

CHAPTER 10

PUBLIC-PRIVATE PRIORITIES FOR AID FOR TRADE IN THE DIGITAL ERA

Contributed by Business for eTrade Development

Abstract: *The enabling environment for digital trade is suboptimal in many developing countries, impeding the translation of new technologies into trade and growth. Yet there are huge gaps in the data available on private sector views, and on systematic public-private collaboration. This chapter discusses the findings from interviews with companies engaged in e-commerce to shed light on the challenges of the enabling environment for digital trade. It examines data that show that trade finance, logistics, and digital regulations are often suboptimal, making it difficult for developing country companies to engage in cross-border e-commerce. It provides highlights of various projects being championed by the private sector to cultivate e-commerce worldwide, including among women and rural entrepreneurs. The chapter proposes innovative solutions to these challenges and highlights ways of operationalising public-private partnerships in e-commerce development, as well as fresh ways of financing them, such as social impact bonds. It maps out policy pathways to overcome the challenges to e-commerce.*

INTRODUCTION

A small number of “export superstars”—typically large multinational companies—currently shapes the trade patterns of practically all economies. Meanwhile, the majority of companies, particularly small businesses, have yet to engage in trade. Export participation rates for firms in East Asia and the Pacific are 10.4%, in Latin America 12.4%, and in sub-Saharan Africa 9.8% (World Bank, 2017). Where these companies do export, they are normally “narrow” exporters, selling on average to only two to three markets. However, exporters derive a significant share of their sales from exports. For example, about 50% of sub-Saharan African exporters’ revenues stem from exports. Yet the volume of this trade is still small, as is the number of exporters. Trade flows are driven by a limited number of firms: in most countries the top 5% of exporters, the largest exporters, typically account for over 80% of exports (World Bank, 2016). Most new exporters, often at least 70%, do not last more than a year as exporters.

However, these patterns are now radically changing. Using the Internet and e-commerce platforms, companies of all sizes are much more visible to prospective customers around the world and, research shows, much more poised to export and import, and to scale their sales, than ever before. For example, in a survey of developing country firms, Suominen (2017a) shows that while fewer than 20% of small offline sellers export, about 50% of small online sellers do so; and while offline exporters tend to export to only one market, over 60% of online sellers export to two or more markets. The Boston Consulting Group finds that small and medium enterprises that are heavy web users are almost 50% likelier to sell products and services outside of their countries than those that make less use of the web (Zwillenberg et al., 2014).

Similarly, eBay data shows that in Chile, all companies that sell on eBay also export, as opposed to only 18% of brick-and-mortar companies; and they sell on average to 28 different markets, as opposed to the 2 to 3 markets the median exporter sells to (eBay Mainstreet, 2013). Unlike offline sellers, most online exporters also survive as exporters year after year—partly because, precisely, they are so diversified across markets.

In short, digitization is breaking the “iron law” of international trade—that exporting is possible only for a few.

Digitisation is not only impacting sales of goods across borders; it also is disrupting trade in services. By leveraging cloud-based tools, developing country businesses can efficiently build a regional footprint and local following, allowing them to service customers around the world. For example, the Indian software company Freshdesk has grown from two employees in 2010 to 800 today by helping 80 000 companies worldwide, such as Cisco, Honda and 3M, to offer a better customer experience (Freshdesk, n.d.). “Born-digital” companies like Freshdesk are often also “born global”, i.e. able to launch in several markets in quick sequence. Microwork platforms, such as Upwork and Freelancer, are expanding the opportunities for freelancers and small businesses in developing countries to sell their services or engage in “trade in tasks” with businesses in other countries.

These findings also mean that digitisation is opening up entirely new opportunities for developing countries to promote entrepreneurship, job-creation, productivity growth and trade across borders. It enables countries to grow both their intensive and extensive margins in trade—that is, to increase the number of exporting firms, the range of goods and services exchanged, the number of markets reached, and the volume and value of sales. It enables developing country companies and consumers to access a wider variety of goods and services at lower cost, streamline trade operations and logistics, and access new data to create operational efficiencies, develop deeper market insights, gain in competitiveness, and even productise data as a new revenue stream—all without having to build their own expensive information technology (IT) infrastructure (Suominen, 2017a; 2017b). As an example, by running its African and Middle East online booking operations on Amazon Web Services, the South African travel-booking website Travelstart has realized operational cost savings of 43% and reduced downtime by 25% (Amazon Web Services, n.d.).

