Nataliia Babiak
Department of Corporate Finance and Controlling,
Kyiv National Economic University named after Vadym Hetman, Kyiv, Ukraine (corresponding author)
E-mail: nataliia.babiak@kneu.edu.ua
ORCID: https://orcid.org/0000-0002-3210-4045
ResearcherID: AAI-9002-2021
Oleh Shtunder
Department of Corporate Finance and Controlling,
Kyiv National Economic University named after Vadym Hetman, Kyiv, Ukraine
E-mail: Shtundero@icloud.com
ORCID: https://orcid.org/0009-0002-8727-8605

Digital Payment Systems as a Tool for Optimising Corporate Working Capital Management

Abstract

The article examines how digital payment systems affect the efficiency of working capital management in corporations in an era of global digital economic transformation. The research *focuses* on the mechanisms through which digital payment platforms influence the components of the cash conversion cycle, transaction costs and the operational efficiency of international settlements. The *study methodology* is based on a comparative analysis of five global payment platforms (PayPal Business, Stripe, Wise Business, SWIFT gpi and Revolut Business) using a multi-criteria evaluation and ranking methodology to assess the digital maturity of ten Ukrainian corporations and calculate the economic impact of implementing digital payment solutions. The *research objective is twofold*: first, to substantiate the role of digital payment systems in optimising working capital management; and second, to develop methodological approaches for evaluating the effectiveness of their implementation within the corporate finance system. The *study reveals* that switching from traditional banking channels to digital platforms reduces Days Sales Outstanding by two to three days, cuts transaction costs by seventy-six to ninety-two per cent, and frees up ten to fifteen million dollars of working capital for every one billion dollars of annual revenue. An empirical analysis of Ukrainian corporations shows that there is a significant difference in the level of digital maturity in international settlements. Fintech and e-commerce companies have DSO indicators that are five to eight times lower than companies that use traditional channels exclusively. The research proposes a four-level system of KPI indicators for monitoring the effectiveness of digital payment systems, a methodology for calculating the total economic effect considering direct financial benefits and the effect of capital release, and a multi-criteria matrix for selecting optimal payment platforms for different types of corporations. The practical significance of this integration lies in the development of tools for integrating digital payment systems into financial controlling systems, and in substantiating their impact on credit ratings and cost of capital. The study's findings offer a valuable resource for corporate treasuries, financial services, and regulators, providing insights that can inform the optimisation of payment infrastructure and the acceleration of digital transformation in the corporate finance sector.

Keywords

digital payment systems, working capital management, cash conversion cycle, corporate finance, financial controlling, payment platforms, digitalisation

JEL: G32, G15, O33, M41

DOI: https://doi.org/10.30525/2500-946X/2025-4-4

1 Introduction

In the context of the global digital transformation of the economy, the management of working capital in corporations is acquiring new characteristics, which are determined by the speed, transparency and cost of financial operations. Traditional approaches to managing accounts receivable, cash flows and short-term liabilities, which are based on multi-day cycles of international banking settlements, are being replaced by digital payment ecosystems that can facilitate near-real-time transactions with minimal costs. The urgency of researching digital payment systems in the context of corporate working capital management is driven by the need for a scientifically grounded approach to selecting digital payment channels that can optimise

the cash conversion cycle, reduce financial costs and improve transparency of current asset movement in cross-border operations.

Working capital is a financial resource that ensures the continuity of operational activities by financing inventory and accounts receivable and maintaining an adequate level of liquidity. The efficiency of its management is determined by the cash conversion cycle indicator, which measures the time taken to convert cash from suppliers' payments to buyer payments. Shortening this cycle has a direct impact on the return on capital, financial stability, and investment attractiveness of the enterprise. The introduction of digital payment systems such as SWIFT gpi, SEPA Instant, Wise Business, Stripe, PayPal and Revolut Business has radically changed the time and cost parameters of international settlements, creating a qualitatively new context for managing corporate liquidity.

Research indicates that 74% of corporations currently utilise digital or instant payment systems in international settlements, with 92% of large corporations having incorporated at least one fintech platform into their financial architecture (McKinsey, 2023; Deloitte, 2023). Concurrently, the degree of digitalisation of payments varies significantly between economic sectors. Fintech and e-commerce companies demonstrate high indicators of digital maturity, while industrial and energy corporations focus on integrating digital solutions within traditional ERP systems and banking channels. This differentiation gives rise to the necessity for a comparative assessment of the functional efficiency of global payment platforms and a diagnostics of the state of digitalisation in the Ukrainian corporate sector.

