# BRINGING SMEs ONTO
# THE E-COMMERCE HIGHWAY



International Trade Centre

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# Abstract for trade information services

This publication studies e-commerce-related policies that affect SMEs' engagement in cross-border e-commerce. It identifies the bottlenecks and requirements of e-commerce participation and presents examples of best practices in regulating cross-border e-commerce. The paper addresses competitiveness issues in each segment of the cross-border e-commerce process chain, including establishing business online, international e-payment, cross-border delivery and aftersales services. It provides a checklist of the essential ingredients for SME success in cross-border e-commerce, by examining enabling factors at the firm level, immediate business environment level and national policy level. The paper also reviews global cross-border e-commerce and offers a deeper analysis of selected economies. The paper serves as a starting point for a public private dialogue on e-commerce, especially for SMEs in developing countries.

Descriptors: **Electronic Commerce, Cross-border Trade, SMEs, Competitiveness, Public Private Dialogue**

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# Foreword

Transformations in the landscape of trade and technology have fundamentally altered the way we purchase and consume goods and services. As the costs of international communication and transportation decrease, and the demand for immediacy increases, suppliers are increasingly turning to e-commerce and e-platforms as the preferred method for reaching clients. Online shoppers are experiencing a revolution in their buying habits, often seeking options in other countries and regions. These changes can offer significant opportunities for businesses in both developed and developing countries to expand their outreach into global markets.

By any measure, e-commerce is big business. For example, by 2018 Africa's e-commerce market is projected to soar to US$ 50 billion, up from US$ 8 billion in 2013. E-commerce represents a sea change in the way that trade is conducted, and offers great potential to contribute to the United Nations Global Goals.

For many people, e-commerce is becoming business as usual. Online retail is estimated by the Centre for Retail Research to account for 13% of consumer spending in the United States and around 10% in Europe, and much more in some countries such as the United Kingdom and Germany. And yet, many developing countries are still not taking full advantage of this opportunity. Best estimates put the current share of African enterprises in e-commerce, for instance, at below 2%, a share that could be much higher.

Cross-border e-commerce has opened up a new, more efficient way to connect producers and merchants directly to customers around the world, bridging the gap between demand and supply. It opens new opportunities by providing new markets, products and services but also by reducing the role of intermediaries, which can result in substantial purchasing discounts.

Cross-border e-commerce also provides a unique opportunity for small and medium-sized enterprises (SMEs) in countries and regions that may traditionally have found it difficult to reach regional and international markets – such as landlocked developing countries (LLDCs) – and connect with potential buyers beyond their borders.

This report provides practical guidance on how to ensure that the opportunities posed by e-commerce are accessible to SMEs, especially those in developing countries.

In practice, a number of barriers effectively preclude the involvement of a majority of SMEs. Key among them is the level of shipping costs, which can be especially high for small volumes of traffic from remote SMEs. Another barrier is the availability and cost of international payment solutions: In many least developed countries, for example, firms cannot open such facilities, or must rely on expensive cash transfers that are increasingly shunned by international customers.

Business-to-consumer (B2C) e-commerce opens the possibility for producers to capture higher margins, again by disintermediation in the international distribution of goods. However, this form of trade also requires the use of postal or express delivery services that ship directly to the consumer. Failure to take taxes and duties into account can generate a high proportion of rejected shipments and have a negative impact on an SME's profitability and reputation.

The high-frequency, low-value nature of B2C cross-border e-commerce presents new challenges for regulators, particularly customs authorities, in handling the growing number of items traded across borders. Some countries have piloted innovative trade facilitation and regulatory practices, such as simplified customs duties and clearance procedures for low-value items, which further reduce cross-border e-commerce costs.

This publication examines regulatory issues and key determinants for competitiveness related to cross-border e-commerce from the perspective of a small e-business. Potential bottlenecks are identified and examples of best practices are provided. Each segment of the cross-border e-commerce process chain, including establishing business online, international e-payment, cross-border delivery and aftersales services, is considered in detail.

A checklist of the essential ingredients for the success of cross-border e-commerce is presented, analysing factors affecting competitiveness of e-commerce businesses at the firm level, in the immediate business environment and at the national policy level. The publication also features the opinions of entrepreneurs active in developing countries, offering a vivid picture of concrete issues encountered by SMEs in cross-border e-commerce.

At ITC our vision is one where small firms in developing and least developed countries have access to advanced solutions. We actively support SMEs in acquiring the necessary skills and capabilities to trade through e-commerce channels. Our e-Solutions Programme provides a platform of shared technologies and services, including access to international payment solutions and logistics, enabling small firms to share the costs of exporting goods, handle foreign payments and generate awareness in foreign markets.

Rapid cross-border e-commerce growth will have an impact on traditional brick-and-mortar retailers, whose business opportunities might shrink as consumers turn to virtual marketplaces. Nevertheless, the growth of cross-border e-commerce, driven by reduced transaction costs and rapidly evolving consumer preferences, may provide new employment opportunities and demand new skill sets. ITC, with its mandate of helping to build the competitiveness of SMEs, will continue to facilitate adaptation to this new paradigm for trade.

It is our hope that this publication will provide policymakers, trade and investment support institutions and SMEs with a better understanding of the policy aspects of cross-border e-commerce and make them better equipped to capitalize on the opportunities offered by the growing global online market.

Arancha González

Executive Director
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# Acknowledgements

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# Tables, Figures, Boxes and Case Stories

# Abbreviations

| | |
|---|---|
| APEC | Asia-Pacific Economic Cooperation |
| ASEAN | Association of Southeast Asian Nations |
| B2B | Business-to-business |
| B2C | Business-to-consumer |
| BASIS | Bangladesh Association of Software and Information Services |
| C2C | Consumer-to-consumer |
| CBP | U.S. Customs and Border Protection |
| EU | European Union |
| FDI | Foreign direct investment |
| FOB | Free on board |
| G20 | Group of Twenty |
| GATS | General Agreement on Trade in Services |
| GATT | General Agreement on Tariffs and Trade |
| GDP | Gross domestic product |
| GNI | Gross national income |
| GST | Goods and services tax |
| ICANN | Internet Corporation for Assigned Names and Numbers |
| ICT | Information and Communications Technology |
| IMF | International Monetary Fund |
| IP | Intellectual property |
| IPR | Intellectual property right |
| IT | Information technology |
| ITC | International Trade Centre |
| ITU | International Telecommunication Union |
| LDC | Least developed country |
| Mbps | Megabits per second |
| MFN | Most favoured nation |
| MLES | Model Law on E-Signatures |
| MPF | Merchandise processing fee |
| OECD | Organisation for Economic Co-operation and Development |
| PKI | Public Key Infrastructure |
| RAQUEL | Registered Article Quality Enhancement Lead |
| RTA | Regional trade agreement |
| SDR | Special drawing right |
| SME | Small and medium-sized enterprise |
| Tbps | Terabytes per second |
| UNCTAD | United Nations Conference on Trade and Development |
| UNCITRAL | United Nations Commission on International Trade Law |
| UPU | Universal Postal Union |
| USITC | United States International Trade Commission |
| VAT | Value added tax |
| WCO | World Customs Organisation |
| WIPO | World Intellectual Property Organization |
| WTO | World Trade Organization |

# Executive Summary

E-commerce is transforming the global business landscape at an unprecedented speed, and successful e-commerce requires the ability to embrace change. Entrepreneurs working in e-commerce today – particularly the cross-border variety – must master new business techniques along with time-tried precepts of international trade.

The first e-commerce transaction on a commercial website was recorded only 21 years ago, and involved a broken laser pointer sold in 1995 on AuctionWeb, the predecessor of eBay, for US$ 14.83. In 2013, global business-to-consumer (B2C) e-commerce sales totalled US$ 1.2 trillion; by the end of 2016, they will reach an estimated US$ 1.92 trillion. E-commerce has become business as usual for people in developed countries: Online retail is estimated by the Centre for Retail Research to account for 13% of consumer spending in the United States and around 10% in Europe, and much more in such countries as the United Kingdom and Germany.

This publication focuses on cross-border e-commerce, defined as the cross-border sale or purchase of goods or services conducted over computer networks. In the current economic era, where information technology is a significant driver of growth, participating in cross-border e-commerce is likely to be a major factor of a company's success and even a prerequisite for survival, especially for small and medium-sized enterprises (SMEs).

**Expanding SME outreach**

E-commerce has the potential to help SMEs scale up and expand their outreach in a number of ways:

• *Building an international reputation*

   Online transactions create a verifiable track record of a company's performance and trustworthiness. Consumers rely on such records to find the companies that are most likely to provide satisfactory service. Businesses rely on them to find reliable partners, and financial institutions rely on them to identify solid companies whose growth they can confidently support. A sound record of online transactions is one of the most valuable assets a company can accumulate.

• *Expanding outreach*

   Cross border e-commerce helps SMEs expand their outreach, as it reduces the investment required for a company to become visible in the global market. Online platforms all function to bring consumers to a single virtual marketplace. These platforms have a network effect: once the number of users has surpassed a certain threshold, the marginal cost of attracting newcomers to a website is minimal. This is a benefit that SMEs operating on the platforms can share.

• *Reducing market research costs*

   The big data generated from transaction records can help SMEs reach out to a targeted group of potential buyers. One widely used technology by many e-commerce websites involves analyses users' browsing history to assess what type of product consumers are looking for and then automatically suggests similar products.

• *Disintermidiation in international trade*

   A significantly larger proportion of international value can be captured by disintermediation of those responsible for import and export activities, as SMEs can ship goods directly to the end user via e-commerce.

- *Leveraging e-commerce ecosystems*

  Online platforms are building ecosystems which help SMEs to access, often at a discounted price, the essential services needed for company growth. Among them are financing options, shipping, delivery and logistics solutions, promotion packages, legal and financial advisory services, market information and analysis, and B2B matchmaking services.

But e-commerce has challenges as well as potential. Old methods of doing business may no longer be available, and new mechanisms for trade may be required.

Creating trust is crucial, particularly when the old methods lose their relevance. When buyers cannot see the goods or interact directly with the sellers and new types of trading relationships must be created, e-commerce is especially challenging. Technologies – such as online customer testimonials, digital signatures and security certificates – can go only so far in building trust.

Developing countries are not yet taking full advantage of e-commerce opportunities. Best estimates put the current share of African enterprises in cross-border e-commerce at below 2%. This proportion could be much higher, and is as low as it is because small businesses on the continent often simply lack access to e-commerce platforms and international payment solutions.

The eight country profiles in this paper show that e-platforms are still far from global. The main online platforms accessed by users in major emerging economies tend to be national platforms, i.e. platforms run by companies headquartered domestically. Exceptions to this are the Russian Federation, where Chinese platforms are heavily used, and possibly India, where United States platforms are prominent, even if the market leader is actually headquartered in India.

**Challenges and bottlenecks**

This publication examines challenges and bottlenecks to e-commerce. It looks at e-commerce through a conceptualized chain of processes that are typical of all cross-border e-commerce transactions, regardless of whether they involve goods or services. From the lens of businesses, SMEs often face policy challenges in four key areas: establishing online business, international e-payment, international delivery and aftersales.

**E-commerce process chain**

Establishing online business → International e-payment → Cross-border delivery → Aftersales
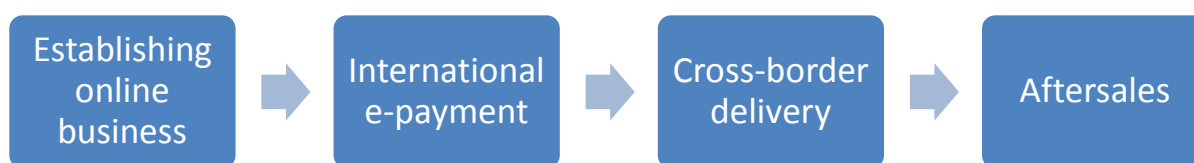
The paper provides checklists of essential ingredients that should be available to ensure the competitiveness of SMEs engaged in cross-border e-commerce:

- ✓  at the firm level;

- ✓  within the immediate business environment;

- ✓  at the national level.

**Checklists for success**

An analysis of the process chain of e-commerce reveals that at the *firm level*, success in cross-border e-commerce starts with an ability to understand and use appropriate technologies to establish an online presence and to conduct international e-payments. Success requires appropriate capabilities in logistics,

such as handling multiple small orders. It also calls for the ability to deal directly with customers abroad in providing pre- and aftersales services, rather than going through a foreign distributor.

For e-commerce to flourish, the *immediate business environment* needs to guarantee access to networks and platforms that are relevant for the different stages of the e-commerce process chain. To establish an e-commerce business, access to affordable Internet and e-commerce platforms matters. To conduct international e-payments, firms need access to third-party e-payment service providers, linked to domestic banks.

**New consumer protection laws needed**

At the *national level*, legislation must be supportive for e-commerce to grow. E-signature and e-contract laws are needed to facilitate the establishment of online business. International e-payments require regulations on the free cross-border flow of foreign exchange and, ideally, on the prevention of online fraud and cybercrime. Cross-border delivery depends critically on countries' transport infrastructure and customs clearance practices. Last but not least, e-commerce may demand new rules for consumer protection.

New rules and regulations at the national level require international solutions when e-commerce crosses borders. The need for such international solutions was recognized in the early days of e-commerce by such institutions as the World Trade Organization (WTO). Global solutions to critical challenges – including cross-border e-signature recognition, international e-payments and international consumer and data protection – still need to be found.

While e-commerce can enhance the inclusion of developing-country SMEs in global markets, it also risks engendering the opposite outcome. The digital gap between the rich world and the poor world is well documented and far from being addressed. On top of this, SMEs are less e-connected than large firms, and the firm-level digital gap is wider in the developing than in the developed world.[1] Closing both of these gaps is critical, if e-commerce is to work in favour of developing-country SMEs.

**A starting point for public-private dialogue**

This publication provides an overview of the challenges ahead. The checklists it offers for meeting those challenges are intended to provide a useful starting point for dialogue between public- and private-sector players on how best to address those challenges. Including SMEs in this dialogue will be essential if e-commerce is to exploit its full potential and become truly inclusive.

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[1] ITC (2015). SME Competitiveness Outlook 2015.

# Introduction

E-commerce is transforming the global business landscape at an unprecedented speed. The first e-commerce transaction on a commercial website was recorded only 21 years ago, in 1995, and involved the sale of a broken laser pointer on AuctionWeb, the predecessor of eBay, for US$ 14.83.[2] In 2013, global business-to-consumer (B2C) e-commerce sales were valued at US$ 1.2 trillion[3] and are estimated to reach US$ 1.92 trillion by the end of 2016.[4] Billions of transactions are completed each day on the Internet, and e-commerce is redefining business competitiveness, particularly for small and medium-sized enterprises (SMEs).

**What is e-commerce?**

Despite the seeming ubiquity of e-commerce, the word "e-commerce" itself is often understood only vaguely. For some people, e-commerce is equivalent to "buying stuff online", while for others, it encompasses a much wider range of activities, including online purchases of physical products (e.g. T-shirts and books), digital products (e.g. music, video, apps and games) and services (e.g. travel and entertainment tickets, insurance, consultancies). It can also include activities in which there is no visible transaction in traditional terms, such as reading marketing copy and advertisements that roll out on-screen before a YouTube video can be played.

Given the broadness of the subject, it comes as no surprise that a common definition has yet to be accepted. International organizations, governments and businesses put forward various definitions, all slightly similar and all slightly different.

This report uses the widely used definition of the Organization for Economic Co-operation and Development (OECD), which describes e-commerce as covering the sale and purchase of both goods and services over computer networks. OECD defines e-commerce as:

> "the sale or purchase of goods or services, conducted over computer networks by methods 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 organizations. To be included are orders made over the web, extranet or electronic data interchange. The type is defined by the method of placing the order. To be excluded are orders made by telephone calls, facsimile or manually typed e-mail."[5]

**Domestic vs. cross-border e-commerce**

As the cost of international trade is reduced, consumers look beyond national borders for the best online deals. Cross-border e-commerce involves goods and services delivered across borders from a supplier in one country to a consumer in another country. According to a recent survey of 24 countries published in the Nielsen Global Connected Commerce Report,[6] more than half the respondents (57%) say they purchased from an online retailer outside their country's border in the past six months.

In the area of services trade, cross-border e-commerce also brings new opportunities for SMEs. Online software and app markets such as App Store and Google Play help deliver digital products from SME developers to billions of smart devices. Freelancers can offer their design, programming, consulting and marketing services to clients around the world, knowing that their payment will be secured. Additionally, crowdsourcing activities, from freelance services to funding, are being carried out online.

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[2] Waxman, O. B. (2015, September 2). This is the first item ever sold on eBay.

[3] UNCTAD (2015). Information Economy Report 2015: Unlocking the potential of e-commerce for developing countries.

[4] Statista (n.d.). B2C e-commerce sales worldwide from 2012 to 2018 (in billion U.S. dollars).

[5] OECD (2013). Glossary of Statistical Terms.

[6] Nielsen (2016). Global connected commerce : is e-tail therapy the new retail therapy?

**B2B vs. B2C e-commerce**

Cross-border e-commerce comes in different forms and shapes, involving different types of players, deals and procedures. Transactions may involve enterprises (B2B), a business and a consumer (B2C), or two individual consumers (C2C).

B2B transactions account for the largest share of global cross-border e-commerce in value, exceeding US$ 15 trillion in 2013. Global cross-border B2C e-commerce has a much smaller share, at US$ 1.2 trillion in 2013. However, B2C trade is the fastest-growing section of international e-commerce and offers the greatest opportunities for SMEs, which represent the majority of the suppliers in cross-border B2C e-commerce. B2B and B2C cross-border e-commerce also differ in nature: B2B, in most instances, is still traditional international trade between import and export businessess who are connected by the Internet. Cross-border B2C e-commerce is potentially redefining international trade through its entirely new process chain that links sellers directly with buyers.

The following table summarizes the scope of this publication and provides examples of the differences between traditional commerce and e-commerce; domestic and cross-border e-commerce; and goods and services e-commerce. As indicated in the area below, this paper focuses on cross-border e-commerce, for both trade in goods and trade in services, with a focus on B2C trade.

**Table 1.    Scope of this publication**

| | Domestic | | International/Cross-border | |
|---|---|---|---|---|
| | **Goods** | **Services** | **Goods** | **Services** |
| **Traditional commerce** | A consumer buys a product from a domestic retail store | A consumer receives a service offline from a domestic supplier, e.g. a haircut in a local salon | Bulk import and export of goods by international trading companies | Four modes of supply defined by GATS,[7] not involving online transactions, e.g. international shipping, international tourists, companies that have foreign investments, supplying a service to local customers, and temporary movement of a service supplier to another country to supply a service |
| **E-commerce** | A consumer buys a product from a domestic online store | A service is supplied from a domestic supplier via Internet, e.g. e-banking services provided by domestic banks | A consumer orders a product from an online store and the product is shipped from the producer/retailer in another country directly to the consumer | Mainly mode 1 and 2 of GATS, involving cross-border supply of services, which could include:<br>- Digital products: music, video, apps and games downloaded and paid for online<br>- Services transactions completed online between a consumer and a supplier located in different countries |

**Benefits for SMEs**

In an era where technology drives growth and progress and information is key, businesses that do not participate in e-commerce are at risk of being shut out of a critical part of the marketplace. Adopting e-commerce may become a necessity to survive, especially for SMEs. E-commerce helps SMEs to scale up and expand their outreach:

- Building an international reputation

    Online transactions create a verifiable track record of a company's performance and trustworthiness. Consumers rely on such records to find the companies that are most likely to provide satisfactory service. Businesses rely on them to find reliable partners, and financial institutions rely on them to

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[7] WTO Document (2013). The General Agreement on Trade in Services – An Introduction.

identify solid companies whose growth they can confidently support. A sound record of online transactions is one of the most valuable assets a company can accumulate.

- Expanding outreach

  Cross border e-commerce helps SMEs expand their outreach, as it lowers the threshold required for a company to become visible in the global market. Online platforms all function to bring consumers to a single virtual marketplace. These platforms have a network effect: once the number of users has surpassed a certain threshold, the marginal cost of attracting newcomers to a website is minimal. This is a benefit that SMEs operating on the platforms can share.

- Reducing market research costs

  The big data generated from transaction records can help SMEs reach out to a targeted group of potential buyers. One widely used technology by many e-commerce websites involves analyses users' browsing history to assess what type of product consumers are looking for and then automatically suggests similar products.

- Disintermediation in international trade

  A significantly larger proportion of international value can be captured by disintermediation of those responsible for import and export activities. SMEs can ship goods directly to the end user.

- Leveraging e-commerce ecosystems

  Online platforms are building ecosystems which help SMEs to access, often at a discounted price, the essential services needed for company growth. Among them are financing options, shipping, delivery and logistics solutions, promotion packages, legal and financial advisory services, market information and analysis, and B2B matchmaking services.

**Key determinants of SME competitiveness in cross-border e-commerce**

For analysing SME competeveness, the publication applies the methodology developed in the ITC flagship publication, *SME Competitiveness Outlook 2015*. The SME competeveness grid below provides a framework to assess SME weaknesses at the firm level, within the immediate business environment and at the national level, in terms of three pillars: the capacity to compete, to connect and to change.

**Table 2.    SME competitiveness grid**

|  | Capacity to compete | Capacity to connect | Capacity to change |
|---|---|---|---|
| Firm-level capabilities |  |  |  |
| Immediate business environment |  |  |  |
| National environment |  |  |  |

*Source:* ITC (2015). *SME Competitiveness Outlook 2015: Connect, Compete and Change for Inclusive Growth.*

"Capacity to compete" refers in this context to the static dimension of competitiveness and centres on the efficiency of firms' operations in terms of cost, time, quality and quantity. "Capacity to change" reflects the capacity of a firm to execute change in response to, or in anticipation of, dynamic market forces and to innovate through investments in human and financial capital. "Capacity to connect" refers to the gathering and exploitation of information and knowledge, notably regarding consumer profiles and competitor profiles. In today's fast-moving markets, the capacity to connect and the capacity to change are both crucial.

There is overlap in SME competitiveness determinants when comparing traditional trade and e-commerce. In both cases, companies need to have an offering that meets consumer demand (capacity to compete), need to be able to connect to market information (capacity to connect) and need to adjust to change (capacity to

change). Differences do, however, exist. In the case of e-commerce, connectivity and speed of change appear to be more critical. There are also differences in what drives competitiveness within individual pillars. For e-commerce, for instance, product size matters, as it affects whether delivery will be undertaken via postal or express courier. A country's Internet infrastructure is also particularly important for e-commerce. Box 1 below presents a range of fundamental determinants of SME competitiveness for e-commerce, with a focus on what makes e-commerce different from "ordinary trade".

**Competitiveness along the e-commerce process chain**

The fundamental determinants described necessary for SME competitiveness in e-commerce may not be sufficient. Cross-border e-commerce is conducted following a relatively standardized process chain, and many detailed elements along this chain need to be in place in order for SMEs to succeed.

Chapters that follow are structured around a chain of processes that are typical to all cross-border e-commerce transactions from the SME perspective.

**Figure 1.   E-commerce process chain**

Establishing online business → International e-payment → Cross-border delivery → Aftersales
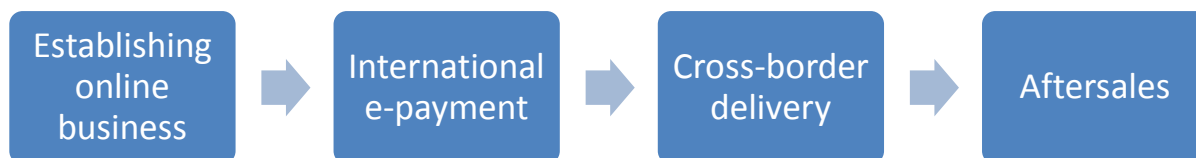
Each of the following chapters focuses on one segment of the process chain and examines policy issues related to the particular segment through analysis, case examples and best practices.

Each chapter begins with a checklist which summarizes the most important elements at the firm level, within the immediate business environment or at the national level to ensure the SME competitiveness in cross-border e-commerce. Elements in the checklist are further discussed along with analysis and case examples.

Cross-border e-commerce is a form of international trade. As with 'ordinary' trade, questions arise as to how to regulate cross-border e-commerce. Chapter 5 therefore provides an overview of the emerging landscape of international cooperation on cross-border e-commerce in the areas of analysis, regulation and capacity-building. Chapter 6 concludes and is followed by a substantial Appendix that provides e-commerce country profiles for major markets in the developing and emerging world.

**Box 1.    SME competitiveness in cross-border e-commerce: the fundamentals**

Although technological progress and the widespread Internet use, together with tariff reduction and deregulation, have helped create new opportunities for SMEs, cross-border trade through electronic means is not necessarily a viable option for all SMEs. Firm-level capabilities, local and industry-related factors and the national environment play a role in determining how competitive a company can be in supplying goods or services online across borders.

SMEs can theoretically control:

- **Fitness of products and services (compete)**

  Companies supplying goods of a reasonable size that can be easily delivered via postal or express courier and that guarantee a high profit margin have an advantage over firms that do not match these criteria in adopting e-commerce to access foreign markets.

- **Access to technology (change)**

  E-commerce competitiveness in international markets requires SMEs to access the state-of-the-art technology necessary to create an online presence and to offer electronic payment.

- **Knowledge and skills (compete, connect and change)**

  Being savvy about information and communications technologies (ICTs) is key to e-commerce competitiveness in international markets. Familiarity with computers, Internet and related technologies is essential for engaging in e-commerce, and technological skills are required to ensure technical security to prevent fraud, information leaks, and all other forms of attack that can undermine foreign consumers' confidence in the use of e-commerce solutions. Language skills are also often crucial to accessing foreign markets.

Factors partially or entirely beyond their control:

- **Regulatory and business environment (compete)**

  Rules and regulations become a key asset to a company's competitiveness in cross-border e-commerce when they favour the use of e-commerce. They regulate such matters as technical communications and interconnectivity standards, the legality and modality of digital signatures, certification and encryption, as well as disclosure, privacy, online content and tax policies. They are also beneficial when they call for simple and transparent trade-related procedures and allow for the development of adequate e-commerce standards.

- **Infrastructure (compete)**

  SMEs that want to be competitive in cross-border e-commerce need access to cost-efficient infrastructure. This consists primarily of stable power supplies, good telecom services, wide penetration and/or low cost of Internet connections, good Internet security, adequate quality and speed of lines, as well as good physical infrastructure itself.

*Source:*

Almeida de Almenida et al. (2007), Promoting E-Commerce in Developing Countries.

Mann, Catherine L. (2000), Electronic Commerce in Developing Countries.

# Chapter 1   Establishing online business
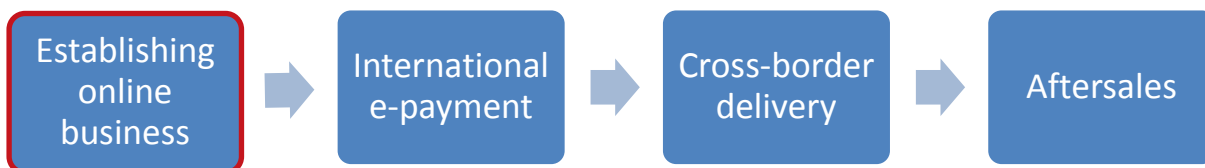
| Establishing online business | → | International e-payment | → | Cross-border delivery | → | Aftersales |

| Checklist: Establishing online business | |
|---|---|
| Firm-level capabilities | ✓ Device to connect to Internet<br>✓ Technical knowledge and skills<br>✓ Business knowledge and skills<br>✓ Language skills<br>✓ Ability to create a secure online presence |
| Immediate business environment | ✓ Affordable access to Internet<br>✓ Access to registration as vendors on online e-commerce platforms<br>✓ Access to skilled labour market |
| National environment | ✓ Simple business registration process with the local authorities<br>✓ Easy intellectual property (IP) registration and policies addressing IP infringement<br>✓ Solid ICT and electricity infrastructure<br>✓ Successful implementation of e-signatures and e-contracts laws<br>✓ National strategies for e-commerce growth |

The fast-changing growth of Internet technology across the globe has fomented the widespread use of the Internet for commercial purposes. In the digital age, it is an absolute must for any business to invest in building an online presence. Establishing an online presence is required to effectively showcase the goods or services that a business is offering to billions of people on the web.

With the advent of new technologies and the growing e-commerce market, there is a wide range of options to explore when establishing online business, including low-cost options that require little or no technical expertise. For instance, businesses can create an auction on an e-commerce platform to highlight their products and can direct people to their websites for as little as 30 cents.

An online presence allows businesses to be open around the clock without any increase in overheads. Products or services are advertised for the duration of the listing or for as long as the company's website is operational. Transactions and payments are executed online automatically without supervision. An online presence is easy to set up and the benefits are reaped almost instantly. This is useful for businesses, especially SMEs looking to go global, as it gives them access to potential consumers from many corners of the world that would not otherwise be so easy to reach.

## 1. Building blocks for establishing successful online business

**Business knowledge and skills**

Prior to setting up an online presence, a firm must first search for a niche market by identifying something that consumers feel they lack, and then figuring out how to meet the demand through e-commerce. Business and entrepreneurial skills, such as the ability to develop a business plan, conduct market surveys, obtain

knowledge of the product/service offering and search for funding, are as important in creating a successful online business as they are for traditional brick-and-mortar businesses.

E-commerce is not simply about selling products and services. In many cases, it offers a new way to collect and share information, and with the reduced cost of sharing information comes greater efficiency and increased transparency. The first SME entrepreneur featured in this publication describes how he has established an online tender portal that helps to disseminate procurement information and improve transparency.

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**Sharing procurement information online in Bangladesh**

By Shohorab Ahmed Chowdhury, TenderBazar.com



*Buyers and bidders for procurement contracts in Bangladesh are meeting online through TenderBazar.com, a portal created to share information about tender opportunities in the public and private sector. The platform now serves 3,000 local and foreign subscribers, who can access the 8,000 tenders posted every year in Bangladesh and make direct contact with the issuing companies and individuals. The platform is a forerunner to the Government's e-procurement system, now under development.*

Current public procurement rules in Bangladesh oblige all buyers to publish tender notices in at least two local newspapers. Roughly 500 tenders are published daily on the Central Procurement Technical Unit website and in more than 60 local newspapers, making it cumbersome for bidders to filter relevant contents.

TenderBazar.com, which is dedicated to collecting all tender notices from various sources, was built to address this challenge. Our daily activities include the collection and scanning of all local newspapers, collection of tender notices from online sources, removal of repetitive content, quality control, translation from Bengali to English and publishing on the portal. This user-friendly portal is designed to allow the sharing of information about tender opportunities advertised across the country through one single access point, enabling users to migrate to electronic tendering. It sends relevant tender notices to interested bidders everyday through text messages, email and the portal itself. This is especially useful for international bidders who, because of their location, are unable to purchase our local newspapers.

