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THE 2025 OECD DEFINITION OF E-COMMERCE AND GUIDELINES FOR INTERPRETATION

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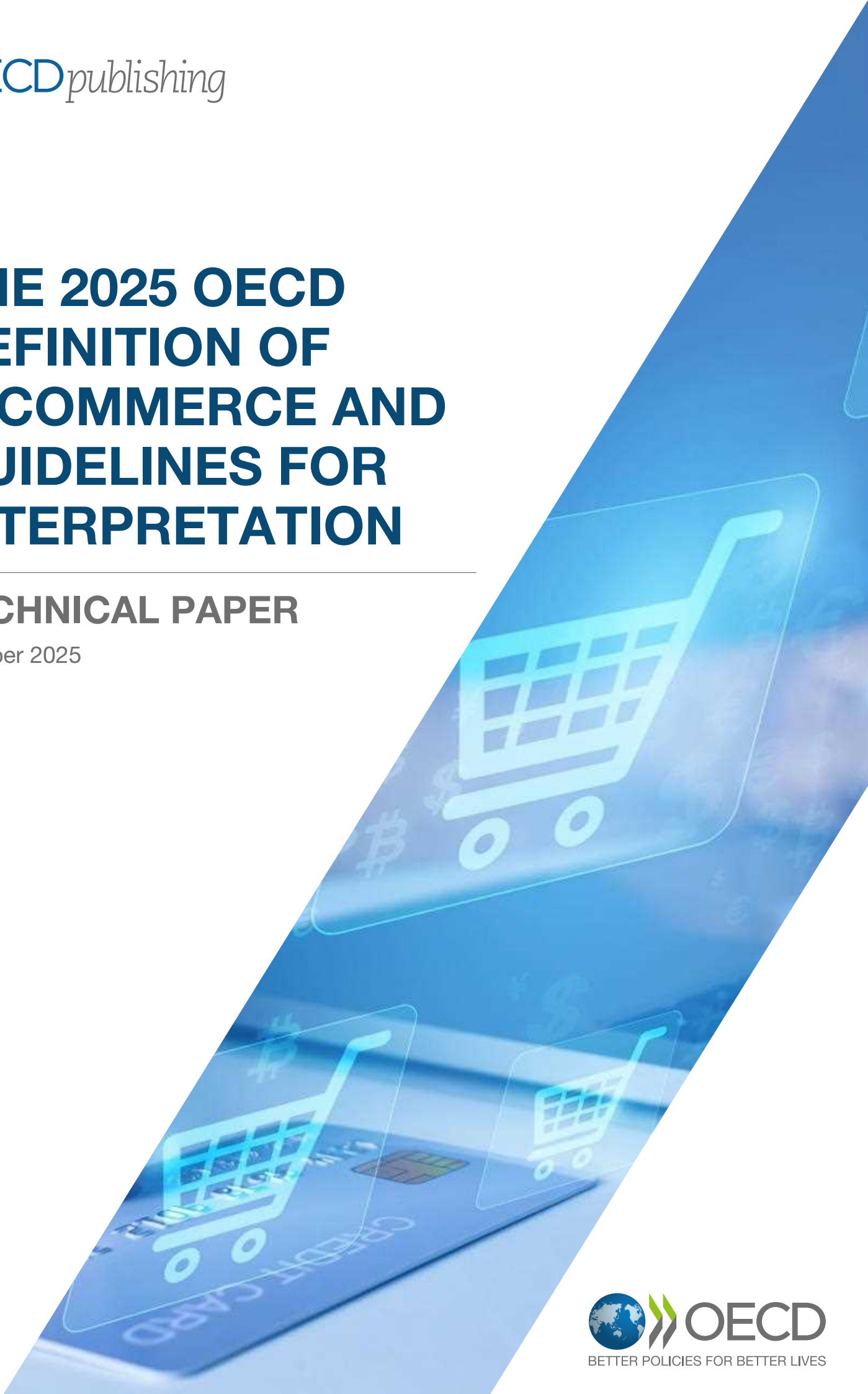

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Technical Paper

The 2025 OECD definition of e-commerce and guidelines for interpretation

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Abstract

E-commerce is a cornerstone of today's digital economy, transforming how people, businesses, and governments engage in commercial transactions. By broadening market access and accelerating the diffusion of digital technologies, it plays a central role in driving growth, innovation, and trade. Reliable statistics are therefore essential to capture its scope and inform evidence-based policymaking. This report presents the 2025 revision of the OECD definition of e-commerce and its guidelines for interpretation. Building on the 2009 definition, the revision reaffirms core principles while refining guidance to ensure clarity, adaptability, and continued statistical relevance in a rapidly evolving digital landscape. The updated framework strengthens key concepts, provides guidance on digital intermediaries, subscriptions, and AI-assisted transactions, and clarifies the treatment of emerging ordering channels. In so doing, the 2025 revision aims to improve the measurement of e-commerce and support OECD's broader efforts to inform policy on digital transformation.

Keywords: e-commerce, digital trade, digital transformation, digital economy.