The extent to which the problem has been developed is characterised by the presence of key publications on corporate finance theory, the digital transformation of payment systems and working capital management. Significant contributions have been made by Ukrainian scientists to the field of corporate finance. These include Babichenko, who examined corporate finance in the information economy and identified determinants of their development (Babichenko, 2016), Zymovet and Tereshchenko, who substantiated corporate finance as the dominant of financial science (Zymovet & Tereshchenko, 2015), and Krysovatyi, Fedosov, and Riazanova, who revealed the essence of corporate finance in the context of challenges of the innovative economy (Krysovatyi et al., 2013). The digital transformation of payment systems has been examined in the works of Bolduieva, Horbunova, and Kusakova, who analysed the role of banks in globalising financial infrastructure (Bolduieva et al., 2024), Kozyr, who investigated the functional role of blockchain technologies in transforming payment systems (Kozyr, 2023), and Dmytryk, Tokarieva, and Kotenko, who studied the impact of digital technologies on payment systems (Dmytryk et al., 2023).

Significant contributions have been made by foreign researchers in the field of payment systems and financial market infrastructures. Wandhöfer (2019) conducted an examination of technological innovation in financial markets and its implications for money, payments and settlement finality. Macharia's analysis (2023) examined the applications of distributed ledger technology in payment, clearing, and settlement systems. However, despite the numerous studies conducted on this subject, the issue of quantifying the impact of digital payment systems on working capital management indicators and integrating them into corporate financial controlling systems remains insufficiently explored, which determines the scientific novelty of this study.

The objective of the research is to provide substantiated evidence regarding the impact of digital payment systems on the efficiency of corporate working capital management. In addition, the research aims to propose methodological approaches for evaluating the effectiveness of their implementation. These approaches will be based on integrating financial controlling tools and comparative analysis of global payment platforms. In order to achieve this objective, the following tasks have been set: firstly, to reveal the conceptual foundations of managing working capital in the context of the digitalisation of payment systems; secondly, to conduct a comparative assessment of global payment platforms by the criterion of their impact on working capital indicators; thirdly, to diagnose the state of digitalisation of international settlements in the Ukrainian corporate sector; fourthly, to develop a system of KPI indicators and a methodology for evaluating the economic effect of implementing digital payment solutions; and fifthly, to substantiate the integration of digital payment monitoring into the financial controlling system.

2 Theoretical Foundations and Comparative Evaluation of Digital Payment Platforms

The concept of cash conversion cycle, and its connection with payment speed, forms the methodological basis for studying the impact of digital payment systems on working capital efficiency. In the domain of financial theory, working capital is delineated as the disparity between current assets and current liabilities. The efficiency of working capital is evaluated through the utilisation of the cash conversion cycle indicator, which reflects the duration of a single capital turnover cycle. This indicator is calculated using the formula:

$$CCC = DIO + DSO - DPO \quad (1)$$

where DIO represents Days Inventory Outstanding, the inventory holding period; DSO denotes Days Sales Outstanding, the accounts receivable collection period; and

DPO signifies Days Payables Outstanding, the accounts payable payment period.

The reduction of the cash conversion cycle is indicative of an acceleration in capital turnover, a decrease in the necessity for external financing, and an increase in return on assets. Digital payment systems have a direct impact on the DSO and DPO components, as they determine the speed at which funds are received from buyers and the timing of payments to suppliers. In the conventional model, international bank transfers through the SWIFT MT system are executed within a time frame of one to three days, thereby creating a temporal discrepancy between the moment of invoicing and the actual receipt of funds. This has been shown to result in capital being frozen in accounts receivable, an increased demand for short-term loans, and a reduction in enterprise liquidity.

Implementing digital payment systems that provide instant or near-instant transactions has several transformative effects. Firstly, it enables DSO to be reduced by one to three days. For a large corporation with a daily receipts volume of five million dollars, this means releasing an additional five to fifteen million dollars of working capital. Secondly, it reduces the need for factoring financing because faster receipt of funds closes the gap between shipment and payment. Thirdly, it improves the accuracy of liquidity forecasting by enabling real-time payment tracking. These effects create conditions that allow for a fundamental change in the way working capital is managed in the digital economy.