More than 3,000 local and foreign companies are now subscribed to our portal. Bidders interested in any of the calls for tenders announced on the portal may get in touch with the point of contact mentioned in the tender notice directly and arrange an agreement. TenderBazar.com also serves as a knowledge hub for public procurement information. We provide various analytical reports like tender trend analysis, geographical distribution of tenders, share of public and private tenders and share of local and international tenders.

Our portal provides a platform for buyers and bidders to meet, but does not facilitate transactions between the two parties. We may expand its functions and enable payments in the future if more payment methods are made available to our country (see Chapter 2). To ensure sustainability and grow our business, we made the portal replicable in other markets, especially those where procurement through tenders is common, such as China, India, Indonesia and Malaysia.

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In general, to take a business from offline to online, the entrepreneur may adopt one of the following business models:

- Brick-and-mortar businesses have a physical presence but lacka commercial Internet presence. They may use their sites for passive promotional purposes rather than to engage in online commercial activity.

- Bricks-and-clicks businesses have both an offline and an online presence, enabling consumers to purchase goods or services online and offline.

- Pure-play businesses operate exclusively online. Examples include giant e-commerce platforms, such as Amazon and eBay, as well as search engines and Internet service providers.

Each model has its own advantages as well as shortfalls. Deciding which model works best will depend on the entrepreneur's knowledge about the market and available resources.

**Language skills**

Great potential exists for attracting the growing number of online consumers around the world in their native languages. A business looking to go global should therefore build a multilingual site that is accessible in different countries and targeted to a much wider audience. According to a 2011 study by the European Commission, 88% of Internet users in the European Union (EU) said that when given a choice of languages, they always visited a website in their own language. Furthermore, 44% of Internet users in the EU thought they were missing out on interesting information because websites were not available in a language they understood.[8] Language skills or the ability to hire a translator for building a multilingual site are therefore essential to providing customers with an online shopping experience in their preferred language.

> "In my mind, a key challenge when retailers are selling in foreign marketplaces is delivering quality translations in the native language. Good translations are vital because they need to be in the right tone of voice, be very accurate, deliver the benefits of the product or service and obviously make sense to the customer. If the translation is word-for-word then the chances are that it won't make sense and you will encounter customer issues and product returns."
>
> Matt Thorpe, Internet Marketing Consultant, Grasshopper UK
>
> *Source*: Geldman, A. (2015). Selling internationally? Here's 34 tips for cross-border e-commerce. WebRetailer.

**Device to connect to the Internet**

There are many devices which sellers can use to connect to the Internet, including laptops, notebooks, desktops and smartphones. While any of these should suffice to set up an online business, sellers should consider crafting an e-commerce website or using a platform which provides an online experience that is accessible from all devices in order to reach a larger target audience and pick up more sales. Many e-commerce sites are built without mobile browsing capability because sellers often falsely assume that a desktop-optimized site will deliver the same experience on a tablet.

Advances in technology will help narrow the language gap. Some online markets already offer machine translation to facilitate communication. Nevertheless, at present, investing in the development of websites that use the language of the company's primary market is a good business decision.

**Technical knowledge and skills**

Sellers do not have to be world-class programmers to build an online business, but they do need to at least understand how basic web technologies work. Basic building blocks, such as setting up an email account or using online communication tools provided by online platforms or social media, are needed to get an online store up and running. Programming, graphic design and photo editing skills are useful for the development of a more sophisticated website, but these skills can also be outsourced to specialists.

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[8] European Commission (2011). User language preferences online: Analytical Report. Flash Eurobarometer Series No. 313.

**Ability to create a secure online presence**

As e-commerce develops, security issues and threats become inevitable, preventing businesses from engaging in e-commerce, especially in developing countries. E-commerce security, the most critical element of e-commerce, is defined as the protection of e-commerce assets from unauthorized access, use, alteration or destruction.[9]

The virtual world operates quite differently from the offline environment, where consumers visit a physical store, inspect potential purchases, engage in face-to-face contact with the seller and judge the trustworthiness of the seller. Many consumers in the virtual world have no option but to rely on faith, knowing little about the seller to whom they are entrusting their personal information.

The increased incidence of commercial fraud, coupled with weak Internet security control, inhibits the advancement of e-commerce and makes customers even more reluctant to provide sensitive information. Such security concerns deter people from going online. Even when the technology is actually capable of handling the whole process, from placing an order to order fulfilment, online shopping is still perceived as not providing the same level of security as offline shopping.

Consumers need to know that when they conduct a transaction online, they enjoy the same legal protection as they do with traditional businesses – i.e., their confidence in the integrity of the business must be reinforced before they will commit to a purchase. It is therefore necessary for businesses to follow a set of open, industry-led, technical standards that facilitate interconnection and interoperability of businesses over networks.

Information security, authentication and integrity are imperative for the smooth functioning of any e-commerce business. Any organization that uses a website to request, receive, process, collect, store or display confidential or sensitive information may satisfy these criteria by obtaining a Secure Sockets Layer (SSL) certificate, a global standard security technology that enables encrypted communication between a web browser and a web server. Adherence to this standard is just as important as strengthening infrastructure services like user authentication which are supported by the appropriate legislation.

There are three main channels through which a business can represent itself on the web and access the e-commerce market: e-commerce platforms, social media and the company's own website. Each channel offers different types of services and targets different audiences. While e-commerce platforms have long been the main channels for cross-border e-commerce, social media sites are rapidly catching up on e-commerce sales. With the reduced cost of web hosting, and increased use of ready-made templates, more and more companies are adding e-commerce functions to their own websites.

## 2. Main channels for setting up an e-commerce business

## 2.1. E-commerce platforms

E-commerce platforms connect millions of buyers and sellers around the world and are expanding trade online. They create an opportunity for retailers around the world to increase the visibility of their products or services. E-commerce companies like Amazon.com and Alibaba.com offer a platform for buyers and sellers to meet online. Sellers have the opportunity to showcase their products and reach a large target audience. Buyers have the opportunity to browse through numerous products from various sellers in different locations and compare prices, all on the same platform.

Sales transactions on e-commerce platforms are initiated when both parties agree on a price for the chosen product or service using the available methods of payment, with the e-commerce platform acting as a deal facilitator. Once it receives payment from the customer, it notifies the seller to send the merchandise to the buyer and transfers the payment to the seller. At times, other services such as warehousing, logistics and customer service are provided to help the sellers focus on growing their businesses.

Some advantages for companies to incorporate e-commerce platforms into their business systems are:

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[9] Niranjaanamurthy, M. and Chahar D (2013). The study of E-commerce Security Issues and Solutions.

- **Access to a wide range of customers**

  E-commerce platforms enable businesses, including SMEs, to reach international masses through the ease of access and convenience offered by the platforms.

- **Market research**

  E-commerce platforms allow sellers to scope the market for a product or service offering, giving them the ability to compare prices with competitors globally.

- **Credibility**

  Many e-commerce platforms require registration and verification of sellers, which ensures the authenticity of the seller and the legitimacy of his/her business. The authenticity of Internet users involved in an e-commerce transaction can be verified through the provision of credit card information, SMS authentication or other means.

- **Reputation**

  Many e-commerce platforms allow consumers to post reviews, which are key to building the reputation of a business; Positive feedback for sellers can be effective in encouraging other customers to trust the sellers. Negative feedback, on the other hand, can be detrimental to a business's reputation, but can usually be addressed through a dispute settlement function integrated into the platform.

- **Security**

  Various modes of secure online payment integrated into the platforms facilitate transactions and help businesses, including SMEs, to gain customers from diverse backgrounds.

## Table 3. Major e-commerce platforms

| E-commerce platforms | Details |
| --- | --- |
| eBay | eBay Inc. is headquartered in the United States. It started as one of the first online auction sites and is now a multibillion-dollar business with operations in over 30 countries. The website is free to use for buyers, but sellers are charged fees for listing items and again when those items are sold. |
| Amazon | Amazon is the largest Internet-based e-commerce retailer in the United States, and operates 10 online marketplaces (websites) worldwide, in Canada, China, France, Germany, India, Italy, Japan, Spain, United Kingdom and United States. Amazon allows companies to advertise their products by paying to be listed as featured products. Its fulfilment centres provide warehousing and order-fulfilment, including customer service and return for third-party sellers. |
| Alibaba | Alibaba is the largest online retailer in China. Alibaba-owned sites include Taobao, Tmall, and Tmall Global. Taobao started as a C2C platform that allows individual sellers and small businesses to sell their products via auctions or fixed prices. Tmall operates as a virtual mall, linking small businesses and major brands to consumers. Tmall Global, designed to accommodate sellers outside of China, allows foreign companies to sell directly to Chinese consumers without requiring them to have Chinese business licences or to store inventory in China. |

| Mercado Libre | MercadoLibre is Latin America's leading e-commerce site. Headquartered in Argentina, it offers a cross-border trade programme for foreign sellers that is operational in Brazil and Mexico and will eventually be available in other Latin American countries. |
| --- | --- |
| Jumia | Jumia, the leading e-commerce platform in Africa, was established in May 2012 in Nigeria as part of Africa Internet Group (AIG). The company operates in Algeria, Cameroon, Côte d'Ivoire, Egypt, Ghana, Kenya, Morocco, Nigeria, Senegal, Uganda and United Republic of Tanzania. |
| Souq.com | Souq.com is the largest e-commerce platform in the Arab world, and currently delivers to Bahrain, Egypt, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates.. |

*Source:* eBay, Amazon, Alibaba, Mercado Libre, Jumia, Souq.com and Wikipedia.

## 2.2. Social media e-commerce

The online landscape has changed profoundly since the emergence of social media. Social media allow individuals to easily remain connected with one another. More and more people are communicating information on a "many-to-many" global platform that permits users to learn about the experiences of others residing in other countries. Consumers tend to trust the opinions of their peers more than those presented by traditional advertisements, and use social media to find reviews of specific products and services.

Social media have become a cornerstone of marketing products and services. They can be a particularly important channel for SME suppliers from developing countries since, although in many cases they are unable to compete on costs and quantity with big firms, they can promote the uniqueness of their offerings as a competitive edge. Marketing through word of mouth is thus more important for SMEs that do not yet have an established brand influence.

Facebook estimates that 50 million of SMEs are on its platform, twice as many as in 2013. To put this figure in perspective, consider that the World Bank estimated there were 125 million SMEs worldwide in 2010.[10] Social media attract a large number of users and can thus be used as a channel for companies to improve online visibility and acquire new customers. In addition, many social media networks now feature business tools that allow businesses to build customer relationships and better promote their products/services. Social media are also important for services exporters. For instance, LinkedIn serves as a crucial portal for businesses to find professionals and build partnerships. Its network has grown to 400 million members worldwide.[11]

While companies primarily use social media to connect to customers, create marketing buzz and bring consumers to their websites, many social media platforms are looking to bring conversions closer by developing features that facilitate e-commerce transactions, such as enabling sellers to post and sell items directly through social networks.

Shopify, a Canadian e-commerce company, conducted a study comparing various major social media platforms and their e-commerce features.[12] The findings are summarized in Table 4.

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[10] Manyika et al. (2016). Digital globalization: the new era of global flows.

[11] Awan, A. (2015, October 29). How LinkedIn's 400 million members are helping build the economic graph.

[12] Macdonald, M. (n.d.). Which social media platforms drive the most sales? (infographic).

**Table 4.   Major social media platforms and their e-commerce functions**

| Pinterest | |
|---|---|
| In June 2014 Pinterest rolled out "buyable pins" which can be clicked on for immediate purchase. These buyable pins are currently offered at no cost. Pinterest has around 100 million users, 93% of whom use the platform to research purchases and 87% of whom purchased an item because of Pinterest. | |
| Targeting | Users can discover pins either through traditional text search or through Pinterest's newly launched visual search feature. |
| Availability | Buyable pins are available to companies working with specific e-commerce engines, such as Shopify, Magento and IBM Commerce. |
| Limitations | Buyable pins are available only in the United States, on iPhones and iPads. |
| **Instagram** | |
| With the launch of its new application program interface (API) in summer 2015, Instagram added a direct-response functionality for specific advertisements. Buttons prompt users to shop now, learn more and download now (in the case of advertising for apps). | |
| Targeting | Advertisers can target users based not only on demographic information, but also on Facebook data. |
| Availability | Instagram ads are available only to selected brands. Such brands as Disney, Electronic Arts, The Gap and Taco Bell have run Instagram ad campaigns to date. |
| Limitations | Ads keep users inside the Instagram ecosystem by opening a mini-browser within the app. Brands like The Gap use third-party services, including Like2Buy, to drive users to their websites. |
| **YouTube** | |
| YouTube began rolling out dynamic ads in TrueView pre-roll videos in May 2015. The ads can display products related to the content of the video being viewed. According to Google, in 2015 product review videos jumped 50% compared to 2014. Wayfair participated in preliminary tests of the software and found that revenue per impression tripled over that of past campaigns. | |
| Targeting | Products are dynamically added to in-stream videos based on demographic and contextual information. The videos can also be used for remarketing. |
| Availability | Available to AdWords advertisers via Google Merchant Center. |
| Limitations | The rollout of cards also led YouTube to change how it charges advertisers for TrueView ads. When people click on any card element, YouTube charge the advertiser, even if the viewers choose to skip the ad . |
| **Twitter** | |
| Twitter has attempted to roll out social shopping, including Amazon Cart integration and a partnership with American Express. Twitter launched a buy button in 2014, and in summer 2015 added product collections from brands and influencers. | |
| Targeting | Users can be targeted by username, keyword groups, interests and geolocation. |

| Availability | Buyable pins are available to companies working with specific e-commerce engines, such as Shopify, Big commerce and demandware. |
|---|---|
| Limitations | Buy buttons are available only to United States retailers. |
| **Facebook** | |
| | Facebook has been testing a range of social commerce integrations since 2010. Facebook is the most popular app for the average smartphone user, accounting for 10% of total usage time, according to a Forrester survey. Facebook itself states that 50% of users come to the site looking for products. |
| Targeting | Beyond demographic and location data, users can be targeted based on purchasing behaviour and life events. Facebook also offers "custom audiences" based on external contact lists (including email databases). |
| Availability | Shopping feeds present users with a feed of products that retailers have chosen to highlight on their pages. Feeds are personalized, based on such factors as interests, liked pages and connections. Immersive ads, called "Canvas", allow advertisers to show users interactive, full-screen product ads. Canvas can be used to explore product size and style variants before moving users to the vendor site to complete their transaction. The ads are intended to reduce friction on mobile devices between browsing and buying. Both features are currently being tested by selected advertisers and shown to a small number of Facebook users. |
| Limitations | As both features are now in a testing phase, they may never become available to smaller retailers. |

*Source:* Shopify.

## 2.3. Company's own website

A website helps a business increase its visibility, establish its credibility and build its reputation. Globally, two thirds of small businesses with an online presence said they elected to create a company website because it makes the company look more credible, and 60% said they believe that a website is critical for a small company's success.[13]

Despite the importance of having a website, a 2013 Weebly survey reveals that over 55% businesses do not have a website, while 56% of survey respondents said they do not trust a business without a website. Without a website, businesses may seem inaccessible and unreliable, whereas what consumers want is companies with easy-to-access information. Online presence also drives consumers to a business's physical store. For instance, the top-viewed pages on a museum website are generally those that list the opening hours, directions, events calendars and other visitor information.[14] A website may not replace the experience of visiting a physical store, but it increases the visibility of the business and entices more consumers to visit the physical store.

Some companies may simply opt for social media rather than creating a website because of the convenient template that social media offer and the seemingly daunting task of building a website. Fortunately, in today's digital era, establishing a viable online presence can be done in a short time and for a small price tag. There are many software programmes that provide website hosting, domains and drag-and-drop design platforms and templates, eliminating or at least reducing the need for technical skills. These programmes are generally free at the base level. The variable cost of maintaining a website is small compared to the benefits

[13] Verisign (2013). Benefits and barriers of bringing a small business online: perspectives from global small businesses.
[14] Haynes, J., & Zambonini, D. (2007). Why Are They Doing That!? How Users Interact With Museum Web sites. In Museums and the Web.

and exposure a business gets from building its online presence. A website offers comprehensive information about a business to all of its potential consumers, including those who are not within close proximity of the physical store. Smaller businesses can leverage their position with minimal effort. Rather than having to choose social media over a website or vice versa, a business can maximize its coverage by having both. Through social media channels, a business can keep its prospects engaged and redirect them to the website where information can be accessed in greater detail. When used effectively, social media can help businesses boost both online and in-store traffic.

# 3. Enabling policies for establishing e-commerce businesses

## 3.1. Seller registration on online e-commerce platforms

Although it might seem that access to the global leading e-commerce platforms should be unlimited in all countries, the truth is that registration with e-marketplace or e-commerce platforms sometimes remains limited for merchants in certain developing countries. For instance, Amazon.com – one of the world's largest e-commerce companies by online revenue – restricts seller registration to those residing in specific countries:[15]

**Table 5.    Countries accepted for seller registration on Amazon Marketplace**

| Amazon Marketplace | Total number of countries accepted for seller registration | Number of developing countries accepted for seller registration |
|---|---|---|
| United States | 102 | 62 |
| Canada | 101 | 63 |
| United Kingdom | 71 | 23 |

*Source:* Amazon U.S., Amazon Canada, Amazon U.K.

A recent MasterCard study of four economies – Canada, Brazil, Germany and South Africa – finds that although 90% of merchants have an online presence, only 20% have an e-commerce website because they lack the technology for accepting payments online.[16]

According to a recent ITC study, some African countries place domestic restrictions on the amount of money that can be transferred across borders.[17] All foreign exchange transactions in South Africa, for instance, are subject to exchange control regulations administered by the South African Reserve Bank. The regulations limit the amount of money a person may transfer out of South Africa and the circumstances in which such transfers are permitted.

Exchange controls are used to protect the country's foreign exchange reserves and regulate available foreign currency in the best interest of the country as a whole. In South Africa, a limit of R 1 million per calendar year may be utilized by any resident under 18 years of age for any legal purpose abroad, including investment.[18] The regulations forbid anyone from executing a transfer without prior approval from the Reserve Bank and limit the execution of currency transfers to authorized dealers.[19] Credit card purchases of imports, including goods and services online, are limited to R 20,000 per transaction.[20]

Furthermore, a number of African countries may only receive payments from foreign credit card holders through costly intermediaries, because the domestic banking system lacks the necessary international links.

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[15] Amazon U.S., Amazon Canada and Amazon U.K. (n.d.). List of Accepted Countries.

[16] MasterCard (2014). Small to mid-sized merchants seek competitive technology in omni-channel world.

[17] ITC (2015). International E-commerce in Africa: The Way Forward, ITC, Geneva.

[18] South African Reserve Bank (n.d.). Financial Surveillance and Exchange Control – Section H.

[19] Incompass Forex (n.d.). South Africa Exchange Control Regulations.

[20] IMF (2000). South Africa: selected issues. IMF Staff Country Report No. 00/42.

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Although global e-commerce platform providers offer integrated payment solutions, many African companies cannot actually use them because they lack the requisite foreign bank account or subsidiary.[21] For instance, PayPal's expansion into Nigeria, the country with the largest Internet penetration in Africa, eases online payment, which is a huge leap forward that could empower e-commerce merchants, but users in Nigeria cannot yet transfer funds from their PayPal account to a local bank account.[22] Compliance with banking regulations and related private-sector rules is yet another challenge to be addressed for the smooth functioning of the e-commerce industry.

## 3.2. IP-related issues in e-commerce

E-commerce often involves selling products and services for which IP is the main value component of the transaction. This is particularly true of trade in such digital products as music, video, pictures, photos, software, designs, training modules and systems.

Safeguarding intellectual property rights (IPRs) is crucial to every e-commerce business, as it protects things of value that are traded over the Internet and helps businesses obtain remuneration for their work. IP is also vital to the very functioning of e-commerce businesses, encompassing such systems as software, networks, designs, chips, routers and switches, user interfaces and so on.[23] IP can include formal properties, such as trademarks, copyrights and patents, as well as informal properties, such as company know-how or secrets. Rules governing IP not only allow businesses to have exclusive rights over their unique ideas, but also help establish the business identity, thus encouraging the establishment of e-commerce business.

IP registration is an integral step for any e-commerce business to take as it enforces the owner's rights; without such registration, it would be difficult to prove infringement of the property. However, the complex and costly procedures often associated with IP registration may deter companies from acquiring IP protection or establishing any online presence at all.

Governments should therefore assist SMEs in making effective use of the IP system by improving the policy framework and creating a conducive business environment. This can be done through the provision of institutional support services for any IP-related issues. For example, the Cuban Industrial Property Office offers a series of information and advisory services on intellectual property to SMEs. It acts as a link between the private sector and the technical areas of the IP Office and offers such services as diagnosis of a company's IP needs, training and advice on IP.[24]

One of the consequences of digital technology is that it makes it easy to copy and redistribute ideas through a few simple clicks of a mouse, which allows unscrupulous third parties to abuse the benefits of e-commerce. While large e-commerce companies have the financial capability and resources to fight this issue and protect themselves against infringers, SMEs generally lack the resources to do so. Deficiencies in the law protecting IPRs, or a weak policy framework, can result in massive losses that may strip an e-commerce business down to nothing. Countries – and developing countries in particular – therefore need to implement a framework to better protect and enforce IPRs.

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[21] ITC (2015). International E-commerce in Africa: The Way Forward, ITC, Geneva.

[22] Nsehe, M. (2015, March 12). Nigeria Becomes PayPal's 2nd Largest Market In Africa.

[23] World Intellectual Property Organization (WIPO) Small and Medium Enterprises Division (n.d.).

[24] World Intellectual Property Organization (WIPO) (n.d.). The Cuban Industrial Property Office.

**Protect intellectual property across borders for Kenyan software developers**

by Ann Gakere, Sawasawa.com



*Sawasawa.com, a custom software design and development firm based in Kenya, is concerned about protecting its intellectual property abroad. Registering trademarks and patents in every destination country is burdensome and costly, impeding the company's growth. Limited finances mean that Sawasawa, and other young innovators like it, must sometimes export without IP protection. Governments should stimulate innovation by enforcing intellectual property rights that protect pre-patent concepts.*

We've successfully exported our web and software solutions to over 12 African countries, Switzerland and Myanmar. However, going global has proven expensive and burdensome, since we have to register our trademarks and patents both in Kenya and in every country to which we export, which may also involve hiring legal experts. Sometimes we're forced to export without IP protection, putting our intellectual property at risk and impeding the growth of our e-commerce business.

One of our greatest struggles arises when unrefined ideas are developed at an early stage, as they cannot be registered until further articulated and translated into products, services or fully rationalized business propositions. Unlike big companies, many young innovators in Kenya, especially university students and SMEs, lack the financial capability to develop their ideas into a prototype or product that can be registered as a patent or trademark. Their ideas risk being purloined.

We have found that IP protection is key to success in any business, including e-commerce, but it is largely inadequate in Kenya. Currently, innovators in Kenya are able to register their IP and obtain copyright through an automated online registration system developed by the Kenya Copyright Board and Microsoft 4Afrika. They can also obtain a patent, trademark or certification mark from the Kenya Industrial Property Institute. But while it is manageable for a small-sized company like ours to register a few items, it is financially challenging to register numerous items.

To stimulate innovation in Kenya, IP rights that protect pre-patent concepts and propositions must be enforced. This is an area where the Government can step in and help innovators protect their ideas. It can, for example, enhance existing ICT initiatives like Enterprise Kenya, which aims to encourage tech innovation in the country.

IP is an invaluable foundation for any software development company like ours, as we garner the greatest economic value from the innovative ideas or intangible assets embodied in our software. Patent protection benefits our small-sized company by granting us exclusive rights to commercialize our products and services for a period of time, hence giving us a strong market position.

## 3.3. Solid ICT infrastructure and affordable access to the Internet

In many developing countries, basic infrastructure like electricity and ICT – the main ingredients for the promotion of e-commerce – is insufficient. Existing electricity and ICT infrastructure in developing countries often has uneven coverage, with higher concentration in urban areas. Inadequate access to basic infrastructure is a key barrier to the establishment of e-commerce business. Improving SMEs' access to Internet technologies requires extensive ICT and electricity infrastructure-building and expanded provision to

rural areas, which are currently underserved in many developing countries. This may include the development of shared ICT facilities that offer free public access to computers and the Internet.

For small firms to set up an online business, the benefits of e-commerce adoption must outweigh the costs, since they generally face budget constraints and may be averse to risks. Therefore, the provision of affordable Internet access and reliable Internet networks is an important policy area for policymakers to examine for e-commerce readiness. This includes broadband connectivity, which determines the speed of data transfer and affects the overall online experience for both sellers and buyers.

To conduct e-commerce in an efficient way, connectivity is not enough. Fast broadband connections may not initially have been necessary for setting up an online presence, but bandwidth is certainly needed to keep an e-commerce business going, especially those that offer more sophisticated interactive functions online involving heavy use of images and videos. In addition, a slow Internet connection may discourage businesses from adopting e-commerce, as it makes establishing an online presence costly and/or time-consuming.

While mobile broadband is increasingly important, fixed broadband remains dominant in many developing countries. In 2014, a basic fixed broadband subscription cost less than 5% of the average gross national income (GNI) per capita in 111 countries, of which 44 were developed and 67 were developing countries.[25] In many developing countries, such service remains out of reach for many people, especially those with low incomes or those who live in rural areas. In developing countries, average monthly fixed broadband rates are three times higher than in developed countries. High-speed Internet is not widely available in developing countries for many different reasons. Private investors may be risk-averse about investing in infrastructure: Connecting the more than 18,000 islands that make up Indonesia, for example, would pose a major logistical challenge.[26]

## Figure 2.  Broadband rates as a percentage of gross national income



2014 broadband rates as a % of GNI
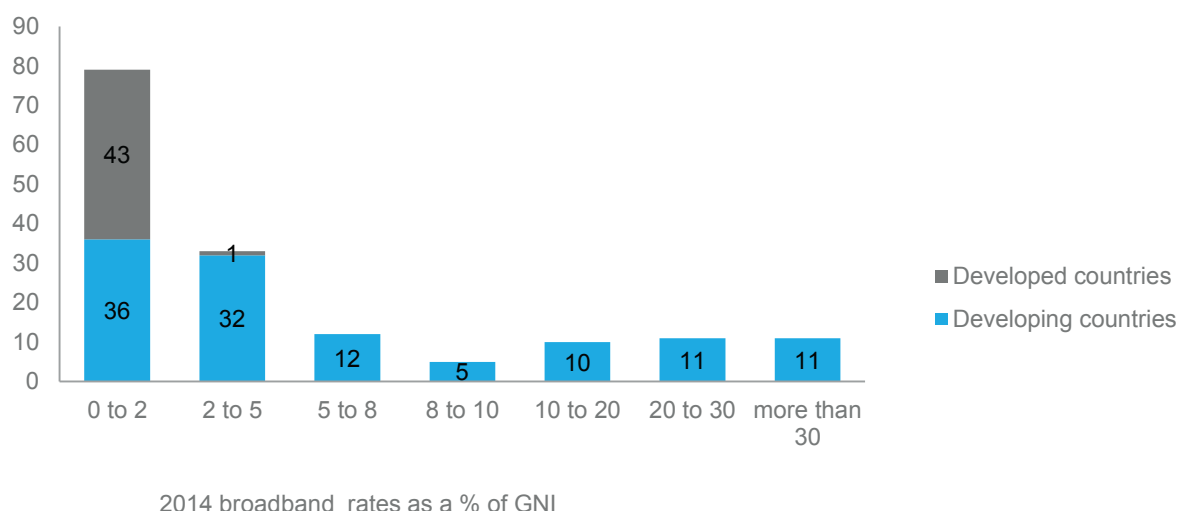
*Source:* ITU (2015). ICT Facts and Figures: the world in 2015.

While Internet service providers can improve broadband connection, it is up to policymakers to increase competition or remove monopolies in the ICT industry to drive down the cost of Internet access. Advances in Internet penetration will not increase SMEs' involvement in e-commerce unless it is complemented by low connection costs. Oftentimes, the bottleneck originates not with incumbent broadband providers but with the Government's regulatory interventions regarding broadband infrastructure. The Government needs to build

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[25] ITU (2015). ICT Facts and Figures: the world in 2015.

[26] A.T. Kearney, Inc & CIMB ASEAN Research Institute (2015). Lifting the barriers to e-commerce in ASEAN.

an enabling environment for all companies to be able to compete fairly in the market. Regulations favouring some companies over others often come at a cost for consumers and businesses in terms of limited and expensive Internet access or bandwidth that is inadequate for e-commerce.[27]

## 3.4. Access to skilled labour market

The availability of solid Internet infrastructure alone, when not accompanied by access to the relevant skills, does not lend itself to the adoption of e-commerce. A firm relies on locally available ICT expertise, which is determined by the pool of skilled labour available in the country. While a firm has the option to outsource the skills and tap the global labor pool, some work cannot simply be outsourced. For instance, Jeffrey Taft, an engineer fluent in programming languages, works as a translator between the different vernaculars and cultures of computing and electric power, which involves a lot of face-to-face interaction. This type of work cannot be done overseas.[28]

Developing countries often suffer from information technology (IT) skills shortages because their workforce is not sufficiently equipped with the necessary skills for the adoption of e-commerce. Furthermore, some developing countries are unable to retain skilled workers at home, with many talented individuals leaving the country (brain drain). The advent of the Internet has opened up the possibility of providing services to foreign consumers without physically moving skilled labour abroad. Given the large wage differentials for skilled workers in developed and developing countries, the potential gain from exports of services through cross-border e-commerce is high, and could potentially alleviate brain drain.

Education is the most crucial policy intervention to overcome skilled labour shortages. It is a key factor in endowing developing countries with a talented e-commerce workforce and for enhancing the ability of developing-country nationals to participate in the digital economy. Governments can also encourage greater investment in education, provide digital education programmes in schools or universities that charge reasonable tuition fees, and increase human resource capacity-building so as to equip the labour force with computer literacy and business skills.

## 3.5. Simple business registration process with the local authorities

It is well recognized that a favourable business environment is essential to support the growth of the private sector. Yet in many developing countries the business registration system is cumbersome and costly, constituting a barrier for business development. To set up a business entity, including e-business, entrepreneurs must usually comply with a number of government formalities and other requirements.

