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DIGITAL PAYMENTS, E-COMMERCE AND ECONOMIC GROWTH IN EMERGING ECONOMIES: EVIDENCE AND IMPLICATIONS FOR AZERBAIJAN

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Abstract. *This overview paper examines the channels through which digital payments and e-commerce may influence economic growth in emerging economies and evaluates the implications of those channels for Azerbaijan. The analysis synthesizes research on digital economics, information and communication technologies, payment formalization, technology adoption, platform markets and digital transformation, together with Azerbaijan-specific institutional evidence. Five recurring mechanisms emerge from the literature: reductions in search and transaction costs; formalization and access to finance; expansion of market reach for firms; consumer adoption conditioned by trust and facilitating infrastructure; and the distribution of value between domestic firms and digital platforms. The evidence indicates that digital activity is generally associated with stronger economic performance, but the relationship is neither automatic nor uniform across countries or indicators. For Azerbaijan, payment modernization creates an enabling infrastructure, while the growth effect depends on complementary capabilities in logistics, skills, competition, consumer protection and domestic value capture. The paper concludes that transaction growth should be interpreted as an intermediate indicator of digital transformation rather than as a direct measure of productivity or causal economic impact.*

Keywords: *digital payments; e-commerce; economic growth; digital transformation; emerging economies; Azerbaijan.*

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Introduction

Digitalization changes the economic organization of exchange by reducing some information and coordination costs, widening access to markets and creating new forms of intermediation. E-commerce is one of the most visible manifestations of this change, yet the expansion of online transactions should not be equated mechanically with economy-wide digital transformation. A digitally ordered transaction, a card payment, internet access, a platform sale and a productivity-enhancing digital capability represent related but distinct economic constructs. This distinction matters particularly in emerging economies, where rapid growth in connectivity and payments can coexist with institutional bottlenecks, uneven firm capabilities and dependence on imported platforms or goods (Bukht and Heeks, 2017; OECD, 2019).

The economic relevance of e-commerce lies in several potential mechanisms. Digital ordering can lower search costs, improve price comparison and reduce the cost of reaching geographically dispersed consumers. Electronic payments can reduce settlement frictions, create auditable transaction records, support formalization and strengthen access to financial services. Digital platforms can allow small and medium-sized enterprises to reach larger markets and benefit from network effects. At the same time, these mechanisms generate new dependencies on logistics,

cybersecurity, platform governance, data access and consumer trust. A rise in transaction volume may therefore indicate productive transformation, a shift from cash to cards, higher prices, imported consumption, or some combination of these effects (Goldfarb and Tucker, 2019; Kenney and Zysman, 2016).

Azerbaijan provides a useful context for examining these distinctions. The country combines a resource-dependent macroeconomic structure with an active policy agenda for economic diversification and digital modernization. Official sources document the expansion of card infrastructure, digital banking and payment systems, while the Azerbaijan 2030 national priorities emphasize innovation, private-sector development and a broader non-oil economic base (President of the Republic of Azerbaijan, 2021). Recent Azerbaijan-focused research likewise identifies both opportunities and institutional constraints in the development of the digital economy (Huseynov et al., 2025). However, the macroeconomic impact of digital commerce cannot be inferred from transaction growth alone because gross domestic product (GDP) is also influenced by hydrocarbon production, external prices, fiscal expenditure, investment and post-pandemic adjustment. The analytical problem is therefore not simply whether e-commerce is growing, but under what conditions growth in digital transactions is likely to become domestic productivity, income and value added.

The aim of this paper is to synthesize the main economic mechanisms connecting digital payments and e-commerce to growth in emerging economies and to interpret their relevance for Azerbaijan. The paper addresses three questions. First, what channels are most consistently identified in the literature? Second, why do empirical results differ across countries and indicators? Third, which complementary conditions are most important if digital transaction growth is to support economic diversification in Azerbaijan? The contribution is an integrated interpretation that connects macroeconomic evidence with adoption, trust, platform governance and measurement issues rather than treating digitalization as a single homogeneous input.