Working capital consists of three main elements that are susceptible to different degrees to the influence of the digitalisation of settlements. Although inventory is not directly affected by digital payments, it creates conditions that allow for more accurate synchronisation of supplies with payment schedules. This enables a reduction in safety stock and a transition to just-in-time models. It is evident that accounts receivable is the component most sensitive to digitalisation. This is due to the fact that the speed of its collection is directly dependent on the time taken for payment to be executed. Digital payment systems provide instant transaction confirmation through end-to-end tracking, automatic allocation of payments by invoices through API integration with ERP systems, and reduction of risks of erroneous payment identification due to the ISO 20022 standard. Digital platforms facilitate the maintenance of an optimal balance between liquidity and profitability for corporations by enabling the instant transfer of funds, thereby reducing the necessity for substantial cash balances in current accounts.

Within the corporate finance system, the management of working capital is the purview of operational financial controlling. The function of operational financial controlling is to ensure planning, monitoring, and control over the movement of current assets and short-term liabilities. In accordance with the conceptual framework of financial control as expounded in the extant works of domestic researchers, the effective management of working capital is predicated on the execution of several pivotal tasks (Babichenko, 2016). The need for working capital is planned based on sales forecasts, supply schedules and settlement terms, in order to determine the optimal volume of current assets, ensuring continuity of operational activities without the excessive freezing of funds. Turnover indicators are monitored by tracking key performance indicators constantly, including the accounts receivable turnover ratio, inventory turnover duration, current liquidity ratio and cash conversion cycle indicator.

To assess the impact of digital payment systems on working capital management, an analysis was conducted of five global platforms that are actively used by corporations for international settlements (see Table 1). The comparison criteria were determined by an analysis of their direct impact on cash conversion cycle components. These components included transaction execution speed affecting DSO, transaction cost impacting transaction expenses, availability of API for automation enabling integration with ERP and reduction of operational costs, geographical coverage providing the possibility of working with international counterparties, and the number of corporate clients as an indicator of market recognition.

The comparative assessment indicates that the most expeditious platforms are Wise and SWIFT gpi, which facilitate the execution of international payments within a time frame of ten to thirty minutes.

TABLE 1 Comparative parameters of global digital payment platforms (2023-2024)

Platform	Transaction time	Commission	API	Corporate clients	Source
PayPal Business	1-3 hours	2.9% + fixed	Yes	>30 million	PayPal, 2023
Stripe	1-2 hours	2.7-4%	Yes	>4 million	Stripe, 2024
Wise Business	10-20 minutes	0.4-1.2%	Yes	>300 thousand	Wise, 2023
SWIFT gpi	5-30 minutes	$15-40	Partial	>11 thousand institutions	SWIFT, 2024
Revolut Business	Instant-2 hours	0.2-1%	Yes	>500 thousand	Revolut, 2024

Source: compiled based on official platform reports

Despite their popularity in the global market, Stripe and PayPal have higher commission rates and slower settlement times, which reduces their efficiency in large corporate flows. Revolut Business is distinguished by its low commissions, but its global infrastructure is less developed. These results indicate a shift in the corporate sector towards fast and inexpensive cloud payment solutions. For a corporation with a monthly volume of international payments amounting to fifty million dollars, the transition from a traditional banking channel with a commission of two point five percent to Wise Business with a commission of zero point eight percent results in monthly savings of eight hundred fifty thousand dollars, or an annual effect of ten point two million dollars on transaction costs alone.

The integration of digital payment systems with corporate ERP/CRM systems (e.g., SAP, Oracle, Microsoft Dynamics) is a critical factor in automating working capital management (see Table 2).

The availability of an API and the ability to integrate digital payment systems with corporate ERP and CRM systems, such as SAP, Oracle or Microsoft Dynamics, is crucial for automating working capital management. Automating payment allocation through API integration reduces accounting time for receipts from two to three hours to just five to ten minutes per one hundred transactions. It also decreases the number of payment identification errors by between eighty-five and ninety per cent. Furthermore, it provides real-time analytics of accounts receivable status and automates the formation of reports for management accounting and controlling. With the highest multi-currency capability and integration indicators, Stripe and Wise Business are the optimal choice for corporations with complex international supply chains.