The downsides of complicated registration procedures – an excessive number of repetitious steps, unclear information on the procedure, and slow processing time – may discourage businesspeople from registering or establishing their businesses. The government is generally responsible for making the business registration process as simple and efficient as possible. In fact, some countries already offer "one-stop-shopping" for SME business registration, which greatly helps small businesses to get off the ground.

Regulators in developing countries are highly encouraged to review registration procedures, determining which steps are really necessary and which can be simplified or even eliminated, thereby cutting the costs and effort involved in registering a business. Transformation from a paper-based to an automated system that allows registration applications to be submitted online and incorporates e-payment and e-signature functionalities should encourage more businesses to register. It would speed up the process and make it more convenient, representing lower entry barriers for new entrants into e-commerce in developing countries.

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[27] Crovitz, L. G. (2015). Government's internet monopoly: regulatory control, not mergers in a declining cable industry, is what limits consumer choice.

[28] Lohr, S. (2007, 4 July). In high-tech economy, some jobs cannot be outsourced.

## 3.6. Successful implementation of e-signatures and e-contract laws

Developing countries often encounter technical challenges in the implementation of public key Infrastructure (PKI), including the infrastructure for digital signatures, which are used to authenticate a document's origin. PKI refers to the technical mechanisms, procedures and policies that collectively provide a framework for addressing the fundamentals of security – authentication, confidentiality, integrity, non-repudiation and access control.[29] PKI is a global standard for Internet security that is vital for e-commerce, as the major challenges for online communication include establishing trust similar to the trust that develops in physical marketplaces, and binding contracts for online transactions. The proper handling of the legal implications of electronic transactions is the important part of PKI implementation.

Developing countries sometimes also lack the mechanisms to facilitate cross-border recognition of electronic signatures. If electronic signatures and the certification services providers who authenticate them cannot satisfy the various legal and technical requirements in different jurisdictions, this may prevent e-signatures from being used in cross-border transactions.

The Model Law on Electronic Signatures (MLES) of the United Nations Commission on International Trade Law (UNCITRAL) aims to enable and facilitate the use of electronic signatures by establishing criteria of technical reliability for the equivalence between electronic and hand-written signatures.[30] The Model Law establishes criteria for equivalence between electronic and handwritten signatures based on a two-tiered approach and on liability rules for the parties involved in the signature process.[31]

## 3.7. National strategies for e-commerce growth

To support efforts to create an enabling environment for e-commerce and fully exploit the opportunities offered by the e-commerce industry, governments can play an active role by adopting a national e-strategy based on consultations with officials, business practitioners and other relevant stakeholders. Strategic measures to help galvanize e-commerce include fostering SMEs and facilitating innovation, exports and cross-border trade capability, Other key measures are to promote new payment solutions, a bigger consumer market, local productivity, inclusive rural development, and job opportunities in the IT and business process outsourcing sectors.[32]

The first phase of developing a national strategy involves gauging the country's readiness for e-commerce, which helps identify actions needed to further propel the growth of e-commerce. Measuring a country's e-readiness includes assessing the quality of a country's ICT infrastructure, the ability of businesses to use ICT, and other factors mentioned in this chapter. For example, if e-signature recognition is a challenge, then a national strategy may include actions to create mechanisms that facilitate cross-border recognition of e-signatures.

Asia-Pacific Economic Cooperation (APEC) defines a country that is ready for e-commerce as one that has free trade, industry self-regulation, ease of exports and compliance with international standards and trade agreements.[33] APEC's e-readiness assessment measures six different factors at the macro level:

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[29] Comodo (n.d.). What is PKI?

[30] UNCITRAL (2001). UNCITRAL Model Law on Electronic Signatures.

[31] Gregory, J. D. (2015). The United Nations Electronic Communications Convention. Regional Workshop on e-Commerce Legislation Harmonization in the Caribbean [PowerPoint slides].

[32] UNCTAD (2015, November 30). UNCTAD to support Government of Egypt in developing a national e-commerce strategy.

[33] APEC (2000). E-commerce Readiness Assessment Guide. Asia Pacific Economic Cooperation (APEC) Readiness Initiative, Electronic Commerce Steering Group.

**Implement cross-border recognition of e-documents in Africa**

By Rose Maghas, GreenBell Communications



*GreenBell Communications, a Kenya-based digital marketing agency, has lost out on tenders because e-signatures are not universally accepted in Africa, and the cost of shipping hard copy can be prohibitive. The firm urges policymakers to facilitate recognition of e-documents, citing Kenya's e-Citizen portal as a model for how government can support the e-commerce community.*

Our company, GreenBell Communications, develops customized web and mobile applications that help businesses establish or strengthen their online presence. The biggest obstacle we face is the lack of recognition of electronically signed documents in many African countries.

In 2013, we accepted an invitation to tender for designing an Intranet for a bank in Egypt. Despite the short deadline, we managed to prepare the documents. Since the invitation had been sent digitally, we assumed we could also submit our proposal online. However, the proposal was not accepted in electronic form, leaving us no choice but to have hard copy shipped from Kenya to Egypt. The shipping costs were way beyond what a small company like ours could afford. As a result, our bid was not considered and we missed out on this valuable business opportunity. Three years have passed, but the problem persists.

We have partially solved the problem by partnering with export specialists. We worked with a local company in Rwanda, for example, which is authorized to print and deliver official proposals, enabling us to deliver hard-copy documents to our clients in Rwanda. But in cases where partnerships are not possible, we typically opt not to bid, as the cost of bidding outweighs the benefits of winning the assignments. This is why we call on policymakers to develop a better legal framework or take other steps to facilitate the recognition of e-documents, encourage digitization within companies and create a favourable environment for e-commerce. The Kenyan Government has already taken action to support the country's expanding e-commerce community by launching e-Citizen, a portal through which a number of services can be processed and paid for online.

While some African countries already have laws in place to recognize e-signatures, implementation is apparently lagging behind. As digitization becomes increasingly common in the rest of the world, addressing the problem in Kenya will have huge implications on the ground and facilitate the transition to end-to-end digital systems. Promotion of e-commerce will improve the efficiency of our business and a whole raft of other businesses in Kenya by minimizing commuting and reducing paper-based processes.

- Basic infrastructure and technology (speed, pricing, access, market competition, industry standards, foreign investment)

- Access to network services (bandwidth, industry diversity, export controls, credit card regulation)

- Use of Internet (in business, government and homes)

- Promotion and facilitation (industry-led standards)

- Skills and human resources (ICT education, workforce)

- Positioning for the digital economy (taxes and tariffs, industry self-regulation, government regulations, consumer trust).

Undertaking this assessment helps in understanding national needs, analysing the characteristics of the e-commerce market, identifying the main challenges to the country's full participation in e-commerce, and formulating effective solutions to increase technology integration in business activities.

The assessment should include a comprehensive review of the evolution of e-commerce, existing initiatives to support it and a stocktaking of the resources and capabilities that could contribute to its development.[34] The strategy formulation phase is aimed at producing recommendations on how to develop the optimal conditions for e-commerce. Due to the complex, dynamic, multifaceted and rapidly evolving e-commerce landscape, regular and thorough performance monitoring is needed to evaluate whether the implemented policies have succeeded in harnessing the opportunities offered by e-commerce.

**Figure 3.  Phases to develop a national strategy to promote e-commerce growth**
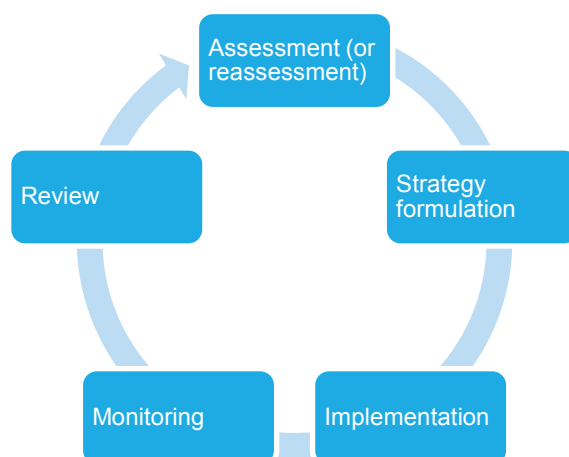


*Source:* UNCTAD (2015). Information Economy Report 2015: Unlocking the potential of e-commerce for developing countries.

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[34] UNCTAD (2015). Information Economy Report 2015: Unlocking the potential of e-commerce for developing countries.

**Box 2.    The ASEAN ICT Masterplan 2015**

The ASEAN ICT Masterplan 2015 was launched at the 10th Telecommunications and IT Ministers Meeting of the Association of Southeast Asian Nations (ASEAN) in 2011. It has provided a framework and roadmap for the development of ICT at the regional level and has resulted in greater ICT development in the ASEAN member countries.

The master plan revolves around six strategic thrusts comprising three pillars and three foundations:

- Economic transformation: ASEAN will create a business environment conducive to attracting and promoting trade, investment and entrepreneurship in the ICT sector. ICT will also be the engine that transforms other sectors of the economy.

- People empowerment and engagement: ASEAN will enhance the quality of life through affordable and equitable ICT.

- Innovation: ASEAN will foster a creative, innovative and green ICT sector.

- Infrastructure development: ASEAN will develop ICT infrastructure to support the provision of services to all ASEAN communities.

- Human capital development: ASEAN will develop competent and skilled human capital in ICT to support the growth of the ICT sector and help transform other sectors of the economy.

- Bridging the digital divide: ASEAN will address the varying levels of ICT development and adoption within individual countries and across the region. ASEAN will also focus on bridging other gaps within the digital divide to promote greater adoption of ICT.

The Mid-term Review of the Masterplan was published in late 2013. At that time, 62% of the action points were completed, 24% were ongoing and 14% were at risk of not being completed. Since then, the efforts of the ASEAN Member States have resulted in timely completion of all the action points. This reflects the commitment of the AMS to work together towards the completion of the AIM 2015 and underlines how collaboration between the AMS has borne fruit.

*Source:* ASEAN secretariat (2015), ASEAN ICT Masterplan 2015 Completion Report.

# Chapter 2   International e-payment
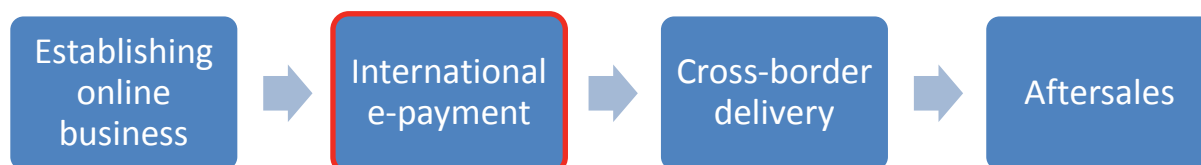
| Establishing online business | → | International e-payment | → | Cross-border delivery | → | Aftersales |

| Checklist: International e-payment | |
|---|---|
| Firm-level capabilities | ✓ Bank account and online banking<br>✓ Sign-up for encryption solutions, e.g. SSL certificate<br>✓ Knowledge of e-payment solutions |
| Immediate business environment | ✓ Availability of third-party e-payment services provider<br>✓ Links between third-party e-payment services provider and local banks to enable local withdrawals |
| National environment | ✓ Functional financial market in line with international standards<br>✓ Foreign exchange system allowing free convertibility of currency and regulations on the free flow of currency (current account)<br>✓ Adoption of internationally recognized standards<br>✓ Regulations on prevention of online fraud and combating cybercrime |

## 1.   E-payment markets in e-commerce development

E-payments are defined as payments that are initiated, processed and received electronically. Economic and behavioural changes are leading to a continued rise in non-cash payments, including those made online.[35] Access to competitive payment solutions is vital for all forms of e-commerce; unlike bricks-and-mortar companies, online retailers often require payments to be made before a sale is completed,[36] which underlines the importance of e-payment options.

Payment systems for online purchases can be classified into account-based, electronic currency and other systems.[37, 38] Account-based payment systems allow payment through an existing personalized account, which can be executed using credit cards, debit cards, mediators such as PayPal, mobile phones/landline telephones or online banking. Electronic currency systems include smart cards (mainly used to pay small amounts within organizations) and online cash systems (software-only electronic money instruments or prepaid cards).

The advent of e-payment offers considerable opportunities for SMEs to expand their customer base, launch new products and rationalize their businesses by competing in global economies. Adoption of e-payments is likely to increase the global access of SMEs, reduce their transaction costs and provide substantial benefits via improved efficiencies and raised revenues. It could also facilitate access to potential customers and suppliers, productivity improvements, and information exchange and management.[39] Limited access to e-payment options, by contrast, can represent a significant barrier to e-commerce, especially for SMEs

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[35] European Central Bank (2004). E-payments without frontiers. Issues paper for the ECB conference on 10 November 2004.

[36] UNCTAD (2015). Information Economy Report 2015: Unlocking the potential of e-commerce for developing countries.

[37] OECD (2006). Online payment systems for e-commerce.

[38] OECD (2012). Report on consumer protection in online and mobile payments.

[39] UNCTAD (2012). Information Economy Report 2012: The software industry and developing countries.

interested in cross-border e-commerce.[40] In fact, the availability of secure e-payment options is one of the vital ingredients for participating in e-commerce.

Globally, e-commerce is proving to be a vast and rapidly growing market. Driven by the proliferation of smartphones and tablets, Internet/mobile access, and e-payments, global B2C e-commerce grew 21% in 2012, topping US$ 1 trillion for the first time.[41] With the continued maturation of online purchase tools and consumer confidence, emerging Asian markets have been driving the ongoing global acceleration of e-commerce spending. E-commerce volume in Viet Nam, for example, reached US$ 1.3 billion in 2015, nearly doubling from US$ 700 million in 2012.[42] The Indian e-commerce market was up by 35% in 2013 (after a 40% rise in 2012), while the Chinese e-commerce market increased by 65% in 2013 over the previous year.[43]

Credit cards account for the lion's share of retail e-commerce settlements.[44] However, usage patterns vary substantially, with most of the developed countries relying on accounts-based systems. The distribution of e-transactions value by payment method and region for 2012 is shown in Table 6 below. The table shows that credit cards are the dominant mode of e-payments in North America and Europe, with considerably more variation in the developing world, where credit cards account for less than half by value of total e-transactions. While mobile payments accounted for only 1% of the total value of e-payments in 2012, they are more important in several African countries "due to high degrees of financial exclusion, limited availability of fixed lines, cost of fixed lines and cost of the card infrastructure".[45] That said, cash on delivery was the dominant mode of payment in Africa and the Middle East.

**Table 6.     Distribution of e-transactions value by payment method and region (%, 2012)**

| Region | Credit cards | E-wallets | Direct debit | Cash on delivery | Bank transfer | Other |
|---|---|---|---|---|---|---|
| United States and Canada | 71 | 18 | 2 | 1 | 1 | 7 |
| Europe | 59 | 13 | 5 | 5 | 8 | 11 |
| Latin America | 47 | 10 | 4 | 8 | 13 | 18 |
| Africa and Middle East | 34 | 5 | 0 | 48 | 3 | 10 |
| Asia and Oceania | 37 | 23 | 1 | 11 | 14 | 14 |
| World | 57 | 17 | 2 | 5 | 7 | 12 |

*Source:* WorldPay (2014). Your global guide to alternative payments. Second edition.

Global payments revenue rose from US$ 1.5 trillion in 2013 to US$ 1.7 trillion in 2014, and annual global payments revenue is expected to increase by 6% per annum during the next five years, exceeding US$ 2 trillion by 2020.[46] Credit cards accounted for a significant share of the global payments revenue in 2014, even as there were striking differences across regions (see Figure 1 below). Asia-Pacific accounted for 43.5% (US$ 740 billion) of the global payments revenue in 2014, but credit cards represented only 9% of those revenues. Credit cards were far more important as a source of payments revenue in North America, accounting for half of the US$ 360-billion total. Similarly in Latin America, they accounted for nearly one third (US$ 205 billion) of all payments revenue in the region. In Europe, Middle East and Africa, credit cards contributed to 15% of the US$ 370 billion in payments revenue. Credit cards thus accounted for more than one fifth (21.8%) of global payments revenue in 2014.

In sum, the use of e-payments has been growing exponentially around the world, and demographic trends are likely to continue the drive towards further adoption in the future. Three macroelements will be

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[40] UNCTAD (2015). Information Economy Report 2015: Unlocking the potential of e-commerce for developing countries. United Nations publication.

[41] eMarketer (2013). B2C Ecommerce Climbs Worldwide, as Emerging Markets Drive Sales Higher.

[42] Vietnam E-Commerce and Information Technology Agency. (2013, May 26). Press release.

[43] eMarketer (2013). B2C Ecommerce Climbs Worldwide, as Emerging Markets Drive Sales Higher.

[44] WorldPay (2014). Your global guide to alternative payments.

[45] Innopay (2012). Online payments 2012 – Moving beyond the web.

[46] McKinsey (2015). Global payments 2015: A healthy industry confronts disruption.

instrumental in accelerating the growth of e-payments in emerging markets:[47] the growth of the middle class; financial inclusion and rural economic mobility; and global mobility and remittances.

**Figure 4.   Global payments revenue in 2014**



**Payments revenue, 2014**
Percent, ($ billion)

*Footnotes (below chart):*
[1] Fee, float and FX income from trade finance and cross-border payments services.
[2] Net interest income and maintenance fees on liquid assets (overdrafts) and deposits (current accounts and transactional savings accounts; i.e., savings accounts from which transactions can be done without restrictions).
[3] Fee and float income on domestic transactions (excluding credit cards).
[4] Fee, float and net interest income on credit card accounts.

Source: McKinsey Global Payments Map

## 2.   Challenges to adopting e-commerce

While e-commerce offers potential benefits relating to enhanced participation in global value chains (GVCs), increased market access and reach, and improved internal and market efficiency combined with lower transaction costs, [48] the uptake of e-commerce has largely been confined to large enterprises in the developed world. [49] This is also true for the adoption of e-payments, as confirmed by the stylized facts documented in the preceding section; cash on delivery, for example, remains the dominant mode of payment in Africa and the Middle East. Barriers to e-commerce are economic in nature (inadequate ICT infrastructure and use, unreliable and costly power supply, limited use of credit cards, lack of purchasing power and underdeveloped financial systems); sociopolitical (weak legal and regulatory frameworks, cultural preferences for face-to-face interaction and reliance on cash in society); and cognitive (poor ICT literacy, awareness and knowledge of e-commerce). [50] Interestingly, the same factors can be attributed to the generally lower uptake of e-payment solutions in the developing world, as the following brief review of literature illustrates.

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[47] Rau, A. (2013). 'E-payments in emerging markets'.

[48] UNCTAD (2015). Information Economy Report 2015: Unlocking the potential of e-commerce for developing countries.

[49] UNCTAD (2010). Information Economy Report 2010: ICTs, enterprises and poverty alleviation.

[50] Kshetri, N. (2007). 'Barriers to e-commerce and competitive business models in developing countries: A case study', Electronic Commerce Research and Applications 6(4): 443-452.

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**Eliminate regulatory bottlenecks to cross-border e-payments in Bangladesh**

By Ahmad Niaz Murshed, Ice9Interactive



*Ice9Interactive, a Bangladeshi firm specializing in interactive marketing and communication technology solutions, has to source its intermediate IT inputs abroad, as they are not available at home. Paying its foreign suppliers is challenging, due to limited domestic payment systems and restrictive regulations governing cross-border transactions in foreign currencies. Foreign payments for specific business purposes are made possible through marketing partnerships, but such payments cannot be used for consultants outside Bangladesh. Relaxing the restrictions is crucial to the development of the local IT industry.*

Ice9Interactive offers mobile app development, creative services, augmented reality applications, gesture-controlled applications and interactive virtual reality-based solutions. It particularly targets the real estate industry, a field previously unexplored in Bangladesh.

In the product development phase, intermediate IT inputs not available domestically have to be sourced from foreign countries. We often encounter problems with payment because of the limited payment systems available in Bangladesh and the restrictive regulations governing cross-border transactions that involve foreign currencies. All payment instruments and channels are strictly supervised by the Government. In partnership with Brac Bank, the Bangladesh Association of Software and Information Services (BASIS) facilitates foreign payments for its members through the issuance of a special credit card. The card can be used for specific business purposes, such as domain purchase, server hosting and software licence purchases, as allowed by Bangladesh Bank. Bangladesh Bank has approved the transfer by BASIS member companies of up to US$ 10,000 a year.

So while most of our online purchases are largely made possible by BASIS credit cards, payments to foreign consultants and similar cases still pose problems, as the law forbids us from making payments to anyone outside Bangladesh, let alone establishing a subsidiary abroad. Additionally, only the authorized dealers are allowed to deal in foreign currencies. The availability of foreign exchange to pay foreign vendors requires the approval of the Bangladesh Bank. Because of these restrictions, the flow of money into and out of Bangladesh takes relatively longer than it does elsewhere.

Marketing partnerships provide a workaround to this problem, enabling us to market our products abroad and avoid the aforementioned payment issues. Such alliances are advantageous for small firms like ours that lack the financial backing for extensive promotion, as they increase our visibility and help us gain access to new target markets where our services are most in demand: Europe, Asia and the United States. To solve the core of the payment problem, the Government should relax the restrictions on online money transfers, and especially on transfers abroad. This recommendation is crucial to the development of the IT industry, as there are only a few accepted online methods for purchasing software resources from foreign sources.

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Despite the benefits associated with e-payments, a majority of SMEs have generally been slow in adopting the use of e-payment systems.[51] In Indian slums, for example, businesses perceive cash as a more

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[51] Wanjau Kenneth, R. M. (2012). 'Factors affecting adoption of electronic commerce among small medium enterprises in Kenya: Survey of tour and travel firms in Nairobi',

convenient and safer mode of payment. [52] In Ghana, problems with mobile money industries include "connectivity, security, scalability, interoperability, accessibility, and agent training and representation". [53] In some cases slow adoption is associated with implementation or regulatory constraints, or with the providers having focused initially on unsophisticated microfinance institutions as partners. [54] The limited trust in online transactions is one of the reasons for the limited use of e-commerce by SMEs. [55]

A study on the adoption of e-payment solutions by SMEs in the Kenyan hotel industry in the town of Kissi, concludes that the entrepreneur's background and the ease of use of electronic gadgets were the main factors behind the adoption of e-payments. The study finds that high speed, convenience of payment and the low cost of storage facilities also make electronic gadgets easy to use, which in turn encourages the adoption of e-payments by SMEs in the hotel sector. Speed and comfort are likely to improve the quality of service and save time, both of which would also encourage the use of e-payments. [56] These findings confirm work by Charles Lee at Stanford Business School showing that the speed of payment and the relatively lower number of complexities increase the adoption of e-payments. They also confirm work by Stuart and Cohen (2011), who finds convenience to be a major contributing factor in the adoption of e-payment by SMEs. [57] In other work, Mas and Ngweno (2012) find low storage to be critical to the electronic mode of payments. [58]

Young people adopt e-payment options faster than their elders. The level of education and skills is also a significant factor, as the operation of electronic tools requires some basic skills and the absence of technology phobia'. [59] Greater adoption of e-payment solutions has thus been observed amongst young entrepreneurs, [60] who are more likely than their older counterparts to take the risks associated with the adoption of e-payments. [61] Higher education has also been found to be critical for the adoption of e-payment solutions. [62] Basic IT and ICT skills are also important. [63]

## 3.    Policy recommendations

Policy advice for increasing SMEs' adoption of e-payment solutions follows directly from the discussion in the previous section of the bottlenecks to such adoption. Thus, education and training policies for improving the relevant entrepreneurial skills are likely to improve SME access to e-payment systems. Similarly, public policy that can encourage innovation, including cheaper and user-friendly e-payment tools, is also likely to increase the uptake. And government intervention in the form of reduced taxation and tariffs would significantly reduce the cost of installation and operation of e-payment solutions.

Public policy can also directly target the economic reasons behind the limited recourse to e-payment solutions in developing countries by investing in ICT infrastructure and producer services, and by developing financial systems and making them more inclusive.

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[52] Deepti, K.C. & M. Tiwari (2013). Understanding the movement of cash of the privately led enterprises in Dharavi and scope for electronic or mobile payments.

[53] Mensah, E. C., & Dzokoto, V. (2011). Post redenomination and money management among Ghana's urban poor.

[54] Machaels L. H. (2008). GSMA Development Fund Top 20: Research on the Social and Economic Impact of Mobile Communications in Developing countries.

[55] UNCTAD (2010). Information Economy Report 2010: ICTs, enterprises and poverty alleviation.

[56] Sokobe O.E. (2015). 'Factors influencing adoption of electronic payment by small and medium hotel enterprises in Kisii town, Kissi county, Kenya'.

[57] Stuart, G and Cohen, M. (2011). Cash in, cash out Kenya: The role of M-Pesa in the lives of low-income people.

[58] Mas, I., & Ngweno, A. (2012). Why doesn't every Kenyan business have a mobile money account?

[59] Sokobe O.E. (2015). 'Factors influencing adoption of electronic payment by small and medium hotel enterprises in Kisii town, Kissi county, Kenya'.

[60] Aguiar, M. and E. Hurst (2007). 'Life-Cycle Prices and Production'.

[61] Mann, A. and R. Mann (2011). 'Debt, Financial Distress, and Bankruptcy over the Life Course'.

[62] Ongori, H. & Migiro S.O. (2011). 'Enhancing SMEs competitiveness: The strategies to resolve barriers to information communication technologies adopted by SMEs'.

[63] InterMedia (2012). Mobile money in Uganda: Use, barriers and opportunities.

Security is integral to the adoption of e-payment systems. It involves a set of procedures, mechanisms and computer programmes to authenticate the source of information and guarantee the integrity and privacy of the information (data).[64] Security has three basic building blocks:

- Encryption: to provide confidentiality, authentication and integrity;

- Digital signatures: to provide authentication, integrity protection and non-repudiation;

- Checksums/hash algorithms: to provide integrity and authentication. Public policy therefore also needs to incentivize the creation of secure e-payment systems. More broadly, State and/or private sector intervention should also address the regulatory and legal challenges to creating the right enabling environment for e-payment solutions.

The following threefold action is needed to circumvent some of the cultural factors that militate against the adoption of e-payment solutions:[65]

- Revise the role of issuers and consumers to hinder security threats;

- Encourage and promote e-commerce;

- Reduce and de-incentivize the use of traditional payment methods.

Finally, United Nations Conference on Trade and Development (UNCTAD) suggests the following policy prescriptions to foster an enabling environment for e-payments:[66]

- Strengthen the environment for online payments

  Governments should create a regulatory environment that is conducive to online payments and the development of adequate payment solutions. This would include policies to foster payment security, data encryption and data privacy.

- Promote the availability of e-commerce solutions

  This includes encouraging e-commerce platforms that are tailored to local needs and opportunities. By way of illustration, foreign investors have contributed greatly to new e-commerce platforms in sub-Saharan Africa, showing the positive role of FDI, and public policy should incentivize such initiatives.

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[64] Raja et al. (2008). 'E-payments: Problems and prospects'.

[65] *Ibid*.

[66] UNCTAD (2015). Information Economy Report 2015: Unlocking the potential of e-commerce for developing countries.

# Chapter 3   Cross-border delivery
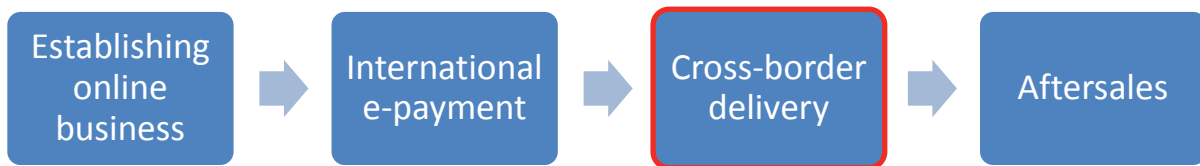
| Establishing online business | → | International e-payment | → | Cross-border delivery | → | Aftersales |

| Checklist: Cross-border delivery | |
| --- | --- |
| Firm-level capabilities | ✓ Effective warehouse organization<br>✓ Secure packaging for delivery of goods<br>✓ Capacity to handle surges in sales during peak periods |
| Immediate business environment | ✓ Access to postal and express delivery services with tracking ability<br>✓ Access to warehouses and delivery services at destination |
| National environment | ✓ Increased transparency on cross-border e-commerce-related customs procedures and rules on the application of duties and taxes<br>✓ Application of simplified customs procedures and expedited customs clearance for small parcels<br>✓ Increased de minimis threshold for import duty exemption to reduce the burden on the customs authorities<br>✓ Mechanisms to ensure freedom and security of cross-border data flows<br>✓ Increased efficiency for connectivity infrastructure (for delivery of goods: road, air transport; for delivery of services: encryption technology, Internet bandwidth)<br>✓ Modernized national postal services to increase efficiency of delivery |

Cross-border delivery is the single most important aspect of electronic commerce beyond domestic boundaries, as it can have a major impact on:

•   The final price of the product or service for sale, because transport and delivery costs, as well as customs duties and other taxes, have the potential to raise the total cost of production considerably and thus to erode profit margins;

•   Customer satisfaction, because it also affects time and place of delivery as well as product integrity (e.g. damages occur primarily during delivery), which are among the key aspects that consumers consider when making an informed decision to purchase online from a foreign supplier;

•   The reputation of cross-border e-commerce transactions, as customers will consider buying online rather than resorting to traditional forms of commerce only as long as the cost efficiency can be preserved, the experience is not more time-consuming and the quality of the product can still be guaranteed.

Cross-border delivery comprises a wide variety of distinctive but strongly interconnected phases that are usually associated with the transport of goods by sea, road, rail or air (i.e. shipping), the crossing of a border and the related payment of duties (i.e. customs) and the consignment of the product or service to the end user (i.e. delivery).[67] However, the importance of each of these phases varies according to the object of the transaction, i.e. whether it involves a good or a service.

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[67] Lawrence, J. E. and Tar, U. A. (2010), Barriers to E-commerce in Developing Countries, Information, Society and Justice.

# 1. Delivering goods across borders

## 1.1. Products fit for cross-border e-commerce

In order to understand how delivering goods occurs in practice when a company engages in cross-border electronic commerce, it is necessary to first describe the type of goods that are most commonly sold via electronic means. Indeed, not all goods are suitable for e-commerce, and even less for cross-border e-commerce.

Online tradable goods tend to share certain characteristics:

• **Size**

Delivery costs depend, among others, on the size of the item that is shipped. The larger the good, the more costly and complicated the delivery. From a cost-efficiency perspective, businesses that sell small- or medium-sized goods are a better fit for e-commerce than companies that specialize in much more sizeable goods, as smaller products are usually easier and quicker to transport abroad (i.e. by road or by air, which are generally less time-consuming than by sea). Smaller goods are also more suitable for delivery via post, which is the main distribution channel used by developing countries to deliver goods both domestically and internationally. CDs, books, small appliances, computers and mobile phones best exemplify the type of good that is usually delivered cross-border through e-commerce.