Literature Review

Digitalization, productivity and economic growth

The literature on digitalization and growth generally reports positive associations, but the magnitude and interpretation vary substantially with the technology measured, the sample and the empirical design. Niebel (2018), examining information and communication technology (ICT) capital across developing, emerging and developed economies, finds a positive relationship with economic growth but no clear evidence that developing countries receive systematically larger marginal benefits. This finding challenges a simple leapfrogging argument: late adoption may create opportunities, but returns remain dependent on complementary capital, management capability and institutions. Myovella et al. (2020) similarly show that the relationship between digitalization and growth differs across groups of countries, reinforcing the importance of development conditions and the composition of digital indicators. Regional evidence from the Western Balkans also reports a positive association between e-commerce and economic growth while underscoring the importance of country context (Toska and Fetai, 2023).

Bahrini and Qaffas (2019) further demonstrate that different ICT proxies capture different stages of digital development. Mobile access, fixed connectivity and internet usage are not interchangeable measures of productive digital capability. This distinction is central to the analysis of e-commerce. Internet penetration measures an enabling infrastructure; digital payments measure the use of a transaction technology; e-commerce transactions measure observed market activity; and productivity or GDP measures an outcome. Treating these variables as substitutes can generate misleading interpretations, because a country may have high connectivity but weak commercial adoption, or rapidly increasing electronic payments without a proportional increase in domestic production.

Endogenous-growth reasoning provides one explanation for why complementary capabilities matter. Digital software, data routines and platform architectures can be replicated at relatively low marginal cost and can support learning, innovation and organizational improvement across many transactions. The growth contribution becomes stronger when firms develop reusable

domestic capabilities in payment integration, inventory management, analytics, cybersecurity and digital marketing rather than merely shifting existing purchases onto an electronic channel (Romer, 1990; Verhoef et al., 2021; Vial, 2019).

Digital payments, formalization and access to finance

The macroeconomic role of digital payments is nevertheless broader than online retail. Electronic records can formalize previously informal transactions, improve tax visibility and create information that may support credit assessment. Aguilar et al. (2024), using data for 101 economies, associate greater use of digital payments with future GDP-per-capita growth, productivity, financial inclusion and lower informal employment. Global Findex evidence also documents the expanding role of digital payments in financial inclusion and resilience, particularly during and after the COVID-19 disruption (Demirgüç-Kunt et al., 2022). Their findings are particularly relevant to emerging economies because they indicate that payment use may affect economic organization through formalization and finance as well as through direct transaction efficiency.

The same evidence also warns against treating payment technology as an independent productivity shock. Once broader measures of digitalization and government effectiveness are controlled for, the independent productivity effect of digital payments becomes less clear. A payment can replace cash without changing the quantity of goods or services produced. In the short run, measured turnover may rise because activity becomes more visible rather than because real output increases. The policy significance of digital payments therefore lies partly in their role as infrastructure: they can enable other productive activities, but the presence of electronic settlement alone does not guarantee growth.

E-commerce, firm expansion and platform markets

E-commerce can relax geographic constraints on firms by allowing sellers to reach consumers beyond their immediate location, test demand before investing in physical expansion and use digital marketing to reduce customer-acquisition costs. These advantages are particularly important for small firms operating in markets fragmented by distance or regional differences. Payment and logistics integration can reduce fixed transaction costs and make a larger effective market available to local enterprises. The potential growth channel is therefore not limited to retail sales; it includes firm entry, scale, specialization and the creation of transferable digital capabilities.

Platform intermediation, however, introduces a countervailing mechanism. Network effects can improve matching between buyers and sellers, but they can also concentrate data, bargaining power and rents in a small number of intermediaries. Kenney and Zysman (2016) emphasize that platforms establish the architecture and rules within which market participants interact. Where leading platforms, advertising infrastructure or data services are located abroad, domestic sales may increase while part of the high-value digital rent accrues outside the domestic economy. The effect on national income therefore depends on local merchant margins, logistics, employment, software services and the capacity of domestic firms to retain value.

Consumer adoption, trust and facilitating conditions

Infrastructure becomes economically relevant only when households and firms actually use it. Technology Acceptance Model research identifies perceived usefulness and ease of use as core determinants of adoption (Davis, 1989). The Unified Theory of Acceptance and Use of Technology (UTAUT) adds performance expectancy, effort expectancy, social influence and facilitating conditions (Venkatesh et al., 2003). Trust-based extensions are especially relevant for e-commerce because online transactions involve uncertainty about seller identity, payment security, delivery, privacy and dispute resolution. Pavlou (2003) and Gefen et al. (2003) show that trust and perceived risk complement usability in explaining willingness to transact online.