3 Empirical Analysis of Ukrainian Corporations and Methodological Approaches to Efficiency Evaluation

To empirically assess the state of digitalisation of international settlements of Ukrainian corporations, a sample of ten enterprises that are active in international markets and have developed digital services was formed. This sample includes Naftogaz of Ukraine, DTEK Group, MHP, Kernel Holding, Nova Poshta, NovaPay, Ukrposhta, Ukrainian Railways, Metinvest Group, Rozetka and RozetkaPay, as well as monobank.

Diagnostics were carried out based on ten factors that comprehensively characterised the level of digitalisation of international settlements. These factors were: the level of integration of electronic document management with payment systems; the use of international payment channels, including SWIFT and SEPA; the share of cashless and online payments in the structure of international settlements; the availability of digital payment services; the level of automation of anti-money laundering and know-your-customer procedures; integration with ERP and CRM systems, and the availability of open APIs; the development of digital self-service channels; the level of cybersecurity of payment infrastructure; the geographical diversification of digital settlements; and the innovation of payment solutions.

Three groups of corporations were identified based on a ranking of ten factors, including integration of electronic document management, use of international payment channels and share of online payments. These groups were leaders (77–88 points), average level (60–66 points) and outsiders (45–47 points). The initial group of digitalisation leaders, achieving a score in excess of seventy-five points, comprises monobank, which attained eighty-eight points and is a fully digital bank offering instant international transfers and API services for business, Rozetka and RozetkaPay, which achieved seventy-eight points and is an e-commerce platform with its own payment infrastructure, and Nova Poshta and NovaPay, which attained seventy-seven points thanks to multi-currency digital payments and integration with international marketplaces. This group is characterised by the complete digitalisation of payment processes, the use of their own payment platforms or deep integration with fintech solutions, the ability to perform instant or near-instant transactions, and a high level of automation and API access.

The second group comprises corporations with an average level of digitalisation, scoring between 60 and 70 points. This group includes Metinvest, an industrial

TABLE 2 Assessment of corporate functions of digital payment platforms

Criterion	PayPal	Stripe	Wise	SWIFT gpi	Revolut
Analytics and reporting	++	+++	++	+++	++
Multi-currency capability	+	+++	+++	+	++
AML/KYC compliance	++	+++	+++	+++	++
ERP integration	++	+++	++	+	++
Payment speed	+	++	+++	+++	++

Note: + low level, ++ average level, +++ high level

Source: compiled based on functional specifications of platforms

group with a developed ERP infrastructure, which scored 66 points. It also includes DTEK, Naftogaz, MHP and Kernel, which are large industrial and agricultural corporations with a high level of back-office automation, and scored between 60 and 61 points. This group's key characteristics are the digitalisation of predominantly internal processes through ERP, the use of traditional international channels such as SWIFT GPI, the limited application of fintech platforms, and an emphasis on reliability and compliance. The third group comprises corporations with a low level of digitalisation, scoring less than fifty points. This group includes Ukrposhta and Ukrainian Railways (Ukrzaliznytsia), which are state operators of mass services with basic online services and a dependence on traditional banking channels. This group's key characteristics are the fragmentary digitalisation of business-to-consumer services, outdated infrastructure, an absence of integration with modern payment platforms and high transaction costs.

Examining the relationship between the level of digitalisation of settlements and key indicators of working capital management using the open financial data of corporations is possible (Table 3).

The correlation analysis reveals several important patterns. There is a direct correlation between digital maturity and DSO: corporations with a digital maturity score exceeding seventy-five points have a DSO that is five to eight times lower than corporations with a score of less than fifty points. Transaction cost reduction is a significant benefit, with digitalisation leaders saving seventy to eighty-five percent on international payment commissions compared to companies using exclusively traditional banking channels. The release of working capital is found to be substantial. For a corporation with an annual sales volume of one billion dollars, a reduction in DSO from fifty to ten days has been shown to release one hundred ten million dollars of working capital. These results provide confirmation of the hypothesis regarding the direct impact of digitalisation of payment systems on the efficiency of working capital management.