• **Price**

Goods that can be successfully traded online tend to be made available at a competitive price that allows for making a profit and guarantees transactions of high value. Selling goods online is usually not a viable option when the profit margin is negligible, or when the costs of production and shipping far exceed the price. Besides shipping costs, customs duties are also relevant to the pricing of goods sold online across borders, although some countries may exempt the payment of customs duties or additional taxes in specified countries for products whose total value remains below a certain threshold. For example, Swiss customs authorities do not levy duty and value added tax (VAT) if the amount due does not exceed CHF 5 per customs declaration. They also do not levy taxes on consignments with a value of up to CHF 62, including shipping costs, customs clearance, insurance, customs duties, etc. (at a VAT rate of 8%) or CHF 200 (at a VAT rate of 2.5%).[68]

• **Specificity**

Goods most commonly traded online across borders are often typical or specific to a certain location and generally not available everywhere. For example, for small manufacturers of traditional African handicrafts, the Internet provides an opportunity to access both the African diaspora and foreign consumers more generally.[69] Such are the cases of eshopAfrica.com (Ghana), SkinnylaMinx (South Africa) and Botswana Craft (Botswana), e-commerce firms specialized in selling African arts and crafts primarily to the North American and European markets.

## 1.2. Shipping, clearing customs and delivery: a multistep process

In e-commerce, cross-border delivery refers to all the activities that take place from the moment a customer makes an online payment for a good to the moment the product is finally in his or her hands. These activities can roughly be summarized as follows:

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[68] Swiss Customs Administration (2016). Courier by post, online shopping, mail-order company.

[69] Toland, J. (2007). E-Commerce in Developing Countries, in Global Information Technologies: Concepts, Methodologies, Tools and Applications.

- **STEP 1. Warehouse product identification**

  In the supplier's warehouse, the product(s) bought online must be found, identified and prepared for delivery. The structure and organization of the warehouse must be such as to guarantee that the operation runs smoothly, efficiently, and in a timely and rapid manner, to avoid delays and product misidentification. All identified products must correspond in all aspects (e.g. size, quantity, colour, series, type) to those indicated in the online order. Access to key warehousing technologies, such as scanning devices, inventory software, warehouse management systems and advanced picking systems, can be crucial to e-traders' competitiveness, both domestically and internationally.

- **STEP 2. Secure packaging for delivery of goods**

  Once production identification has taken place, the supplier (or the shipper) must proceed with packaging the product(s) for safe transport, to ensure that it remains intact during shipping and delivery. For example, fragile items like glass should be covered in bubble wrap before being placed into boxes. Again, the more organized, structured and efficient this phase of the process, the faster and timelier cross-border delivery can be.

- **STEP 3. Transport and shipping**

  From the supplier's warehouse the shipper must then transport the package or parcel via the most cost-efficient route (e.g. road, air, rail or sea) to the shipper's warehouse in the country of destination. Clearly, e-commerce operators must be able to count on an efficient, solid and extensive infrastructure, possibly allowing for multimodal transportation, both within and outside national borders, in order for cross-border delivery to be cheap and fast.[70] Indeed, poor road maintenance, limited mileage of paved roads or inadequate airport facilities can make transport and shipping more costly and time-consuming. But the quantity, quality and age of the means of transport available to shippers – including trucks, airplanes and trains – can also affect the cost and timing of delivery. For example, newer trucks generally require less maintenance than older ones, as in theory they have better-functioning and more efficient engines and are thus less likely to break down and cause delays in delivery.

- **STEP 4. Crossing the border and customs procedures**

  International e-commerce transactions differ from domestic online business dealings insofar as crossing a border implies a passage through customs, the government entity responsible for the collection of tariffs or other duties and the regulation of merchandise flows. Authorization to cross the border is granted only after customs clearance, which requires the shipper to execute all customs procedures, including payment of customs duties and other taxes and, in some circumstances, customs inspections. Customs are a particularly critical aspect of logistics because they can have a remarkable impact on the cost and timing of a transaction, going far beyond the simple collection of a tariff or duty. The simpler, more transparent and clearer customs procedures are, the less time it takes goods to clear customs.

- **STEP 5. Delivery to end user**

  The last leg of the process concerns the transport of the purchased product(s) from the shipper's warehouse to the final destination, i.e. the address of the end user – which for B2C e-commerce transactions is usually the home address. For cross-border e-commerce, the most common forms of delivery are postal or parcel delivery, express mail, private package delivery services and truckload shipping. Properly written and easily traceable street names, access to postal and express delivery services with tracking ability and modernization of national postal services, can be crucial to ensuring efficient, cheap and timely delivery of goods to end users.

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[70] Lawrence, J. E. and Tar, U. A. (2010), op. cit.

## 1.3. Bottlenecks in cross-border delivery process

Compared to the domestic realm, international e-commerce logistics is more expensive, convoluted and time-consuming because it requires firms to determine the most cost-efficient delivery and warehousing solutions, incorporate shipping information into their website, and manage delays, damages and return policies.[71]

Given its complexity, cross-border delivery is rather prone to obstacles and complications. Indeed, at any given point on the logistics chain e-traders, especially from developing countries, are likely to face bottlenecks and problems that, if not properly addressed, can have a significant impact on the cost of cross-border e-commerce transactions and the timing of delivery of purchased goods, which may in turn negatively affect the overall reputation of e-commerce as a trustworthy and valuable trading mechanism.

The most prominent obstacles to be overcome by e-commerce operators from developing countries are:

- **Customs: procedural and tariff issues**

    - Burdensome customs procedures

        E-traders are often confronted with complicated and overly burdensome customs procedures (e.g. excessive documentation to be produced for the customs authorities, mandatory customs inspections) that can potentially cause delays and translate into additional costs, which are particularly detrimental to small businesses, in light of their high sensitivity to cost fluctuations.[72]

    - Lack of adequate information on customs procedures

        Customs and VAT administration rules can differ greatly from country to country, a variation that affects the ability of e-traders to understand and determine all the paperwork required, estimate the time for clearance and calculate all duties and taxes.[73] It is a problem that affects the cost and timing of delivery, as well as customer relations. Indeed, a lack of adequate information on customs procedures and duties can lead e-traders to misinform customers, for example by not taking into account sales tax or import duties, a mistake that can lead to costly return shipments or even a loss of business.[74]

    - Tariffs

        Tariffs themselves can pose a major barrier to cross-border e-commerce, especially for businesses operating in developing countries, because they contribute to raising the final price of the goods sold by e-traders, thus potentially reducing their competitiveness.[75] This is particularly true for countries that have a relatively low de minimis threshold for import duty exemption.

    - Corruption

        Sometimes customs authorities will ask for a bribe to allow or speed up customs clearance, an illegal act that can have a profoundly negative impact on both the cost and timing of delivery. Small businesses are especially vulnerable to this problem.[76]

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[71] U.S. Postal Service (2015). Cross-Border E-Commerce: An International Roundtable Recap.

[72] National Board of Trade (2012). E-Commerce: New Opportunities, New Barriers: A survey of e-commerce barriers in countries outside the EU.

[73] U.S. Postal Service (2015). Cross-Border E-Commerce: An International Roundtable Recap.

[74] International Trade Centre (2015). International E-Commerce in Africa: The Way Forward, ITC, Geneva.

[75] National Board of Trade (2012). E-Commerce- New Opportunities, New Barriers: A survey of e-commerce barriers in countries outside the EU.

[76] *Ibid*.

## Box 3. Tax policies

Among the most significant e-commerce-related laws and regulations are tax policies, whose relevance mostly depends on the large revenues being generated through electronic commerce.

The additional costs and administrative issues associated with differences in tax regulations can have adverse effects on cross-border e-commerce development and competitiveness. For example, a lack of clarity about VAT registration requirements and about where VAT should be accounted for carries the heaviest burden for e-traders, a legal uncertainty that derives from the traditional tax policy approach based on establishment. E-commerce permits companies to conduct worldwide activities without any physical presence in foreign markets, but international tax principles have traditionally emphasized the need for a physical presence within foreign markets before foreign governments are permitted to tax cross-border transactions taking place within their borders.

The vast majority of the 1,500 treaties governing the tax treatment of international business activity stipulate that governments will not be able to tax foreign businesses unless the businesses employ a "permanent establishment" within the source country. As a result of this traditional tax policy approach, developing countries and other net e-commerce-importing nations suffer tax revenue losses, precluding them from taxing profits derived from business activities that have no physical presence within their jurisdictions. By weakening the traditional tax policy concept that allocates tax claims based on physical presence, e-commerce raises concerns about where to tax non-resident e-commerce businesses, how to assess intragroup transactions, how to classify digital goods, how to identify taxpayers, and where and how to collect consumption tax, as well as issues of enforcement.

The business community and governments alike have tried to address e-commerce-related tax policy issues. A significant number of companies bypassed establishment requirements by hiring a local representative, although that meant incurring additional costs with a potential erosion effect on their competitiveness. Governments, on the other hand, have approached the issue in one of two ways: (a) the creation of tax-sharing mechanisms that encourage importing nations to cooperate with exporting nations to ensure the elimination of international double taxation and to promote investments in telecommunications infrastructure; or (b) the establishment of consumption taxation of cross-border e-commerce, based on the principle that the country where the consumption takes place has tax jurisdiction. This approach, however, raises practical difficulties in ensuring collection of consumption taxes on cross-border B2C transactions of electronic services and intangible products.

*Sources:*

Mann, Catherine L. (2000), Electronic Commerce in Developing Countries, Institute for International Economics.

National Board of Trade (2012), E-Commerce: New Opportunities, New Barriers.

Cockfield, Arthur J. (2011), Tax Policy, Electronic Commerce, and Developing Countries.

UNCTAD (2015), Information Economy Report 2015: Unlocking the Potential of E-Commerce for Developing Countries.

- **Transport and infrastructural deficiencies**

  – Lack of adequate infrastructure

    The poorer the conditions of roads, airports, railways and ports, the more difficult transport is, and the longer it takes for goods to reach their destination. The lack of adequate infrastructure is a problem that concerns primarily developing countries and least developed countries (LDCs) because, although there are examples of developing countries whose overall physical infrastructure is rated relatively highly (e.g. Malaysia and Sri Lanka rank 16th and 26th, respectively, in the World Economic Forum's *Global Competitiveness Report 2015-2016*), developing countries in general still lag behind their developed counterparts on infrastructure.[77]

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[77] International Trade Centre (2015). International E-Commerce in Africa: The Way Forward.

     –     Lack of efficient transport services

A good number of developing and least developed countries do not provide adequate road, rail or maritime transport services, thus forcing e-traders to rely primarily on air freight, which can be particularly expensive when the target market (e.g. Europe or the United States) is quite far away.[78]

- **Delivery: inefficiencies and regulatory concerns**

     –     Lack of access to modern delivery services

A number of e-traders, especially from developing countries, do not have access to e-commerce platforms, such as Amazon Fulfilment Services, that handle stocks of goods, do picking and packing, and negotiate the best rates with local transporters. They are forced to rely instead on old and inefficient postal services.[79]

     –     Inadequate street names

In a number of developing countries, especially in Africa and Oceania, streets are not properly named and signage is sketchy, thus compromising the efficiency and cost-effectiveness of delivery.

     –     Differences in local legislation

E-traders, especially from developing countries, may struggle with the plethora of differences in service, standards and labelling in different countries, resulting in high costs and long time-to-market for merchants wanting to implement new carriers.[80] In addition, consumer spending in target markets may not suffice to offset all the costs incurred and the time spent to deal with each individual market's separate requirements for contracts, deals and localizations.[81]

     –     Problematic reverse logistics

Implementing return policies can be very burdensome, complicated and costly, especially for small volumes.

## 1.4. Facilitating cross-border e-commerce delivery

The vast majority of bottlenecks and issues that e-traders face during the cross-border delivery phase of the e-commerce process chain relate to the speed, timing and ease with which goods purchased online are shipped and delivered across borders. Overcoming these hurdles, therefore, means finding solutions – at firm, institutional and national level – that would make it possible to:

- Move products faster;

- Improve overall logistics; and

- Help ensure a smoother, easier, less burdensome logistics process.

In order to do so, government intervention would have to focus on the two most critical issues in cross-border delivery: infrastructural deficiencies and a convoluted and burdensome regulatory environment.

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[78] International Trade Centre (2015). International E-Commerce in Africa: The Way Forward.

[79] *Ibid*.

[80] E-commerce Europe (2015). e-Logistics: A need for Integrated European Solutions.

[81] Russell, J. (2013). Thailand's top tech entrepreneurs aim to fix Southeast Asia's e-commerce 'bottleneck'.

**Addressing infrastructural deficiencies**

Since cross-border delivery is strongly correlated with the quality and efficiency of its infrastructure system, policy action is required whenever infrastructural deficiencies contribute to increasing costs or time for international shipping and delivery, or affect logistics capacity in general. Infrastructural shortcomings affecting cross-border e-commerce are especially common in the vast majority of developing countries.

In order to reduce international shipping fares, minimize delays and improve overall cross-border delivery performance, firms, institutions and governments must take all the necessary steps to ensure that: (a) transport infrastructure is reliable, of adequate quality and guarantees efficient connectivity; (b) e-traders make use of high-performing technology for logistics; and (c) delivery services are efficient.

- **Transport infrastructure**

    – Increased efficiency for connectivity infrastructure

        By developing greater terrestrial and air connectivity, improving road and railway conditions, and promoting the upgrade of infrastructural facilities, governments would be able to enhance the quality of transport infrastructure, increase its reliability and boost its efficiency. For example, adding greater road mileage or improving road maintenance could help reduce traffic and delays in transport, with a potentially positive effect on the ability of e-traders and shippers to move products quickly across borders.

Since pursuing this course of action requires substantial financial resources, which are often lacking in countries that commonly struggle with infrastructural problems (i.e. developing countries and LDCs), attracting FDI can be instrumental to increasing the efficiency of connectivity infrastructure.

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**Box 4.    Addressing infrastructural deficiencies at firm level**

Addressing market failures, combating information asymmetries and providing public goods are among the most common reasons behind government intervention, with infrastructure falling within the public good category. Still, due to regulatory, administrative or financial constraints, governments are not always able to intervene efficiently, adequately or promptly. When this is the case, creative solutions may emerge at firm level.

Nigerian company Jumia offers a very informative example of an e-commerce provider that attempted to circumvent inadequate infrastructure conditions by creating its own logistics infrastructure. Established in 2012, Jumlia is Nigeria's no. 1 online retailer, with a presence in Cameroon, Côte d'Ivoire, Egypt, Ghana, Kenya, Morocco, Uganda, and United Republic of Tanzania. Because of Nigeria's poor infrastructural conditions the company relies on more than 500 of its own motorbikes and trucks to deliver to customers in the country's eight largest cities.

*Source:*

www.jumia.com.ng                                                                                                          .
International Trade Centre (2015), International E-Commerce in Africa: The Way Forward, ITC, Geneva.

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    – Improved transport services

        Improving infrastructure itself, however, may not suffice to support cross-border delivery if shippers rely on trucks, planes or other vehicles that require constant maintenance due to old age, deteriorated engines, worn-out tyres and the like. The older the vehicles, the lower their speed and the more often maintenance is required. This in turn leads to longer shipping and delivery times, making shippers less likely to offer e-traders a reasonable charge for international shipping and delivery. By proposing incentives to shippers to renovate their auto and airline fleets, governments could offer a viable solution to this problem, although it is a strategy that might put additional strain on the already-meagre government resources available to many developing and least developed countries. Once again, therefore, attracting FDI could be of great importance in improving the conditions of shipping and delivery transport services.

- **Technology and organization**

Besides being instrumental in cutting the time and costs of international shipping and delivery, greater access to adequate and modern logistics-related technology and a more efficient warehousing organization could help improve customer relations, helping to reduce the incidence of damaged goods during transport and mistakes in product delivery.

&ndash; Secure packaging for delivery of goods

Goods change hands frequently and are likely to be transported in a variety of vehicles during cross-border delivery. This means it may be unrealistic, and ultimately beyond the e-trader's control, to rely on products being handled with care all along the transport chain. But ensuring proper packaging for delivery of goods is within the control of firms that engage in cross-border e-commerce, and is the simplest and most secure way to limit damages to goods in the delivery process. However, lack of adequate technology and poor warehousing organization can compromise the ability to properly package goods for transport. E-traders should therefore aim at upgrading existing technology and optimizing logistics solutions, for example by acquiring access to electronic commerce-enabled storage and handling services, such as Fulfilment by Amazon.

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**Box 5.    Fulfilment by Amazon**

Fulfilment by Amazon offers package services including warehousing, delivery and, in a number of cases, customs clearance as well. It can help SMEs scale up their business and reach more customers globally, since these e-commerce platforms such as Fulfilment by Amazon and eBay allow sellers to store their products in warehouse centres around the world, with those sellers then responsible for picking, packing and shipping the products and providing customer services. However, merchants from developing countries are often unable to register on these types of e-commerce platforms (India being one of the few exceptions).

*Source*: Amazon.

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&ndash; Capacity to handle surges in sales during peak periods

But access to new and modern technology, and better warehouse management systems, can also be instrumental in improving e-traders' capacity to handle surges in sales during peak periods. Suppliers with little or no international experience may be unprepared to handle unexpected or unfamiliar periods of increased demand that can result from accessing new markets through electronic commerce, leaving them prone to two problems: a potentially higher probability of making mistakes with the orders and the preparation of packages for delivery, and wasting precious time sorting through and handling products in the warehouse. Firms that adopt inventory mechanisms specifically designed to accommodate periods of peak demand (e.g. placing the promotional inventory near the packing station), that re-organize warehouse management and staff to handle everyday and peak demand separately, and that improve overall warehouse technology (e.g. data scanning, conveyor belts, picking mechanisms) have an advantage over e-traders who rely on more traditional warehouse management systems.

- **Delivery services**

&ndash; Modernized national postal services for increased efficiency of delivery

In many developing countries, e-traders rely almost exclusively on postal services to deliver products cross-border. Especially for SMEs that are unable to build their own distribution networks, the international postal network provides a cost-effective way of engaging in global e-commerce. [82] However, in some regions (e.g. Africa) postal services lack efficiency and

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[82] International Trade Centre (2015). International E-Commerce in Africa: The Way Forward, ITC, Geneva.

reliability, undermining their ability to support cross-border e-commerce.[83] In these countries, therefore, governments should promote the modernization of postal services in order for cross-border e-commerce to develop, a modernization that requires ICTs (to modernize and diversify postal products) and infrastructural adaptations (to guarantee availability of electricity and Internet connections).[84]

   – Improving street naming

In order to reduce delays in delivery and ensure that products purchased online reach their exact final destinations, consumers must provide a correct address. This may prove difficult in a number of countries, especially in Africa and Oceania, where street names are often inadequate if not missing entirely.[85] Improving the identification of locations, parcels, properties and dwellings can thus contribute significantly to moving products faster and to better cross-border delivery overall. Although the modernization of the postal service can in itself act as an incentive for making mailing addresses more precise, specific schemes for improving street naming could also provide useful. One such scheme is already being implemented in Ghana, and involves designating street names and assigning a street number to every property.[86]

**Improving the regulatory environment**

• **Transparency**

   – Increased transparency in cross-border e-commerce-related customs procedures and rules on the application of duties and taxes

Policymakers at the national level should work first and foremost on securing greater and more pervasive transparency in e-commerce-related customs procedures, taxes and duties. Ensuring that businesses have clear advance knowledge of the full costs of international door-to-door shipping; applicable VAT charges and customs duties; and required export documents and procedures would benefit e-commerce operators in a variety of ways.

First of all, this would help reduce the risk of e-traders incurring unexpected costs – often a major concern for small businesses with limited financial resources, and which are generally more sensitive to cost variations. Second, greater transparency in customs-related documentation and procedures would allow e-traders to better anticipate potential delays and, consequently, predict the timing of delivery more accurately.

Third, policy actions that address transparency issues can have a profound and positive effect on customer relations. Indeed, since both the cost of online transactions and the delivery date play a key role in consumers' decisions to purchase goods online, the more precise the information provided to them by retailers, the more consumers will trust e-commerce operators and online transactions in general. This will in turn encourage more potential exporters to adopt e-commerce as a means of cross-border trade.

The European Commission's recent focus on improving EU regulations and ensuring greater transparency in the parcel delivery process shows that developed countries are also confronted with lack of transparency and inconvenience of cross-border delivery of products purchased online. The EU approach to regulatory transparency provides some guidance for developing countries on potential government intervention in this area.[87]

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[83] Defoundoux, C. (2015). Union Panafricaine des Postes: Mid Term Assessment of the Doha Postal Strategy Implementation.

[84] *Ibid.*

[85] International Trade Centre (2015). International E-Commerce in Africa: The Way Forward.

[86] Ghana Ministry of Land and Natural Resources (2016, May 1). Street Naming.

[87] European Commission (2015). Cheaper cross-border parcel delivery to boost e-commerce in the EU, Growth –International Market, Industry, Entrepreneurship and SMEs.

- **Reduced administrative red tape**

  – Reduce the risk of corruption

    In regulatory environments where special rules and tariff exemptions give individual officials significant discretion over duty collection, red tape is considerable and information regarding processes and procedures is lacking, abuse by public officials finds fertile ground. In order to fight corruption within customs authorities, which weighs heavily on the ability of goods to be delivered across borders efficiently, cheaply and quickly, government should focus on promoting digitalization of customs duties and tariffs (e-governance); increasing the transparency of regulations and customs procedures; and adopting confirmation-of-origin policies whereby central customs agencies, rather than low-level customs staff, are responsible for verifying and auditing the origin and purpose of imports and exports.[88]

- **Simplified customs procedures**

  – Application of simplified customs procedures and expedited customs clearance for small parcels

    Greater regulatory transparency may not suffice to support small businesses from developing countries in their quest to export goods via electronic means if their limited financial and human resources are drained by overly complicated customs procedures.

    Hence, policy intervention in the form of simplified customs procedures may be warranted whenever the length and implementation of border clearance operations impinges on the time and cost of e-commerce transactions. Simplifying custom procedures would require governments to tackle the legal content of rules and regulations as well as unintended effects of its application, such as corruption and illegal conduct of customs authority representatives.

## 1.5. Best practice: expedited customs, higher *de minimis* threshold

Customs procedures can be facilitated by (i) exempting imports from duties and taxes, and (ii) simplifying the procedures themselves. The former is referred to as "de minimis", which is a valuation ceiling for goods, including documents and trade samples, below which no duty or tax will be levied, and clearance procedures including data requirements, are minimal. Historically, the de minimis threshold for duty-free shipments (mainly air cargo) is intended to achieve a balance between the costs of assessing and collecting customs duty and the revenue raised.[89] A list of the most recent information on de minimis value and entry threshold can be found in Appendix I.

With e-commerce generating ever-greater numbers of low-value shipments, the provision of de minimis value is vital, as it facilitates the importation of goods into a country. High de minimis exemptions might reduce government revenue, but would also generate great economic benefits, especially for SMEs, including those SMEs which export through e-commerce. In some cases, the benefits and savings derived from raising the de minimis value are greater than the loss of revenue, which implies that there is a net gain from raising the de minimis threshold.

High de minimis thresholds benefit businesses by cutting overall compliance costs. They benefit shipping firms by reducing handling costs and enabling faster delivery.[90] They benefit all custom agencies by reducing paperwork and freeing up resources to deal with more important security and product safety issues, hence increasing the agency's productivity. The time and money saved by high de minimis thresholds reduces barriers to trade, and the reduction of problems at the border encourages the growth of e-commerce. Many SMEs find it difficult to access the international market, partly because they are deterred by lengthy customs procedures or high compliance costs, which may well exceed the value of the shipment itself. Expedited customs procedures for low-value shipments would open up opportunities for SMEs looking beyond their

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[88] Ardigo, A. I. (2014). Corruption in tax and Customs Authorities, Anti-Corruption Helpdesk.
[89] International Chamber of Commerce (2012). ICC Customs Guidelines Policy Statement Document No. 103-6/12.
[90] Hufbauer, G. C., & Wong, Y. (2011). Logistics Reform for Low-Value Shipments.

national borders. Table 7 lists a few country examples of expedited custom procedures which include exemption or reduction in custom duty, VAT and other fees.

**Table 7.    List of expedited customs procedures by country**

| Country | Customs procedure | References |
|---|---|---|
| Brazil | CUSTOMS DUTY:<br>The importation of goods through the mail, including purchases through the Internet, is subject to a special regime (with the exception of alcoholic beverages and tobacco products).<br>**The regime applies to imports of up to US$ 3,000 that are subject to 60% import duties on the invoice price, including transportation and insurance costs**. Goods transported by international courier are also subject to an 18% services and merchandise circulation tax. [91]<br>**Imports up to a value of US$ 50, including medicines, books, journals and newspapers, are exempt from duties**.<br>**When the value of the imported goods does not exceed US$ 500, a simplified tax note is used to pay the customs duties**; if the value exceeds US$ 500, a simplified import declaration form must be filled in. | Trade Policy Review Brazil. WT/TPR/S/140-WTO<br>www.wto.org/english/tratop_e/tpr_e/s140-3_e.doc |
| China | CUSTOMS DUTY:<br>**Articles with import duties of less than CNY 50.00 (approx. US$ 7) are exempt from duties**. This includes samples and advertising articles valued at CNY 400 that were previously duty-free.<br>General tariff rates apply to imports originating in countries with which the People's Republic of China has not concluded any agreements or treaties, and to imports whose places of origin are not known. General tariff rates for importation range from 0% and 8% to 270%, with over 20 different rates. Preferential tariff rates vary from 0% and 1% to 121.6%, with over 50 different rates. **Lowered duty rates include: Most favoured nation duty rates, conventional duty rates, special preferential duty rates, tariff quota rates and temporary duty rates.**<br>Tariff schedule:<br>www.cbp.gov/sites/default/files/documents/merchandise_pf_table_0.pdf .<br><br>VAT:<br>There are two types of VAT payers: general VAT payers and small-scale VAT payers. Small-scale VAT payers are entities engaged in manufacturing or that provide processing, repair and replacement services with sales not exceeding RMB 0.5 million per year, and firms engaged in wholesale or retail trade with sales not exceeding RMB 0.8 million per year. The VAT rate for a general VAT payer is 17% and is applied on importation of goods into China. **A lower rate of 13% applies primarily to essential goods** such as books, newspapers and tap water. **A 3% VAT rate is applicable to small-scale taxpayers and certain supplies,** such as tap water, specific construction materials and specific biological products. | DHL Express in China Overview and China Customs regulations. DHL www.iesingapore.gov.sg/~/media/IE%20Singapore/Files/Events/iAdvisory%20Series/China/3_Exporting_into_China_DHL.pdf<br>A guide to China Import Customs. DHL<br>www.dhl.ie/content/dam/downloads/gb/express/customs_regulations_china/import_guidelines_to_china.pdf<br>Taxation and Investment in China 2015 Reach, Relevance and Reliability- Deloitte<br>www2.deloitte.com/content/dam/Deloitte/global/Documents/Tax/dttl-tax-chinaguide-2015.pdf<br>Ministry of Economy and Industry of Israel: Foreign Trade Administration<br>http://itrade.gov.il/china-en/2013/11/12/import-export-taxes-duties-china/ |
| EU | CUSTOMS DUTY:<br>A customs declaration must be submitted to customs officers who determine, impose and collect customs duties that are due. Customs duty is calculated as a percentage of the customs value of the goods, depending on the type of goods.<br>**Goods with a value equal to or less than EUR 150 are exempt from customs duty**. The exemption does not apply to perfumes | European Commission http://ec.europa.eu/taxation_customs/common/buying_online/buying_goods/within_non_eu_en.htm<br>EUR-Lex : Access to European Union Law |

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[91] The services and merchandise circulation tax (ICMS) is a value-added tax applicable at the state level, usually 18% for imports.

| | | |
|---|---|---|
| | and toilet waters, tobacco or tobacco products, or alcoholic products.<br>Tariff schedules:<br>http://ec.europa.eu/taxation_customs/dds2/taric/taric_consultation.jsp?Lang=en .<br><br>VAT:<br><br>The import VAT is calculated as a percentage of the taxable amount, which is made up of the customs value plus the duty paid and the transportation and insurance costs up to the first place of destination within the EU.<br>**Goods having a total value below a threshold are granted an exemption from VAT, with the exception of certain products such as tobacco products and alcoholic products. The threshold varies between EUR 10 and EUR 22,** depending on the EU country. Some countries, however, exclude mail orders from the exemption.<br>A commercial shipment valued between EUR 22 and EUR 150 is duty-free, but VAT is collected on it. | http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32009L0132<br><br>Europa.eu : Your Europe<br>http://europa.eu/youreurope/business/vat-customs/excise-duty/index_en.htm |
| United States | CUSTOMS DUTY:<br>**If shipped by international postal services, packages whose declared value is under US$ 200 will generally be cleared without any additional paperwork prepared by CBP.**<br>A good valued between US$ 200 and US$ 800 is classified as "informal entry", requiring only the submission of a simplified reporting form .<br>The Low Value Shipment Regulatory Modernization Act of 2015 sought to increase the de minimis exemption level on imported items to US$ 800. The bill has not been passed. If the item's value is less than US$ 2,000 and more than US$ 200, a CBP official will usually prepare the paperwork for importing it, assess the proper duty and release it for delivery. If the item's value is more than US$ 2,000, it may be held at the mail facility until a formal entry is arranged.<br>Tariff schedules:<br>http://export.gov/fta/ftatarifftool/TariffSearch.aspx .<br><br>VAT:<br>**There is currently no federal VAT in the United States on goods or services.** A sales and use tax is common in most United States states, and some imported goods may be subject to state taxes, but CBP does not collect taxes on behalf of the state. It collects federal taxes and fees on behalf of other federal agencies and under the Consolidated Omnibus Budget Reconciliation Act (COBRA).<br><br>USER FEES:<br>In addition to duty and possible excise tax, goods imported into the United States are subject to user fees. The amount of user fee collected by CBP depends on the type of entry and mode of transportation used for the imports. For instance, formal and informal entries are subject to a merchandise processing fee (MPF).<br>**Certain goods that enter the United States under a free trade agreement or trade preference programme may also be exempt from paying the MPF.**<br>MPF exemptions:<br>www.cbp.gov/sites/default/files/documents/merchandise_pf_table_0.pdf | KPMG<br>www.kpmg.com/us/en/issuesandinsights/articlespublications/taxnewsflash/pages/2015-1/kpmg-report-q-and-a-on-proposal-to-increase-de-minimis-threshold-for-low-value-imports.aspx<br>U.S CBP<br>https://help.cbp.gov/app/answers/detail/a_id/810/~/other-taxes-or-fees-required-to-import-goods-into-the-u.s.,-other-than-duty |