These micro-level mechanisms help explain why similar levels of infrastructure can generate different transaction outcomes. Consumers may have internet access and payment cards but avoid online purchasing when delivery is unreliable, refunds are difficult, security is unclear or seller verification is weak. Merchant adoption likewise depends on integration costs, skills and logistics. Adoption is therefore a mediated process: connectivity and payments create enabling conditions; usefulness, trust and facilitating conditions influence active use; active use generates transaction

intensity; and only then can market activity contribute to output through productivity, demand or formalization.

Measurement and the interpretation of digital growth

The literature also reveals a measurement problem. OECD (2019) defines e-commerce by the method through which an order is placed, not by the payment method or the delivery channel. A card payment is therefore not necessarily an e-commerce transaction, while an online order paid in cash may still qualify as e-commerce. Composite indicators of the digital economy add further ambiguity because they combine connectivity, skills, public digital services, firm adoption and innovation using explicit or implicit weighting schemes. These measures can be useful for broad comparisons but may obscure the mechanism being tested.

For growth analysis, nominal transaction value is particularly difficult to interpret. It may increase because of more buyers, larger orders, higher prices, a shift from cash to electronic payment or increased purchases of imported goods and services. Transaction counts capture frequency or diffusion but not economic size. Internet penetration measures access but not productive use. Consequently, positive coefficients in different studies are not necessarily estimates of the same economic effect. Comparisons should distinguish the construct, frequency, sample and identification strategy before transferring conclusions from one country to another.

Methods

This paper uses a structured narrative review based on the theoretical, empirical and institutional source base assembled for the underlying doctoral research on e-commerce and economic growth in Azerbaijan. The review prioritizes sources that directly address at least one of five themes: digitalization and economic growth; digital payments and formalization; e-commerce and firm-level market access; technology adoption and trust; or platform governance and domestic value capture. Peer-reviewed research is combined with international institutional sources where those sources define measurement concepts or document digital-development mechanisms.

The core evidence includes cross-country and developing-economy studies of ICT and growth (Bahrini and Qaffas, 2019; Myovella et al., 2020; Niebel, 2018), payment-oriented evidence (Aguilar et al., 2024), research on digital economics and platforms (Goldfarb and Tucker, 2019; Kenney and Zysman, 2016), technology-adoption models (Davis, 1989; Gefen et al., 2003; Pavlou, 2003; Venkatesh et al., 2003), digital-transformation research (Verhoef et al., 2021; Vial, 2019), and institutional frameworks from the Organisation for Economic Co-operation and Development (OECD, 2019), the World Bank (2016, 2022), the United Nations Conference on Trade and Development (UNCTAD, 2021), and Azerbaijani public institutions. Azerbaijan-specific evidence is used to interpret transferability rather than to assume that coefficients estimated elsewhere apply directly to the national economy.

The synthesis is organized by economic mechanism rather than by publication chronology. For each mechanism, the review distinguishes the immediate effect on transaction activity from the conditions required for a broader productivity or growth effect. Particular attention is given to disagreements caused by measurement differences. The analysis does not calculate a meta-analytic pooled effect because the underlying studies use heterogeneous variables, countries, frequencies and estimators. The objective is explanatory integration: to identify which channels recur across the literature, where evidence is qualified, and what those qualifications imply for a resource-dependent emerging economy.

Results

The literature synthesis produces five main results. First, digital payments and e-commerce affect economic performance through multiple channels rather than a single direct path. Second, the strongest recurring mechanisms are transaction-cost reduction, formalization, market expansion, adoption and capability formation. Third, institutional and organizational complements consistently determine whether access becomes productive use. Fourth, the distribution of value between domestic firms and external platforms affects the domestic growth outcome. Fifth, measurement

choices substantially influence empirical conclusions and limit the transferability of estimated coefficients across countries.