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Acronyms and abbreviations

AI	Artificial intelligence
DIP	Digital intermediation platform
DPC	Digital Policy Committee
EDI	Electronic data interchange
ERP	Enterprise resource planning
EU	European Union
ICT	Information and communication technology
IMF	International Monetary Fund
NSO	National Statistical Office
OECD	Organisation for Economic Co-operation and Development
SaaS	Software-as-a-Service
SNA	System of National Accounts
TG eCOM	Task Group on Measuring e-commerce Value
UN	United Nations
UNCTAD	UN Trade and Development
VAT	Value added tax
WPDEMA	Working Party on Digital Economics, Measurement, and Analysis
WPIIS	Working Party on Indicators for the Information Society

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Executive summary

E-commerce is a key pillar of today's digitalised economy, reshaping how enterprises, households, individuals, and governments engage in commercial transactions. By facilitating exchanges over computer networks, e-commerce broadens market access, stimulates international trade, and accelerates the diffusion of productivity-enhancing digital technologies across sectors and borders. Accurate measurement of e-commerce is therefore essential to understanding these developments and informing evidence-based policymaking on the scale, scope and impact of digital technologies on commerce today.

The OECD has played a leading role in establishing and advancing a statistical definition of e-commerce and related measurement guidelines since 1998. The first definition was adopted in 2001 and reflected technological advances and the emergence of new business models. It was updated in 2009 and remains an international standard for e-commerce measurement, supporting cross-country comparability and consistency. In this vein, the 2009 definition underpins the broader concept of digital trade (IMF et al., 2023[1]) and is incorporated in the 2025 edition of the System of National Accounts (UN et al., 2025[2]).

Given the rapid pace of digital transformation in recent years, it was timely to review the 2009 definition and its guidelines for interpretation to ensure that they are still fit for today's digital economy. A thorough review of the 2009 definition and its guidelines for interpretation took place over 2024-2025 with OECD Members and beyond in a multistakeholder process. This review highlighted that the 2009 OECD definition of e-commerce continues to provide a solid foundation for measuring digital commercial transactions. At the same time, the review highlighted the need to update the guidelines for interpretation.

As a result, the 2025 revision of the OECD definition of e-commerce reaffirms the 2009 definition's core principles – notably the principle that e-commerce is defined by the method of ordering rather than the method of payment or delivery – while refining interpretative guidelines to enhance clarity and ensure continued statistical relevance. It strengthens the foundational concepts of automation and remoteness by explicitly addressing emerging business models and new types of digital transactions. These refinements provide clearer methodological guidance for national statistical offices and the international statistical community to support consistent and comparable e-commerce measurement across countries.

The 2025 guidelines for interpretation likewise reinforce the definition's adaptability. By providing additional measurement guidance on digital intermediaries, digitally ordered subscriptions, and electronic data interchange, the revised guidelines enhance the interpretative framework to ensure consistency, clarity, and continued relevance. The updated guidelines also clarify the inclusion of structured transactions on social media platforms, ordering assisted by artificial intelligence, and other automated digital purchasing methods, aligning measurement practices with the principles governing e-commerce.

A summary table of the 2025 OECD definition of e-commerce and guidelines for interpretation can be found below.

Overview of the 2025 OECD definition of e-commerce and guidelines for interpretation

Definition of e-commerce	Guidelines for interpretation
An **e-commerce transaction** is the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders. The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online. An e-commerce transaction can be between enterprises, households, individuals, governments, and other public or private organisations.	**Include**: Orders made via webpages, apps, extranets, and Electronic Data Interchange (EDI). The type is defined by the method of making the order. **Exclude**: Orders made by telephone calls, facsimiles, on-premise mechanisms (including but not limited to kiosks or QR codes), manually typed messages (including but not limited to e-mails).

As digital ordering channels continue to evolve rapidly, the 2025 revision adopts a forward-looking approach to anticipate future developments while strengthening the statistical relevance and consistency of e-commerce measurement. By reinforcing its conceptual foundations and refining its interpretative guidance, the 2025 revision seeks to foster reliable, internationally comparable statistics that inform evidence-based policymaking. Continued dialogue and collaboration among the international statistical community and stakeholders is essential to keeping the OECD's e-commerce measurement framework relevant in an evolving e-commerce landscape going forward.

1 Introduction

E-commerce stands as a key pillar of the digital economy, reshaping how transactions occur across enterprises, households, individuals, governments, and other public and private organisations. By enabling transactions over computer networks, it enhances market access, fosters trade, and supports digital transformation. Measuring e-commerce is therefore essential for capturing these dynamics and supporting evidence-based policy making on the impact of digital technologies on the economy.

The OECD first established a statistical definition of e-commerce in 2001, with a revision in 2009 to reflect technological and business model developments. The 2009 definition has since served as a widely adopted framework, ensuring cross-country comparability in e-commerce measurement. It is also a key element used to define the broader concept of digital trade (IMF et al., 2023[1]) and it is included in the 2025 SNA (UN et al., 2025[2]).

Discussions at the joint workshop of the OECD Working Party on Digital Economics, Measurement and Analysis (WPDEMA) and the UN Trade and Development (UNCTAD) Task Group on Measuring E-commerce Value (TG-eCOM) reaffirmed its relevance, highlighting its simplicity, technology neutrality, and adaptability as key strengths that have facilitated its wide implementation across countries. At the same time, discussions at the April meeting of the WPDEMA and a WPDEMA webinar in May 2025 underscored the need for enhanced guidance to support consistent interpretation of the OECD definition of e-commerce in light of evolving technologies and business models.

The 2025 revision of the OECD definition of e-commerce takes stock of these discussions, beginning with an overview of the origins and principles of the 2009 framework. It then examines its application, highlighting both its widespread adoption and the challenges that have emerged over time. The report next introduces the 2025 OECD definition of e-commerce, which maintains the core principles of the 2009 framework while refining its guidelines to ensure continued measurement relevance amid technological change.

