DIGITAL READINESS OF MOLDOVAN SMES FOR CROSS-BORDER E-COMMERCE: A PATHWAY TO EU MARKET INTEGRATION

DOI: https://doi.org/10.53486/dri2026.14
UDC: [004:334.72.012.63/.64]+[339.5:004.738.5](478)

Daniela BUGA
Academy of Economic Studies of Moldova
Chișinău, Republic of Moldova
Bludarudaniela@gmail.com
ORCID ID: 0009-0004-8690-316X

Abstract: *The development of cross-border e-commerce represents a strategic opportunity for small and medium-sized enterprises (SMEs) in the Republic of Moldova to access the European Union market with lower entry costs and greater operational flexibility than traditional internationalization channels. However, the effective use of e-commerce as an export mechanism depends not only on internet access or the existence of online shops, but on the broader digital readiness of firms — understood as the capacity to integrate and operationalize digital tools within export-oriented business processes. This article examines the digital readiness of Moldovan SMEs for cross-border e-commerce and evaluates its relevance for EU market integration. The analysis draws on institutional reports, policy documents, and academic literature on e-commerce development, digital transformation, SME capabilities, and EU digital market requirements. The findings suggest that Moldova has made visible progress in expanding e-commerce infrastructure, digital policy frameworks, and online retail activity. Nevertheless, major constraints persist: limited use of online payments, weak inventory management systems, insufficient digital business skills, fragmented logistics, and incomplete regulatory adaptation. The article argues that these constraints are particularly acute for cross-border export contexts, where EU consumer protection standards and platform requirements exceed domestic thresholds. Cross-border e-commerce can become a realistic pathway to EU market integration only if Moldovan SMEs develop firm-level capabilities in digital marketing, online payments, data management, logistics, compliance, and customer protection. Public policy should therefore move beyond general digitalization objectives and focus on practical, export-oriented e-commerce readiness for SMEs.*

Keywords: *digital readiness, SMEs, Moldova, cross-border e-commerce, EU market integration, digital transformation, international competitiveness.*

JEL: F23, L81; O33; M16; F15; L81

Introduction

The integration of the Republic of Moldova into the European economic space increasingly depends on the country's ability to modernize its productive structure, strengthen SME competitiveness, and connect domestic firms to external markets. In this context, cross-border e-commerce has emerged as more than a technological channel for selling goods and services. It represents a potential mechanism for reducing market-entry barriers, increasing export diversification, and supporting the gradual alignment of Moldovan businesses with European market standards. Yet the pathway from domestic digitalization to EU export performance is neither automatic nor linear, and the existing literature offers limited guidance on transition economies at an early stage of both e-commerce development and EU integration.

For SMEs, traditional export expansion typically requires significant financial, logistical, and institutional resources: identifying foreign distributors, negotiating contracts, adapting to complex regulatory frameworks, and managing cross-border delivery. Cross-border e-commerce alters part of this logic by allowing firms to reach foreign consumers directly through digital platforms, marketplaces, social media channels, and online payment systems. The academic literature increasingly treats cross-border e-commerce as a foreign market entry mode, not merely a supplement to offline export activity. Cassia and Magno (2022, pp. 267–268) demonstrate, drawing on a sample of Italian food and beverage exporters, that the performance of SMEs in cross-border e-commerce depends on firm-level capabilities in information technology, international marketing, and export operations management, with third-party platform use partially substituting for internal IT infrastructure. Critically, the three capability dimensions exert differentiated effects on strategic versus financial performance — a distinction relevant for Moldovan SMEs that may seek to build brand presence in EU markets before achieving financial returns (Cassia and Magno, 2022, p. 278).

For Moldova, the relevance of this issue is reinforced by the country's strategic orientation toward European integration. Moldova received EU candidate status in 2022 and formally opened accession negotiations in 2024. The Digital Transformation Strategy 2023–2030 explicitly links digital development with the European integration agenda, emphasizing electronic services, ICT sector development, institutional efficiency, cybersecurity, and the creation of a digital national brand (Ministry of Economic Development and Digitalization of the Republic of Moldova, 2023). These objectives create a favorable policy context, but they do not automatically ensure that SMEs are prepared to use e-commerce for EU market access. The gap between national-level policy ambitions and firm-level operational readiness constitutes the central analytical problem of this article.