The analysis identified key obstacles to the implementation of digital payment systems in the Ukrainian corporate sector. The barriers to infrastructure are manifold. Firstly, there is the issue of outdated ERP systems, which are incompatible with modern APIs. Secondly, there is the question of limited broadband internet availability in certain regions. Thirdly, and finally, there is the issue of the high costs of modernising IT infrastructure. The organisational barriers encompass conservatism of financial services of state corporations, insufficient digital literacy of personnel, and lack of a clear digital transformation strategy. The regulatory barriers encountered in this context include the fragmented regulation of digital financial services, currency control restrictions for certain operations, and insufficient harmonisation with international standards such as ISO 20022 and PSD2. Financial barriers pertain to the necessity of considerable initial investments in implementation, as well as the restricted access to financing for small and medium-sized corporations.

In the context of working capital management, the effectiveness of implementing digital payment systems should be measured through a system of key performance indicators reflecting financial, operational and strategic results. The proposed KPI system is structured across four levels. The first level includes indicators of capital turnover speed, particularly Days Sales Outstanding, which is calculated by dividing accounts receivable by revenue and multiplying by 365 days. The target value after digitalisation is a reduction of twenty to forty percent. The Cash Conversion Cycle, calculated using formula one, should show a reduction of between 15 and 30%. The Receivables Turnover Ratio, calculated by dividing revenue by the average accounts receivable, should demonstrate growth of between twenty-five and fifty percent.

The second level encompasses financial efficiency indicators. The Transaction Cost Ratio, calculated as

TABLE 3 Relationship between digital maturity and working capital indicators

Corporation	Digitalisation rating	Estimated DSO (days)	Transaction cost level
Monobank	88	1-3	Very low (0.1-0.5%)
Rozetka	78	5-10	Low (0.5-1.5%)
NovaPay	77	7-12	Low (0.4-1.2%)
Metinvest	66	30-45	Average (1.5-3%)
DTEK	61	35-50	Average (2-4%)
Naftogaz	60	40-55	Average (2-3.5%)
Kernel	60	35-50	Average (1.8-3.5%)
MHP	60	40-60	Average (2-4%)
Ukrposhta	47	50-70	High (3-5%)
Ukrainian Railways	45	55-80	High (3-6%)

Source: calculated based on open financial reports and industry benchmarks

the sum of payment commissions divided by revenue and multiplied by 100%, should demonstrate a reduction of between 60% and 85%. Working capital efficiency, calculated as revenue divided by average working capital, should demonstrate growth of between twenty and thirty-five percent. Return on working capital, calculated as operating profit divided by average working capital, should increase by between 15 and 25 percent. The third level includes operational indicators such as payment processing time, with a target value of reducing it from 24 to 72 hours to 0.5 to 2 hours; straight-through processing rate, calculated as the number of automatic payments divided by the total number, multiplied by 100%, with a target value of exceeding 85%; and error rate in payment reconciliation, with a target value of reducing it by 80 to 90%.

The following methodology is proposed for the calculation of the total economic effect of the implementation of digital payment systems. This methodology takes into account both direct financial benefits and indirect effects of improving working capital management (see Table 4). The first step involves calculating direct financial effect from reducing transaction costs using formula two:

$$\Delta TC = (C_0 - C_1) \times N \times V \quad (2)$$

where C_0 represents commission of traditional banking channel in percentage, C_1 denotes commission of digital platform in percentage, N signifies number of transactions per period, and V indicates average transaction amount.

The second step involves calculating the effect of releasing working capital using formula three:

$$\Delta WC = (DSO_0 - DSO_1) \times \left(Revenue / 365\right) \quad (3)$$

where DSO_0 represents initial collection period and DSO_1 denotes period after implementing digital payments.

The third step calculates savings on financing cost using formula four:

$$\Delta FC = \Delta WC \times r \quad (4)$$

where r represents average short-term credit rate.

The calculation of total economic effect is performed using formula five:

$$TEE = \Delta TC + \Delta FC + \Delta OC - IC \quad (5)$$

where TEE represents total economic effect, ΔOC denotes operational cost savings, and IC signifies investment costs for implementation.