2 Origins and principles of the 2009 definition of e-commerce

2.1. Background

E-commerce has long been a central policy focus and a key driver of the digital economy, reshaping trade by offering a virtual alternative to physical stores. It expands consumer choice, extends market reach for businesses, and transforms how firms manage information flows and interact with customers, fostering automation and operational efficiency. By transcending geographical barriers and integrating digital technologies into trade, e-commerce enhances competitiveness and reshapes how business organise their operations. As a result, indicators measuring e-commerce's diffusion and economic value provide essential insights into its broader impact.

Recognising the growing significance of e-commerce, the OECD was entrusted at the 1998 Ottawa Ministerial Conference with developing policy-relevant and statistically robust definitions. This mandate aimed to create a statistical framework that aligned with policy priorities while ensuring international comparability (OECD, 2001[3]). The Working Party on Indicators for the Information Society (WPIIS), the predecessor of WPDEMA, played a key role in this effort. WPIIS worked to define core concepts, address user needs, and develop statistical methodologies for measuring key e-commerce indicators (OECD, 2000[4]).

Building on this work, OECD Member countries approved in 2000 a two-tiered definition of e-commerce (narrow vs. broad) based on the communications infrastructure used for ordering. This definition established that the key criterion for classifying a transaction as an Internet transaction (conducted over the Internet) or an electronic transaction (conducted over computer-mediated networks) is the method used to place or receive the order—regardless of the payment method or delivery channel (OECD, 2001[3]). In April 2001, WPIIS further refined this definition by developing detailed interpretative guidelines (see Annexe A).

While the 2001 OECD definition of e-commerce marked a significant advancement, it faced challenges in capturing the rapidly evolving landscape of digital transactions. Its dual-tiered approach introduced potential measurement inconsistencies that hindered international harmonisation. As technologies converged and transaction types became increasingly difficult to distinguish, applying the definition grew more complex (OECD, 2009[5]).

In response, WPIIS launched a revision process. In 2008, an expert group was convened to review the definition and propose a more coherent framework. This effort drew on measurement experience from OECD Member countries and insights from Eurostat's Working Group on Information Society Statistics. Feedback from WPIIS delegates played a key role in shaping the proposal, ensuring that the revised definition addressed emerging challenges while securing broad stakeholder consensus (OECD, 2009[5]).

2.2. Core principles for the 2009 revision: Relevance, measurability, and adaptability

The 2009 revision of the OECD e-commerce definition prioritised simplicity, coherence, and practicality, enhancing the quality and comparability of e-commerce statistics across countries while maintaining flexibility for future technological advancements. The update was guided by three core principles: relevance, measurability, and adaptability.

Moving away from the previous two-tiered approach, the 2009 definition unified these concepts into a single, more precise framework. The term *"computer-mediated networks"* was replaced with *"computer networks"* to streamline terminology and avoid unnecessary complexity (OECD, 2009[5]). The revision focused on clearly definable and statistically significant electronic transactions.

A key refinement was the inclusion of *"by methods specifically designed for the purpose of receiving or placing orders,"* ensuring that only transactions conducted over computer networks with a dedicated ordering function qualified as e-commerce. To maintain clarity, the guidelines explicitly excluded orders placed via manually typed emails, as these lack an automated e-sales system (OECD, 2009[5]). This approach reduced ambiguity and supported consistent statistical reporting across countries.

Table 2.1. The 2009 OECD definition of e-commerce

OECD definition of e-commerce	Guidelines for interpretation
An e-**commerce transaction** is the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders. The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online. An e-commerce transaction can be between enterprises, households, individuals, governments, and other public or private organisations.	**Include**: orders made in webpages, extranet or EDI. The type is defined by the method of making the order. **Exclude**: orders made by telephone calls, facsimile, or manually typed e-mail.

Source: (OECD, 2009[5]).

The 2009 revision precisely defined the boundaries of e-commerce based on ordering methods. It included orders placed via web pages, extranets, and electronic data interchange (EDI) systems while excluding those made by telephone, fax, or manually typed emails.[1] This distinction streamlined reporting, ensuring data consistency and relevance. By integrating elements from both narrow and broad definitions, the revision balanced inclusivity with practicality (OECD, 2009[5]). It expanded the previous narrow definition to include EDI while excluding general-use digital tools like Minitel and interactive telephone systems, which had been part of the earlier framework.

The revision aimed at clarifying concepts and ensuring consistent interpretation and reliable measurement, balancing relevance and measurability. By focusing on transactions that could be easily identified, it improved the accuracy and relevance of data collection.

To reflect the evolving digital economy, the definition adopted a technology-neutral approach. Unlike the 2001 version, which specified certain types of internet transactions, the 2009 definition avoided such distinctions, enabling it to accommodate emerging technologies seamlessly. This neutrality allowed for the inclusion of app-based transactions without requiring further modifications. The objective was to ensure long-term relevance by capturing new forms of digital ordering while allowing for future refinements.

Certain elements were excluded to improve measurement accuracy. As in the 2001 definition, online payments and delivery methods—while important aspects of the digital economy—were not considered essential for defining e-commerce. By focusing solely on order placement, the definition reduced risks of ambiguity, inflated figures and double counting, particularly as digital payments grew faster than e-commerce transactions.

