowledge*, vol. 3, no. 1, pp. 44–55, 2018.
- [6]. J. C. Westland, *Global Innovation Management*. London, UK: Bloomsbury Publishing, 2017.

- [7]. N. D. Kondratiev, *Bol'shie Tsikly Konyunktury i Teoriya Predvideniya: Izbrannye Trudy* [Large Cycles of Conjuncture and the Theory of Forecasting: Selected Works]. Moscow, Russia: Akademicheskii Proekt, Alma Mater, 2015.
- [8]. Federal Reserve Bank of Atlanta, "Economic Review," Aug. 1983, p. 10.
- [9]. World Bank, "World Development Data." [Online]. Available: <https://data.worldbank.org>. [Accessed: Nov. 25, 2024].
- [10]. International Monetary Fund (IMF), "Official Website." [Online]. Available: <https://imf.org>. [Accessed: Nov. 25, 2024].