However, the gains from digitisation are not automatic. The enabling environment for digital trade is suboptimal in many developing countries, impeding the translation of new technologies into trade and growth. These issues have been discussed in previous chapters.

There are two obstacles standing in the way of solutions to these challenges:

- 1. Lack of actionable, granular data on the enabling environment, which is critical to companies engaging in e-commerce.** While the key components of the enabling environment for e-commerce are by and large understood, there is still relatively little data available—mostly only anecdotal evidence—regarding the obstacles companies face when engaging in e-commerce in any given country.
- 2. Lack of systematic collaboration between the public and private sectors.** In many countries, public-private partnerships to fashion e-commerce policies and regulations, or to pool efforts to unlock specific challenges to e-commerce, are lacking.

The private sector is closest to the opportunities, challenges, and solutions to e-commerce development; as such private sector participation is critical for informing and guiding policymaking on e-commerce issues around the world. The private sector is also engaged in a stunning array of projects to bring women, rural populations, and small and medium enterprises (SMEs) into the stream of e-commerce. Yet there are huge gaps in the data available on private sector views and on systematic public-private collaboration. These gaps limit the ability of developing countries to fuel digital trade, to prioritize policy choices and investments in digitisation and e-commerce, or to build on the private sector's ongoing work to boost connectivity, fuel logistics and indeed, to create entirely new e-commerce markets. These knowledge gaps also complicate efforts to re-gear aid for trade to better support digital connectivity and trade.

The purpose of this chapter is to tackle these challenges by:

- discussing the findings of two new surveys and an index developed by the author, which examine the challenges of the enabling environment for digital trade by interviewing those closest to these challenges: companies engaged in e-commerce as merchants, e-commerce platforms, IT enterprises, and payment or logistics providers;
- providing highlights of various projects being championed by the private sector to cultivate e-commerce worldwide, including among women and rural entrepreneurs;
- mapping out, based on these findings, policy pathways to overcome priority challenges to e-commerce and fuel public-private partnerships in e-commerce development.

The chapter discusses the survey data, then turns to the examination of various projects. It offers recommendations for moving forward, including a new framework for public-private dialogue and partnerships for e-commerce development. Finally, the chapter offers conclusions.

VIEWS ON THE BOTTLENECKS TO DIGITAL TRADE IN DEVELOPING COUNTRIES VARY

Digitisation is reshaping the patterns, players, and possibilities of international trade. It is opening new trade opportunities for companies of all sizes and across all sectors. However, it is quite widely known that there are also numerous challenges that need to be overcome for digitisation to translate into trade and growth gains. These challenges include basic connectivity issues, especially in the LDCs; limited digital skills in many economies; and logistics and market access bottlenecks. They also include policy and regulatory issues, such as data privacy rules that limit access to customer data and its transfer; incomplete intellectual property frameworks; and legal liabilities for Internet intermediaries regarding content, such as user reviews on their portals.

To date, however, there is very limited understanding of the policy priorities for unlocking the enabling environment in any one country. Two recent studies have been carried out by the author: one in 14 developing economies (Argentina, Brazil, Chile, Colombia, Mexico, Uruguay, Pakistan, Bangladesh, India, Philippines, Kenya, Nigeria, South Africa and Ghana) covering 3 500 merchants and e-commerce ecosystem companies (e-commerce and payment platforms, shippers, banks, IT firms, etc.); and another covering some 300 Latin American firms. These studies aim to bridge the knowledge gaps, providing nuanced and actionable policy insights for governments to unlock their e-commerce economies.¹ The first study also creates a new E-commerce Development Index that enables the tracking of private sector views on e-commerce development in countries worldwide (Suominen, 2017a). The key findings from this study include:

- In every size-category, **companies with online sales are much likelier to export** than companies that do not have online sales (Figure 10.1).