The objective of this article is to assess the level of digital readiness of Moldovan SMEs for cross-border e-commerce and to identify the main structural, organizational, and regulatory barriers affecting their integration into EU digital markets. The article contributes to the literature by linking SME digital readiness with EU market integration in the specific context of a candidate country with an emerging e-commerce ecosystem. The central research question is: to what extent are Moldovan SMEs digitally prepared to use cross-border e-commerce as an instrument for entering and expanding within the EU market?

Methodology

A consistent challenge in researching Moldova's e-commerce sector is that firm-level data — disaggregated by enterprise size, sector, and cross-border trading status — is largely unavailable. The monitoring infrastructure for digital trade in Moldova does not yet generate the granular statistics that a conventional quantitative analysis would require. This study therefore proceeds through a qualitative assessment of secondary data, drawing on institutional reports, policy documents, and peer-reviewed academic literature. The approach is not a methodological compromise but a deliberate adaptation to the available evidence base — one that makes it possible to map the structure of the problem at sector level and to identify the policy mechanisms most likely to shift outcomes, even in the absence of firm-level survey data (Cozniuc, 2023, p. 165).

The sources used in this analysis were not assembled exhaustively. Three selection criteria guided the process: whether a source has direct institutional standing in the Moldovan or EU digital policy context; whether it covers the period from 2019 onwards, given that pre-pandemic data on digital adoption increasingly misrepresents current market conditions; and whether it speaks specifically to SME digitalization or cross-border e-commerce rather than to the broader digital economy in aggregate. The AmCham Moldova market reports (2024, 2025) satisfy all three criteria and remain the most detailed quantitative source on Moldova's domestic e-commerce market. For regional comparison and benchmarking against EU standards, the OECD SME Policy Index for Eastern Partner Countries (OECD et al., 2024) provides a standardized assessment across twelve policy dimensions, including — for the first time in its 2024 edition — a dedicated analysis of SME digitalization policy. Eurostat's annual survey on ICT usage and e-commerce in enterprises (2024) supplies the EU-level comparators: the Digital Intensity Index and the share of enterprises conducting e-sales, broken down by firm size. For the regulatory and technical dimensions specific to Moldova's EU integration context, the EU4Digital Facility's eCommerce harmonization recommendations (EU4Digital Facility, 2021) and the Economic Council's Digital Economy and E-commerce Roadmap (Economic Council of the Republic of Moldova, 2024) provide the primary reference documents.

The analysis is organized around four dimensions of digital readiness. The choice of this framework reflects a conceptual position developed in Section 1: that digital readiness is not a binary condition determined by access to technology, but an organizational capacity that must be assessed across multiple interdependent domains. A firm may have a functioning website and still be structurally unprepared for cross-border sales if it cannot process advance payments, fulfil orders reliably, or communicate its return policy in a foreign language. The four dimensions — technological, organizational, market access, and regulatory — are designed to capture this breadth. Table 1 sets out the indicators used to assess each dimension, their operational definitions, and their relevance to cross-border e-commerce performance.

Table 1. Digital Readiness Framework: Dimensions, Indicators and Relevance to Cross-Border E-Commerce

Dimension	Indicators	Operational definition	Relevance to CBEC
D1. Technological Readiness	– Online payment adoption (upfront) – WMS integration rate – Share of SMEs with functional e-commerce platform – Broadband penetration – Real-time inventory management	Capacity to conduct digital transactions reliably: process online payments, maintain accurate stock data, and operate a functional sales channel accessible to foreign consumers.	Upfront payment and real-time stock visibility are minimum requirements for EU marketplace participation; their absence generates order cancellations and reputational penalties.
D2. Organizational Readiness	– Share of SME staff with digital business skills – Participation in digital export training – Knowledge of EU consumer rights (14-day withdrawal) – Multilingual product content capacity – Use of digital marketing tools (Meta Ads, Google Shopping)	Availability of human capital capable of managing cross-border digital operations: platform onboarding, digital advertising, multilingual communication, and EU trade compliance.	Digital skills are the primary mediator between platform access and export performance; deficits compound as competitors accumulate platform ratings and customer relationship capital.
D3. Market Access Readiness	– International logistics cost as % of transaction value – Availability of consolidated cross-border shipping – Share of SMEs registered on EU marketplaces – Per capita cross-border online spending (€) – Average delivery time to EU markets (days)	Operational capacity to fulfil cross-border orders at competitive cost and speed: international shipping infrastructure, marketplace access, and price competitiveness relative to EU-based sellers.	For SMEs selling goods below €40, shipping costs may represent 40–60% of transaction value, rendering CBEC economically nonviable without logistics solutions or pre-positioned EU inventory.
D4. Regulatory Readiness	– Legislative alignment with EU e-commerce directives	Degree to which Moldovan SMEs can operate in compliance with EU consumer protection, data	Formal legislative harmonization and operational compliance are distinct achievements;