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| India | CUSTOMS DUTY:<br>Customs duty is levied on imported goods. **Exemptions for special economic zones, preferential or developing countries are listed here:**<br>www.cbec.gov.in/htdocs-cbec/customs/cs-tariff2015-16/cst2015-16-idx.<br>Bona fide gifts up to a value limit of Rs.10,000/-, imported by post, are exempt from customs duties.<br>For example, goods manufactured in Nepal that are made wholly from Nepalese materials are free of customs duty.<br><br>VAT:<br>**Import of goods into India is not subject to VAT. Rendition of services is also not subject to VAT, as services are governed at a federal level by an independent legislation – that is, service tax.** The sale of movable goods in India is chargeable to tax at the central or state level. VAT is generally charged at standard rates, namely 4–5% or 12.5–15%, depending on the nature of goods. The categories of goods eligible for exemption and subject to VAT at 4–5%, 12.5–14.5%, or higher rates vary across states. **Books are exempt from VAT.** | Avalara VATlive¨<br>www.vatlive.com/global-vat-gst/india/indian-vat/<br>British Chamber of Commerce in partnership with DHL<br>www.britishchambers.org.uk/Q2%2015%20BCC%20QITO%20FINAL.pdf<br>KPMG<br>www.kpmg.com/Global/en/services/Tax/GlobalIndirectTax/Documents/vat-gst-essentials-2012/india-vat-2011-vat-gst-essentials.pdf |
| Japan | CUSTOMS DUTY:<br>Japan maintains a de minimis level of JPY 10,000. **Goods with a total customs value of JPY 10,000 or less are exempt from customs duty and consumption tax.**<br>**When the total customs value of commercially imported goods is 200,000 yen or less per importation, the simplified tariff schedule is applicable** (e.g. wine: 70 yen/l, coffee: 15%, rubber: free). These duty rates do not include consumption tax or other internal taxes. Consumption tax is imposed at the rate of 8% on, in general, all goods imported into or manufactured in Japan.<br>**Temporary rates are laid down for certain kinds of goods under the Temporary Tariff Measures Law and are applicable for a certain period of time, in place of general rates. They are lower or higher than general rates depending on the circumstances or products.**<br>**Preferential rates are applicable to goods originating in designated developing countries.**<br>**Economic partnership agreement rates are applicable to goods originating in Singapore, Malaysia and Mexico.**<br>**World Trade Organization (WTO) rates are applicable to certain countries with which Japan has concluded bilateral agreements to grant most favoured nation treatment, even though they are not Members of the WTO.**<br>Tariff schedule:<br>www.kanzei.or.jp/english/book/ebook.htm.<br><br>CONSUMPTION TAX (VAT equivalent):<br>Consumption tax is imposed at the rate of 8% on, in general, all goods imported into or manufactured in Japan.<br>**Goods are exempt from consumption tax when the sum of the value of the goods, shipping and insurance cost does not exceed JPY 10,000, or when the amount of consumption tax payable does not exceed JPY 100.**<br>The duty and consumption tax exemption does not apply to imports of the following products: leather goods, leather footwear, and knitted apparel. | Japan Customs<br>www.customs.go.jp/english/c-answer_e/imtsukan/1006_e.htm<br>www.customs.go.jp/english/summary/tariff.htm |
| Canada | CUSTOMS DUTY:<br>Duty rates in Canada range from 0% to 35%, with an average rate | Justice Laws website-Government of Canada |

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| of 8.56%. **Some goods are not subject to duty (e.g. certain electronic products, antiques, etc.). Goods are exempt from duty if their free on board (FOB) value – i.e. the value of goods excluding shipping and insurance – is less than CAN$ 20.**<br><br>**Goods originating from most favoured nation (MFN) beneficiary countries use the MFN rate of duty. Preferential tariffs are reduced rates of duty for goods based on trade agreements or rates of duty based on special tariff provisions.**<br>Tariff schedules:<br>www.cbsa-asfc.gc.ca/trade-commerce/tariff-tarif/2014/html/tblmod-eng.html.<br><br>TAXES:<br>**If the FOB value of the item is worth less than CAN$ 20, goods and services tax (GST), harmonized sales tax (HST) and provincial sales tax (PST) are not charged.**<br>Some Items do not qualify for the CAN$ 20 exemption, e.g. tobacco, books and alcoholic beverages.<br><br>POST CHARGES:<br>To process goods imported as mail that are subject to duty and/or tax, Canada Post charges the recipient CAN$ 9.95. **If the item is duty-free and tax-exempt, no amount is charged.** | http://laws.justice.gc.ca/eng/regulations/SI-85-181/page-1.html<br><br>Canada Border Services Agency<br>www.cbsa-asfc.gc.ca/import/postal-postale/duty-droits-eng.html |

## 2.   Delivering services across borders

### 2.1.  Differences between goods and services trade

The substantial differences between goods and services have major implications for the way they are handled in cross-border e-commerce. First of all, they are non-storable and non-perishable, which means that supply and consumption generally occur simultaneously (e.g. a hairdresser giving a haircut). It also means that no warehousing system is required for services to be supplied online, either domestically or cross-border.

But services are also intangible and invisible, since they have no specific form that can be touched or seen (e.g. a person can physically handle a computer – a good – but cannot do the same with a data processing service provided on that computer). These characteristics are of great significance for cross-border delivery: services supplied electronically never cross borders. Therefore, unlike goods purchased online, services offered across borders through e-commerce are not subject to customs duties or procedures.

The General Agreement for Trade in Services (GATS) lists four different modes of supply of services: cross-border trade, consumption abroad, establishment of a commercial presence and movement of natural persons.

In theory, all services can be supplied through all four modes of supply, via traditional commerce. However, when services suppliers engage in cross-border electronic commerce, either of the following two scenarios applies:

• Services that were already provided under modes 1 and 2 (e.g. via post or telephone) continue to be supplied through cross-border trade and consumption abroad, but via electronic means (e.g. the Internet). This does not apply to services that require simultaneous physical presence of consumer and supplier in the same location (e.g. when a dentist performs a root canal procedure on a patient).

• Services previously supplied via commercial presence or movement of natural persons are provided via modes 1 or 2.

The second scenario has important implications for cross-border delivery of services, because resorting to cross-border e-commerce would drastically reduce transport costs since the supplier would no longer have to pay for travel fees. An example is managers or staff who temporarily move abroad to provide a service (mode 4), or transport-related costs associated with the establishment of a commercial presence abroad (mode 3).

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**Box 6.     GATS modes of supply**

**Mode 1** (cross-border trade): from the territory of one Member into the territory of any other Member

Example: Users in country A receive services from abroad through the telecommunications or postal network (e.g. market research reports, telemedical advice)

**Mode 2:** Consumption abroad: in the territory of one Member to the service consumer of any other Member [Example: Nationals of country A have moved abroad as tourists, students or patients to consume the respective services

**Mode 3:** Commercial presence: by a service supplier of one Member, through commercial presence, in the territory of any other Member

Example: The service is provided within country A by a locally established affiliate, subsidiary or office of a foreign-owned and -controlled company (e.g. bank, hotel group)

**Mode 4:** Presence of natural persons: by a service supplier from one Member, through the presence of natural persons of a Member in the territory of any other Member

Example: A foreign national provides services within country A as an independent supplier (e.g. consultant, health worker) or employee of a foreign service firm (e.g. consultancy, hospital)

*Source:* WTO Document (2013), The General Agreement on Trade in Services – An Introduction (last accessed on 01 May 2016), www.wto.org/english/tratop_e/serv_e/serv_e.htm.

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## 2.2.  Connectivity infrastructure and data flow

Because of the substantial difference between services and goods, it is not surprising that the cross-border delivery phase of the e-commerce process is also significantly different in a services context. While the delivery of goods across borders normally consists of five different steps (i.e. warehouse product identification; secure packaging for delivery of goods; transport and shipping; crossing the border and customs procedures; and delivery to end user), for services only a single phase suffices: delivering the service electronically to the customer, upon online payment.

Although a number of problems affecting cross-border e-commerce goods suppliers (e.g. burdensome customs procedures, inadequate warehousing management systems, poor transport-related infrastructure) are not of concern to services suppliers, the cross-border delivery of services is not without its own challenges. Two in particular are most likely to affect the ability of services suppliers to deliver services across borders in an inexpensive and timely manner:

- **Inefficiency of connectivity infrastructure**

    Cross-border services delivery depends on the presence, in both the home and destination country, of efficient, affordable and reliable connectivity infrastructure, which includes technological and process infrastructure. Technological infrastructure comprises all technologies that establish interconnectivity among telecommunications, cable, satellite, or other Internet backbone, as well as the Internet service providers who connect market participants to that backbone. Process infrastructure is the intangibles

that connect the Internet marketplace to the traditional marketplace and support the distribution and delivery of goods and services purchased over the Internet .[92]

Inefficient telecom services, inadequate quality and speed of lines, unstable power supplies, limited penetration and/or high cost of Internet connections can all contribute to increasing the cost and time of delivery of services across borders.

For example, supplying gambling services or interactive videogames online would be negatively affected by differences in Internet connection speed between the countries where gamblers are located, as gamblers or players with better Internet connectivity would have an advantage over those with lower connectivity.

- **Inadequate protection of data flows**

    Another issue that may arise in the context of cross-border delivery of services is inadequate protection of personal data. A number of services require consumers to provide suppliers with personal data (e.g. telemedicine). Clearly, consumers want to ensure that their data are used only for the purposes of the service to be provided and that they are not, for example, transferred to third parties for unsolicited marketing activities.

    Although some countries have introduced binding regulations on the protection of data flows, many others have not. For example, the EU has established a comprehensive and complex data protection mechanism based on government authority and supervision, which regulates cross-border data transfer. In the United States, by contrast, data flows are regulated on an ad hoc and sectoral basis.

    Cross-border delivery of services may therefore be negatively affected by the absence of data protection laws and mechanisms in either home or host country, as well as by the difference in approach to data protection.

Addressing both issues would require, primarily, government intervention, which could take the form of incentives for innovation, greater investments in technology and adoption of adequate data protection laws and mechanisms.

## 2.3. Cross-border opportunities for e-commerce services

Technological progress and the emergence of e-commerce have given many developing countries the opportunity to insert themselves into global value chains, participate more actively in cross-border trade and reduce the distance between services suppliers and foreign customers.

Although electronic commerce allows for the supply of services across borders in a variety of sectors, the greatest opportunities it represents for developing countries arise especially in:

- **Tourism**

    Tourism is a key driver of socioeconomic progress in the vast majority of developing and least developed countries, through its role as a primary source of exports, growth and employment. Among the top 10 international tourism destinations are China, Turkey and Mexico (ranked by international tourist arrivals), as well as Thailand, Hong Kong SAR and Macao (ranked by international tourism receipts).[93]

    While a country's historical, geographical and cultural endowments certainly contribute to attracting foreign visitors, its level of accessibility, along with the quality of its food and lodging establishments (e.g. hotels and restaurants) and payments services, are equally significant.

    Rapid advances in technology, which reduce costs and expand potential customer bases, give SMEs in developing and least developed countries the opportunity to participate in global value chains and to

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[92] Mann, Catherine L. (2000). Electronic Commerce in Developing Countries, Institute for International Economics.

[93] UNWTO (2015). UNWTO Tourism Highlights – 2015 Edition, Madrid.

have equal Internet access to international tourist markets.[94]

SMEs interested in accessing foreign markets can particularly benefit from the adoption of cross-border e-commerce because it allows them to disintermediation in favour of a closer relationship between supplier and consumer and, consequently, to eliminate their need to abide by the conditions set by larger companies in the supply chain.[95]

Most opportunities in e-tourism for SMEs operating in developing countries emerge in travel-related services, such as car bookings, hotel bookings, flight bookings and tour operator services.

- **Business outsourcing services**

    Advances in information and communication technologies have contributed to the rapid growth of the business outsourcing industry, and countries with advanced skills and lower labour costs have benefited greatly from the cross-border delivery of these services.

    For example, developing countries like Bangladesh, India and Thailand, along with LDCs like Senegal, have acquired worldwide renown as top performers in the export of IT-enabled business outsourcing services to English- and French-speaking destination markets.

    Since business outsourcing services exports foster the transfer of knowledge and lead to investments in physical and technological infrastructure and improvement of the education system, developing countries with adequate skilled personnel should take advantage of the opportunities offered in this sector.

- **Creative industries**

    Writers, artists, musicians and game producers have benefited significantly from technological progress. The Internet and services digitalization give content producers easier access to distribution and to more communication channels (e.g. video-sharing or streaming services for movies and TV series), and enable consumers to access content almost anywhere at any time.[96]

    This means that developing countries with well-established film industries, such as India (Bollywood) and Nigeria (Nollywood), can use digital services to distribute their movies beyond national and regional borders. Similarly, writers in more remote parts of the world can now publish their work online and make it available to readers worldwide.

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[94] Kim, C. (2004). E-Tourism: an Innovative Approach for the Small and Medium-Sized Tourism Enterprises (SMTEs) in Korea.

[95] Jago, L. (2012). Developments in Digital Business, Guest Lecture of E-Tourism.

[96] Acker et al. (2013). The digital future of creative Europe & The impact of digitization and the Internet on the creative industries in Europe.

# Chapter 4   Aftersales

| Establishing online business | → | International e-payment | → | Cross-border delivery | → | **Aftersales** |

| **Checklist: Aftersales** | |
|---|---|
| Firm-level capabilities | ✓ Effective customer feedback mechanism and customer relations management<br>✓ Return or cancellation policies<br>✓ Provision of sufficient information to enable consumers to make informed choices, including information on available forms of redress |
| Immediate business environment | ✓ Availability of dispute settlement procedures<br>✓ Mechanisms for recognizing the validity of transaction-related records, including delivery records, chat records with salespersons, etc. |
| National environment | ✓ Consumer rights and rights enforcement<br>✓ Adequate infrastructure for implementing and monitoring consumer protection policies<br>✓ Appropriate policies for ensuring firms' adherence to national/international standards on consumer protection<br>✓ National initiatives for developing effective online dispute settlement schemes<br>✓ Elimination of duties on returned products |

The aftersales phase of the e-commerce process includes all the activities that take place after buyers have made their payment online and sellers have delivered the product or service to their clients. Its significance should not be underestimated, as it provides the basis for establishing a lasting relationship between suppliers and customers.

Customers play a key role in the aftersales phase, which consists of two main stages:

- Consumers' evaluation of the product or service delivered to them in terms of the information provided by the supplier and the consumers' subsequent expectations about the quality, functionality and cost of their purchase;

- Consumers' assessment of, and potential recourse to, all available tools and instruments for seeking redress in case the product or service does not meet their expectations.

Once a product or service is delivered, the end user is confronted with some questions: Does the product resemble the one presented on the website? Does it perform as indicated on the supplier's website? Was the product or service provided of good quality? Does it meet the expectations consumers may have had about its functionality, performance and quality? Were there additional costs upon delivery (e.g. customs duties) that were not included in the information provided by the supplier about the final price of the online transaction?

When suppliers provide their customers with transparent, precise, exhaustive, complete and clear information – the kind of information that enables them to make informed choices in their online purchases – consumers' expectations about the quality, functionality and final cost of the products or services are likely to be met.

Information inaccuracies, shortcomings or asymmetries, on the other hand, may result in customer disappointment and dissatisfaction. Examples abound of dresses, shirts or other pieces of clothing that were bought online but did not match the picture that the supplier used to describe them on the website (e.g. the colour, style or shape was different) because the image was somehow altered (e.g. through Photoshop or deceitful lighting) or even intentionally fraudulent.

But consumers may also be confronted with the possibility of receiving a product that is damaged (e.g. a broken CD, a shattered glass, a ripped dress), or malfunctioning (e.g. a phone charger that does not properly charge the battery, takes too long to do so or damages the phone because either the charger or the battery is not the original product).

## 1. Using aftersales tools for consumer retention

In case of dissatisfaction with a good or service purchased online, consumers may resort to a number of tools or instruments made available by the supplier or the regulatory environment to provide some form of remedy. Among the most common are:

- **Customer review mechanism**

  Companies may provide an online system that allows customers to rate the product or service they purchased (e.g. using stars, numbers or other scoring schemes) and write comments about its quality, functionality or cost. This is an extremely powerful instrument for SMEs interested in entering the e-commerce arena and export abroad, because establishing and maintaining a good reputation is key to competitiveness and customer attraction, both domestically and internationally. Companies like TripAdvisor[97] and RottenTomatoes[98] have built their businesses around the concept of reputation, the importance of customer reviews and the role that customer feedback plays in providing free publicity and guidance for potential customers who want to make informed purchase decisions. By the same token, dissatisfied consumers can use customer review mechanisms to express their grievances to suppliers, possibly obtain additional remedies (e.g. a refund) or simply warn other potential customers about their negative experience and the reason for their discontent.

- **Refund**

  Sellers can also create refund mechanisms for dissatisfied customers, either by paying back a percentage of the total purchase price or by giving them a discount on future purchases, while also allowing them to keep the item purchased. This type of remedy would only be made available for situations that meet certain conditions (e.g. proof that the product is damaged or malfunctions, proof that the damages were caused during delivery, or proof that the item delivered does not match the picture on the website).

- **Cancellation policy**

  Under special circumstances and within certain time limits, consumers may be allowed to cancel their purchase and obtain a full refund. For example, a tourist who finds accommodation through AirBnb, which requires advanced payment to secure the booking, may be entitled under the company's cancellation policy to cancel the reservation within one to five days prior to arrival (i.e. flexible or moderate cancellation policy) and receive a refund, less a non-refundable fee. This applies if the tourist is unhappy with the renter because of a lack of communication post-booking, or because the tourist has seen negative reviews that were not available at the time of booking. But cancellation policies can be helpful also in circumstances beyond the supplier's control (e.g. unexpected family or work-related events that may force a customer to cancel hotel or travel reservations prior to arrival).

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[97] TripAdvisor is the world's largest travel site and travel community, reaching 350 million unique monthly visitors  and 320 million reviews and opinions covering more than 6.2 million accommodations, restaurants and attractions. See www.tripadvisor.com.

[98] RottenTomatoes is the leading online aggregator of movie and TV show reviews from professional critics. See www.rottentomatoes.com.

- **Return policy**

  Goods-exporting companies may offer dissatisfied customers the opportunity to return items without paying additional fees or customs duties. This type of remedy is particularly useful when a product gets damaged during delivery and the customer is interested in having it replaced rather than accepting a partial or full refund, especially when the product is sold online by a relatively small number of suppliers (e.g. iPhone cases with unique designs that are produced in limited numbers, or when the customer is in particular need of the product (e.g. a photographer who requires a special lens that is only available online).

- **Warranty**

  Products sold online may also be subject to a warranty, i.e. additional protection provided by the supplier to the consumer, whereby the former is responsible for replacing or repairing a faulty or damaged product. In some cases, consumer protection laws and regulations in the country of purchase may extend rights beyond the period covered by the supplier's warranty. For example, Apple voluntary offers a one-year warranty all over the world, but Italian law calls for a two-year warranty to be offered to consumers for purchases made in Italy (including through e-commerce). This would mean that consumers in Italy may be entitled to a longer period of warranty than other Apple consumers.[99]

- **Privacy**

  The emergence of e-commerce and digital trade has allowed for the transfer of data, including sensitive personal data, across borders, and such data are increasingly used for personalized marketing purposes. Consumer protection legislation may tackle this problem by establishing specific rules and limitations governing the use of personal data for e-commerce purposes. Companies selling their services or products online across borders may, for example, be required to provide their customers with transparent, clear and easily accessible information on which personal data they intend to use and for what purpose, and allow them to opt out of data collection for marketing or publicity.

- **Dispute settlement procedures**

  Whenever the instruments described above and internal complaint resolution procedures, are unable to resolve a dispute that arises between supplier and consumer about non-performance of contractual obligations, poor performance of contract, breach of privacy policy or breach of security of confidential information, consumers may resort to third party dispute settlement procedures, which can be carried out offline (e.g. court litigation, arbitration, mediation and other alternative dispute settlement mechanisms) or online (i.e. online dispute resolution, which employs arbitration, mediation or negotiations to settle disputes).[100] In some cases a company expressly indicates which procedure it prefers (e.g. Amazon provides for disputes to be settled through binding arbitration rather than in court).[101] In other cases, countries have developed effective online dispute settlement schemes, in a bid to help consumers and traders resolve their disputes without going to court, in an easy, fast and inexpensive way.[102] This is, for example, the case of the EU.

## 2. Challenges to aftersales service

SMEs engaging in e-commerce that want to be competitive in international markets and perceived by consumers as better, more reliable and trustworthy than others should:

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[99] Apple (2016). Garanzia limitata di un (1) anno di Apple (ITALIA).

[100] Harvard Law School (2001). E-commerce: Session 5 – Disputes.

[101] Amazon (2016). Conditions of Use.

[102] European Commission (2016). Alternative and Online Dispute Resolution (ADR/ODR).

- Provide a good or service that meets or even exceeds their customers' expectations in terms of quality and functionality;

- Offer a good balance between price and quality;

- Give consumers clear, transparent and correct information about the good or service supplied, its pricing and all phases of the transaction, from payment to delivery;

- Ensure secure and reliable payments via the Internet;

- Deliver goods or services within a reasonable amount of time;

- Provide adequate customer support.

This means that bottlenecks and problems that may confront suppliers and consumers in all the previous stages of the e-commerce process chain (i.e. establishing a business online, payments, and cross-border delivery) can also have an impact on the last stage of the process – aftersales – which focuses on the relationship between supplier and consumer and the instruments used to protect the latter.

For instance, if a supplier struggles to find precise information about the total amount of taxes and customs duties to be paid by the consumer for a cross-border delivery, the supplier will also find it difficult to provide the consumer with the information needed to assess whether the product is worth the price, thus potentially undermining the relationship between supplier and consumer. This is a problem faced by many European consumers when buying products from United States suppliers: Consumers usually have to paid additional customs duties to have the products delivered to their address, duties which are rarely indicated on United States suppliers' websites.

But failure to address privacy and security concerns in the first two stages of the e-commerce process (i.e. establishing a business online and creating an efficient and secure payment system) can also have repercussions on aftersales, as consumers may resort to dispute settlement procedures and internal complaint mechanisms (e.g. customer reviews) to seek redress for breaches of privacy, hacking or cyberfraud.

Two problems are most relevant for the aftersales phase of the e-commerce process chain:

- Information deficiencies

    Suppliers may fail to provide consumers with sufficient information for making informed choices, including information on available redress. There are four main reasons for this:

    – Transparency concerns. Misinformation may derive from lack of transparency in consumer protection legislation in foreign markets as to the type of information that should be made available to consumers (e.g. disclosure of all the ingredients or origin of a food product; warnings about the use or application of an electrical item; information on the treatment of personal data).

    – Human capital constraints. Online goods and services suppliers may struggle to properly inform their foreign customers because they lack knowledge of the regulatory environment in destination markets, which can often be ascribed to the limited financial and human resources available to most SMEs.

    – Marketing flaws. Ensuring that foreign consumers are able to make informed choices may prove impossible for e-traders who rely on poorly designed websites where information is scattered, fragmented and not readily accessible, and which consumers cannot easily navigate.

    – Regulatory diversity across countries. Providing adequate, exhaustive and relevant information to consumers can prove difficult for SMEs in light of the remarkable variations in consumer protection legislation across countries, with differences going beyond content and provisions, as illustrated in Box 7 below. Though designed to reinforce potential customers' confidence in e-

commerce, law and regulations protecting end users can have the opposite effect, insofar as they may make it more complex, time-consuming and costly for companies, especially SMEs, to trade across borders via electronic means. Indeed, the variations in consumer protection laws across different target markets have two unfavourable outcomes. First, they often generate legal uncertainty, especially for e-traders who lack the necessary human and financial resources to carry out proper market intelligence on what local consumer protection laws and regulations dictate in each target market (e.g. as regards the type of information websites should or should not contain). Second, they may create a more costly, time-consuming and cumbersome adaptation process for websites, which can be particularly burdensome on SMEs, especially when businesses are unsure about what is actually required of them.[103]

- Burdensome return policy

E-traders who engage in cross-border e-commerce may find it too burdensome and costly to adopt and implement a return policy, as they are responsible for paying all additional customs duties and fees and for dealing with all the administrative red tape required to return a faulty or damaged product across borders. Therefore, consumers may not be able to benefit from any return policy that does not impose additional costs on the consumer, unless there is applicable legislation mandating the protection of consumers' rights to return purchased goods and legislators are able to enforce it.

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### Box 7.    Consumer protection approaches

Government supervision: type of regulatory mechanism for e-commerce based on the Government's administrative regulations and the belief that consumer protection cannot be left to individual [private-sector?] enforcement, as market inefficiencies may lead to unwanted mistrust by consumers and underdevelopment of markets and production. Government authorities endeavour to monitor misbehaviour in markets in order to protect the weaker parties. In keeping with this approach, governments can set up entities or agencies specifically dedicated to consumer protection for e-commerce transactions. A number of countries have adopted this approach, including China, which although it lacks a law dealing exclusively with consumer protection in e-commerce, has adopted a consumer code that applies to both traditional and online transactions.

Private regulatory mechanism: consumer protection achieved through industry self-regulation and supervision of the market by consumer organizations. This approach, adopted by the European Union, which has no central agency for consumer protection in e-commerce transactions, may give rise to enforcement issues.

Hybrid approach: a consumer protection mechanism that entails private sector enforcement and State-based market supervision, in conjunction with making use of market forces, and which results from a convergence between the other two mechanisms.

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## 3.    Strategies and policy recommendations for improving aftersales service

- **Improving information collection and dissemination**

A number of solutions to the issues that may emerge in the aftersales stage can be provided at firm level, since they are within the control of SMEs that engage in cross-border e-commerce. For example, companies can employ their resources to improve the design and structure of their website, with a view to making information more readily accessible to consumers. They can also invest more time and effort in regulatory-related market intelligence, possibly by employing more qualified personnel or through outsourcing.

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[103] National Board of Trade (2012). E-Commerce - New Opportunities, New Barriers: A survey of e-commerce barriers in countries outside the EU.

- **Adopting binding consumer protection laws**

    Government intervention may be key to addressing the vast majority of the problems that affect aftersales. For example, by adopting laws and regulations specifically designed to safeguard the economic interests of consumers (e.g. right to return and cancellation policies, policies protecting data transfer and privacy, and information requirements), governments can help SMEs in their quest to build a good reputation and encourage consumers to engage in cross-border e-commerce, in lieu or in combination with traditional trade.

    Buying a good at a shop allows customers to personally assess the product, its quality and functionality before paying for it. If customers are interested in buying a dress, they can try it on to check how it fits and how the fabric looks and feels, and they can examine it for defects (e.g. faulty zip, loose button). If anything is found to be wrong the seller can either immediately provide another dress of the same size and type or, if none is available, customers can leave the shop without making any payment. For customers to be persuaded to buy the dress online and have it delivered to their address across borders, they must be sure that they will receive satisfactory treatment if the product is faulty or damaged; they must be able to return the product or cancel the purchase with a full refund, without having to pay any additional fees or customs duties. In the absence of private mechanisms regulating this type of consumer rights, administrative regulation by governments would not only be viable but highly recommended.

- **Implementing enforcement mechanisms**

    Adopting binding regulation on consumer protection is not sufficient to ensure that consumer rights will indeed be respected and protected: Enforcement mechanisms and adequate infrastructure for implementing and monitoring consumer protection policies are actually necessary. Indeed, with a view to strengthening the enforcement of EU legislation with respect to consumers' economic interests, the EU adopted the 2004 regulation on consumer protection cooperation, which set minimum enforcement capacities for national authorities and allowed joint enforcement actions with the European Commission (e.g. screening of thousands of websites across a variety of sectors for infringements of EU law, which resulted in increased compliance).[104]

- **Increasing transparency**

    Government intervention can also be crucial in addressing transparency concerns about the accessibility of information on consumer protection laws and regulations. Increasing regulatory transparency would benefit suppliers and consumers alike, allowing suppliers to gather all the necessary information that must be provided to consumers – information that is key to gaining customers' trust and brand loyalty – and allowing consumers to make informed choices. Different avenues are available to policymakers to foster greater regulatory transparency:

    − Improving channels of communication and information dissemination on newly adopted rules and regulations governing consumer protection and relevant to cross-border e-commerce (e.g. setting up a website completely focused on the rules and regulations affecting electronic commerce and available in multiple languages);

    − Providing greater clarity on the content of regulatory provisions and the criteria and cases of application (e.g. by indicating whether the scope of application of return policies goes beyond damage or fraud), and encouraging greater collaboration among governments in the regulatory process.

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[104] European Commission (2014). Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the functioning of Regulation (EC) No 2006/2004 of the European Parliament and of the Council of 27 October 2004 on cooperation between national authorities responsible for the enforcement of consumer protection laws (the Regulation on consumer protection cooperation), COM(2014) 439 Final, pp. 1-2.

- **Reducing regulatory diversity**

  In order to solve regulatory-related information issues arising in the context of cross-border e-commerce, attention should also be devoted to reducing regulatory diversity across countries. Simplifying regulations and promoting greater collaboration among countries – possibly by encouraging firms to adopt international standards on consumer protection – would make it less time-consuming and difficult for e-traders, especially SMEs, to access information about the regulatory environment in foreign markets; to implement laws and regulations applicable in destination markets; and to provide consumers with precise, clear and trustworthy information on legislation affecting their economic interests.

- **Eliminating duties on return products**

  Fostering collaboration among governments may also prove necessary, and fruitful, to eliminating duties on return products, with a view to encouraging companies to grant consumer rights to return, in the absence of national legislation on consumer protection, or to enforce existing policies to safeguard consumer rights. As many SMEs may not be able to afford additional costs related to customs duties for returned goods, they may be forced to set higher prices for their products (i.e. prices that take such duties into account), in order to guarantee the application of a return policy established by law. Such a decision could, however, have negative repercussions on the product's price-quality ratio and consequently on the company's competitiveness. Eliminating customs duties on return products would allow companies, especially SMEs, to guarantee consumer protection and comply with relevant national legislation, but without compromising their own competitiveness.

# Chapter 5    Emerging international cooperation

Cross-border e-commerce is essentially international trade. When a product or service is supplied from a seller in one country to a customer in another, an international trade transaction is recorded. International trade is governed by a myriad of laws and treaties, including the rules on goods and services trade of WTO, bilateral and regional trade agreements and, increasingly, international investment rules, as global value chains link trade and investment together. In the context of cross-border e-commerce, rules on cross-border data flows, consumer protection, IP protection and data privacy are also key determinants that shape the flow of trade.