3 Application, benefits, and challenges of the 2009 OECD definition of e-commerce

The 2009 definition of e-commerce has become foundational in global efforts to measure this key aspect of the digital economy. The joint OECD WPDEMA–UNCTAD TG-eCOM workshop, held in November 2024, provided a valuable opportunity to assess its continued relevance and explore potential refinements, as did subsequent meetings of the WPDEMA in April and May 2025. Bringing together government officials, international organisations, and private sector representatives, these meetings facilitated discussions on the challenges of applying the definition across diverse national contexts.

Global adoption of the OECD definition of e-commerce

A key takeaway from these meetings was the widespread adoption of the OECD definition of e-commerce across diverse national contexts, underscoring its global reach and flexibility. The definition has been embraced by a wide range of countries, including those beyond the OECD, such as emerging economies like Brazil, Egypt and the People's Republic of China, among many others. While its application varies to accommodate national statistical needs and technological developments, this adaptability ensures that the framework remains effective in capturing e-commerce flows while maintaining international comparability.

3.1.1. Role in national surveys and statistical systems

The OECD framework has become a global standard for producing official, internationally comparable statistics on e-commerce transactions across regions with varying levels of technological development. It underpins initiatives such as the EU Community Surveys on ICT Usage and E-commerce in Enterprises and on ICT Usage in Households and by Individuals, providing harmonised data across EU member states. Similarly, the OECD's ICT Access and Usage model surveys rely on this definition to generate consistent data across Member countries, which is essential for cross-country analysis and policymaking.

Many countries have integrated the OECD definition into their national surveys and statistical systems, offering valuable insights for policymakers and businesses while enhancing the international comparability of e-commerce statistics.

3.1.2. National and sectoral adaptations

Some countries adapt the OECD definition to suit their specific contexts and priorities. For example, Brazil's ICT Enterprise Survey includes social media platforms to assess their growing role in digital ordering, aligning with national policy objectives. Thailand incorporates manually typed email orders in certain surveys, while Mexico's structural business surveys and economic censuses account for transactions via social networks and manually typed emails. These adaptations help address local realities but also

introduce measurement challenges—especially as emerging transaction types, such as automated orders underpinned by artificial intelligence (AI), come into play.

In some cases, sector-specific adaptations further refine the framework. For instance, the Republic of Türkiye has customised the OECD framework for its customs reporting system to improve the accuracy of digital merchandise trade data, reflecting the ongoing need for precise sectoral measurement.

3.2. Strengths and evolving challenges of the 2009 definition of e-commerce

While the OECD definition has been instrumental in producing robust statistics worldwide and has often served as a legal basis for policy decisions, discussions at the workshop highlighted areas where further clarification may be needed as digital technologies continue to evolve.

3.2.1. Strengths: Simplicity, clarity and technology neutrality

A key strength of the OECD definition is its simplicity and clarity, which have facilitated widespread adoption. Its technology-neutral approach—defining e-commerce based on transaction characteristics rather than specific technologies—has ensured its continued relevance as digital business models evolve. For instance, digital intermediation platforms (DIPs), which have become major players in e-commerce over the past decade, align seamlessly with the 2009 framework. This flexibility allows the definition to accommodate new transaction types without requiring constant revisions, reinforcing its long-term applicability.

This adaptability has enabled countries to maintain consistent measurement practices despite rapid technological advancements. The definition's strengths have contributed to its broad adoption and recognition as an internationally agreed standard for measuring e-commerce, making it a key tool for producing cross-country comparable statistics.

3.2.2. Challenges and areas for clarification

As digital transformation progresses, new challenges have emerged in capturing the full scope of digital transactions. Some countries have reported difficulties in accounting for orders placed through social media platforms, which have become key e-commerce channels in certain regions. Similarly, distinguishing between on-premise mechanisms (e.g., kiosks or QR code payments) and traditional retail transactions poses classification challenges. The rise of subscription models and recurring transactions further complicates efforts to differentiate between one-time orders and automated repeat purchases, potentially leading to inconsistencies in data collection.

Emerging business models, such as AI-driven transactions and interactive digital commerce experiences like livestream shopping, underscore the need for clearer guidance on their inclusion within the OECD definition. The phrase *"computer networks by methods specifically designed for the purpose of receiving or placing orders"* has prompted questions regarding its interpretation, particularly as social media increasingly serves as an interface for digital transactions. These developments have led to calls for further clarification to ensure the definition remains relevant as new ordering methods continue to emerge.

4 The 2025 OECD definition of e-commerce

Discussions at the meetings held in 2024 and 2025 highlighted that the 2009 OECD definition of e-commerce remains a robust framework, continuing to provide a solid foundation for measuring digital transactions. At the same time, they underscored the need to update the guidelines for its interpretation. Emerging technologies, evolving business models, and new transaction types require more detailed operational guidance to ensure accurate and consistent measurement. Striking a balance between precision and flexibility was deemed essential to maintain the definition's adaptability while preserving its core stability.

This section presents the updated 2025 OECD definition of e-commerce, offering a refined framework for interpretation alongside supplementary measurement guidelines addressing three specific transaction types. It also includes recommendations for survey modules on ICT usage and e-commerce, ensuring that e-commerce measurement remains relevant and effective amid ongoing technological advancements.

4.1. Ensuring measurement relevance amid technological changes

In considering potential updates to the 2009 definition and its guidelines, it is essential to revisit the underlying rationale for measuring e-commerce. Reflecting on the phenomena driving the indicators and how these are integrated into the definition itself helps to better understand the necessary adjustments to accommodate new developments.