Figure 10.1. Percentage of companies that export, by company size and online activity

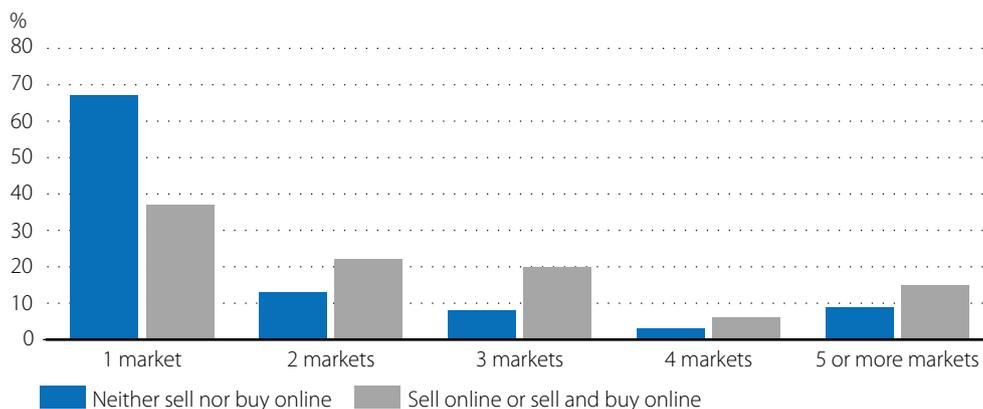


Source: Suominen (2017a), *E-commerce development survey and index*.

StatLink <http://dx.doi.org/10.1787/888933526880>

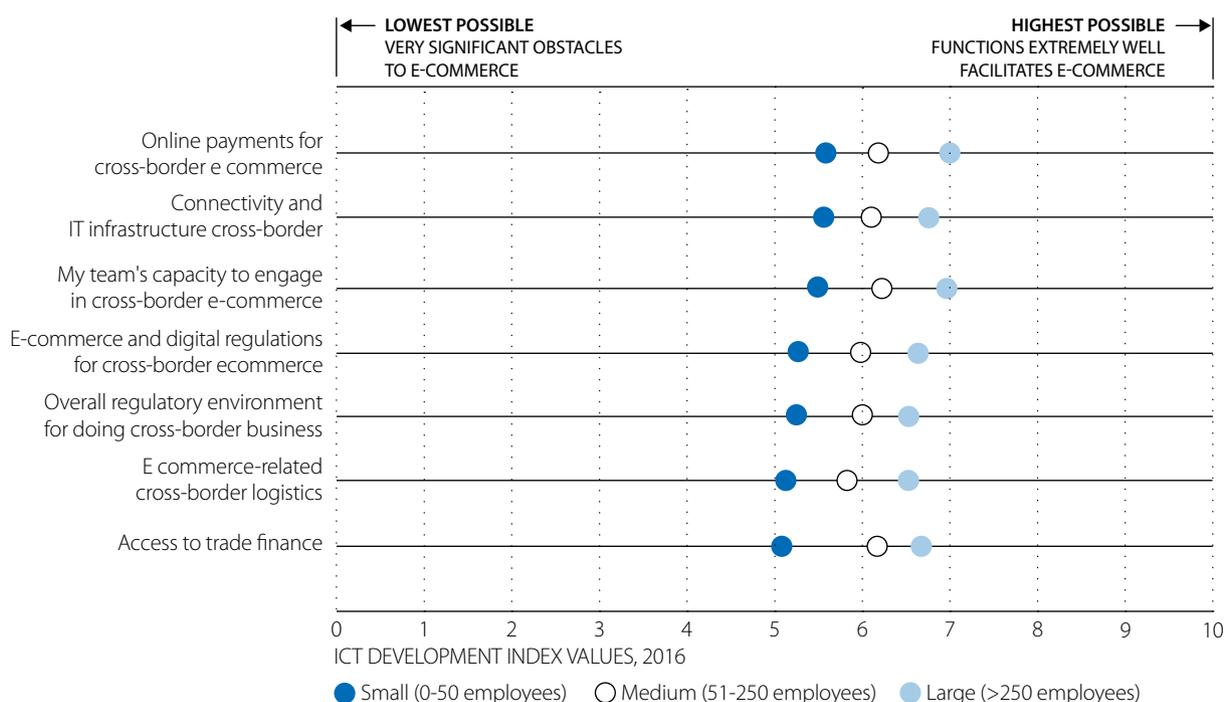
- **Online sellers are more geographically diversified.** Some 63% of online sellers export to two or more markets, while only one-a third of offline sellers do so; surveyed companies that neither buy nor sell online typically export to only one foreign market (Figure 10.2). Companies with online sales also derive a larger share of their revenues from exports than companies that do not buy or sell online. Similarly, companies that sell online are also likelier to be fast-growing (10% or higher annual revenue growth), whereas companies that do not sell online tend to grow slowly (less than 10% per annum).