The rapid increase of cross-border e-commerce, and the online retail sale of goods in particular, poses new challenges for trade regulators. Bulk imports are now broken down into individual parcels, and each parcel still needs to be processed through customs. Cross-border e-commerce businesses are calling for creative solutions to the bottleneck on the flow of trade. Such solutions include more efficient customs administration, greater transparency and predictability of the related duties and taxes, and increased support for SMEs to benefit from cross-border e-commerce. Many of these would require enhanced cooperation among national agencies and national governments, through joint efforts on international trade rules and capacity-building efforts.

International organizations such as WTO, the World Bank, the United Nations Conference on Trade and Development (UNCTAD), the Organisation for Economic Co-operation and Development (OECD), the Universal Postal Union (UPU), the World Intellectual Property Organization (WIPO) and ITC have long been involved in studying the implications of cross-border e-commerce and have helped to assess e-commerce trends, ICT infrastructure development, policy recommendations, opportunities for SMEs and capacity-building needs. E-commerce is also discussed extensively in global and regional governance forums, including the Group of 20 (G20) and APEC, and promoted by regional development initiatives, such as the Asian Development Bank (ADB).

The roles played by international organizations and intergovernmental initiatives in facilitating cross-border e-commerce fall into three areas: studying and analysing trends, negotiating and implementing international rules, and promoting e-commerce through capacity-building initiatives.

## 1.    Analysing e-commerce trends

Many publications are produced each year by international organizations on the growth trends of e-commerce. They provide rich information on the latest developments in the field and point to issues that deserve attention at the global level.

UNCTAD, for instance, produces the UNCTAD *Information Economy Report* each year, which captures the major developments related to ICT and e-commerce. The 2015 edition explores the opportunities in B2B and B2C e-commerce for enterprises in developing countries and studies how best to use and develop ICTs for economic growth and sustainable development. The report advises policymakers to align laws on e-signatures and e-contracting internationally; to update international guidelines on consumer protection; and to establish minimum standards on data protection and cybercrime.

OECD produces the *Digital Economy Outlook*, a biennial series that examines and documents emerging trends, opportunities and challenges in the digital economy. It highlights how OECD member countries and partner economies are taking advantage of ICTs and the Internet to meet their public policy objectives. The publication provides overview of converging trends, policy developments and data in the digital economy on both the supply and demand sides.[105]

In 2016, the World Bank released its annual *World Development Report*, entitled "Digital Dividends", which explores the Internet's impact on economic growth, social and economic opportunities and the efficiency of public services delivery. The report examines how the Internet can be a force for development, especially for

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[105] OECD (2015). OECD Digital Economy Outlook 2015.

the poor in developing countries. It analyses the factors that have allowed some businesses, people and governments to benefit greatly from the Internet.[106]

## 2. Negotiating and implementing international rules on e-commerce

WTO is the premier forum for negotiating and establishing international trade rules, monitoring the implementation of trade rules and resolving trade disputes between governments.

Already in the late 1990s, the emergence of e-commerce caught the attention of WTO members. At the 1998 WTO Ministerial Conference, members agreed to study trade issues arising from global electronic commerce, focusing on three questions: how do existing WTO agreements affect e-commerce? Are there any weaknesses or omissions in the rules which need to be remedied? Are there any new issues not covered by the WTO system on which members may want to negotiate new disciplines?

The 1998 Ministerial Conference also adopted a declaration on global electronic commerce, which included a so-called moratorium stating that "members will continue their current practice of not imposing customs duties on electronic transmission". This moratorium was extended in the subsequent Ministerial Conferences and is still in effect today.

The 1998 declaration also established a work programme on electronic commerce at WTO, mandating the agency to examine issues related to e-commerce in the areas of goods, services, intellectual property and trade and development. Numerous meetings have been held and the secretariat has produced many background documents to explore key issues, including classification of the content of certain electronic transmissions; development-related issues; fiscal implications of e-commerce; the relationship (and possible substitution effects) between e-commerce and traditional forms of commerce; the imposition of customs duties on electronic transmissions; competition; jurisdiction; and applicable legal issues.

Apart from WTO, a number of other international organizations involved in supporting regulatory aspects of e-commerce:[107]

- WIPO is the international leader on digital copyright and trademark issues involving domain names.

  WIPO has created a digital agenda to respond to the confluence of the Internet, digital technologies and the intellectual property system. Through international discussions and negotiations, WIPO is formulating new ways to disseminate intellectual works while also ensuring that the rights of their creators remain protected. The digital agenda also aims at integrating developing countries into the Internet environment through such tools as WIPOnet, which seeks link over 300 intellectual property offices in WIPO Member States; WIPO's Global Information Network and the electronic delivery of information and services; rethinking how intellectual property law works in Internet transactions and examining emerging new norms in this respect; facilitating the creation of effective online dispute settlement mechanisms; and coordinating the development of efficient and consistent responses to common concerns across national and multisectoral boundaries.

- UPU has 192 member countries and focuses on developing easy access for better delivery of goods in e-commerce.

  UPU's E-Commerce Programme, for instance, aims at accelerating global e-commerce by integrating postal services into the world of e-commerce and making international shipping and postal delivery easier. It offers action plans in market development, postal electronic services, logistics (physical services), greater interoperability and enhancing payment solutions.

- OECD is at the forefront of Internet taxation, e-commerce consumer protection and privacy. It has developed policy in areas ranging from telecommunications infrastructure and services to network security and data protection, as well as emerging markets and developing economies. Following the adoption of its OECD Action Plan for Electronic Commerce, endorsed by its members in 1998, its work

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[106] The World Bank (2016). World Development Report 2016: Digital Dividends.

[107] ITU (n.d.). Retrieved from: https://www.itu.int/ITU-T/special-projects/ip-policy/final/Attach04.doc.

programme has focused on building trust among users and consumers; establishing ground rules for the digital marketplace; enhancing the information infrastructure for e-commerce; and maximizing the benefits of e-commerce.

- The Internet Corporation for Assigned Names and Numbers (ICANN) has implemented the Uniform Domain Name Dispute Resolution Policy, which has settled thousands of domain name disputes.

    Future ICANN work is likely to address several key issues, including institutional reform, the participation of Internet users in the policymaking process, the establishment of new top-level domains and amendments to ICANN's domain name dispute resolution process.

- The United Nations Commission on International Trade Law (UNCITRAL) has played a leading role in developing model laws for e-commerce transactions.

    UNCITRAL drafted the Model Law on Electronic Commerce in 1996 to enhance the use of paperless communication. In 2001, it drafted the Model Law on Electronic Signatures. Dozens of countries from every continent have used the Model Law as the basis for establishing e-commerce legislation, including Bermuda, Colombia, Thailand, Tunisia and the United States, as well as the EU.

    Future electronic commerce work will focus on: electronic contracting, with a view to creating a draft convention; online dispute settlement; dematerialization of documents of title; and a convention to remove legal barriers to the development of e-commerce in international trade instruments.

- The Hague Conference on Private International Law has been the worldwide leader on Internet jurisdiction issues.

    In 1999, the Conference held a round-table discussion (in conjunction with the University of Geneva) with experts in various fields on issues arising from e-commerce and Internet transactions. A series of recommendations were adopted in such areas as online contracts, B2B and B2C transactions and online dispute resolution. In June 2001 the Conference held its nineteenth session to work on a new convention on jurisdiction and foreign judgments in civil and commercial matters and to decide on its future work programme.

Many national and regional institutions are also exploring initiatives on the regulatory side to facilitate e-commerce. Most notably, the European Union has issued a number of directives addressing e-commerce-related regulatory issues, including the processing and free movement of personal data, legal protection of databases, protection of consumers in respect of distance contracts, and harmonization of certain aspects of copyright and related rights.

APEC is very active in e-commerce initiatives, including Digital Divide Blueprint for Action, APEC Initiative on Paperless Trading, the Action Plan to Support the Use of Electronic Commerce by SMEs, and APEC Voluntary Online Consumer Protection Principles.

E-commerce is also discussed in the context of the G20 and its international business coalition, the B20. The B20 meetings under the Turkish presidency in 2015, for instance, produced the B20 Digital Economy Policy Paper, calling for G20 actions on ensuring data flow and data security, improving the global trade system for the emerging digital economy, improving access of enterprises to digital economy and infrastructures, and addressing skills mismatches. The G20 leaders also committed themselves to bridging the digital divide in the G20 Antalya Summit Communiqué.

In parallel, international cooperation has been emerging in the field of data and statistics related to e-commerce. For example, the United Nations Interagency Task Force on Trade Statistics (whose members include national Governments, the International Monetary Fund (IMF), UNCTAD, the United Nations Statistics Division (UNSD), WTO and OECD) has been developing concepts, definitions and guidelines for improving the measurement of online international transactions. More recently, WTO initiated collaboration with UNCTAD and UPU to identify ways to improve the measurement of cross-border e-commerce.

In the context of regional trade agreements (RTAs), WTO estimates that a growing number of such agreements now include specific chapters covering e-commerce. Of the 269 RTAs notified to the

organization as of 4 March 2016, 65 (roughly a quarter of the total) include provisions on e-commerce, often addressing such issues as paperless trade, electronic authentication and e-signature.

With the rising importance of e-commerce and cross-border e-commerce in particular, the international community will see a growing need to cooperate on developing a new set of trade rules that more specifically address policy issues related to cross-border e-commerce.

## 3. Capacity-building for global e-commerce

SMEs in developing countries are still on the wrong side of the digital divide, and it is therefore crucial for governments and international organizations to help SMEs and developing countries increase their access to the global e-commerce market.[108]

Numerous initiatives exist at the international level to address different issues on the checklists provided in previous chapters. Different actors tend to focus on different points of the e-commerce process chain, or on different levels of determinants (firm level, immediate business environment or national level).

UNCTAD is very active at the national policy level and provides capacity building services to policy and lawmakers at national and regional levels in understanding the legal issues underpinning e-commerce. The agency also provides national diagnostics, assessments and technical assistance for the development of national e-commerce strategies in addition to its work on measuring e-commerce already mentioned above.

UPU works at a variety of levels helping countries build an enabling postal environment for e-commerce at the national and international level. These interventions include actions related to e-commerce logistics and postal delivery infrastructure, postal payments infrastructure, secure ICT infrastructure (under the ".Post" domain), affordable access to e-commerce platform solutions, aspects of cross-border delivery such as transport and security and e-Customs, as well as regulations and standardization for universal access to postal services. One example of these actions is the Registered Article Quality Enhancement Lead (RAQUEL) project in the Asia-Pacific region. RAQUEL aims at improving post offices services by developing better track and trace technology and by helping them in the assessment of end-to-end service quality.

ITC, in turn, works at the firm level, intervening at different stages of the e-commerce process chain. Its e-Solutions programme helps enterprises (and in particular SMEs) take part in digital trade by acquiring key capabilities that are not readily accessible, affordable or understood by smaller enterprises in developing or LDCs. These capabilities include not only an understanding of the opportunities and requirements of international markets, but also the ability to face more practical challenges, such as accepting international payments, proposing efficient and cost-effective transport and logistics, and raising awareness and trust among international customers.

Sometimes technical assistance providers directly collaborate with e-platforms in order to bring SMEs to the market. ITC and the World Bank, for instance, collaborate with global and regional marketplaces to facilitate improved access to these marketplaces. The approach involves building the capacity of local e-commerce advisers who are in turn expected to coach SMEs to generate more visibility and interest in their products on regional and global platforms.

The above list of initiatives and providers is far from exhaustive but gives an idea of the multiplicity of initiatives that exist. Those initiatives are rarely coordinated and rarely address the full e-commerce process chain. In light of this situation, a "Call for Action" has recently been issued under the lead of UNCTAD, with a view to better coordinating Aid for E-Trade. The Call for Action is intended to bring together representatives from governments, international organizations and the private sector to cooperate on unlocking the e-commerce potential of developing countries.

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[108] See ITC (2016) on the digital divide for SMEs in developing countries: ITC (2016) SME Competitiveness Outlook 2016. See also The World Bank (2016). World Development Report 2016: Digital Dividends. Washington, DC: The World Bank.

# Chapter 6   Conclusions

Cross-border e-commerce merges new methods of doing business via the internet with century-old practices of conducting cross-border trade. Being successful in this form of international trade therefore requires the ability to master new methods of doing business and the ability to conduct certain traditional activities differently. Being successful in cross-border e-commerce requires the ability to embrace change.

A systematic analysis of the process chain of e-commerce reveals that at the firm level, success in cross-border e-commerce requires readiness and ability to use information and communication technologies for establishing an online business and conducting international e-payments. Success also depends on reorganizing storage and warehouse management to respond to multiple small orders rather than limited bulk orders. It also requires the ability to deal directly with customers abroad for aftersales service, rather than just working indirectly through a foreign retailer or intermediary.

Other key prerequisites for successful e-commerce concern access: access to the networks and platforms that feed into the e-commerce process chain; access to affordable Internet services; access to third-party e-payment service providers, with links to domestic banks; access to post and express delivery services with tracking ability.

Change must also be embraced by national policymakers wishing to support e-commerce growth in their country. E-signature and e-contract laws are needed to facilitate the creation of online businesses. International e-payments call for regulations on the free cross-border flow of currency and, ideally, on the prevention of online fraud and cybercrime. Cross-border delivery depends critically on countries' transport infrastructure and customs clearance procedures. Last but not least, e-commerce may require new rules for consumer protection.

The above list of requirements is not complete but provides a good sense of the quantity and complexity of the challenges ahead for SMEs that wish to become e-commerce players and for policymakers or trade and investment support institutions wishing to support e-commerce.

Notwithstanding these complexities, e-commerce has been enthusiastically embraced by consumers and producers in a number of economies. Only 21 years after the first e-commerce transaction in 1995, the value of global e-commerce sales is today well above US$ 1 trillion. E-commerce has also enabled the emergence of numerous tech-savvy and dynamic enterprises in the developing world. This publication has provided several examples of success but also of the challenges SMEs may still face.

While e-commerce provides opportunities for enhancing the inclusion of developing-country SMEs in regional and global markets, it also risks engendering the opposite outcome. The digital gap between countries is well documented. Addressing this digital divide has to be a priority. In addition to this, SMEs on average are much less e-connected than large firms, and the firm-level digital gap is wider in the developing than in the developed world.[109] Closing both these gaps is therefore critical if e-commerce is to work in favour of developing-country SMEs, and the checklists in this paper have provided pointers on how that can happen.

International organizations like ITC, UNCTAD, the World Bank and the World SME Forum are actively supporting developing-country SMEs in their endeavours to become cross-border e-commerce players and thus contribute to closing the firm-level digital gap. A number of players, including UNCTAD, UPU and WIPO, are working to strengthen the immediate business environment and national policies required for successful e-commerce. The WTO Trade Facilitation Agreement has the potential to address some of the challenges related to cross-border delivery discussed in this paper.

But making e-commerce work for developing-country SMEs also requires new rules and regulations at the national level and multilateral level. The need for international solutions was already recognized in the early days of e-commerce, in such institutions as WTO. But global solutions to modern challenges – including

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[109] ITC (2015). SME Competiveness Outlook 2015.

cross-border e-signature recognition, international e-payments and international consumer and data protection – still need to be found.

Business and policy leaders are aware of these challenges, as reflected in the prominence of e-commerce in G20 and B20 discussions, the revival of e-commerce discussions at WTO, and the call by Alibaba, China's leading e-commerce giant, for the establishment of a private-sector-led electronic World Trade Platform to enhance public-private dialogue on cross-border e-commerce. The success of these and other related initiatives will be important to ensure that cross-border e-commerce can be a tool to increase the competitiveness of  developing-country SMEs to allow them to connect to new regional and global markets and respond to growing demand for e-commerce activity.

# Appendix I: Country profiles

## Global overview of cross-border e-commerce

As the economic and policy significance of e-commerce has increased, a growing number of countries – including Canada, China, the Russian Federation, the United Kingdom and the United States – have begun to collect data on e-commerce revenues. This process will help refine the currently broad definition of e-commerce and lead to its more universal adoption. In parallel with these government efforts, research has been undertaken by consulting firms and data banks, taking advantage of the growing interest in exploring e-commerce data.

McKinsey Global Institute recently produced a report on digital global flows that highlights some promising facts about e-commerce.[110] It shows, for example, that the flow of Internet data has been exceeding global flows of trade and finance: the former increased 45-fold between 2005 (4.7 Tbps) and 2014 (211.3 Tbps), while the latter are flattening. New technologies (e.g. 3D printing and downloadable media) are among the factors contributing to the decrease in global goods trade. The new trend seems to have a positive impact on economic growth, with world gross domestic product (GDP) from data flows rising by US$ 2.8 trillion. Moreover, GDP in some countries could grow by as much as 50% in the long term if those countries accelerate their participation in global flows. This growth is quite recent; cross-border data flows date back just 15 years. With respect to digital financial flows, cross-border financial flows, including lending, FDI and purchases of equities and bonds, soared from US$ 0.5 trillion in 1980 to US$ 11.9 trillion in 2007 and then fell during the economic crisis. They are now, however, recovering, and reached US$ 5.2 trillion in 2014.

The distribution of e-commerce activity still varies by the development levels of different countries. UNCTAD's *Information Economy Report 2015* assembles data from national statistical officesand private consultancy firms. This report shows that global e-commerce is dominated by developed countries. However, these results may be influenced by the fact that comprehensive data on e-commerce are mostly provided by developed countries. In fact it is developing countries that are growing the fastest, especially in Asia and the Pacific. According to Forrester Research, total online retail revenues in Australia, China, India, Japan and Republic of Korea surpass those in the United States and Western Europe combined, and are forecast to nearly double between 2015 (US$ 733 billion) and 2020 (US$ 1.4 trillion)[111].

**Figure 5.   Global connectivity and the increase in global e-commerce sales**
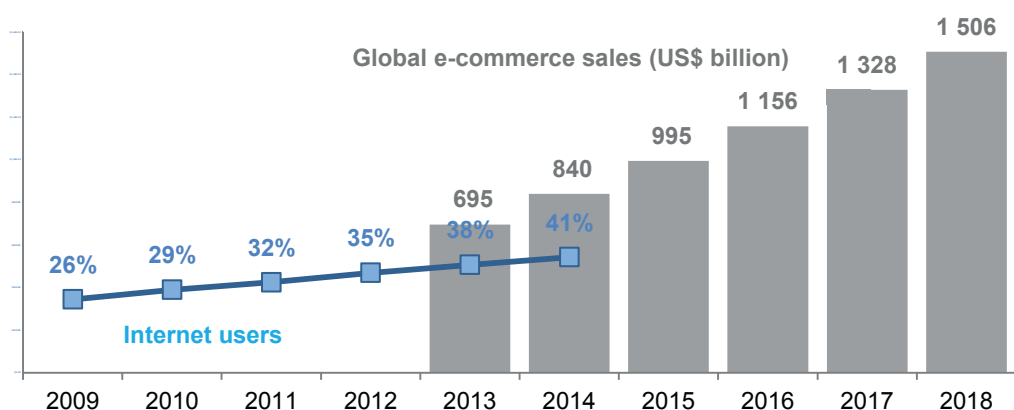


*Source:* Euromonitor & World Bank.

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[110] McKinsey (2015). Global payments 2015: A healthy industry confronts disruption.

[111] Forrester (2016, March 4). Asia Pacific Ecommerce Market to Reach US$1.4 Trillion in 2020.

# 1. Connectivity to the World Wide Web and e-commerce

The growth of e-commerce has been enabled primarily by developments in telecommunications technology, which means that the availability of infrastructure remains a large determinant of the prevalence of e-commerce in a country. This is evident from the substantial increase in e-commerce activity over the past 10 years, which follows the astounding expansion of social media and the development of other new technologies. With the world becoming more interconnected than ever over the past decade, e-commerce has become a significant channel for both cross-border trade and domestic trade. Figure 5 above shows the level of global connectivity vis-à-vis the increase in global e-commerce sales.

The importance of infrastructure in the level of e-commerce activity may explain to a large extent the disparity in e-commerce activity between developing and developed countries. However, this may change in years to come, as connectivity to the World Wide Web through cellular mobile phones is increasing and may soon surpass landline-based Internet use. Conventionally, e-commerce transactions relied on financial tools like credit cards and account transfers, which may be harder to obtain in less developed countries because of the difference in the development of the banking sector or the difference in financial systems. The availability of new payment methods, such as PayPal and prepaid "credit cards", has enabled populations in many developing countries to carry out the type of financial transactions essential for e-commerce.
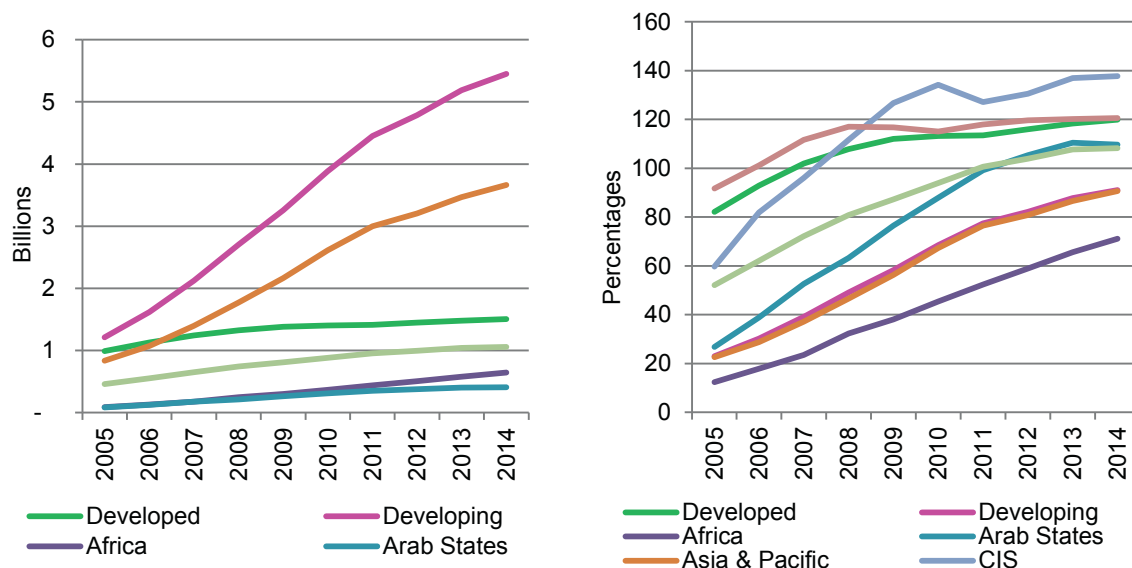
The International Telecommunication Union (ITU) provides the primary reference statistics for this issue.[112] First of all, trends in the use of the Internet and the number of households with Internet access show that developing countries are doing particularly well. In 2014, the number of Internet users in developing countries increased nearly fourfold over the 2005 level. More than one third of the population of those countries has been catching up with developed countries in terms of the number of households with Internet access. Over the decade 2005–2015, the percentage of developing-country households with Internet access jumped from 8% to 34%, a larger expansion than in developed countries. In the latter group, the proportion is in fact higher but the expansion is much flatter.

In terms of mobile-cellular use, ITU provides statistics that can help understand mobile-based e-commerce, known as m-commerce (see Chapter 1b), which is growing at a very fast pace. M-commerce was forecast to reach 40% of global e-commerce transactions in 2015.[113] Smartphones are increasingly popular and are reaching every corner of the world. The platform – the phone – has moved beyond its original designation and has become a pocket-sized personal computer through which people can connect and perform financial transactions, such as paying bills, managing their accounts and, most importantly, shopping.

Figure 6 shows the absolute number and the number per 100 inhabitants of mobile-cellular telephone subscriptions. The growth over the past 11 years, while moderate in developed countries, has been dramatic in developing countries. In 2005 less than one in four persons had a mobile-cellular subscription, whereas by 2014 almost everyone had a subscription. At the regional level, the biggest growth was observed in Africa, where mobile-cellular subscriptions soared from 87 million to 685 million during 2005–2014 or, in relative terms, from 12% to 73.5% of the population. Asia and the Pacific has the largest absolute number of subscriptions of all the regions, although one of the lowest numbers of subscriptions per person. However, given that the growth rates in both absolute and relative terms were the highest in these two regions, they are definitely the fastest-expanding market for mobile commerce.

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[112] ITU (2015). ICT Facts and Figures: the world in 2015.

[113] These trends and forecasts come from Criteo's Q1 2015 State of Mobile Commerce Report, based on its unique pool of online shopping data covering 1.4 billion transactions totalling over $160 billion of annual sales. Mobile commerce in this report excludes NFC/proximity payments. Retrieved from: http://www.criteo.com/media/1894/criteo-state-of-mobile-commerce-q1-2015-ppt.pdf.

**Figure 6.    Mobile-cellular telephone subscriptions**

The active mobile broadband subscriptions indicator captures data that may not be covered by individualized connectivity data, that is, the wireless-broadband Internet subscriptions using terrestrial mobile connections. Once again, developing countries have grown the fastest. During 2010–2014, mobile broadband subscriptions grew more than fivefold in absolute terms and per inhabitant. Africa and the Arab States are performing the best, with more than sixfold growth in only four years.

As data on connectivity indicate, developing countries are becoming increasingly more attractive markets for e-commerce, since their connectivity to the internet is growing rapidly. Therefore, with the continuous development of infrastructure, greater adoption of cellular data plans, and the increase in incomes, the market for e-commerce will become much larger, and will do so at a much faster rate; 65% of the developing-country population still do not use the Internet, and that proportion is higher than in developed countries. For instance, Africa saw the highest growth, from only 17 million Internet users in 2005 up to 193 million in 2014.

The research company eMarketer highlights the importance of "social commerce" in this connection – i.e. the share of e-commerce traffic driven by social media. Although it is a small share, retailers should not ignore it. Social media are a crucial voice of public opinion, with a powerful influence on a retailer's reputation, for example through the reviews published on such opinion websites as TripAdvisor and Yelp. Some 900 million people have international connections on social media, and 360 million take part in cross-border e-commerce.[114] Finally, mobile payment methods through phones and smartphones, such as PayPal and Apple Pay, are many people's favourites, as they are easy to set up and use.[115]

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[114] Manyika et al. (2016). Digital globalization : the new era of global flows.

[115] eMarketer (2016, March 21). Why College Students Prefer Mobile Payment Methods.

**Figure 7.   Increase in social network users worldwide**

Number of social network users worldwide (billions)
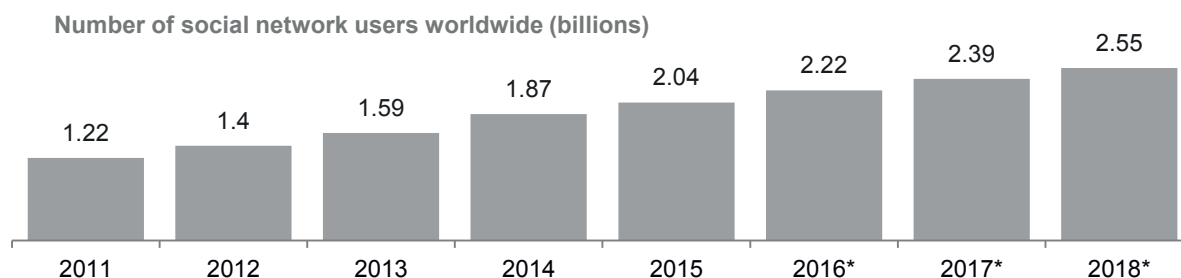


*forecast World Customs Organization.

*Source:* Worldwide; eMarketer.

## 2.   Measuring e-commerce

E-commerce measurement to date has relied primarily on data from international organizations, corporate reports (e.g. PayPal), and some official statistics from developed countries. This lack of official statistics is quite understandable due to the cost of collecting the data and the complexity of defining and measuring e-commerce. That complexity is exacerbated in developing countries by the informal – and sometimes innovative – nature of e-commerce transactions, such as paying by phone credit or informal payments. The main sources are, again, international organizations (including the World Customs Organization (WCO) and UPU) and companies, such as Payvision, which, as discussed in UNCTAD's *Information Economy Report 2015*, provides an international payment processing platform to banks and payment service providers in the e-commerce market.

The sectoral distribution of e-commerce seems to be concentrated in manufacturing and wholesale trade sectors, which generate most e-commerce revenue. The United States Census Bureau estimated that e-commerce accounted for 57% of all manufacturing shipments and 26.5% of total merchant wholesale in 2013.[116] In terms of transaction type, the largest share of trade volume is represented by B2B transactions, which in 2013 exceeded US$ 15 trillion. Some 36% of global B2B e-commerce was accounted for by the United States, followed by United Kingdom (18%), Japan (14%) and China (10%).[117]

In order to find customers and suppliers abroad, small businesses are becoming increasingly international, using digital platforms such as eBay, Amazon, Facebook and Alibaba. This relates to B2C e-commerce, which is supporting economic growth everywhere at a very fast rate.[118] B2C global trade volume was US$ 1.2 trillion in 2013, much smaller than B2B e-commerce, but is expanding the fastest. Particularly in Asia and Oceania, B2C is forecast to double in 2017. China is the largest global market for this type of trade in terms of web sales and turnover, while the United Kingdom recorded the highest average expenditure per online buyer (US$ 5,000 in 2013).[119] UNCTAD developed an index for B2C e-commerce, which shows that in 2014 most of the largest e-commerce companies by revenue were from the United States (Amazon.com, Dell) and China (JD.com, Jia.com). These two countries are also home to the largest B2C online platforms (measured by gross merchandise value), such as Alibaba Group (China), Amazon and eBay (both United States). Most B2C statistics come from research firms, such as e-Marketer, but estimates vary depending on the methodology. This is another wake-up call for establishing a common definition and a harmonized legal and statistical framework in order to measure e-commerce correctly.

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[116] US Census Bureau (2015). *E-Stats 2013: Measuring the Electronic Economy*. Economy-Wide Statistics Briefs E13-ESTATS.

[117] UNCTAD (2015). Information Economy Report 2015: Unlocking the potential of e-commerce for developing countries.

[118] McKinsey (2015). Global payments 2015: A healthy industry confronts disruption.

[119] UNCTAD (2015). Information Economy Report 2015: Unlocking the potential of e-commerce for developing countries.