Table 1. Main mechanisms linking digital payments and e-commerce to economic growth

Mechanism	Immediate economic effect	Condition for broader growth	Main risk of over-interpretation
Transaction-cost reduction	Lower search, settlement and coordination costs	Firm capability, logistics and competitive markets	Digital ordering may shift costs rather than remove them
Formalization and finance	Traceable transactions, lower cash dependence, information for credit	Financial institutions, data use and effective governance	Recorded turnover can rise without new real output
Market expansion	Wider customer reach and lower customer-acquisition costs	SME digital capability and fulfilment infrastructure	Imports or foreign platforms may capture a large share of value
Adoption and trust	Higher active use of digital channels	Security, redress, seller verification, usability	Access does not equal usage or completed transactions
Platform and data effects	Network scale, matching and information advantages	Contestability, interoperability and domestic innovation	Market power and rents can become concentrated

Source: author synthesis based on Aguilar et al. (2024), Goldfarb and Tucker (2019), Kenney and Zysman (2016), OECD (2019), Pavlou (2003), World Bank (2016) and related literature reviewed in the study.

Result 1: Growth effects are conditional rather than automatic

Across the reviewed studies, digitalization is generally associated with stronger economic performance, but the relationship is heterogeneous. Cross-country research does not support the view that developing economies automatically receive larger returns simply because they start from a lower technological base. Instead, the benefits depend on the capacity to combine infrastructure with human capital, firm organization, institutions and competition. This finding is important for policy because it shifts attention from the quantity of connectivity or transactions toward the quality of productive use.

Result 2: Payments are infrastructure and a formalization mechanism

Payment modernization appears most consistently as an enabling mechanism. Faster settlement, better traceability and the creation of transaction histories can support formalization, inclusion and access to finance. Yet a payment instrument is not itself a productivity technology. The same purchase can move from cash to card without changing real output, while improved recording can increase measured formal activity. The growth contribution is therefore strongest when payment records become inputs into credit, inventory management, tax administration, risk management and broader digital business processes.

Result 3: Market access can expand while domestic value capture remains limited

The market-access channel is especially relevant for small economies. Digital channels can aggregate geographically dispersed demand and allow firms to operate beyond a narrow local customer base. However, the national growth effect is sensitive to the origin of the goods sold and the ownership of the platform, data and supporting digital services. If transaction growth primarily reflects imported consumer goods purchased through foreign platforms, welfare and convenience may improve even though domestic productivity and value added grow less. By contrast, when local firms accumulate software, analytics, logistics and export capabilities, e-commerce can support broader productivity effects.

Result 4: Trust and facilitating conditions mediate adoption

The adoption literature explains why payment infrastructure can expand faster than active e-commerce. Usefulness, ease of use, trust, privacy, delivery reliability and dispute resolution influence whether potential users complete transactions. These conditions can be particularly important in emerging markets, where the quality of consumer protection, addressing systems, last-mile logistics and merchant verification may vary. Consequently, policies focused only on connectivity or the number of payment instruments may overestimate readiness for sustained digital commerce.

Result 5: Measurement differences explain part of the disagreement in empirical evidence

A final result is methodological. Studies of the digital economy often place different concepts under a common label. ICT capital, internet access, digital-payment use, e-commerce transaction value and platform activity represent different positions in the chain from infrastructure to market activity and output. The evidence is therefore more consistent when interpreted at the level of mechanisms than when compared as if all digital coefficients measured one common effect. For country-specific research, transparent definitions and matched data frequencies are essential for avoiding pseudo-precision and causal overstatement.

Discussion**Implications for Azerbaijan**

The reviewed mechanisms are directly relevant to Azerbaijan because the national development strategy combines digital modernization with an objective of broadening the non-oil economy. The payment system has developed through card infrastructure, interbank settlement, instant payments and government-payment services documented in the Central Bank of the Republic of Azerbaijan's Digital Payments Report 2023 and its payment-system indicators (Central Bank of the Republic of Azerbaijan, 2024, n.d.). These developments reduce practical barriers to remote settlement and create a stronger foundation for digital business. Their economic significance, however, should be assessed by what they enable firms and consumers to do rather than by transaction growth alone.

The first priority is the conversion of payment infrastructure into reusable domestic business capabilities. Merchant software integration, inventory systems, analytics, cybersecurity, digital marketing and export knowledge can raise efficiency across sectors. These capabilities are closer to the endogenous-growth mechanism than a simple increase in the number of card transactions. They can also contribute to diversification because they are applicable to non-oil manufacturing, services, tourism, logistics and professional activities.