Dimension	Indicators	Operational definition	Relevance to CBEC
	– GDPR operational compliance – Electronic signature acceptance by legal entities – VAT OSS registration awareness and uptake – eKYC availability for business account opening	protection, and fiscal law — both at the legislative level and in firm-level operational implementation.	EU marketplace standards require SMEs to implement compliant checkout, return, and data processing procedures.

Source: *AmCham Moldova (2024, 2025); OECD, ETF, EBRD & European Union (2024); Eurostat, ICT usage and e-commerce in enterprises survey (isoc_ec_esels, isoc_sk_dskl_i21, 2024); EU4Digital Facility (2021); Economic Council of the Republic of Moldova (2023, 2024); Ministry of Economic Development and Digitalization of the Republic of Moldova (2023).*
Note: *CBEC = cross-border e-commerce. WMS = warehouse management system. OSS = One Stop Shop (EU VAT regime). Indicators are assessed qualitatively against available secondary data, given the absence of firm-level survey data disaggregated for Moldovan SMEs engaged in cross-border digital trade.*

Where the analysis draws comparisons beyond Moldova, it focuses on Georgia and Ukraine. The choice is not arbitrary. All three countries applied for EU membership in 2022, and all three had already been operating under Association Agreements and DCFTAs with the EU for several years before that — a shared institutional trajectory that makes cross-country comparison meaningful rather than merely convenient. They also appear together in the OECD SME Policy Index (2024), which means that digitalization policy scores can be compared across the same twelve dimensions and the same methodological framework. Georgia is particularly relevant as a comparator because its enterprise digitalization profile is somewhat more developed than Moldova's, making it useful for identifying what a near-term achievable benchmark might look like rather than an aspirational EU-level target. Ukraine's inclusion is analytically important despite the obvious disruption caused by the full-scale Russian invasion since February 2022: its pre-war trajectory offers a reference point, and the war-related acceleration of digital adoption — documented by the OECD (2024) — generates policy lessons about how crisis conditions can shift digital readiness rapidly when institutional support is present.

Two limitations deserve explicit acknowledgement. First, because the available data describes market dynamics in aggregate rather than firm behavior specifically, several of the indicators in Table 1 are assessed through proxy measures — order cancellation rates as a proxy for WMS adoption, for instance, or market-level e-commerce penetration as a proxy for SME cross-border participation. These are reasonable inferences but they carry inferential risk, and the analysis flags where they are in use. Second, the indicators in Table 1 represent what future empirical research should measure directly at the firm level; they are not all directly measurable from existing secondary sources. The framework therefore serves a dual purpose: it structures the current qualitative analysis, and it functions as an instrument design template for the primary survey research that this article calls for in its conclusions.

Conceptual Framework: Digital Readiness and Cross-Border E-commerce

Digital readiness refers to the capacity of firms to adopt, integrate, and use digital technologies in ways that improve business performance. In the context of cross-border e-commerce, digital readiness encompasses several interdependent elements: functional online sales channels, secure digital payments, inventory and warehouse management systems, digital marketing skills, export logistics, customer service infrastructure, data protection compliance, and knowledge of foreign consumer expectations and legal frameworks. This broader understanding is analytically important because the mere existence of an online shop does not imply readiness for cross-border sales (Moroi, 2024, p. 67). A company may have a website but lack online payment integration, real-time stock visibility, multilingual product descriptions, return policies compliant with EU consumer law, or reliable international delivery partners. Therefore, digital readiness must be assessed as a business capability set, not only as a technological condition.

The resource-based view (RBV) of the firm provides the theoretical foundation for this analysis. Under the RBV, competitive advantage depends on the firm's ability to develop and combine valuable, rare, and difficult-to-imitate resources and capabilities (Barney, 1991, pp. 105–106). In cross-border e-commerce, these capabilities include IT systems, international marketing knowledge, and export operations management. Cassia and Magno (2022, pp. 276–278) operationalize this framework empirically and find that IT, international marketing, and export operations capabilities have differential effects on strategic and financial e-commerce performance. Importantly, the use of third-party e-commerce platforms partially reduces the direct importance of internal IT capabilities for financial outcomes, suggesting a modular pathway for capability development (Cassia and Magno, 2022, p. 278). This finding is particularly relevant for Moldovan SMEs, many of which lack advanced internal digital infrastructure but may partially compensate through marketplace participation and outsourced logistics.