For a corporation that conducts 500 international payments per month, each averaging 100,000 USD, switching from a traditional bank with a commission rate of 2.5% to Wise Business, which charges 0.8%, would provide monthly savings of 850,000 USD, or an annual saving of 10.2 million USD. For a corporation with an annual revenue of 1.8 billion USD, an initial DSO of 45 days and a DSO after digitalisation of 42 days (representing a reduction of three days due to accelerated payments), the released working capital equals 14.8 million USD. At a short-term credit rate of 12% per annum, annual financing savings equal 1.78 million USD. The total economic effect is estimated at 11.56 million USD per year, with an implementation investment of 0.5 million USD, providing a payback period of approximately two weeks.

4 Integration of Payment Digitalisation Indicators into the Financial Control System

Integrating digital payment indicators into the financial control system is essential for the effective management of working capital in the digital economy. As a subsystem of corporate finance management, financial controlling should ensure the systematic monitoring of the efficiency of digital payment channels by integrating the relevant KPIs into management reporting dashboards. The architecture for controlling

TABLE 4 Example calculation of economic effect from implementing digital payment system

Indicator	Value	Calculation basis
Initial DSO	45 days	Current state
DSO after digitalisation	42 days	Target state
Annual revenue	1.8 billion USD	Financial data
Traditional bank commission	2.5%	Market data
Digital platform commission	0.8%	Wise Business tariff
Number of transactions/month	500	Corporate data
Average transaction amount	100,000 USD	Corporate data
Short-term credit rate	12% per annum	Market data
Released working capital	14.8 million USD	Formula (DSO_0-DSO_1)×(Revenue/365)
Annual savings on commissions	10.2 million USD	Formula (C_0-C_1)×N×V×12
Annual savings on financing	1.78 million USD	Formula ΔWC×r
Operational cost savings	81,000 USD	Time reduction calculation
Implementation investment	0.5 million USD	Estimate
Total economic effect	11.56 million USD /year	Formula TEE
Payback period	2 weeks	IC/TEE×365

Source: authors' calculations

digital payments comprises three levels with different time horizons and analytical depths.

Operational control with daily monitoring provides real-time tracking of the status of international payments, monitoring of the straight-through processing rate, control over compliance with the payment schedule, and detection of anomalies, including delays, errors and suspicious transactions. The toolkit includes dashboards in ERP systems such as SAP Cash Management and Oracle Treasury, and is integrated with payment platform APIs. Tactical controlling involves weekly and monthly analysis, examining DSO and CCC dynamics, comparing actual and planned turnover indicators, evaluating the efficiency of different payment channels and monitoring transaction costs by direction. The toolkit includes management reporting, variance analysis and deviation analysis. Strategic control with quarterly and annual reviews includes assessing the return on investment from implementing digital platforms, benchmarking against industry indicators, analysing the impact on the weighted average cost of capital and forecasting the need to modernise payment infrastructure. The toolkit comprises a balanced scorecard, value-based metrics and strategic KPIs. This three-tiered control architecture ensures comprehensive management of digital payments at all levels of the corporate hierarchy.

Improving working capital management indicators by implementing digital payment systems has a positive effect on corporate credit ratings and the cost of attracting capital. This influence operates through several channels. Reducing DSO improves liquidity, enhancing the Current and Quick Ratios and resulting in a positive reassessment of creditworthiness. A decreased need for short-term lending reduces financial leverage and risk. An increased operating cash flow provides a greater ability to service debt, which leads to an increased Debt Service Coverage Ratio.

5 Conclusions

The findings of the research demonstrate that digital payment systems represent a strategic optimisation tool for corporate working capital management, ensuring transformation of time and cost parameters of the cash conversion cycle. The integration of digital platforms into the corporate finance system has been shown to create a synergistic effect through the simultaneous acceleration of capital turnover, reduction of transaction costs, and improvement of financial flow transparency.

A comparative assessment of five global payment platforms revealed that Wise Business and Revolut Business are the most efficient for optimising working capital due to their combination of instant or near-instant transaction speeds of ten to twenty minutes, low transaction costs of 0.2 to 1.2% compared to 2–5% for traditional channels, and a high level of automation and API integration. Transitioning from traditional banking channels to digital platforms can reduce DSO by two to three days, save seventy-six to ninety-two per cent of transaction costs and release ten to fifteen million dollars of working capital for every one billion dollars of annual revenue.