**Figure 8.    Domestic vs. cross-border e-commerce marketplaces in 2017**
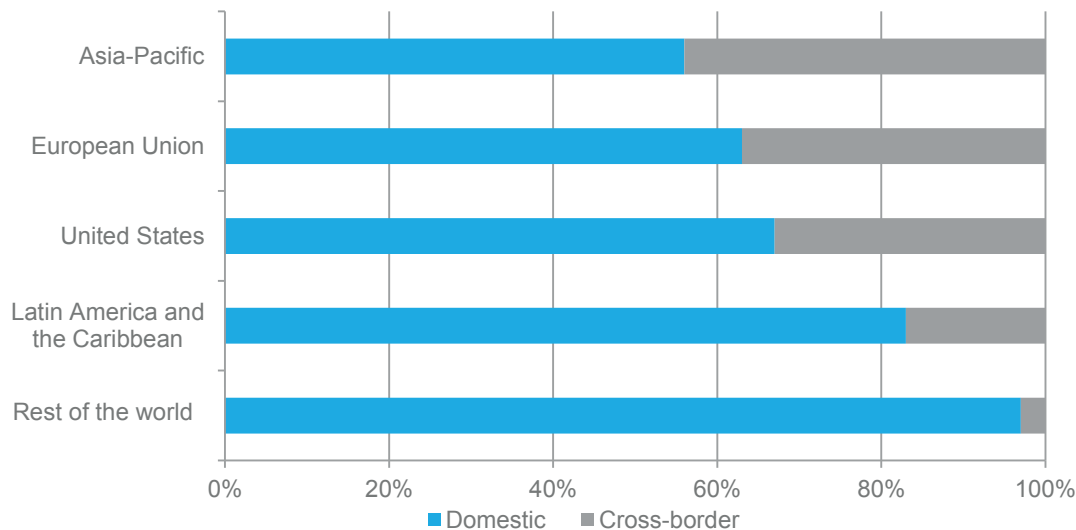


*Source:* Forrester and Channel Advisor.

According to WCO, cross-border e-commerce accounts for 10–15% of total e-commerce volume, and varies considerably between regions. Asia is again the leader for this type of e-commerce. By 2025, Asia may account for 40% of cross-border volumes, followed by Europe (25%) and North America (20%).[120] However, these data may underestimate the reality. WCO collects data through annual surveys, but companies are reticent about contributing. In addition, the data only produce estimates of merchandise trade. WCO has called for a strategy to convince firms that providing information is actually of benefit to them.[121]

Finally, UPU plays an interesting role in measuring e-commerce, and particularly cross-border trade in goods ordered via the Internet, since they own a database on international postal traffic in small packets, parcels and packages.[122] To impute missing data, UPU also relies on external sources, such as data from web crawling technologies.[123] At the WTO technical expert group meeting on measuring cross-border e-commerce (February 2016), UPU undertook to adjust its data collection by including e-commerce and cross-border aspects of all postal shipments.

Between 2011 and 2014, global deliveries of small packets, parcels and packages grew by 48%. The growth rate varies by region. Developing countries in Asia and Oceania are performing relatively well, with significant trade surpluses and the shortest average shipping time. Estimates of ordinary parcel domestic and international traffic offer important insights into recent trends in e-commerce. From 2013 to 2014, international service grew more (+ 5.7%) than domestic service (+ 3.1%), although the latter accounted for almost 99% of total traffic. The largest growth in international parcel post traffic was observed in Latin America and the Caribbean, Eastern Europe, and Commonwealth of Independent States and industrialized countries. However, the large amount of missing data in some regions makes these results less reliable, and the volumes might well be underestimated.[124]

As an initial experiment in the area of trade in services, the United States International Trade Commission (USITC) and the United States Census Bureau measured cross-border e-commerce in services. Their estimates are based on balance-of-payment statistics for "digitally deliverable" services. Digital trade in services accounted for 60% of United States services exports and 17% of the country's total exports in 2011.

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[120] World Customs Organization (2015). WCO 2014-2015 Annual Report.

[121] Summary report of Technical Expert Group meeting on measuring cross-border e-commerce (2016, February 3). WTO headquarters.

[122] These data are for those services defined as postal services in the UPU Treaty.

[123] Summary report of Technical Expert Group meeting on measuring cross-border e-commerce (2016, February 3). WTO headquarters.

[124] UPU – Postal statistics online. Presentation on Development of postal services in 2014.

The lack of information on cross-border e-commerce laws, regulations and methods is considered a major barrier to e-transactions. In that regard, this publication discusses the role of international orgnizations in e-commerce and the importance of achieving harmonization of legal and regulatory frameworks.

UNCTAD mapped national e-commerce regulations and laws in four legal areas: e-transactions, consumer protection, privacy and data protection, and cybercrime in 2014, by region. [125] Among the four areas, adoption is generally the highest for e-transaction laws and the lowest for laws protecting consumers online. The mapping shows that out of 194 countries, 47% have consumer protection legislation and 75% have e-transaction laws. This result mirrors the shares in developing countries, whereas the four types of laws are available in almost all developed economies. The most striking difference in the shares comes from transition economies, where at least 12 out of 17 countries have laws in all legal areas but consumer protection, and only 11.8% have consumer protection laws.

At the regional level, consumer protection laws and privacy and data protection laws are again less common in developing countries. In particular, eastern African economies are lacking in consumer protection laws (17%), as are countries in southern Asia (22%), the Caribbean (16%) and Oceania (8%). Privacy and data protection laws are lacking in Southern Africa (20%), as they are in eastern (25%) and western Asia (25%), Oceania (0%) and Central America (37.5%). Finally, in Central Africa and Oceania, there are relatively few laws pertaining to e-commerce. No more than 2 out of 9 Central African countries, and 5 out of 12 Oceania countries, have laws in all four legal areas.

## 3.   The largest e-commerce economies

Several platforms have attempted to measure e-commerce by country, using different approaches that range from indicators combining connectivity, consumer behaviour and market value to simple indicators of market size. This section focuses on sales of e-commerce to estimate market size, as shown in the following list. For the purposes of this publication the level of connectivity is not considered an indicator of market size, but rather a tool for unlocking potential market size.

**Table 8.   Countries with the largest retail e-commerce sales worldwide in 2015**

| Country | Retail e-commerce sales in 2015 (in US$ billion) |
|---|---|
| China | 672.01 |
| United States | 340.61 |
| United Kingdom | 99.39 |
| Japan | 89.55 |
| Germany | 61.84 |
| France | 42.6 |
| Republic of Korea | 38.86 |
| Canada | 26.83 |
| Brazil | 19.49 |
| Australia | 19.02 |

*Source:* Worldwide; eMarketer; 2014 to 2015.

This is particularly relevant for India, which did not make it onto this list. As reported by the *International Business Times*, India's low e-commerce volume is due primarily to its low and slow Internet connectivity outside the main cities, and to the low credit card penetration rate. However, having a third of the world's Internet users, the Indian e-commerce market is expected to expand dramatically until 2020.

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[125] UNCTAD (2015). Information Economy Report 2015: Unlocking the potential of e-commerce for developing countries.

Country profiles on e-commerce are provided below for the BRICS (Brazil, Russian Federation, India, China and South Africa) and five major emerging markets. The United Arab Emirates is also covered so as to provide some perspective on the Middle East. The country has one of the best-developed infrastructures for e-commerce in the region, and is home to some of its largest e-commerce platforms (e.g. Souq.com, cobone.com and Sukar). Most importantly, it is also one of the largest e-commerce markets in the Middle East, with online spending as high as US$ 2.9 billion in 2012[126] and an e-commerce market valued at US2.5 billion in 2014.[127]

Turkey and Indonesia have been added to the profiles as they are among the fastest-growing economies in their respective regions, boasting considerable recent increases in ICT infrastructure and income levels.[128] This explains the rapid penetration of e-commerce in these countries and reflects their tremendous potential for further e-commerce growth. Indonesia has the highest growth in B2C e-commerce globally; the figure doubled in 2013 and increased by half in 2014.[129] Turkey's e-commerce volume reached EUR 6.34 billion in 2016 and is expected to continue to grow rapidly.[130]

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[126] Jones, R. (2013). PayPal: Key Takeaways on E-Commerce in the Middle East. Wall Street Journal Blogs.

[127] Paye, T. (2014). UAE e-commerce market 'booming'.

[128] Center for Banking and Financial Services (2015) What is driving the growth in e-commerce and m-commerce in Indonesia?

[129] Ecommerce Europe (2014) Global B2C E-commerce Report 2014.

[130] Ecommerce News (2015). Ecommerce in Turkey reaches €6.34 billion.

## Brazil

## 1. Statistics on cross-border e-commerce

**Number of Internet users and percentage of population**

In 2015, 55.7% of the Brazilian population was accessing the Internet. In 2019, it is projected that 61.1% of Brazilians will have access.[131]

**Figure 9. Internet access in Brazil by share of population**



* projected
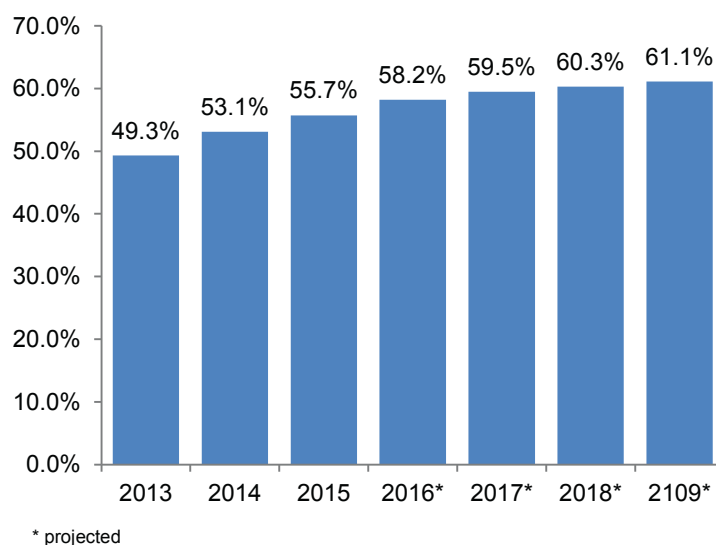
**Percentage of online shoppers making cross-border purchases**

According to an E-bit study from 2014, 4 out 10 online shoppers in Brazil have made cross-border purchases. The main reasons given for choosing non-Brazilian vendors are lower prices, lack of availability on national websites or the product not having been launched in the Brazilian market. The study cited a total cross-border purchase volume in 2014 of US$ 2.4 billion.[132]

**Top import/export products and destinations**

According to another E-bit study from the same year – Relatório Webshoppers – Aliexpress is the most used website in Brazil for cross-border purchases, followed by eBay, Amazon and the like., Products like fashion and accessories, electronics, informatics and books are the major categories in this market.[133]

## 2. Main features of the market

**Major e-commerce platforms in Brazil and their features**

According to a study conducted by emarketer in 2013, MercadoLivre (14.3%) is the biggest e-commerce website in Brazil, followed by Americanas (8.1%) and Walmart Brazil (5.7%).[134]

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[131] Statista (n.d.). Internet user penetration in Brazil from 2013 to 2019, eMarketer.

[132] Payments Cards and Mobile (2015). E-commerce experiences growth in Brazil through cross border sales, Payments Industry Intelligence.

[133] The Paypers and CBEC (2013). Cross Border Ecommerce Report, "Critical Facts and Insights for International Expansion", Country Report – Brazil.

[134] The Paypers and CBEC (2013). Cross Border Ecommerce Report, "Critical Facts and Insights for International Expansion", Country Report – Brazil.

**Growth projections**

A study by E-marketer and Li & Fung Group finds that Brazil's retail e-commerce growth has been declining over the years. In 2016, however, it is projected to grow by 13.5%. [135]

**Figure 10.  Retail e-commerce in Brazil (year-on-year growth rates)**



* projected
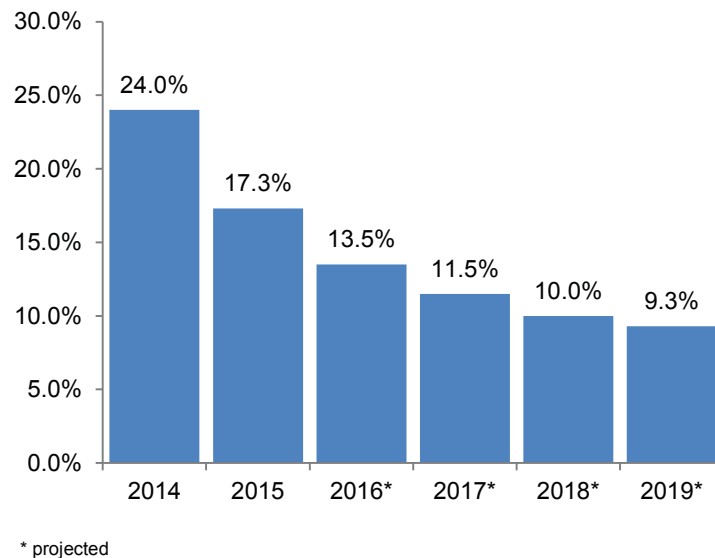
# 3.    Regulatory environment

Decree No. 7962 was passed in 2013, regulating the purchase of goods and services through electronic means. The decree was approved as an amendment to the Consumer protection code (No. 8.078/90), specifically in the area of e-commerce.[136] It applies only to B2C and not to B2B e-commerce, i.e. it applies only when the final consumer is the receiver of goods and services. The decree obliges e-commerce providers to give consumers a summary of the contract prior to concluding the sale; to confirm receipt of acceptance of the offer; to provide effective customer care within five days; and to ensure that the right of regret is given to consumers.[137] In 2014, another important piece of legislation passed: the Internet Civil Landmark (Act No. 12.965/2014) also known as Marco Civil da Internet.[138] This law establishes the rights of Internet users and the obligations of Internet providers,[139] and is also known as the Brazilian legal framework for the Internet.

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[135] Statista (n.d.). Annual retail e-commerce sales growth in Brazil from 2014 to 2019.

[136] Xavier, F. F. (2013). Decree establishes new rules for e-commerce in Brazil.

[137] Xavier, F. F. (2013). Decree establishes new rules for e-commerce in Brazil.

[138] Article 19 (2015, November 5). Country Report: Brazil's Marco Civil da Internet.

[139] FGV Direito Rio (2014). The Brazilian Civil Rights Framework for the Internet.

# China

## 1.    Statistics on cross-border e-commerce

**Number of Internet users and percentage of population**

According to data compiled by the National Bureau of Statistics of China, there were 648.75 million Internet users in the country at the end of 2014, or about 48% of the total population. [140]

The number of Internet users increased from 22.5 million in 2000 to 721 million in 2016 (estimated).[141] In 2014, China reported e-commerce sales of US$ 449.1 billion and an e-commerce penetration of 25.9%.

**Table 9.    Internet usage in China**

| National Bureau of Statistics of China, China Statistical Yearbook 2015 | |
|---|---|
| Individuals using the Internet (%) (at the end of 2014) | 47.67 |
| Broadband subscribers of Internet (millions of subscribers) | 200.48 |
| **International Telecommunication Union (ITU 142) Country Profile: China** | |
| Households with Internet access at home (%) | 43.9 |
| Mobile-cellular subscriptions per 100 inhabitants, 2015 | 92.3 |
| Mobile-broadband subscriptions per 100 inhabitants | 21.4 |

*Source*: National Bureau of Statistics of China, China Statistical Yearbook 2015 and International Telecommunication Union (ITU);

**Percentage of online shoppers making cross-border purchases**

The number of online shoppers who made cross-border purchases amounted to an estimated 259 billion renminbi (RMB) (US$ 40 billion) in 2015, more than 6% of China's total consumer e-commerce.

**Current import/export value of cross-border e-commerce**

According to the second annual PayPal and Ipsos Cross-Border Consumer Research report of 2015, China experienced a 9% increase in cross-border e-commerce, from 26% in 2014 to 35% in 2015.

**Forecasts of import/export value of cross-border e-commerce**

According to an online news article, the Ministry of Commerce of China predicted[143] that the total value of cross-border e-commerce in the country would exceed RMB 6.5 trillion in 2016, accounting for approximately 20% of the total trade volume.[144] According to a report published by Aliresearch, the research arm of the

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[140] The population in China at the end of 2014 was 1.36 billion. Source: National Bureau of Statistics, China Statistical Yearbook 2015.

[141] Internet live stats (2016). China Internet Users.

[142] ITU, the United Nations specialized agency for ICTs, is recognized around the globe as the leading provider of timely and comprehensive telecommunication/ICT statistics and trends.

[143] Tsang, A. (2016). Chinese Mainland Cross-border E-commerce: Export Business Development, Hong Kong Trade Development Council Research...

[144] Shira, D. et al. (2016). Exporting to China: Import Tax Slashed in Cross-Border E-Commerce Zones.

Alibaba group, and the global consulting giant Bain & Company, the total value of cross-border e-commerce in China is expected to reach RMB 1 trillion by 2020.[145]

**Top import/export products and destinations**

According to PayPal Cross-Border Consumer Research 2015, the United States ranks first as a cross-border destination, followed by China, with 19% of online shoppers purchasing from Chinese websites.[146]

A report published by the United States Department of Commerce [147] states that the two largest segments in cross-border sales for China are baby and beauty products. The top destinations for Chinese buyers of baby products are Australia and New Zealand and, for apparel and electronics, the United States.[148]

**Figure 11. Top online shopping destinations**
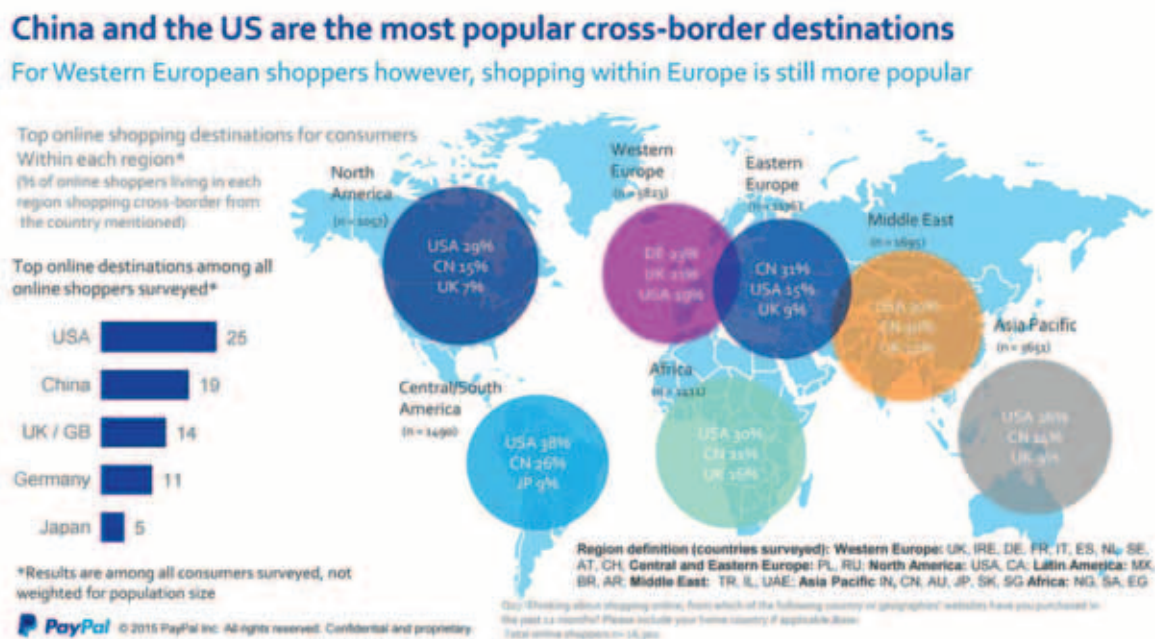


*Source:* Paypal Inc. 2015

## 2.    Main features of the market

The Chinese e-commerce market that started on the C2C platform has become more structured and has given way to a B2C platform that accounts for 50% of all online sales.

**Major e-commerce platforms and their features**

China's top five B2C e-commerce giants are as follows:[149]

1.    Tmall (天猫), the B2C arm of the Alibaba group, which controls 60% of the country's B2C market

2.    JD.com, the second largest e-commerce company in China, which controls 19% of the B2C market

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[145] Bain & Company (2016). China's E-commerce: The New Branding. Bain & Company.

[146] PayPal (2015). PayPal Cross-Border Consumer Research Report.

[147] Cross-border eCommerce China (2015). U.S. Department of Commerce GlobalMarkets.

[148] Bain & Company (2016). China's E-commerce: The New Branding. Bain & Company.

[149] Wan A. (2015, 11 May). Top 5 business-to-consumer e-commerce platforms in China. South China Morning Post.

3.   Suning Commerce Group Ltd, which controls 3% of the B2C market

4.   Vipshop, a Guangzhou-based flash sale platform, which controls 3% of the B2C market

5.   Gome, the e-commerce arm of the retail chain Gome Electrical Appliances, which controls 2% of the market.

**Growth projections**

With increasing technological advancements, the e-commerce industry in China is expected to increase, particularly in mobile commerce (m-commerce). In 2015, Chinese consumers made 55% of their online purchases through mobile phones, a figure that is projected to increase to 70% by 2020.

The online penetration rate is also expected to double to 22%, accounting for RMB 10 trillion by 2020. The total value of cross-border e-commerce in China is slated to reach RMB 1 trillion by 2020.[150]

# 3.   Regulatory environment

**Laws and regulations governing cross-border e-commerce**

In March 2015, China finished drafting the country's first e-commerce law. The new legislation should help deal with problems relating to data protection and infringements of customers' interests. [151]

In 2016, China raised the tax on goods bought from cross-border e-commerce platforms. The new tax will combine an import value-added tax with a consumption tax.[152]

**Agencies in charge and their responsibilities**

The Ministry of Commerce and the Ministry of Industry and Information Technology regulate and govern the e-commerce industry.[153] The Ministry of Commerce formulates policy on foreign trade, export and import regulations, foreign direct investment, consumer protection and market competition, and negotiates bilateral and multilateral trade agreements.[154] The Ministry of Industry and Information Technology is responsible for China's industrial planning, policies and standards.[155]

**Policy initiatives**

In 2015, the State Council set up cross-border e-commerce zones in 12 Chinese cities. A "parcel tax" –which is less than the usual customs duty[156] – is levied on the goods sold through online trading platforms in these zones

**Challenges to cross-border e-commerce**

Two current regulatory policies pose major challenges for cross border e-commerce:

**Taxation:** The Circular on Tax Policy for Cross-Border E-commerce Retail Imports became effective on 8 April 2016. It has changed the preferential tax policies adopted earlier by the Chinese Government on cross-

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[150] Bain & Company (2016). China's E-commerce: The New Branding. Bain & Company.

[151] China Daily (2016, 10 March). China completes drafting e-commerce law.

[152] CCTV.com (2016, 29 March). China hikes tax on cross-border e-commerce purchases.

[153] China Briefing (2013, August 9). China's E-Commerce Legislative and Regulatory Framework.

[154] Ministry of Commerce People's Republic of China (2010, December 7).

[155] Ministry of Industry and Information Technology (2014, August 20).

[156] Shira, D. et al. (2016). Exporting to China: Import Tax Slashed in Cross-Border E-Commerce Zones.

border e-commerce transactions. The tax rates have been increased and an RMB-20,000 limit has been imposed on cross-border purchases made by individual consumers.[157]

**Positive list:** Also in April 2016, the Government published two positive lists of goods for cross-border e-commerce. This means that goods and commodities not on the list may not be imported via cross-border e-commerce.[158]

[157] Shira, D. et al. (2016). China Plugs Cross Border e-Commerce Import Tax Loophole.
[158] Chemical Inspection and Regulation Service (2016). The positive list on cross-border e-commerce of imported commodities at retail has been released.

# India

## 1.   Statistics on cross-border e-commerce

**Number of Internet users and percentage of population**

There were about 375 million Internet users in India in October 2015,[159] or about 28%[160] of the population.[161]

**Table 10.   Internet usage in India**

| ITU[162] country profile: India | |
| --- | --- |
| Households with Internet access at home (%) | 13 |
| Mobile-cellular subscriptions per 100 inhabitants | 70.8 |
| Mobile-broadband subscriptions per 100 inhabitants | 3.2 |

*Source*: International Telecommunication Union (ITU) Country Profile: India; latest data available: 2013

**Percentage of online shoppers making cross-border purchases**

According to PayPal Cross-Border Consumer Research, in 2015, 3.8 million shoppers made cross-border purchases amounting to INR 547 billion.[163]

**Top import/export products and destinations**

According to PayPal Cross-Border Consumer Research 2015, the largest segments of the country's cross-border sales are clothing/apparel, footwear and accessories. India ranks sixth in the list of online buyers of British goods, with an estimated 4.9 million Indians buying from the United Kingdom.[164]

According to a report in the Financial Express, an online news source, the United States, United Kingdom, Russian Federation and Israel are the major export destinations for Indian merchants selling online, while China, Germany, Malaysia and Singapore are the preferred import hubs.[165]

## 2.   Main features of the market

The Indian e-commerce industry, though still in its infancy, has grown from US$ 3.8 billion in 2009 to US$ 12.6 billion in 2013.**[166]**

**Major e-commerce platforms and their features**

According to a report by Acapture, the major e-commerce giants in India with their respective market shares are as follows:[167]

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[159] Verma, S. (2015, December 2). India on course to overtake US next month in Internet user base.

[160] Internet Live Stats (2016). India Internet Users.

[161] D'Monte, D. (2015). Why India's population will outstrip China's in just seven years.

[162] ITU, the United Nations specialized agency for ICTs, is recognized around the globe as the leading provider of timely and comprehensive telecommunication/ICT statistics and trends.

[163] Bansal, S. (10 March 2016). Cross-border online shopping gains traction.

[164] PayPal (2015). PayPal Cross-Border Consumer Research Report.

[165] Chakraborty, S. (2014). Cross-border e-commerce taking giant strides now. Financial Express.

[166] *Ibid*.

[167] Acapture (2014). Cross-Border Ecommerce Infographic India 2014.

**Figure 12. Major e-commerce sites**
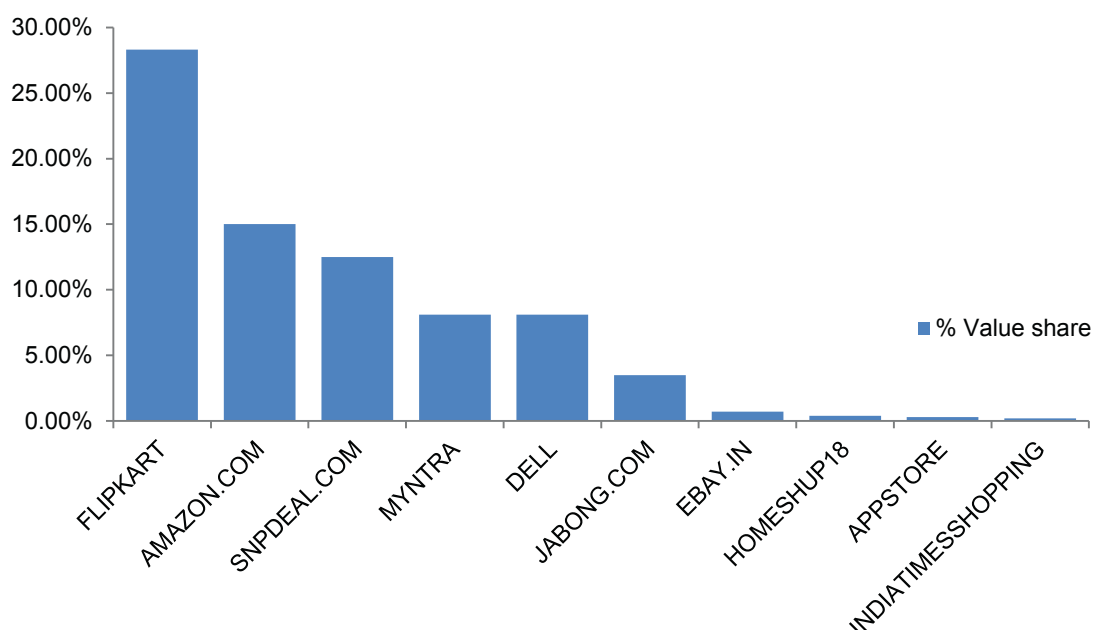


## Growth projections

The e-commerce sector's value in 2014 was US$ 234 billion. B2C cross-border e-commerce is expected to expand to US$ 1 trillion by 2020, with a compound annual growth of 27.4% from 2014 to 2020. The number of consumers is estimated to increase to 900 million by 2020.[168]

## 3.   Regulatory environment

### Laws and regulations governing cross-border e-commerce

In 2016, the Government allowed 100% of Foreign Direct Investment in online retail of goods and services under the so-called "marketplace model" in order to legitimize existing e-commerce businesses operating in India. However, no FDI is permitted in B2C e-commerce.[169]

### Agencies in charge and their responsibilities

The e-commerce industry in India is regulated by nine government agencies and regulatory bodies, including the Reserve Bank of India, the Home Ministry, the Department of Revenue in the Finance Ministry, and the Ministry of Corporate Affairs,[170] as e-commerce activities are too complex and diverse to be kept under the jurisdiction of a single department or ministry.[171]

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[168] Kaushik, P. (2016). Sky is hardly the limit for cross-border ecommerce,

[169] Mishra, A. R. & Dalal, M. (2016). Govt defines e-commerce marketplace rules, allows 100% FDI.

[170] Mankotia, A. S. (2015). E-commerce to be policed by up to nine government agencies including RBI,

[171] Arun, S. (2015). Govt mulling regulatory regime for e-commerce.

## 4.    Challenges to cross-border e-commerce

**Intellectual property rights:** IPR protection remains a big issue for e-commerce in India. Trademark and copyright violations in connection with local or illicitly imported products put immense pressure on cross-border e-commerce.[172]

**Taxation:** A complex array of federal and state indirect taxes is continuously evolving and very hard to follow. There is also some policy paralysis in terms of reforming the taxation system, the uniform GST has been in the pipeline for a number of years now.[173]

**Logistics:** Even though international logistics players like DHL and FedEx operate in India, shipments bound for destinations outside the major cities require local carriers to be used, but they are not as reliable. This has forced companies like Amazon India, Flipkart and Snapdeal to create their own logistics branches – an option not available to cross-border e-commerce websites.[174]

**Payments:** India is a cash-based society with a lack of consumer trust in credit cards and online merchants. Most Indian e-commerce companies have the option of cash-on-delivery, which is quite costly for them and which is not possible for cross-border products. Indian payment systems are not reliable and often require a couple of attempts before payment can actually be made[175].

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[172] Singh, M. and Bansal, S. (2016) India: the complexities of e-commerce.

[173] Pachisia, V. (n.d.). GST could be key to unlock issues faced by e-commerce sector.

[174] KPMG (2015) India's e-commerce retail logistics growth story

[175] Hartley, M. and Walker, C. (2013). The Growing Pains of Indian E-Commerce: What You Need to Know.

