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Digital Payments and E-Commerce for Small Business Resilience during Economic Transformation

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Research focus

How do digital payment and sales practices relate to the operating conditions of Ukrainian small businesses?

Purpose	Describe digital practices and compare them with financing conditions and reporting cessation.
Approach	Secondary analysis of published enterprise aggregates, supported by a targeted review of eight studies.

The study provides descriptive findings. Linked enterprise microdata are unavailable.

Data sources and analytical coverage

Source	Coverage	Role in the study
Mastercard SME Index	445 SME owners and managers 20 regions, June–July 2024	Digital channels and payment practices
World Bank FIN records	2021–2023 Different period-specific populations	Financial access and reporting cessation
National Bank of Ukraine	Card transactions, 2023–2024 Ukraine and abroad	Payment environment and average values

The sources cover different populations and periods. They do not form a linked enterprise panel.

Sources: Mastercard (2024), World Bank (2024), NBU (2025)

Ukraine’s cashless payment environment

94.6%

Cashless share of the number of card transactions

64.5%

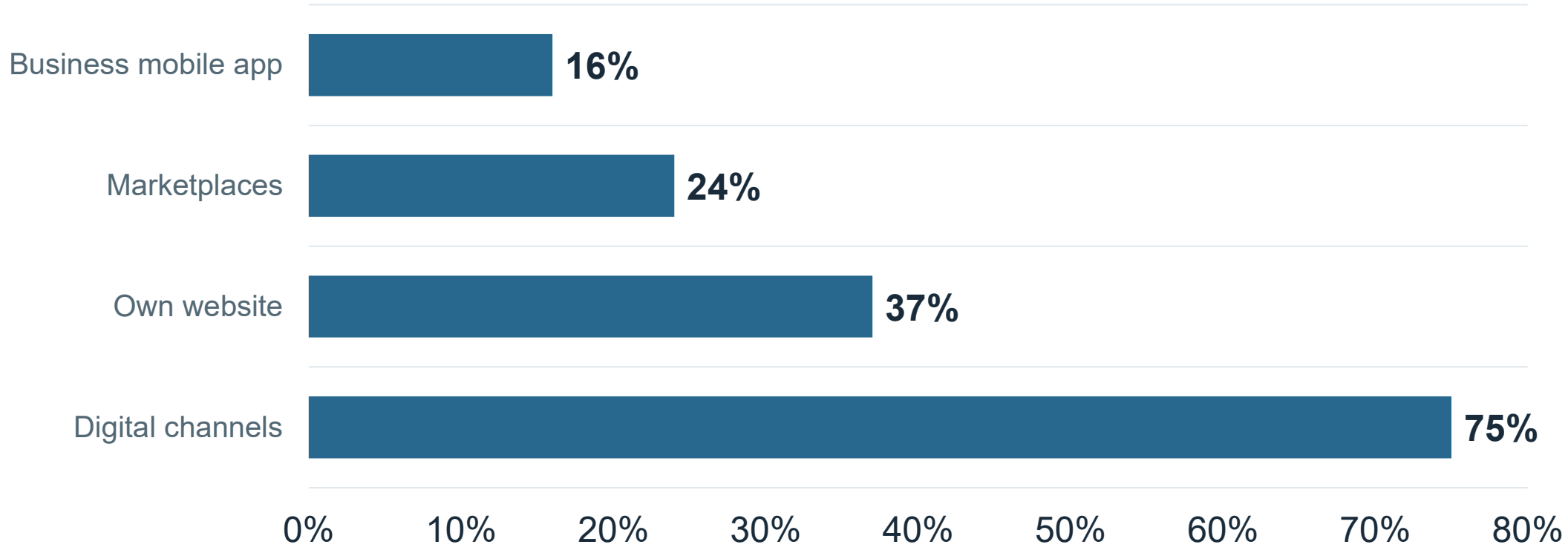
Cashless share of the value of card transactions

Average transaction value	2023	2024	Nominal change
Online payment	UAH 490	UAH 561	+14.49%
Retail network payment	UAH 325	UAH 330	+1.54%

Nominal averages do not establish growth in real demand or small business profitability.