Figure 10.2. Number of markets companies sell into, by company's online sales activity



Source: Suominen (2017a), *E-commerce development survey and index*.

StatLink <http://dx.doi.org/10.1787/888933526899>

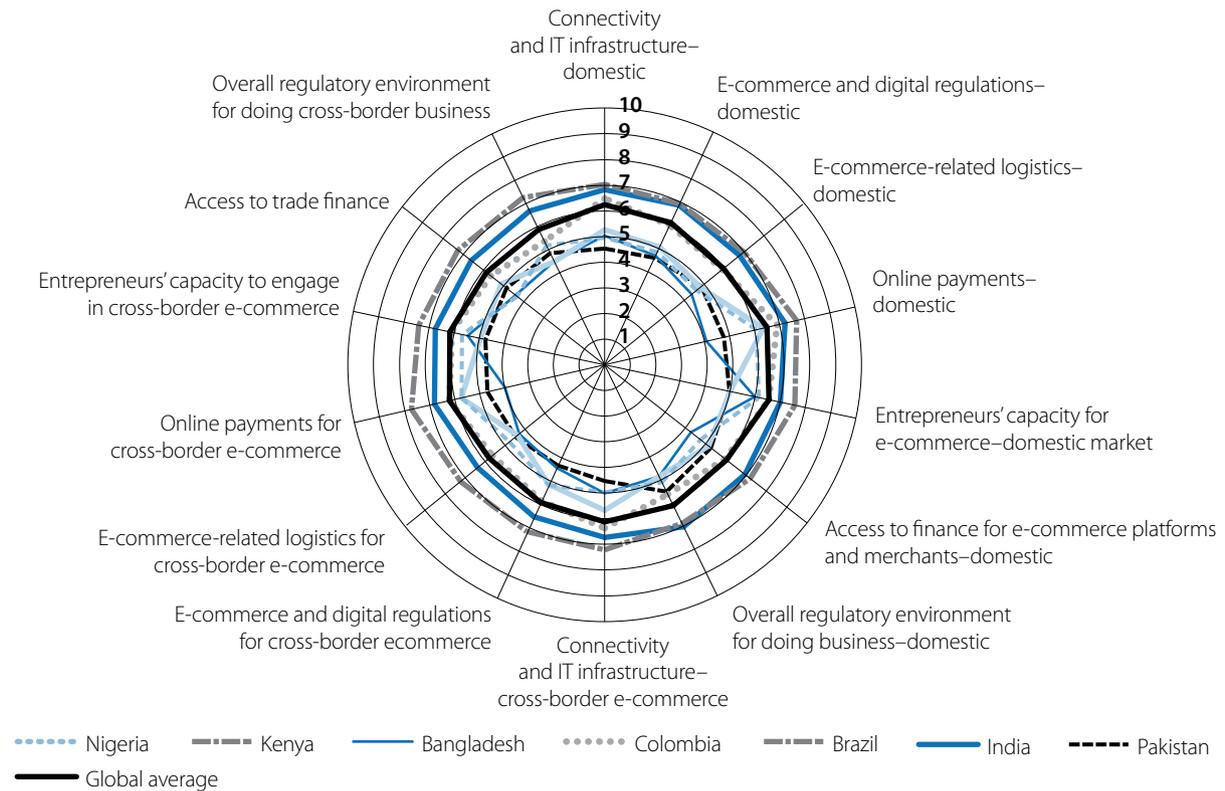
Figure 10.3. Merchants' perception of obstacles to cross-border e-commerce, by company size

Source: Suominen (2017a) *E-commerce development survey and index*.