E-commerce is a key component of the broader digital economy. It plays a pivotal role in reshaping trade by enhancing customer choice, broadening market reach, and substituting physical stores. Moreover, e-commerce transforms the management of information flows both within enterprises and between businesses and their customers.

At the heart of e-commerce lie the complementary concepts of remoteness and automation. The principle of remoteness defines e-commerce as transactions where the buyer and seller are not physically together, while automation, increasingly driven by advanced technologies, enhances the efficiency and scope of these transactions. Both principles have been central to the definition since its inception and remain foundational in shaping the boundaries of e-commerce amidst emerging business models and transaction types.

These guiding principles have shaped the revision and development of the 2025 OECD definition of e-commerce, ensuring that the definition remains adaptable, relevant, and comprehensive, while maintaining a consistent and measurable approach to capturing e-commerce transactions across diverse contexts and jurisdictions.

4.2. Preserving the core while refining guidelines for interpretation

The 2025 revision of the OECD definition of e-commerce preserves the robust foundation of the 2009 framework while refining it to account for emerging digital practices, technologies, and transaction types. Table 4.1 outlines the definition—unchanged from 2009—and its revised guidelines for interpretation.

Table 4.1. The 2025 OECD definition of e-commerce

Definition of e-commerce	Guidelines for interpretation
An **e-commerce transaction** is the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders. The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online. An e-commerce transaction can be between enterprises, households, individuals, governments, and other public or private organisations.	**Include**: Orders made via webpages, apps, extranets, and Electronic Data Interchange (EDI). The type is defined by the method of making the order. **Exclude**: Orders made by telephone calls, facsimiles, on-premise mechanisms (including but not limited to kiosks or QR codes), manually typed messages (including but not limited to e-mails).

Note: Please refer to Table 4.2 for additional information on types of e-commerce transactions included.
Source: Author's elaboration.

While updates have been made to keep the definition relevant, its core principles remain unchanged. Notably, e-commerce transactions continue to be defined by the method of ordering rather than the means of payment or delivery. As in 2009, the definition remains focused on transactions conducted over computer networks using systems specifically designed for placing or receiving orders.

4.2.1. Clarifying the scope of included transactions

The 2025 OECD definition of e-commerce retains the inclusion of webpages, extranets, and EDI, as established in the 2009 framework, reflecting their continued role as key channels for facilitating electronic transactions.

Applications

The revision enhances clarity by explicitly confirming that transactions conducted via applications (apps) also fall within its scope. While apps were already implicitly covered under the 2009 framework, as they rely on the same web-based protocols as webpages, the updated guidelines explicitly mention them to ensure clarity and consistency in implementation. Some countries and organisations, such as Eurostat (2025[6]), have already reflected this understanding by specifying apps alongside webpages and EDI in their operational definitions.

Similarly, the 2025 revision clarifies that transactions on social media and messaging platforms fall within the scope of e-commerce, but only when orders are placed using methods specifically designed for this purpose. A key example is structured in-app catalogues, which allow users to place orders without relying on manually typed messages. This clarification acknowledges the growing role of these platforms in digital ordering while ensuring alignment with the core principle of the OECD definition of e-commerce. In contrast, manually typed messages remain outside the scope, as they lack the structured ordering mechanism required by the definition.

Many platforms are moving in this direction, including offerings such as WhatsApp Carts (WhatsApp, 2025[7]) and TikTok Shop (TikTok, 2024[8]), which integrate structured ordering features into social and messaging environments. However, some applications still redirect users to external webpages to place their orders, as they do not support in-app purchasing. In these cases, the platform primarily serves as a gateway to online stores, where the transaction is finalised. Since the order is ultimately placed on a webpage, only these latter transactions fall within the scope of the OECD definition of e-commerce.

Livestream shopping

The 2025 framework clarifies the treatment of live shopping, a marketing strategy where a host showcases products via livestream, allowing viewers to purchase them in real time (Shopify, 2024[9]). Transactions initiated during livestreaming events qualify as e-commerce when orders are placed through structured ordering methods –such as webpages, apps, or other online interfaces designed specifically for placing orders– accessed via links, tags, or other embedded elements provided during the livestream. In such cases, the livestream serves as a promotional channel, while the transaction itself is completed through a structured, web-based e-commerce protocol.

However, the revised framework clarifies that orders placed via manually typed messages in a livestream chat do not qualify as e-commerce. Unlike purchases completed through embedded links that redirect buyers to structured e-commerce interfaces, these transactions rely on informal, unstructured communication rather than an automated, network-based ordering system. For instance, if a user participating in a live shopping session requests a product link via a chat message and then completes the purchase through an external structured webpage, this transaction would fall within scope, as the order is ultimately placed using a structured method. By contrast, transactions completed solely through manually typed messages—whether in livestream chats or private messages—would fall outside the scope, due to the absence of structured, automated ordering. While some livestream hosts may accept orders through direct messages, this remains a minor channel compared to redirection to standard webpages, which aligns with the OECD definition of e-commerce.

AI-powered ordering methods

The 2025 revision acknowledges the increasing role of AI-powered channels in online ordering, reflecting broader technological advancements in automation and digital transaction processing. AI-driven ordering systems streamline transactions while upholding the OECD framework's core principles of automation and remote processing. As these technologies continue to evolve, ensuring their alignment with the overarching framework remains critical. The inclusion of AI-powered methods within the definition is contingent upon their structured and automated nature, distinguishing them from informal, unstructured interactions that fall outside the scope of e-commerce.