Source: National Bank of Ukraine (2025), transactions in 2024

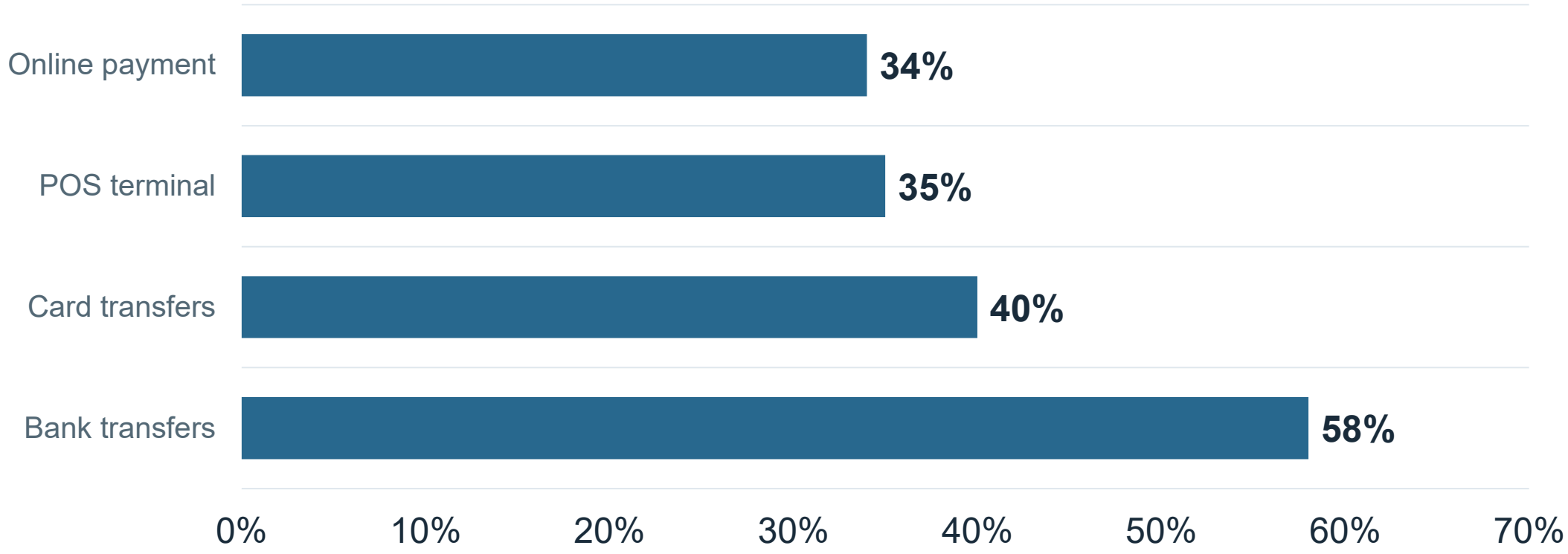
Digital sales and communication practices



Practices overlap. A digital communication channel does not imply a completed online order.

Source: Mastercard SME Index 2024, n = 445

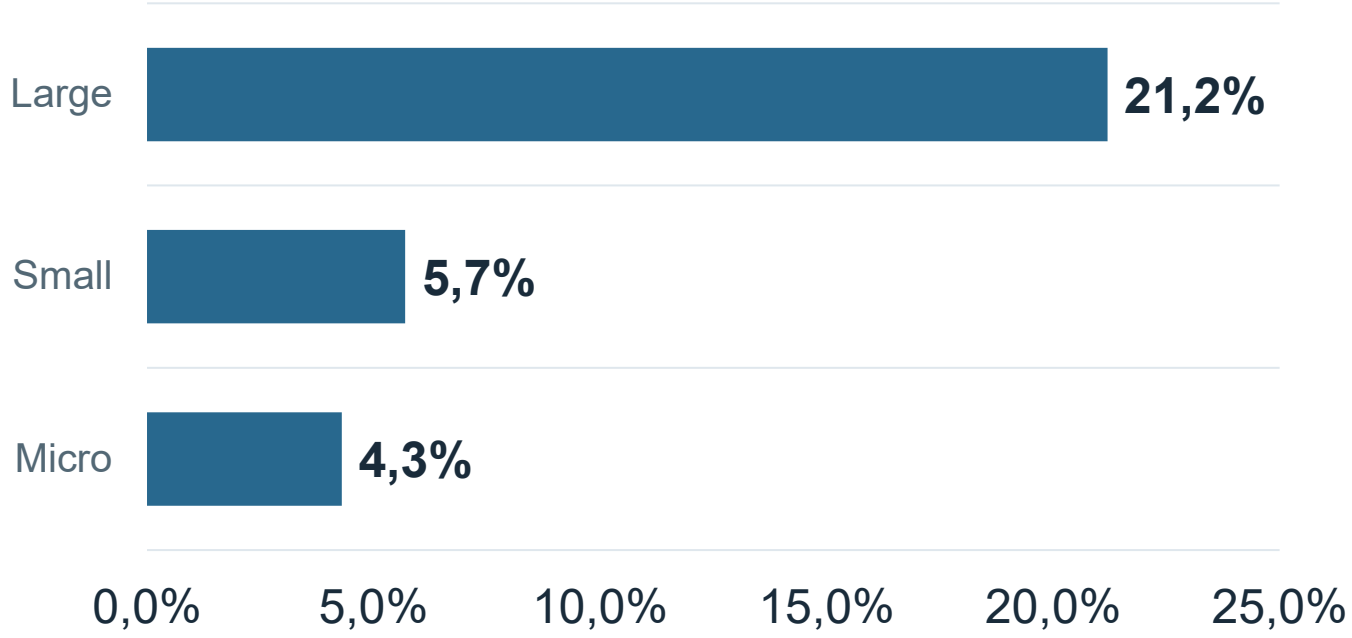
Cashless payment methods among surveyed SMEs



These percentages describe respondents' practices. They do not measure transaction volume or revenue shares.