## Indonesia

## 1.    Statistics on cross-border e-commerce

**Number of Internet users and percentage of population**

Indonesia has 73 million Internet users, about 29% of the population in 2015. [176] It had 5 million online shoppers in 2015, about 12% of the population.[177]

**Percentage of online shoppers making cross-border purchases**

Indonesia reported a low one-digit percentage of cross-border online shopper penetration as of early 2015.[178]

**Top import/ export products and destinations**

Top online import sources are China (16%) and Singapore (14%). Top online export destinations are Japan (15%) and China (13%).[179]

## 2.    Main features of the market

**Major e-commerce platforms and their features**

Indonesia's leading e-commerce sites are Bhinneke and App store, with approximate market shares of 4% and 2.7%, respectively.[180]

**Growth projections**

According to a UBS report , the Indonesian online market is expected to grow to US$ 1.6 billion by 2018.[181] The number of Internet users will reportedly increase to 91 million by 2020.[182]

## 3.    Overview of regulatory environment

**Laws and regulations governing e-commerce**

The Electronic Information and Transactions Act 2008 and supplementary regulations currently govern the e-commerce landscape in Indonesia. In order to improve e-commerce regulation and cybersecurity, the Government introduced the Electronic System Provider and Electronic Transaction Regulation in 2012.[183]

**Agencies in charge**

A number of bodies regulate Indonesia's e-commerce industry, including the Trade Ministry, Informatics and Communication Ministry and Small and Medium Enterprises Ministry.[184]

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[176] The Jakarta Post (2015, March 10). Internet users in Indonesia reach 73 million.

[177] A.T. Kearney, Inc & CIMB ASEAN Research Institute (2015). Lifting the barriers to e-commerce in ASEAN.

[178] PR Newswire (2015, December 29) Asia-Pacific Cross-Border B2C E-Commerce 2015.

[179] Payvision (n.d.). Factsheet Indonesia E-commerce-General Facts and Figures.

[180] *Ibid.*

[181] UBS (2014, June 13). ASEAN eCommerce, Is ASEAN at an inflection point for eCommerce?

[182] Econsultancy.com Ltd (2014, May). State of E-commerce in South-East Asia: in association with SAP and hybris software.

[183] UNCTAD (2015). Information Economy Report 2015: Unlocking the potential of e-commerce for developing countries.

[184] Redwing (n.d.). E-business regulation in Indonesia.

**Policy Initiatives**

Indonesia has made efforts to improve the broadband infrastructure and increase online connectivity, which is relatively low compared to the rest of the world. This has involved investing in connecting the eastern islands to the rest of the country's Internet network; plans are under way to develop a nationwide fibre-optic network.[185]

# 4. Challenges to cross-border e-commerce

The major challenges faced by e-commerce in Indonesia are limited use of banking services, with approximately 80% of the population unbanked; low credit card penetration, which stands at a meagre 3.5%; and major infrastructure deficits, such as limited network coverage.[186] The latter means that there is still no high-speed Internet, as connecting more than 18,000 islands is a major logistical hurdle.

Another challenge is online security.[187] Most customers in Indonesia are reluctant to pay online due to fears of fraud and high rates of cybercrime.[188]

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[185] A.T. Kearney, Inc & CIMB ASEAN Research Institute (2015). Lifting the barriers to e-commerce in ASEAN.

[186] Oxford Business Group (n.d.). Indonesia's e-commerce sales rising.

[187] UNCTAD (2015). Information Economy Report 2015: Unlocking the potential of e-commerce for developing countries.

[188] A.T. Kearney, Inc & CIMB ASEAN Research Institute (2015). Lifting the barriers to e-commerce in ASEAN.

# Russian Federation

## 1. Statistics on cross-border e-commerce

**Number of Internet users and percentage of population**

In 2015, 85 million people used the Internet, or 70.4% of the Russian population over16 years of age.[189]

**Percentage of online shoppers making cross-border purchases**

36% of Russian online shoppers have made cross-border e-commerce purchases.[190]

**Current Import/ export value of cross-border e-commerce**

Cross-border sales in the Russian Federation have skyrocketed, from 40 million packages worth $1.3 billion in 2013 to 135 million packages and small parcels worth US$3.4 billion in 2015.[191]

**Top import/ export products and destinations**

In 2014, clothing, apparel, footwear and accessories were the leading cross-border purchases made by digital buyers in the Russian Federation, followed by consumer electronics and toys.[192]

## 2. Main features of the market

**Major e-commerce platforms and their features**

Chinese e-commerce platforms are ranked the highest in the Russian Federation's cross-border e-commerce. They represent 80% of total fulfilled cross-border orders from the Russian Federation. In 2015, Aliexpress became the number-one e-commerce platform in the Russian Federation, with 180 million visits, followed by Russian e-commerce sites (50 million visits)[193]

**Growth projections**

The chart below shows the projected steady increase in retail e-commerce sales in the Russian Federation over 2014–2019. These sales are projected to reach US$ 34.86 billion by 2019.

**Figure 13. Retail e-commerce sales in the Russian Federation, 2014–2019**



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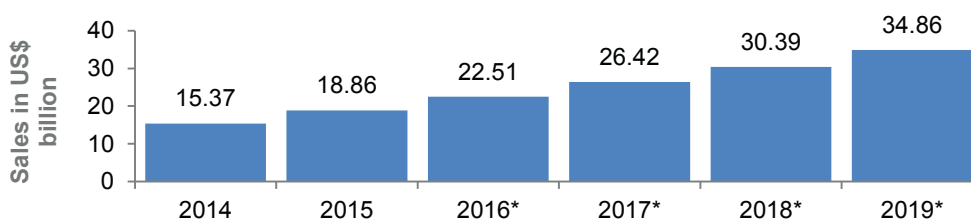
[189] East-West Digital News (2016). With 84 million users, Russia's Internet penetration rate has nearly doubled in five years.

[190] Ecommerce worldwide (n.d.). E-retail in Russia.

[191] Rogan, A. (2016). Russian cross-border e-commerce growing exponentially. Russia Supply Chain.

[192] McDonald, M. (2015). Expectations for Cross Border Sales in Russia 2015.

[193] East West Digital News (2015). Russian B2C e-commerce opportunities for Chinese players.

## 3. Regulatory environment

E-commerce is regulated by the Russian Civil Code. Other relevant legislation includes the laws on electronic digital signatures, trademarks, exchange controls, banks, telecommunications, mass media and advertising.[194]

In 2013, the Russian Federation enacted new legislation on electronic payments. Rules regarding e-wallets and prepaid cards have undergone several changes, in parallel with the development of a national payment platform.[195]

A new law on privacy came into force in 2015, under which only those databases located in the Russian Federation can be used to store Russian citizens' personal data. Similarly, a new bill has been submitted to the State Duma to apply VAT on e-commerce services. The aim of the law is to create a level playing field for Russian and foreign companies, thereby making foreign service providers less appealing.[196]

## 4. Challenges to cross-border e–commerce

Current depreciation of the rouble, weak domestic demand, shrinking consumer income and exchange rate dynamics have made cross-border goods expensive, except those of Chinese origin. A poor postal system and the existence of vast geographical regions also lead to delays in the delivery of online purchases.[197] Furthermore, the legal framework is highly complex and is constantly evolving, and regional differences are rife. This makes it very difficult for SMEs to participate in cross-border e-commerce transactions in the Russian Federation.

Regarding payment systems, the lack of trust in credit cards and the emphasis on cash-on-delivery represent major barriers to cross-border online business, especially for SMEs.[198] They are severely affected by the absence of a robust e-payment system, because cross-border e-commerce represents a far greater risk for them than for big corporations. If things go wrong, it is far more difficult to cover them up or to write off business.[199]

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## South Africa

### 1. Statistics on cross-border e-commerce

**Number of Internet users and percentage of population**

There were 15 million Internet users in South Africa in 2014.[200] According to the World Bank World Development Indicators, 49% of the population is on the Internet.[201] The number of Internet users in South Africa is expected to reach 27 million by 2019, up from 15 million in 2014.[202]

According to a survey by PayU, an online payment gateway, 58% of Internet users shop on the Internet in South Africa.[203]

**Percentage of online shoppers making cross-border purchases**

According to research conducted by PayPal in 2015, 57% of South African Internet users shop online; of these, 59% shop domestically, 37% shop both domestically and across borders, and 5% shop only across borders.[204]

**Top import/export products and destinations for cross-border e-commerce**

North America is the most popular region for online cross-border purchases, with 27% of South Africans shopping on North American websites, followed by Europe (20%) and Asia (19%).[205] On the other hand, the major cross-border export destinations for South Africa are China (8.3%), United States (8.1%) and India (7.8%).[206] South Africans are interested in making cross-border purchases of digital devices, downloadable entertainment, video games, software and educational items, which together comprised 44% of all cross-border purchases in 2015.[207]

### 2. Main features of the market

**Major e-commerce platforms and their features**

The top e-commerce site in South Africa is Gumtree.co.za, with a market share of approximately 23%, followed by Olx.co.za, with a market share of approximately 11%.[208]

The market's largest segment is consumer electronics and physical media, with a market volume of US$ 1,159,500 in 2016. Gumtree.co.za is the most visited domestic e-commerce website in the country.[209]

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[200] ] IT News Africa (2015, July 1). South Africa: Internet users to reach 27 mln by 2019.

[201] World Bank (2014). Internet users (per 100 people). Available from data.worldbank.org/indicator/IT.NET.USER.P2.

[202] IT News Africa (2015, July 1). South Africa: Internet users to reach 27 mln by 2019.

[203] PayU (n.d) Trust is the abstract imperative in online shopping, says CEO.

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[208] Payvision (n.d.). Factsheet South Africa E-commerce-General Facts and Figures.

[209] Payvision (n.d.). Factsheet South Africa E-commerce-General Facts and Figures.

## Figure 14. Number of visitors by platform in South Africa



By unique visitors in thousands, April 2014

Gumtree.co.za (2,277)
Olx.co.za (1,059)
Amazon.com (919)
Kalahari.com (805)
Pricecheck.co.za (605)
Takealot.com (529)
Woolworths.co.za (473)
Pick n Pay (403)
Makro.co.za (380)
Game.co.za (316)
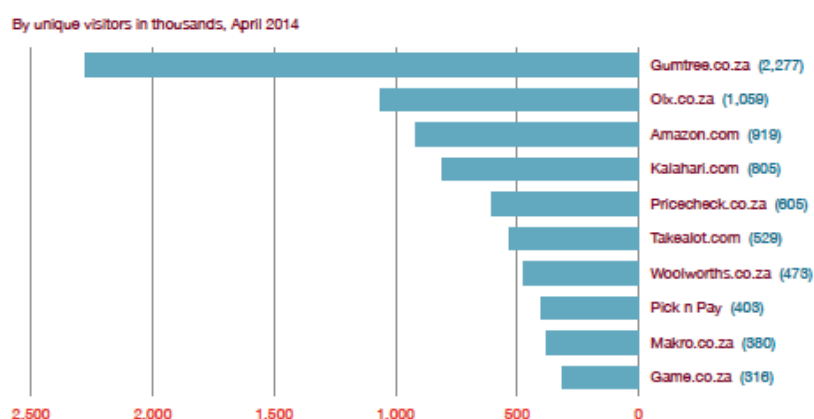
*Source:* ySats – South Africa B2C E-Commerce Market, 2015.

### Growth projections

There will be an estimated US$ 3,188,000 in revenue from e-commerce in South Africa in 2016.[210] The compound annual growth rate of e-commerce revenue over 2016–2020 is expected to be 15.98%, yielding revenue of US$ 5,769,000 in 2020.[211]

## 3.    Overview of regulatory environment

### Laws and regulations governing e-commerce

South African e-commerce policy was first formulated in 1999, in a discussion paper, followed by a green paper on electronic commerce in 2000. In 2002, the Electronic Communications and Transactions Act, 2002 was promulgated to regulate e-commerce. Thereafter, the National Information Society and Development Plan, 2007, the National Integrated ICT Policy, the National Cyber Security Policy Framework and other policies were brought in place for further regulation of e-commerce.[212]

The Government also passed the Consumer Protection Act in 2008 to establish national norms and standards on consumer protection and to promote a consistent legislative enforcement framework for consumer transactions and agreements.[213].

With regard to taxation, in order to capture revenue from e-commerce transactions, the Government has applied a 14% value added tax South African suppliers of e-commerce goods and services must accordingly register as VAT vendors, submit returns and pay taxes.[214]

### Agencies in charge and their responsibilities

The Independent Communications Authority of South Africa is responsible for regulating the e-commerce sector in South Africa under the Electronic Transactions Act.[215]

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[210] Ibid

[211] Ibid

[212] University of Cape Town (n.d.), South Africa's E-Commerce Policy.

[213] ACTS online (n.d.). Consumer Protection Act, 2008 (Act No. 68 of 2008).

[214] Palmer, G. (2014, April 30). South African Institute of Tax Professional.

[215] BusinessTech (2014, April 10). E-commerce to be regulated by Icasa.

**Policy initiatives**

South Africa was among the first African countries to have initiated fixed-broadband development programmes to support e-commerce initiatives. The Government announced its broadband policy, South Africa Connect, in 2013. The policy called for an average user speed of 5 Mbps to be available to half the population by 2016 and a universal average download speed of 100 Mbps by 2030.[216]

## 4.    Challenges to cross-border e-commerce

**Payment systems:** Recently, South African consumers have faced payment problems. In February 2016, e-commerce websites announced that Nedbank and First National Bank (FNB) customers were experiencing problems in making payments with credit card and debit cards.[217] South Africa is also prone to online scams, so e-commerce companies and the Government must work hard to ensure that online payment gateways are secure.

**Logistics:** Last-mile connectivity and logistics is an important area requiring further work in South Africa, as delivery is still inefficient and costly. Successful e-commerce players offer fast and reliable logistics, but that is expensive for both consumers and players.

**Taxation:** With effect from 2014, it is compulsory for all foreign suppliers of e-commerce services in South Africa to be registered and pay tax on all services purchased by South African residents. This applies to both B2B and B2C services. Forcing a foreign supplier to be registered could, however, be detrimental to cross-border e-commerce.[218]

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[217] My Broadband (2016, February 4). South African online shopping payment problems.

[218] Ebiz.tax (n.d.). South Africa: VAT registration of foreign e-commerce service suppliers as of 1 January 2014.

## Turkey

## 1.    Statistics on cross-border e-commerce

**Number of Internet users and percentage of population**

According to the World Bank, 51% of Turkey's population was online in 2014.[219]

**Percentage of online shoppers making cross-border purchases**

According to the Paypers, 20% of Turkish e-commerce buyers have considered cross-border shopping.[220]

**Current import/export value of cross-border e-commerce**

In 2013, cross-border e-commerce transactions in Turkey surpassed EUR 1 billion and since then they have been growing by a third every year.[221]

**Top import/export products and destinations**

According to the Paypers report, Turkish buyers have been purchasing across borders from China, Hong Kong SAR, Germany, the United States and the United Kingdom.[222]

## 2.    Main features of the market

**Major e-commerce platforms and their features**

According to a survey by the Turkish Statistical Institute, websites such as Gitti Gidiyar, Hapsiburada, Araba.com and Trendyol are leaders in domestic e-commerce.[223]

**Growth projections**

E-commerce revenue is expected to show a compound annual growth rate of 13.60% over 2016–2020.[224] This growth will materialize from an estimated 14.84% increase in Internet user penetration by 2020.[225] Figure 15 depicts the projected growth of e-commerce in Turkey in several sectors, including clothes, consumer electronics, food, and home furnishings.

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[219] The World Bank (n.d.). The World Bank Data - Internet users (per 100 people).

[220] The Paypers (2014). Cross-Border E commerce Report- Critical facts and insights for international expansion- Turkey, pp. 18, para 9.
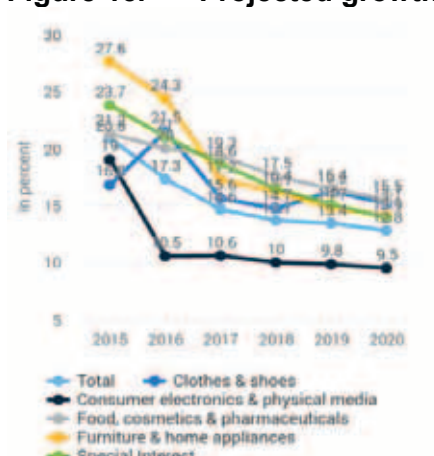
[221] *Ibid*.

[222] *Ibid*.

[223] *Ibid.*

[224] Statista (n.d.). Revenue in the "eCommerce" market.

[225] *Ibid..*

**Figure 15.    Projected growth of e-commerce in Turkey by sector**



*Source:* Statista

# 3.    Overview of regulatory environment

**Laws and regulations related to cross-border e-commerce**

In 2014, Act No. 6502 which covers consumer protection issues came into force.[226] The act also covers consumer protection issues arising from e-commerce transactions. The scope includes distance contracts, right of withdrawal, defective goods, user manuals, warranty certificates, voluntary warranty certificates and aftersales services.[227]

In 2015, Turkey enacted Act No. 6563 on the regulation of electronic commerce, which is aimed at making e-commerce more secure, transparent and accessible. It covers electronic communications, liabilities of service providers, contracts concluded electronically and other areas.[228] It stipulates that the service provider should inform the buyer about introductory information, technical steps in making a contract and information about access to the contract after its conclusion.

# 4.    Challenges to cross-border e-commerce

**Security and privacy:** Turkey being a very technologically literate country, one of the main concerns of its consumers is the absence of a sound policy on data security and privacy. This is a major barrier to cross-border e-commerce, as it means that consumers lack the assurance that websites are secure, and that hackers can obtain their credit card details and/or other personal information.[229]

**Connectivity:** Turkey suffers from a connectivity divide. Broadband connectivity in major cities like Ankara and Istanbul is comparable to European cities, but in rural areas only 26% of the population has Internet access.[230]

**ICT and legal framework:** Turkey is a G20 member, and ranks 14th in the regulatory and framework category of the G20 E-Trade Readiness Index, which is quite low in comparison to most of its neighbours, especially European Union member countries.[231]

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[229] Demirdog, M. (2015). Development and Impact of E-Commerce in Turkey, HC79, UDC: 339.1.

[230] In Lee (2016, March 31). Encyclopedia of E-Commerce Development, Implementation and Management.

[231] The Economist – Intelligence Unit (2014). The G20 e-trade readiness index: an economist intelligence unit report.

# United Arab Emirates

## 1.  Statistics on cross-border e-commerce

### Number of Internet users and percentage of population

In 2014, there were 8,807,226 Internet users in the United Arab Emirates, or approx, 93.2% of the population.[232]

### Percentage of online shoppers making cross-border purchases

In 2015, 60 % of online shoppers in United Arab Emirates made cross border purchases.[233]

### Top import/export products and destinations

The top online import sources for cross border e-commerce in the United Arab Emirates include the United States (30%), the United Kingdom (18%) and India (18%). The preferred cross-border e-commerce product category is travel and transportation products, followed by clothing/apparel, footwear and accessories.[234]

## 2.  Main features of the market

### Major e-commerce platforms and their features

The top online e-commerce retailers in the United Arab Emirates are Souq.com, with a market share of 41.2%, and Amazon, with a market share of 12.3%.[235]

### Growth projections

The total value of the e-commerce sector in the United Arab Emirates in 2014 was US$ 2.3 billion.[236] According to PayPal, that value was expected to reach US$ 5.10 billion by 2015[237] and according to the research firm, Frost and Sullivan, it is expected to reach US$ 10 billion by 2018.[238]

## 3.  Overview of regulatory environment

### Laws and regulations governing cross-border e-commerce

The United Arab Emirates has legislation governing electronic transactions and cybercrime but no legislation on privacy and data protection.[239] In 2006, the Government passed Federal Act No. (1) of 2006 on Electronic Commerce and Transactions to promote adherence to regulatory laws that enable secure e-commerce transactions.[240]

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[233] The Paypers (2015). Cross-border E-commerce report UAE.

[234] *Ibid*.

[235] *Ibid*.

[236] Payfort (2015). State of Payments 2015.

[237] PayPal (2013). PayPal Insights e-commerce in the Middle East 2012-2015.

[238] Kippreport (2013, October 20). UAE leads GCC in e-commerce growth.

[239] UNCTAD (2015). Information Economy Report 2015: Unlocking the potential of e-commerce for developing countries.

[240] Telecommunications Regulatory Authority (TRA) - E-commerce - FAQ

**Agencies in charge and their responsibilities**

The main objective of the Telecommunications Regulatory Authority is to license, monitor, approve and oversee the activities of certification service providers.[241]

**Regulatory approaches**

Websites and social media accounts wishing to conduct electronic activities must obtain a no-objection certificate from the Telecommunications Regulatory Authority. The average time for processing the application is two working days.

# 4. Challenges to cross-border e-commerce

According to a report by Payfort, an online payment gateway, the biggest challenge faced by e-commerce companies is maintaining the same level of service at their offline and online stores.[242]

Another challenge concerns online payment, and the need to increase the end users' trust in the checkout process. Many firms are struggling with the challenge of cash-on-delivery, which can be crippling for small e-commerce companies due to the high costs involved.[243]

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[241] *Ibid.*

[242] Payfort (2015). State of Payments 2015.

[243] *Ibid.*

# Appendix II: Taxes and duties for cross-border e-commerce

**Standard VAT or sales tax rate**
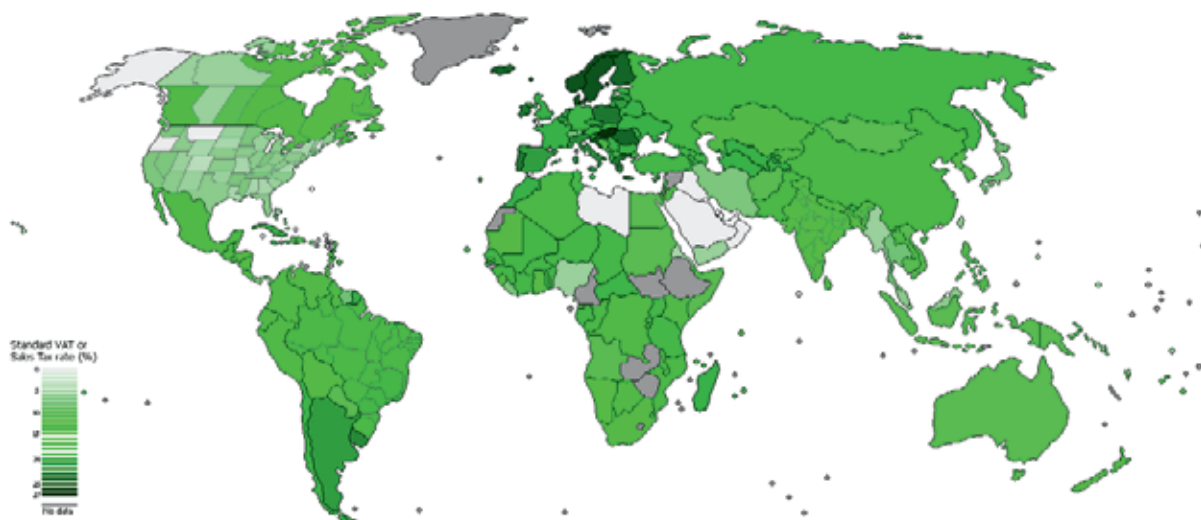


*Source:* GrzegorzusLudi (2015). Wikimedia. Retrieved 11 May 2016 from:
http://www.uscib.org/valueadded-taxes-vat-ud-1676/).

*De minimis* **value and entry threshold**

| Country | De minimis value "no duty/tax collection" | | | Informal entry threshold | | |
|---|---|---|---|---|---|---|
| | in national currency | in US$ | in SDR | in national currency | in US$ | in SDR |
| Andorra | EUR 12 | 16 | 10 | EUR 12 | 16 | 10 |
| Armenia | 150,000 Armenian Drams | 300 | 198 | | | |
| Australia | AUD 1,000 | 918 | 606 | AUD 1,000 | 918 | 606 |
| Austria | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | No information | | |
| Azerbaijan | Non-commercial shipments not exceeding US$ 1,000 and 50 kg | 1000 | 660 | | | |
| | Postal shipments not exceeding US$ 200 and 20 kg | 200 | 132 | | | |
| Bahrain | NA | NA | NA | US$ 10,596 | 10,596 | 6,993 |
| Belarus | EUR 10 | 13 | 9 | | | |
| Belgium | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | EUR 22 (VAT) | 29 | 19 |
| Bolivia | US$ 100 only for postal shipments | 100 | 66 | | | |
| Bulgaria | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 15 (VAT) | 20 | 13 | No information | | |
| Brunei | BND 400 | 312 | 206 | | | |

| Country | Description | | | Description | | |
|---|---|---|---|---|---|---|
| Cambodia | US$ 50 | 50 | 33 | | | |
| Canada | CAD 20 | 19 | 13 | | | |
| Chile | US$ 30 | 30 | 20 | | | |
| China | Shipments with duty and VAT liability less than RMB50 | 8 | 5 | NA | | |
| Croatia | EUR (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | No information | | |
| Cyprus | 150 EUR (Customs duties) | 198 | 131 | | | |
| | 17 EUR (VAT) | 22 | 15 | EUR 17 | 22 | 15 |
| Denmark | 150 EUR (Customs duties) | 198 | 131 | | | |
| | 22 EUR (VAT) | 29 | 19 | EUR 22 (VAT) | 29 | 19 |
| Dominican Republic | US$ 200 | 200 | 132 | | | |
| Ecuador | US$ 400 & 400 kg | 400 | 264 | | | |
| Estonia | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 21.98 (VAT) | 29 | 19 | | | |
| Ethiopia | EUR 20 | 26 | 17 | | | |
| Finland | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | EUR 22 (VAT) | 29 | 19 |
| France | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | Internet shipments subject to VAT using "mail order" exemption on de-minimis in EU law | | |
| Georgia | For non-commercial shipments only: GEL 500 and 30 kg for foodstuffs classified in headings 0401-0406, 1702-1704, 2101-2102, chapters 06, 07, 08, and 19 of the Harmonized System. | 302 | 199 | GEL 700 for imports and GEL 3,000 for exports; excise goods; goods classified in HS chapters 27, 28, 29, 30, 36, 71, and in headings 8701, 8702, 8703, 8704, 8705, 8709, 8710, 8711, 8712, 8713, 8716, and in chapters 88, 89, 93, and 97 | 422 | 279 |
| | For non-commercial shipments only: GEL 1,000 and 50 kg for Commodities classified in HS chapters 28-96. | 603 | 398 | | | |
| | For non-commercial shipments only: GEL 3,000 for airfreight and 50 kg for Commodities classified in HS chapters 28-96. | 1809 | 1194 | | | |
| Germany | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | EUR 22 (VAT) | 29 | 19 |
| Greece | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | No information | | |
| Guatemala | Not applicable | NA | NA | US$ 1,000 | 1,000 | 660 |
| Honduras | US$ 500 with certain exceptions | 500 | 330 | | | |
| Hungary | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | No information | | |
| Iceland | 1,000 Icelandic Krona | 8 | 5 | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| India | Samples and gifts not exceeding INR 10,000 | 170 | 112 | INR 100,000 | 1,700 | 1,122 |
| Indonesia | US$ 50 | 50 | 33 | | | |
| Iran | <US$ 50 | 50 | 33 | | | |
| Ireland | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | EUR 260 | 343 | 227 |
| Israel | US$ 100 | 100 | 66 | | | |
| Italy | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | No information | | |
| Japan | JPY 10,000 | 100 | 66 | JPY 200,000 | 2,000 | 1,320 |
| Jordan | 20 Jordan dinars for commercial samples | 28 | 19 | | | |
| Korea | Personal consumption and samples not exceeding US$ 100 | 100 | 66 | US$ 2,000 | 2,000 | 1,320 |
| Latvia | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | | | |
| Liberia | US$ 150 | 150 | 99 | | | |
| Lithuania | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | Not applicable | | |
| Luxembourg | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | | | |
| Malaysia | MYR 500 | 157 | 103 | | | |
| Malta | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | | | |
| Mexico | US$ 50 | 50 | 33 | | | |
| Morocco | 300 Moroccan Dirham | 35 | 23 | 500 Dirham | 59 | 39 |
| Netherlands | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | Up to EUR 1,000 | 1,320 | 871 |
| New Zealand | NZD 400 | 322 | 212 | | | |
| Norway | NKR 200 | 34 | 22 | | | |
| Panama | US$ 200 | 200 | 132 | | | |
| Paraguay | US$ 100 | 100 | 66 | | | |
| Peru | US$ 200 | 200 | 132 | | | |
| Philippines | PHP 15 | 0,48 | 0 | | | |
| Poland | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | | | |
| Portugal | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | | | |
| Qatar | US$ 822 | 822 | 543 | | | |
| Romania | EUR 150 (Customs duties) | 198 | 131 | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | EUR 22 (VAT) | 29 | 19 | | | |
| Russian Federation | RUR 7,964 | 247 | 163 | | | |
| Rwanda | <US$ 400 | 400 | 264 | | | |
| Singapore | SGD 400 | 316 | 208 | SGD 400 | 316 | 208 |
| Slovakia | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | | | |
| Slovenia | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | Up to EUR 1,000 | 1,320 | 871 |
| Spain | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | EUR 22 (VAT) | 29 | 19 |
| Sweden | EUR 150 (Customs duties) | 198 | 131 | | | |
| | EUR 22 (VAT) | 29 | 19 | EUR 22 (VAT) | 29 | 19 |
| Switzerland | Total duties/taxes less than 5 CHF are waived | 5 | 4 | Not applicable | | |
| Chinese Taipei | TWD 3,000 | 99 | 65 | TWD 50,000 | 1,650 | 1,089 |
| Thailand | 1,000 Thai Baht | 32 | 21 | Less than 40,000 Thai Baht FOB | 1,280 | 845 |
| Uganda | US$ 10 | 10 | 7 | | | |
| Ukraine | US$ 100 | 100 | 66 | | | |
| United Kingdom | EUR 150 (Customs duties) | 198 | 131 | | | |
| | GBP 15 (VAT) | 23 | 15 | | | |
| Uruguay | US$ 200 | 200 | 132 | | | |
| United States | US$ 200 | 200 | 132 | | | |
| Venezuela | US$ 100 | 100 | 66 | | | |
| Vietnam | VND 1,000,000 | 47 | 31 | | | |

*Source:* Global Express Association (2013, 4 August). Overview of de minimis value regimes open to express shipments worldwide. Retrieved 11 May 2016 from: http://www.extremepsi.com/store/files/broker_fees.pdf

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