The second priority is the quality of the domestic e-commerce ecosystem. Trust is an economic input because uncertainty about delivery, refunds, privacy and seller identity raises the expected cost of online exchange. Consumer protection, predictable dispute resolution, merchant verification and reliable logistics can therefore influence both adoption and transaction intensity. Facilitating conditions are also relevant to firms: access to affordable payment acceptance, delivery networks, digital skills and working-capital finance determines whether smaller enterprises can participate effectively.

Table 2. Policy interpretation of e-commerce growth in Azerbaijan

Observed development	Possible positive interpretation	Alternative interpretation	Additional evidence needed
Higher card e-commerce value	Larger digital market activity	Inflation, larger order sizes, import growth	Real transaction values, product composition
Higher transaction count	Broader adoption and repeated use	More small payments without larger domestic value	Active buyers, merchant participation
Greater platform use	Lower search costs and broader market access	Higher dependence on foreign intermediaries	Domestic seller share, platform fees, data ownership
More digital payments	Formalization and lower settlement friction	Substitution away from cash only	Credit use, firm productivity, tax/formalization indicators
Higher internet access	Larger potential user base	Access without commercial adoption	Online purchasing, digital skills, trust indicators

Source: author synthesis based on the conceptual and measurement framework of the underlying research.

The third priority is domestic value capture. Azerbaijan can experience rapid growth in online purchases even when a significant share of platform rents, advertising services, cloud infrastructure or imported product value is generated abroad. Policy evaluation should therefore distinguish consumer welfare from domestic productivity. Both are legitimate benefits, but they answer different economic questions. Indicators of local merchant participation, digital service

exports, SME online sales, logistics value added and the domestic ownership of complementary services would provide a stronger picture of whether e-commerce is contributing to diversification.

The fourth priority is measurement discipline. Official card-based e-commerce data are valuable because they are traceable and available at relatively high frequency, but they do not represent all digitally ordered trade. Cash-on-delivery orders, some bank transfers, cross-border purchases and platform-specific revenues may fall outside the observed proxy. Nominal transaction value also combines price and quantity changes. For this reason, macroeconomic analysis should avoid treating transaction growth as a direct measure of real digital output. Complementary indicators and clearly defined proxies are preferable to a single broad digital-economy index when the research question concerns a specific transmission mechanism.

Limitations and research agenda

This overview has two main limitations. First, the reviewed empirical studies are heterogeneous and therefore do not support a common pooled effect size. Second, the Azerbaijan implications are mechanism-based rather than estimates of causal treatment effects. These limitations are deliberate: the objective is to distinguish channels and boundary conditions rather than to create a false impression of comparability between studies that use different definitions and methods.

Future research for Azerbaijan should combine longer high-frequency payment series with quarter-specific national-accounts data and more detailed measures of merchant participation, cross-border purchases, logistics and digital firm capability. Firm-level or household-level evidence would be especially valuable for testing the adoption and inclusion mechanisms that cannot be observed in aggregate card transactions. Where a sufficiently long series becomes available, more dynamic specifications can examine lag structures and structural breaks; until then, parsimonious and transparent designs remain preferable to heavily parametric models.

Conclusion

Digital payments and e-commerce can contribute to economic growth in emerging economies, but the reviewed evidence does not support a mechanical relationship between transaction growth and productivity. The most plausible transmission channels operate through lower transaction costs, formalization, access to finance, market expansion, adoption and the accumulation of digital business capabilities. Each channel depends on complementary conditions, including trust, logistics, skills, competition, governance and the capacity of domestic firms to retain value.

For Azerbaijan, payment modernization provides a meaningful enabling infrastructure for digital commerce and economic diversification. The policy challenge is to convert this infrastructure into productive domestic use. Growth in card transactions is informative, but it should be interpreted as an intermediate indicator rather than as a complete measure of e-commerce or digital transformation. A stronger assessment framework would combine transaction measures with indicators of local firm participation, productivity, logistics, consumer trust and domestic value capture. This approach better reflects the conditional nature of digital growth and provides a more defensible basis for economic policy than the assumption that more digital transactions automatically produce higher GDP.