1. Digital Infrastructure		
Online sales channels	Secure payment systems	Inventory & logistics technology

↓

Moderating factor: third-party platforms— reduce dependence on internal IT capabilities

↓

2. Organizational Capabilities		
IT & digital marketing	Export operations management	Customer service & data compliance

↓

Moderating factor: outsourced logistics — compensates for lack of advanced internal infrastructure

↓

3. Cross-Border E-Commerce Readiness		
Multilingual content & pricing	EU consumer law compliance	International delivery partners

↓

4. EU Market Integration Capacity		
Marketplace participation	Experiential market learning	Progressive foreign commitment

Figure 1. Digital Readiness and EU Market Integration of Moldovan SMEs through Cross-Border E-Commerce

Source: compiled by the author based on the academic literature (Moroi, 2024; Cozniuc, 2023)

A complementary perspective is offered by the internationalization process literature, particularly the Uppsala model's later formulations, which emphasize network relationships and experiential learning as drivers of progressive foreign market commitment (Johanson and Vahlne, 2009, pp. 1424–1426). Cross-border e-commerce creates an accelerated and lower-cost pathway for such experiential learning: an SME that sells to Romanian or Polish consumers through an EU marketplace gains market knowledge that can inform subsequent product adaptation, pricing, and communication strategies. This dynamic aspect of digital readiness — its progressive accumulation through export experience — is often neglected in policy frameworks that treat readiness as a static precondition rather than an evolving capability (Cozniuc, 2023, p. 170).

Moldovan SMEs: Structural Context and E-commerce Engagement

SMEs constitute the backbone of the Moldovan economy, accounting for the large majority of registered enterprises and a significant share of employment. However, their international competitiveness remains limited by persistent structural constraints: small domestic market, low capitalization, limited managerial capacity, and weak integration into EU value chains (Cozniuc, 2023, pp. 164–166). The Association Agreement and DCFTA with the EU, in force since 2016, created a formal trade liberalization framework, but its translation into actual export growth has been uneven across sectors and firm types.

In the e-commerce domain, the available data describes overall market dynamics rather than SME-specific performance, which is itself a reflection of the limited firm-level monitoring of digital trade. The 2024 AmCham Moldova report estimates that online sales of tangible products and commercial services reached EUR 358.6 million excluding VAT in 2023, representing a 15.2% year-on-year increase, with approximately 470–520 active online shops selling tangible goods (AmCham Moldova, 2024, p. 4). This growth rate is significant, but the base remains modest and the market is heavily concentrated in Chisinau.

A critical structural feature of the Moldovan e-commerce ecosystem is its asymmetry: domestic platforms are growing, but inbound cross-border e-commerce from foreign platforms — particularly Temu and other Chinese marketplaces — is expanding even faster (AmCham Moldova, 2024, p. 7). This competitive pressure from foreign platforms is directly relevant to the discussion of SME export readiness. Moldovan SMEs are simultaneously being exposed to the operational standards of foreign e-commerce operators (as suppliers or observers) and facing increased competitive pressure in domestic niches. Whether this exposure translates into capability development or merely into market displacement is an empirical question that existing data cannot fully resolve (Moroi, 2024, p. 68).

E-commerce in Moldova still represents a modest share of domestic trade — approximately 4 to 6 percent, compared with a world average above 19 percent and significantly higher levels in more advanced European markets (AmCham Moldova, 2024, p. 5). The annual online purchase volume per capita remains well below the EU average. These figures indicate that Moldova's e-commerce sector is growing from a low base, and that the organizational and institutional preconditions for a significant expansion of cross-border export e-commerce are not yet fully in place (Bădărău, 2019, pp. 102–103).

Main Barriers to Digital Readiness Among Moldovan SMEs

Analysis of the available evidence identifies four principal barriers to the digital readiness of Moldovan SMEs for cross-border e-commerce. These barriers are interconnected and mutually reinforcing, which implies that addressing any one in isolation is unlikely to produce substantial gains in export e-commerce performance.