An empirical analysis of ten Ukrainian corporations revealed significant differences in the level of digital maturity in international settlements. Leaders, including Monobank, Rozetka and NovaPay, scored between 77 and 88 points, with DSO of between one and twelve days and transaction costs below 1.5%. Those with an average level of maturity scored between 60 and 66 points, with a DSO of between 30 and 60 days. Those at the lowest level scored between 45 and 47 points, with a DSO of between 50 and 80 days. Correlation analysis confirmed that the DSO of leading corporations is five to eight times lower than that of companies using exclusively traditional channels.

The proposed four-level KPI indicator system, which is designed to monitor the effectiveness of digital payment systems, and the developed methodology for calculating the total economic effect, allow the implementation results to be quantified by taking into account the direct financial benefits, the effect of releasing capital, and the operational savings. For a typical large corporation with revenues of one to two billion dollars, the total effect amounts to ten to fifteen million dollars per year, with a payback period of two to four weeks.

Practical recommendations for corporations include auditing current payment channels, developing a diversification strategy that combines SWIFT GPI for large transactions with digital platforms for operational payments, integrating digital payment systems with ERP systems to automate processes and enable real-time monitoring, and establishing a competence centre for digital financial technologies.

For regulators, recommendations include accelerating the harmonisation of Ukrainian legislation with European Directives PSD3 and MiCA; creating favourable conditions for the development of the fintech sector; supporting Ukraine's integration into the European payment space by joining the Single Euro Payments Area (SEPA); and developing state support programmes for the digital transformation of corporate finance.

Digital payment systems are not just a technological tool; they are also a strategic means of optimising corporate working capital management. Implementing them ensures a multiplicative effect by accelerating financial flows, reducing costs, improving transparency and enhancing credit ratings. This makes them essential for financial stability and strategic business development in an era of global digital transformation.

References:

[1] Babichenko, V. V. (2016). Corporate finance in information economy: determinants and development priorities in Ukraine. (Doctoral dissertation). Kyiv: Kyiv National Economic University.
[2] Bolduieva, O., Horbunova, A., & Kusakova, Yu. (2024). Digital transformation of payment systems and the role of banks in globalization of financial infrastructure. *Economy and Society*, 69. DOI: https://doi.org/10.32782/2524-0072/2024-69-59
[3] Deloitte (2023). Global Corporate Treasury Survey 2023. Available at: https://www2.deloitte.com
[4] Dmytryk, O. O., Tokarieva, K. O., & Kotenko, A. M. (2023). Digital technologies and their impact on payment systems. *Juridical Scientific and Electronic Journal*, 1, 718–722. [in Ukrainian]
[5] Kozyr, Yu. R. (2023). Functional role of blockchain technologies in transformation of payment systems. *Investytsii: praktyka ta dosvid*, 20, 112–116. [in Ukrainian]
[6] Krysovatyi, A. I., Fedosov, V. M., & Riazanova, N. S. (2013). Corporate finance in the context of challenges of modern innovative economy. *Finance of Ukraine*, 9, 7–20. [in Ukrainian]
[7] Macharia, D. N. (2023). Distributed Ledger Technology (DLT) Applications in Payment, Clearing and Settlement Systems. (PhD thesis). University of Huddersfield, Huddersfield.
[8] McKinsey & Company. (2023). Global Payments Report 2023. Available at: https://www.mckinsey.com
[9] PayPal Holdings Inc. (2023). Annual Report 2023. Available at: https://investor.paypal-corp.com
[10] Revolut Business. (2024). Annual Report 2024. Available at: https://www.revolut.com
[11] Stripe Inc. (2024). Annual Report 2024. Available at: https://stripe.com/reports
[12] SWIFT. (2024). SWIFT gpi Tracker & Progress Report 2024. Available at: https://www.swift.com
[13] Wandhöfer, R. (2019). Technology Innovation in Financial Markets: Implications for Money, Payments and Settlement Finality. (PhD thesis). City, University of London, London.
[14] Wise. (2023). Transparency Report 2023. Available at: https://wise.com/transparency
[15] Zymovet, V. V., & Tereshchenko, O. O. (2015). Corporate finance as dominant of financial science. *Finansy Ukrainy*, 9, 78–95.

Received on: 05th of November, 2025
Accepted on: 12th of December, 2025
Published on: 26th of December, 2025