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References

- Aguilar, A., Frost, J., Guerra, R., Kamin, S. and Tombini, A. (2024). Digital payments, informality and economic growth. BIS Working Papers No. 1196. *Bank for International Settlements*. Available at: <https://www.bis.org/publ/work1196.htm>
- Bahrini, R. and Qaffas, A.A. (2019). Impact of information and communication technology on economic growth: Evidence from developing countries. *Economies*, 7(1), 21. <https://doi.org/10.3390/economies7010021>
- Bukht, R. and Heeks, R. (2017). Defining, conceptualising and measuring the digital economy. *Development Informatics Working Paper No. 68*. University of Manchester. <https://doi.org/10.2139/ssrn.3431732>

- Central Bank of the Republic of Azerbaijan (2024). Digital Payments Report 2023. Baku: *Central Bank of the Republic of Azerbaijan*.
- Central Bank of the Republic of Azerbaijan (n.d.). *Payment system indicators*. Available at: <https://www.cbar.az/page-45/payment-system-indicators?language=en> (Accessed: 22 July 2026).
- Davis, F.D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), pp. 319-340. <https://doi.org/10.2307/249008>
- Demirgüç-Kunt, A., Klapper, L., Singer, D. and Ansar, S. (2022). The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19. Washington, DC: *World Bank*. <https://doi.org/10.1596/978-1-4648-1897-4>
- Gefen, D., Karahanna, E. and Straub, D.W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27(1), pp. 51-90. <https://doi.org/10.2307/30036519>
- Goldfarb, A. and Tucker, C. (2019). Digital economics. *Journal of Economic Literature*, 57(1), pp. 3-43. <https://doi.org/10.1257/jel.20171452>
- Huseynov, A., Balsalobre-Lorente, D., Hamidova, L. and Samedova, E. (2025). Challenges and opportunities of digital economy development: Case of Azerbaijan. *Problems and Perspectives in Management*, 23(2), pp. 265-276. [https://doi.org/10.21511/ppm.23\(2\).2025.18](https://doi.org/10.21511/ppm.23(2).2025.18)
- Kenney, M. and Zysman, J. (2016). The rise of the platform economy. *Issues in Science and Technology*, 32(3), pp. 61-69. Available at: <https://issues.org/the-rise-of-the-platform-economy/>
- Myovella, G., Karacuka, M. and Haucap, J. (2020). Digitalization and economic growth: A comparative analysis of Sub-Saharan Africa and OECD economies. *Telecommunications Policy*, 44(2), 101856. <https://doi.org/10.1016/j.telpol.2019.101856>
- Niebel, T. (2018). ICT and economic growth - Comparing developing, emerging and developed countries. *World Development*, 104, pp. 197-211. <https://doi.org/10.1016/j.worlddev.2017.11.024>
- OECD (2019). Measuring the Digital Transformation: A Roadmap for the Future. *OECD Publishing, Paris*. <https://doi.org/10.1787/9789264311992-en>
- Pavlou, P.A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, 7(3), pp. 101-134. <https://doi.org/10.1080/10864415.2003.11044275>
- President of the Republic of Azerbaijan (2021). *Azerbaijan 2030: National priorities for socio-economic development*. Available at: <https://president.az/en/articles/view/50474/print>
- Romer, P.M. (1990). Endogenous technological change. *Journal of Political Economy*, 98(5, Part 2), S71-S102. <https://doi.org/10.1086/261725>
- Toska, A. and Fetai, B. (2023). The impact of e-commerce on the economic growth of the Western Balkan countries: A panel data analysis. *International Journal of Sustainable Development and Planning*, 18(3), pp. 935-941. <https://doi.org/10.18280/ijstdp.180329>
- UNCTAD (2021). Digital Economy Report 2021: Cross-border data flows and development - For whom the data flow. *United Nations*. Available at: <https://unctad.org/publication/digital-economy-report-2021>
- Venkatesh, V., Morris, M.G., Davis, G.B. and Davis, F.D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), pp. 425-478. <https://doi.org/10.2307/30036540>
- Verhoef, P.C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J.Q., Fabian, N. and Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 122, pp. 889-901. <https://doi.org/10.1016/j.jbusres.2019.09.022>
- Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *Journal of Strategic Information Systems*, 28(2), pp. 118-144. <https://doi.org/10.1016/j.jsis.2019.01.003>
- World Bank (2016). World Development Report 2016: Digital Dividends. *World Bank*. <https://doi.org/10.1596/978-1-4648-0671-1>
- World Bank (2022). *Azerbaijan Country Economic Memorandum*. Available at: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099100009222236784>

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