Limited Online Payment Adoption and Consumer Trust

The first and most immediately visible barrier is the limited use of online payments and the persistence of cash or card payment on delivery. The 2024 AmCham Moldova report identifies this as a defining structural feature of the Moldovan e-commerce market: online payments for goods bought through e-shops are not yet common practice, which prevents the use of aggregated banking data for accurate market valuation and limits the scalability of online retail operations (AmCham Moldova, 2024, p. 9). This payment pattern reflects deeper problems of trust and operational reliability. Moldovan consumers frequently prefer to pay only after receiving and checking the product, a behavior linked to stock availability problems, inaccurate product information, and weak refund confidence (AmCham Moldova, 2024, p. 11). Critically, approximately 70 percent of suppliers registered on marketplaces do not have functional warehouse management systems that update product availability in real time, which results in 10 to 30 percent of online orders being cancelled due to missing stock updates (AmCham Moldova, 2024, p. 12).

For cross-border e-commerce directed at EU consumers, these weaknesses are compounding rather than merely additive. EU consumers expect transparent pricing, secure upfront payment, accurate stock information, clear delivery terms, statutory return rights, and predictable customer support (European Commission, 2026). A Moldovan SME that cannot manage domestic online orders reliably is structurally disadvantaged in competing for EU consumers, where platform requirements and consumer protection standards are materially stricter and where reputational penalties for poor service propagate rapidly through review systems.

Insufficient Digital Business Skills

The second barrier is the limited level of digital business skills within Moldovan SMEs. OECD analysis of Moldova emphasizes that digital skills are cross-cutting and require coordinated policy responses involving education, labor market measures, innovation support, and private-sector participation (OECD, 2023). For SMEs seeking to enter EU e-commerce markets, this means that digital readiness is not primarily a technical procurement question. Managers and employees must understand online customer acquisition, platform algorithm dynamics, digital advertising (including EU-specific platforms such as Meta and Google Shopping), cybersecurity, data analytics, electronic invoicing, online dispute resolution, and export documentation.

The skills gap is particularly acute at the intersection of digital competence and international trade knowledge (Cozniuc, 2023, pp. 168–169). Selling to an EU consumer through a marketplace requires understanding not only how to list a product, but also how to price competitively in a foreign market, how to handle returns under EU consumer rights directives, how to manage VAT obligations across jurisdictions, and how to communicate effectively in the target language. These compound skill requirements exceed what generic digital literacy programs can address, and they point to the need for export-oriented digital training that is currently absent from the Moldovan SME support ecosystem.

Logistics and Fulfillment Fragmentation

The third barrier is the fragmentation of logistics and fulfillment infrastructure for cross-border operations. Moldova's domestic e-commerce growth has been partly driven by the expansion of last-mile delivery companies operating within the country (AmCham Moldova, 2024, p. 15). However, domestic delivery development does not automatically solve cross-border fulfillment challenges. Cross-border e-commerce requires reliable international delivery with customs integration, competitive shipping rates, parcel tracking, and efficient returns management — all at a cost structure that allows Moldovan SMEs to offer prices competitive with EU-based sellers (EU4Digital, 2026).

The geography and transit infrastructure of Moldova create additional challenges. As a landlocked country dependent on road transit through Romania and Ukraine (the latter being disrupted since 2022), shipping times and costs to major EU markets are less predictable than for sellers located within the EU customs area. For SMEs selling lower-value goods where shipping costs represent a significant share of the product price, this structural disadvantage may render cross-border e-commerce economically unviable without access to consolidated logistics solutions or warehousing partnerships in Romania.

Incomplete Regulatory and Institutional Implementation

The fourth barrier is the incomplete implementation of the digital institutional infrastructure that cross-border e-commerce depends on. The Digital Economy and E-commerce Roadmap of the Economic Council includes actions related to payment services, digital tools, electronic signatures, eKYC, and the modernization of business-government interactions (Economic Council of the Republic of Moldova, 2024). However, some digitalization measures remain partially realized:

electronically signed documents are not always accepted by legal entities, and in-person attendance is sometimes still required for administrative procedures that should be fully digital (Economic Council of the Republic of Moldova, 2023).

This institutional incompleteness creates friction costs that disproportionately affect SMEs, which lack the legal and administrative resources of larger firms to navigate complex or inconsistent procedures. For cross-border e-commerce specifically, incomplete digital identity infrastructure and limited acceptance of electronic signatures complicate the registration on foreign platforms, the conclusion of digital contracts with logistics partners, and the management of EU VAT compliance through digital systems.