Source: Mastercard SME Index 2024, n = 445

Financial access differs by enterprise group



FIN group	Enterprises
Micro	69,387
Small	130,778
Large	10,564

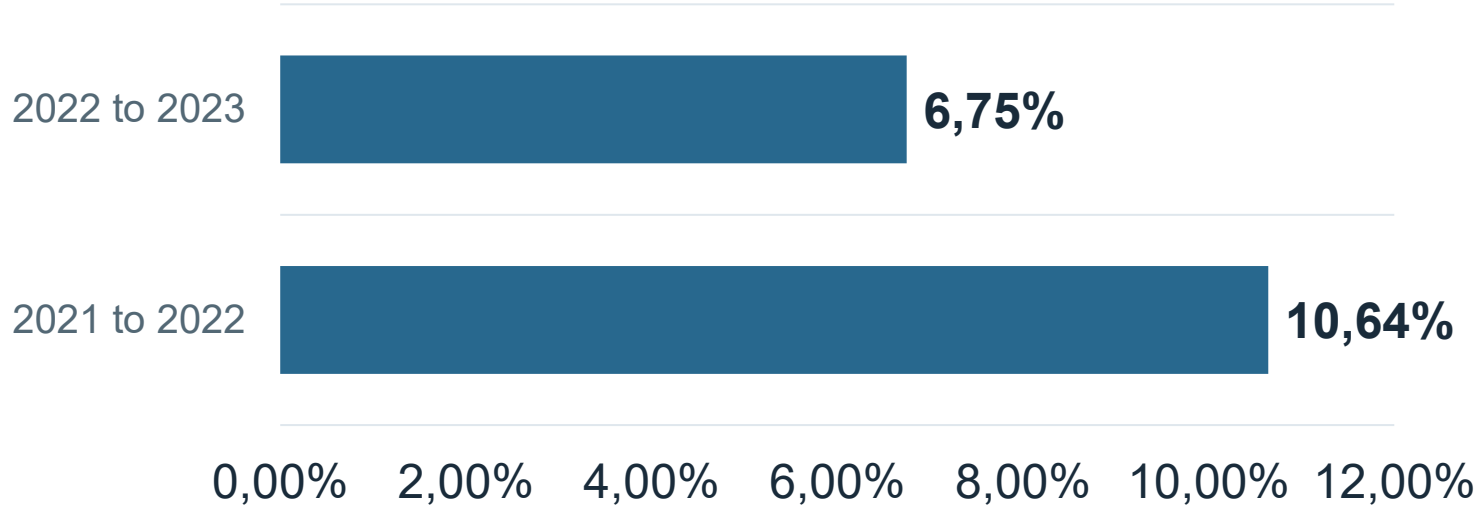
15.5 percentage points

Difference between large and small firms
21.2% − 5.7%

The source's "Access financing" indicator does not represent the approval rate of credit applications.

Source: World Bank (2024), Table A.1, p. 83, financial records for 2021

Reporting cessation decreased across two transitions



−3.90 pp

Arithmetic difference between period-specific rates

Transition	Enterprises, N	Cases, E	Rate
2021 to 2022	199,013	21,183	10.64%
2022 to 2023	164,757	11,117	6.75%

Denominators differ. Reporting cessation does not measure legal closure or one cohort’s survival.

Source: World Bank (2024), Table 2.1, p. 26, calculations from reported counts

Operational indicators for assessing continuity

Process stage	Indicator to observe	Meaning
Payment	Failed or repeated payments	Ability to complete settlement
Access to funds	Days until funds become available	Timing of usable revenue
Order fulfilment	Orders completed within the agreed time	Continuity of customer service
Recovery	Downtime and time to restore processing	Response to an actual disruption

These indicators guide further enterprise-level research. This study does not estimate their effects.

Limits of the empirical evidence

Separate populations	Survey practices cannot be linked to the same firms' financial outcomes.
Selection and coverage	Online surveys and financial records cover different parts of business activity.
No causal identification	The available aggregates cannot establish a technology effect on enterprise survival.

Next step: linked records on adoption dates, revenue, settlement times and actual disruptions.

Conclusions

Digital practices are common among the surveyed SMEs

Their prevalence describes adoption. Operational outcomes require separate measurement.

Initial financing conditions differ substantially

The published access indicator for large firms exceeds that for small firms by 15.5 percentage points.

Reporting cessation fell in the later transition

The 3.90 percentage point decline cannot be attributed to digital payment use from these data.

Selected references and contact details

Mastercard (2024). Mastercard SME Index 2024. Survey findings, 24 October.

World Bank (2024). Ukraine: Firms through the War 2.0. Tables 2.1 and A.1.

National Bank of Ukraine (2025). Cashless payments dominated card transactions in 2024.

Onjewu, Hussain & Haddoud (2022). E-commerce, resilience and exports. Information Systems Frontiers, 24, 1209–1221. DOI: 10.1007/s10796-022-10342-w

Roffia & Dabić (2024). Management control and integrated information systems. Review of Managerial Science, 18, 1353–1375. DOI: 10.1007/s11846-023-00657-6

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