A range of AI-driven technologies are emerging to facilitate online transactions, enhancing the automation and efficiency of digital ordering. While not exhaustive, the following examples illustrate how structured, automated AI-powered ordering methods align with the OECD framework.

AI-powered chatbots

AI-powered chatbots are emerging as a key channel for facilitating online transactions, leveraging natural language processing and automated conversational interfaces to guide users through the ordering process. Integrated into e-commerce platforms, messaging applications, and company websites, some chatbots enable customers to search for products, receive recommendations, and place orders through structured, automated workflows (Shopify, 2023[10]). These transactions follow predefined protocols and meet the OECD framework's criteria of automation and remoteness.

A clear distinction should be made between AI-powered chatbots and human-operated chat functions. While AI chatbots leverage automated, predefined scripts for structured order processing, human-assisted chat interactions are typically unstructured and rely on manual input. As such, orders placed via human-operated chats are comparable to manually typed emails or messages, and therefore fall outside the scope of e-commerce as defined in the 2025 framework.

With ongoing advancements, AI-powered chatbots are increasingly sophisticated, with some integrating payment gateways that allow customers to complete transactions within the same interaction.[2] By enabling

structured and automated ordering over computer networks, AI-powered chatbots align with the OECD framework.

Voice shopping

Voice-assisted ordering marks a significant evolution in digital commerce, using AI-driven natural language processing to enable structured ordering. Voice assistants such as Amazon Alexa, Google Assistant, and Apple Siri enable users to browse, select, and purchase products through voice commands, integrating seamlessly with e-commerce platforms (Shopify, 2024[11]). These transactions, processed over web-based protocols, align with the OECD definition of e-commerce by maintaining a structured order placement system.

To qualify as e-commerce, a voice-assisted transaction must involve an automated and predefined mechanism for confirming and placing orders, ensuring consistency with the framework. By contrast, voice interactions that merely suggest products or provide recommendations without a structured ordering process do not meet the necessary criteria.

4.2.2. Clarifying the scope of excluded transactions

The 2025 OECD definition of e-commerce maintains the exclusions set in the 2009 framework, which already excluded orders placed via telephone calls, facsimile, or manually typed emails due to their lack of automation. The revision further clarifies that manually typed messages, including text-based orders without structured digital ordering mechanisms, also fall outside the scope of e-commerce.

Building on this, it further emphasises the criterion of remoteness, explicitly excluding on-premise orders placed via kiosks or QR codes. While kiosks and QR codes automate transactions, similar to vending machines, they serve as technology-enabled substitutes for salespersons rather than constituting e-commerce in the strict sense. As these transactions occur in physical settings where buyers and sellers interact in person, they do not meet the criterion of remoteness central to the OECD definition.

4.3. Supplementary measurement guidance on specific types of transactions

This subsection provides supplementary guidance on three specific types of transactions that require further clarification beyond the concise definitions provided in Table 4.1. The focus is on ensuring consistency and accuracy in measuring digital intermediary transactions, digitally ordered subscriptions, and EDI, all of which are prevalent features of the e-commerce landscape.

4.3.1. Digital intermediaries

Digital intermediaries are third parties that facilitate transactions between buyers and sellers, often charging a fee for this service. A prominent subset of these intermediaries includes DIPs such as Amazon Marketplace, eBay, and Airbnb, which enable third-party transactions without taking ownership of the goods or services involved for a fee.

The key measurement challenge lies in the risk of double counting. Since these platforms connect multiple parties—buyers, sellers, and intermediaries—it is crucial to measure only the intermediation fees charged by the platform, rather than the total transaction value. This ensures that e-commerce statistics accurately reflect the role of intermediaries, while avoiding the inflation of transaction values.

4.3.2. Digitally ordered subscriptions for goods and/or services

Digitally ordered subscriptions refer to recurring transactions for goods or services ordered via computer networks, such as Software-as-a-Service (SaaS) or digital content subscriptions. These subscriptions, whether for digital or physical goods, qualify as e-commerce transactions under the OECD framework, as the focus is on the method of ordering, not the delivery or payment method.

A common measurement challenge with subscriptions is distinguishing between different types of recurring payments, particularly when businesses use varying accounting practices. To ensure accurate reporting, subscription payments should be recorded based on when they are incurred. If a subscription is paid upfront, the full amount should be reported in the year of payment, in line with standard accounting practices. For subscriptions paid in monthly instalments, each payment should be reported in the year it occurs. For instance, a two-year subscription paid upfront should be reported in full in the year of purchase, while monthly payments should be recorded in their respective years.

Transactions such as recurring university fee payments, which do not involve the exchange of goods or services covered under the e-commerce definition, should be excluded.

4.3.3. Electronic Data Interchange (EDI)

EDI is an e-business tool for exchanging business information in a structured, standardised format that allows for automatic processing without manual input. EDI is used here as a generic term encompassing formats such as EDIFACT and XML, and it is commonly employed in complex supply chains to send or receive various types of business messages, including orders, invoices, and shipping notices. A key measurement challenge with EDI arises when it is integrated into broader enterprise systems, such as Enterprise Resource Planning (ERP) platforms, or used alongside web-based applications.