EU Market Integration and Regulatory Alignment

EU market integration through e-commerce requires alignment with the rules and expectations of the EU digital market. The European Commission's e-commerce framework imposes consumer rights obligations, transparency requirements for online marketplaces, rules on digital contracts, mandatory cancellation rights, and compliance with the Digital Services Act and Digital Markets Act (European Commission, 2023). The DSA in particular introduces tiered obligations for online intermediaries that may affect Moldovan SMEs selling through EU-based platforms or operating their own online shops directed at EU consumers.

Moldova has taken steps toward legislative harmonization. National e-commerce legislation has been updated in accordance with the European model, including amendments related to domestic trade, e-commerce concepts, notification procedures, business units without commercial premises, information society services, and personal data protection (Economic Council of the Republic of Moldova, 2023). EU4Digital has developed specific recommendations for harmonizing e-commerce frameworks between Eastern Partnership countries and the EU, focusing on ecosystem development, legal framework alignment, and technical standards (EU4Digital, 2026). These are meaningful institutional advances that create a foundation for further integration.

However, formal legislative harmonization and operational firm-level compliance are distinct achievements, and the gap between them is where SME e-commerce readiness is actually tested (Bădărău, 2019, p. 104). A law may define the concept of an electronic contract or codify consumer cancellation rights, but an SME must still implement compliant checkout procedures, secure data processing, transparent consumer communication in the target language, and reliable post-sale service including cross-border returns. The conversion of regulatory alignment into firm-level operational readiness requires not only legal reform but also implementation support, advisory services, and practical digital tools that remain underdeveloped in the Moldovan SME support ecosystem (Cozniuc, 2023, p. 172).

A comparative perspective reinforces this point. Georgia and Ukraine, which have also pursued EU Association Agreements and DCFTA frameworks, offer partial analogues for Moldova's trajectory. In both cases, formal regulatory alignment preceded widespread SME e-commerce export activity by several years, and the gap was closed primarily through targeted export digitalization programs, marketplace access facilitation, and logistics infrastructure investments rather than through legislative reform alone. Moldova's EU candidacy status creates a more direct institutional pathway, but the organizational translation of that pathway remains contingent on firm-level capability development (Ministry of Economic Development and Digitalization of the Republic of Moldova, 2023).

Cross-Border E-commerce as a Pathway for Moldovan SMEs

Despite the constraints identified above, cross-border e-commerce offers a strategically realistic pathway for Moldovan SME internationalization, subject to important qualifications about sequencing and capability prerequisites. Four mechanisms are particularly relevant.

First, cross-border e-commerce reduces the upfront cost of EU market entry. SMEs can test demand in EU markets through online channels before committing to physical distribution networks, permanent representation, or costly market research (Johanson and Vahlne, 2009, p. 1416). This is particularly important for firms with limited capital and limited prior export experience. The data-generating properties of e-commerce — conversion rates, search patterns, geographic demand variation, price sensitivity — provide low-cost market intelligence that can inform subsequent internationalization decisions.

Second, cross-border e-commerce enables direct positioning in niche markets. Moldovan producers in sectors such as food products with regional specificity (wine, traditional foods), textiles, artisanal goods, cosmetics, or digital services may benefit from direct online positioning if they can build credible brand identities and meet EU regulatory requirements (Bădărău, 2019, pp. 100–101). The long-tail structure of EU e-commerce markets creates spaces for differentiated offerings that would struggle to achieve sufficient scale through traditional retail channels.

Third, participation in third-party EU marketplaces can partially substitute for internal digital infrastructure investment. As Cassia and Magno (2022, p. 278) demonstrate, platform use reduces the direct impact of internal IT capabilities on financial performance, which is significant for Moldovan SMEs that may lack the resources to build proprietary e-commerce infrastructure. Platforms such as Amazon.de, eMAG, or Etsy provide logistics integration, payment processing, and consumer trust that individual SMEs cannot replicate independently. The strategic risk of platform dependence — including fee structures, algorithm changes, and listing control — must be weighed against the capability access that platform participation provides.

Fourth, cross-border e-commerce can drive organizational modernization through competitive pressure (Moroi, 2024, pp. 69–70). To sell online across EU borders, SMEs must improve product data quality, inventory management, payment integration, customer communication, and logistics reliability. These operational improvements are transferable and can increase competitiveness in domestic markets and in offline export channels simultaneously.

The pathway is, however, not automatic. Cross-border e-commerce does not eliminate the need for capabilities; it transforms their structure and raises their complexity (Cassia and Magno, 2022, p. 280). Instead of relying on physical distribution, firms must manage digital visibility, platform dependence, online reputation, delivery reliability, payment security, and multilingual regulatory compliance. Academic literature confirms that cross-border e-commerce should be approached strategically and with a medium-term planning horizon, because performance depends on the progressive development of appropriate capabilities rather than on a single investment in digital tools.

Policy Implications and Recommendations

The analysis generates six policy implications, organized from the most immediate operational priorities to the broader institutional framework.

The first and most important implication is that Moldova should reframe SME digital readiness as an export competitiveness issue rather than a general digitalization objective. Existing strategies recognize the importance of digital transformation and ICT competitiveness, but their operational translation into export-oriented e-commerce support remains weak (Ministry of Economic Development and Digitalization of the Republic of Moldova, 2023). A dedicated policy package for export-oriented SME e-commerce readiness — distinct from general digitalization programs — would create a more coherent and measurable intervention framework.

Second, training and capacity-building programs should be redesigned around practical export e-commerce tasks (OECD, 2023; Cozniuc, 2023, p. 173). Priority content areas should include: marketplace onboarding procedures for EU platforms; EU consumer rights implementation (right of withdrawal, returns, complaints); cross-border VAT and customs basics for low-value shipments under the EU's One Stop Shop regime; digital advertising on EU-dominant platforms; online payment integration; cybersecurity for small sellers; and multilingual product content standards. Generic digital literacy programs are useful but insufficient for firms that want to sell into EU markets within a medium-term horizon.

Third, the trust and payment infrastructure must be strengthened. Wider adoption of online payment methods, broader acceptance of electronic signatures, implementation of eKYC for business registration, and expansion of secure digital identity mechanisms would reduce friction in both domestic and cross-border commerce (Economic Council of the Republic of Moldova, 2024). The Digital Economy and E-commerce Roadmap already identifies these as priorities; the policy challenge is implementation pace and SME-specific outreach.

Fourth, inventory and warehouse management system adoption should be supported through targeted incentives for SMEs. The high rate of order cancellation caused by poor stock visibility — 10 to 30 percent of marketplace orders by current estimates — is both a consumer trust problem and a competitiveness problem (AmCham Moldova, 2024, p. 12). Cross-border e-commerce at EU standard cannot tolerate this level of fulfillment failure, and addressing it requires investment in operational systems, not only in customer-facing digital presence.

Fifth, Moldova should develop structured partnerships with logistics providers and EU-accessible marketplaces that can offer preferential terms or integration support for Moldovan SMEs (EU4Digital, 2026.). For many small firms, the costs of establishing cross-border fulfillment independently are prohibitive. A government-facilitated or industry-association-coordinated logistics access program — analogous to arrangements developed in Georgia and Romania for their respective SME sectors — could significantly lower the practical barriers to entry.

Sixth, regulatory harmonization must be accompanied by systematic implementation support (EU4Digital, 2026; Economic Council of the Republic of Moldova, 2023). SMEs need standardized templates, advisory services, and digital tools that translate legal requirements into operational procedures. EU-compliant legislation will have limited impact on SME export behavior if firms lack the practical knowledge to operationalize compliance requirements in areas such as data protection, consumer communication, and electronic invoicing.

Conclusions

The digital readiness of Moldovan SMEs is a decisive condition for transforming cross-border e-commerce into a genuine pathway toward EU market integration. Moldova has made meaningful progress in e-commerce development, digital policy formulation, and legislative harmonization since 2016 (Bădărău, 2019, p. 99; Economic Council of the Republic of Moldova, 2023). The market is growing, the number of online platforms has expanded significantly, and the government has adopted strategic documents that connect digital transformation explicitly with EU integration objectives (Ministry of Economic Development and Digitalization of the Republic of Moldova, 2023).

At the same time, the current level of SME readiness for cross-border export e-commerce remains uneven and insufficient relative to EU market requirements (AmCham Moldova, 2024; Moroi, 2024; Cozniuc, 2023). The principal weaknesses are organizational and institutional rather than narrowly technological: limited online payment adoption, weak inventory management, low consumer trust, insufficient export-oriented digital business skills, logistics fragmentation, and incomplete implementation of digital institutional infrastructure. These barriers interact and reinforce each other, which implies that small and fragmented interventions are unlikely to produce the capability required for sustained cross-border e-commerce performance in EU markets.