To ensure consistent reporting, the 2025 revision maintains that the type of e-commerce transaction is determined by the method used to place the order. If an order is placed via a web interface, even if transmitted using EDI, it should be classified as web e-commerce. Only orders placed directly using an EDI system should be classified as EDI e-commerce. This approach aligns with the 2009 framework, which aimed to prevent misclassification in mixed ordering processes and to support consistent, cross-country measurement (OECD, 2009[5]).

4.4. Operationalising the 2025 OECD definition of e-commerce

The framework for measurement provides an implementation tool to operationalise the 2025 OECD definition of e-commerce. Building on the approach established in the 2009 framework, this revision maintains a clear functional split between different types of e-commerce transactions, ensuring that these can be consistently measured and compared across countries.

The 2025 revision introduces a more refined approach by recognising new types of transactions and specifying clearer exclusions, while preserving the core categories of web-based and EDI-based transactions. Table 4.2 below reflect those changes.

Table 4.2. Decomposing transactions: Web and EDI e-commerce

E-commerce type	Definition
Web e-commerce	**Include**: Orders made through web-based interfaces, such as online stores (web shops), web forms on the Internet, extranet, or via an app, regardless of the access device (computer, laptop, mobile phone, etc.). Also included are orders placed via social media and messaging platforms using structured ordering features (e.g., catalogues) and AI-powered transactions that follow predefined, automated ordering processes (e.g., chatbots or voice shopping). Within web e-commerce, it is recommended to distinguish orders placed on platforms that act as intermediaries for a fee. **Exclude:** Orders placed via manually typed messages (including but not limited to e-mails), on-premise mechanisms (including but not limited to kiosks or QR codes), and voice or chatbot interactions that do not involve structured, automated ordering mechanisms.
EDI e-commerce	Orders initiated with electronic data interchange (EDI). EDI is an e-business tool for exchanging different kinds of business messages. EDI is here used as a generic term for sending or receiving business information in an agreed format which allows its automatic processing (e.g., EDIFACT, XML, etc.) and without the individual message being manually typed. "EDI e-commerce" is limited to EDI messages that place an order.

Source: Author's elaboration.

The orientations for operationalising the 2025 OECD definition of e-commerce introduces an important refinement to reflect the growing role of digital intermediaries. Within web e-commerce, it is now recommended to distinguish orders placed on platforms that act as intermediaries for a fee. This adjustment acknowledges the increasing importance of digital intermediaries like DIPs in facilitating e-commerce transactions, providing clearer insight into their role in the digital economy.

However, this recommendation also implies a potential reporting burden of additional disaggregation. To address this, the revised framework suggests making further breakdowns conditional on assessing businesses' reporting capacity and burden. This approach ensures practicality in data collection while enabling a more detailed understanding of intermediaries' roles when feasible.

4.5. Survey questions on e-commerce sales in enterprises

This section provides example survey questions designed to enhance data collection on total e-commerce sales by enterprises. The questions are structured into modules to determine whether enterprises engage in e-commerce (web and EDI-type sales), capture the value of these transactions, and assess their geographic destination. These modules build on existing international survey frameworks, including the Eurostat Model Questionnaire for the EU Survey on ICT Usage and e-commerce in Enterprises 2024 (2023[12]). However, they have been adapted to allow enterprises to report total e-commerce sales instead of requiring web and EDI-type sales separately, reducing the potential burden on survey respondents and aligning with the other measurement frameworks. Similar modules could also be developed for ICT surveys targeting households and individuals, or to further distinguish between goods and services.

Table 4.3. Example survey module on e-commerce sales in enterprises

E-commerce sales of goods or services occur through methods specifically designed for receiving orders. These include web-based interfaces and Electronic Data Interchange (EDI). The payment may be made online or offline.

E-commerce sales **do not include** orders placed via manually typed messages (including but not limited to e-mails), on-premise mechanisms (including but not limited to kiosks or QR codes), and voice or chatbot interactions that do not involve structured, automated ordering mechanisms.

E-commerce encompasses both web-based and EDI-type sales:

- Web sales cover orders, bookings and reservations placed by your customers via:
  - Your enterprise's websites or apps:
    - Online store (web shop);
    - Web forms on the Internet, extranet;
    - Social media or messaging platforms with structured ordering features (e.g., catalogues like WhatsApp Carts, TikTok Shop);
    - Chatbots or voice shopping;
  - E-commerce marketplace websites or apps (used by several enterprises for trading goods or services).

- EDI-type sales cover orders placed by customers via EDI-type messages, including:
  - in an agreed or standard format suitable for automated processing;
  - EDI-type order message created from the business system of the customer;
  - including orders transmitted via EDI-service provider;
  - including automatic system generated demand driven orders;
  - including orders received directly into your ERP system.

  Examples of EDI: EDIFACT, XML/EDI (e.g. UBL, Rosettanet).
  Only orders placed directly using an EDI system should be classified as EDI e-commerce

Orders placed via manually typed messages (including but not limited to e-mails), on-premise mechanisms (including but not limited to kiosks or QR codes) are not considered e-commerce.