The central conclusion of the article is that cross-border e-commerce should not be treated as a simple digital extension of domestic online retail. It constitutes a more demanding form of internationalization that requires firms to combine digital tools with export capabilities, regulatory compliance, and customer-oriented operational systems calibrated to EU standards (Cassia and Magno, 2022, p. 280; Johanson and Vahlne, 2009, p. 1428). For Moldova, the strategic priority should be the creation of an integrated SME e-commerce readiness framework explicitly oriented toward EU market access, distinct from broader digitalization programs and anchored in firm-level capability development rather than in legislative reform alone.

This article is subject to the limitation of reliance on secondary data, which constrains the specificity of conclusions about SME behavior. Future research should assess Moldovan SMEs directly through empirical indicators such as cross-border platform registration rates, online payment adoption, digital marketing capacity, logistics readiness, multilingual communication, EU compliance awareness, and actual cross-border sales performance. Comparative research with other EU Eastern Partnership candidates — particularly Georgia and Ukraine — could provide additional analytical traction on the determinants of successful e-commerce-led internationalization from similar institutional starting points.

References

1. AmCham Moldova, 2024. The e-commerce market in Moldova in 2024. [online] Available at: <https://amcham.md/st_files/2024/07/05/0AmCham%20Moldova%20Report%20on%20the%20electronic%20commerce%20market%20in%20the%20Republic%20of%20Moldova.pdf> [Accessed 02 May 2026].
2. Bădărau, E., 2019. Dezvoltarea comerțului electronic în Republica Moldova în contextul dezvoltării strategiei UE. Relații Internaționale. Plus, (2), pp.99-105. [online] Available at: <https://ibn.idsi.md/sites/default/files/imag_file/99-105_5.pdf> [Accessed 2 May 2025].
3. Barney, J.B., 1991. Firm resources and sustained competitive advantage. Journal of Management, 17(1), pp.99-120.
4. Cassia, F. and Magno, F., 2022. Cross-border e-commerce as a foreign market entry mode among SMEs: the relationship between export capabilities and performance. Review of International Business and Strategy, 32(2), pp.267-283.
5. Cozniuc, O., 2023. Digital transformation of SMEs in the Republic of Moldova: opportunities and perspectives. In: *Virtual International Scientific Conference "Development through Research and Innovation"*, IVth Edition, 25 August 2023, Chișinău, pp.164-179.
6. Economic Council of the Republic of Moldova, 2023. https://consecon.gov.md/en/2023/03/17/national-e-commerce-legislation-has-been-updated-according-to-the-european-model/. [online] Available at: <https://www.economic-council.md> [Accessed 18 April 2026].
7. Economic Council of the Republic of Moldova, 2024. Digital economy and e-commerce roadmap. Chisinau: Economic Council of the Republic of Moldova.
8. EU4Digital, 2026 Recommendations proposed for eCommerce environment harmonisation in the EaP countries: Republic of Moldova. [online] Available at: < https://eufordigital.eu/wp-content/uploads/2026/04/EU4Digital-GDPR-Best-practices-recommendations-v5.00-2026.04.23.pdf > [Accessed 12 April 2026].
9. European Commission, 2026 E-commerce rules in the EU. [online] Available at: <https://commission.europa.eu/law/law-topic/digital-single-market/e-commerce-rules-eu_en> [Accessed 20 April 2026].
10. Johanson, J. and Vahlne, J.-E., 2009. The Uppsala internationalization process model revisited: from liability of foreignness to liability of outsidership. Journal of International Business Studies, 40(9), pp.1411-1431.
11. Ministry of Economic Development and Digitalization of the Republic of Moldova, 2023. Digital transformation strategy 2023-2030. Chisinau: Government of the Republic of Moldova.
12. Moroi, E., 2024. The evolution and optimization of e-commerce in the Republic of Moldova: trends, challenges, and opportunities. *Meridian Ingineresc*, (1), pp.66-71.
13. OECD, 2023 Promoting digital business skills in the Republic of Moldova. [online] Available at: <https://www.oecd.org/digital/ieconomy/promoting-digital-business-skills-moldova.htm> [Accessed 10 April 2026].