Module A	In YYYY, did your enterprise have e-commerce sales of goods or services via:	Yes	No
	a) your enterprise's websites or apps?	□	□
	b) e-commerce marketplace websites or apps used by several enterprises for trading goods or services? (e.g. Amazon, eBay, Alibaba, etc.)	□	□
	c) EDI-type messages	□	□
Module B If both Module A a) and Module A b) and Module A c) = "No" then go to the next section	What was the total value of your enterprise's e-commerce sales?		
	a) In YYYY, what was the total value of your enterprise's e-commerce sales of goods or services?	National currency, excluding VAT if applicable _____	
	OR b) In YYYY, What percentage of your enterprise's total turnover was generated by e-commerce sales of goods or services?	__ __ __ , __ %	
Module C	In YYYY, what was the percentage breakdown of the turnover from e-commerce sales that were placed by customers located in the following geographic areas? *(estimates in percentage of the monetary values in national currency, excluding VAT if applicable)*		
	Own country	__ __ __ , __ %	
	Rest of the world	__ __ __ , __ %	
	TOTAL	100%	

Notes: "YYYY" = year. They have been slightly adjusted and simplified to enhance data collection on the value of total e-commerce sales.
Source: Author's elaboration.

Module C is particularly valuable for advancing the measurement of digitally ordered trade, as it captures the share e-commerce sales sold internationally (rest of the world). These data are central to international

efforts to quantify cross-border e-commerce as outlined in the *Handbook on Measuring Digital Trade* (IMF et al., 2023[1]) and highlighted in OECD work to construct experimental estimates of digital trade (OECD, forthcoming[13]).

Expanding the adoption of these modules would strengthen the empirical foundation for analysing global digital trade flows, improving the accuracy and comparability of international e-commerce statistics. Encouraging their systematic inclusion in national surveys would help close existing data gaps, supporting evidence-based policymaking in the digital economy. To this end, the OECD stands ready to collaborate with NSOs and other relevant stakeholders to facilitate their implementation.

5 Looking ahead

The 2025 revision of the OECD definition of e-commerce reaffirms its core principles while refining interpretative guidelines to enhance clarity and ensure continued statistical relevance. It preserves the foundational concepts of automation and remoteness, strengthening applicability by explicitly addressing emerging business models and digital transaction types. These refinements provide clearer methodological guidance for NSOs and international organisations, supporting consistent and comparable measurement across countries.

As digital transactions evolve, the revised guidelines reinforce the definition's adaptability. By providing additional measurement guidance on digital intermediaries, digitally ordered subscriptions, and EDI, the 2025 revision enhances the interpretative framework to ensure consistency, clarity, and continued relevance. The updated guidelines also clarify the inclusion of structured transactions on social media platforms, AI-assisted ordering, and other automated digital purchasing methods, aligning measurement practices with the principles governing e-commerce.

The revision upholds the principle that e-commerce is defined by the method of ordering rather than payment or delivery. It clarifies that transactions lacking automation and remoteness remain outside the measurement framework, ensuring consistency with the overarching approach.

Discussions held in the context of the revision acknowledged the role of less automated digital ordering channels, such as manually typed messages (including bot not limited to e-mails). However, due to their reliance on manual interaction, these channels pose significant measurement challenges and have not been incorporated into the revised measurement framework. Instead of developing an additional definition for such transactions, the revision reinforces the focus on structured ordering methods that align with the core principles of automation and remoteness.

Meanwhile, digital ordering channels continue to evolve, expanding beyond traditional platforms like webpages to social media networks with integrated ordering features. These advancements strengthen statistical relevance and measurement consistency, reinforcing the OECD's forward-looking approach to capturing e-commerce activity.

Looking ahead, the OECD definition of e-commerce remains a robust and adaptable framework, capturing the dynamic nature of digital transactions while maintaining methodological consistency. By reinforcing its conceptual foundations and refining its interpretative guidance, the 2025 revision ensures reliable, internationally comparable statistics that inform evidence-based policymaking. Continued dialogue and collaboration among NSOs, international organisations, and private stakeholders will be essential to keeping the framework relevant in an evolving e-commerce landscape.

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Annexe A. The 2001 framework for measuring e-commerce

Table A.1. The OECD definitions of electronic commerce transactions and proposed guidelines for their interpretation

E-commerce transactions	OECD definitions	Guidelines for the Interpretation of the Definitions (WPIIS proposal April 2001)
BROAD definition	An **electronic transaction** is the sale or purchase of goods or services, whether between businesses, households, individuals, governments, and other public or private organisations, conducted over **computer-mediated networks**. The goods and services are ordered over those networks, but the payment and the ultimate delivery of the good or service may be conducted on or off-line.	**Include**: Orders received or placed on any online application used in automated transactions such as Internet applications, EDI, Minitel or interactive telephone systems.
NARROW definition	An **Internet transaction** is the sale or purchase of goods or services, whether between businesses, households, individuals, governments, and other public or private organisations, conducted over the Internet. The goods and services are ordered over the **Internet**, but the payment and the ultimate delivery of the good or service may be conducted on or off-line.	**Include**: Orders received or placed on any Internet application used in automated transactions such as web pages, Extranets and other applications that run over the Internet, such as EDI over the Internet, Minitel over the Internet, or over any other web enabled application regardless of how the web is accessed (e.g. through a mobile or a TV set, etc.) **Exclude**: Orders received or placed by telephone, facsimile, or conventional e-mail.

Source: (OECD, 2001[3]).

Notes

[1] While the 2001 OECD definition of e-commerce partially excluded orders made via telephone, fax, or manually typed emails, there was some ambiguity regarding their treatment. The 2009 definition provided greater clarity by explicitly excluding these transactions, ensuring a more consistent and internationally comparable approach to measuring e-commerce.

[2] The definition remains focused on the ordering method rather than the payment or delivery method.