StatLink <http://dx.doi.org/10.1787/888933526918>

- As expected on the basis of firm-level studies in international trade, company characteristics shape companies' perceptions of barriers to e-commerce, with small businesses reporting that they are particularly hampered.** In every country, small companies tend to be considerably more affected by the various potential barriers to e-commerce than large companies, with access to finance and e-commerce logistics posing particularly steep challenges for small businesses (Figure 10.4). Midsize and large companies, meanwhile, wrestle most with logistics, and with digital and other regulations. The gaps are significant between small and large companies: for example, some 60% of the surveyed small companies rate the e-commerce enabling environment at 5/10 or below, while only one-third of large companies do so. These differences are echoed in the responses to questions about cross-border e-commerce (Figure 10.3).
- Perceived challenges to e-commerce vary significantly across and within countries; every country has its idiosyncratic challenges, which means that policy recommendations and interventions need to be tailored to each country.** The study asked companies to rank the functioning of the enabling environment for e-commerce from 1 (very poor, significant barriers to e-commerce) to 10 (excellent, facilitates e-commerce), both in broad categories (such as logistics) and in narrow subcategories that are helpful for designing policy interventions (such as, under logistics, last-mile delivery and customs procedures for e-commerce imports). The results show substantial variation. For example, in countries such as Bangladesh, online payments are a leading hindrance to e-commerce; in others, such as Argentina and Kenya, cross-border logistics and customs procedures are the most challenging issues (Figure 10.4). In other countries, such as Brazil, e-commerce and digital regulations, and the overall regulatory environment, complicate e-commerce. In Nigeria, access to finance and logistics issues dominate the list of problems. In Pakistan, the high cost of broadband and lack of Internet connectivity are reported to hamper e-commerce.

Figure 10.4. Rating of the enabling environment for e-commerce and cross-border e-commerce, selected countries



Note: 1 = very poor; 10 = excellent.

Source: Suominen (2017a), *E-commerce development survey and index*.

StatLink <http://dx.doi.org/10.1787/888933526937>

- Driving e-commerce development requires actionable insights into specific bottlenecks.** While it is useful to know that e-commerce logistics require improvements, it is even more useful for policy purposes to know the specific aspects of logistics that need work, such as urban last-mile delivery, or customs procedures specific to e-commerce imports. When asked about specific challenges, developing country merchants name total cost of delivery, legal liability rules, and customs procedures for e-commerce imports as key challenges in cross-border e-commerce (Table 10.1). Ecosystem companies, meanwhile, also see logistics as a bottleneck; in addition, they highlight a range of digital regulations as challenges for cross-border e-commerce.
- Companies believe that undoing barriers to e-commerce would result in significant revenue and growth gains.** If their top three perceived challenges to e-commerce were removed, developing country companies believe they would perceive annual revenue gains of 34% in their domestic markets and 30% in international markets (Figure 10.10). Small companies would expect gains of 37% domestically and 34% internationally.

Table 10.1. Small company rating of the top 15 challenges in enabling environment for cross-border e-commerce, by subcomponent

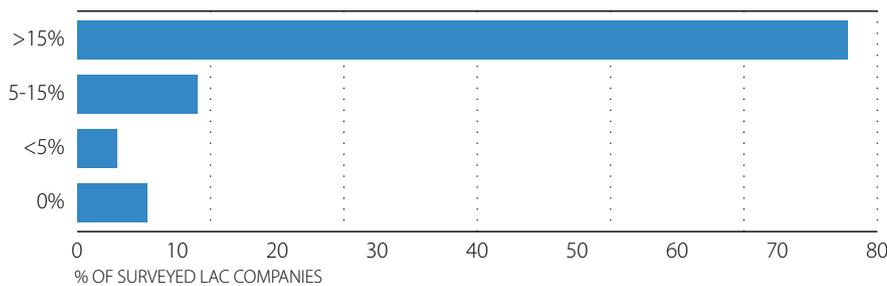
Ranking of challenges	Merchants	Ecosystem
1	Finance: Availability of trade finance for merchants	Logistics: Total cost of delivery from my country to foreign buyers (exports)
2	Logistics: Customs procedures for e-commerce imports	Digital regulation: Intellectual property protections in other markets
3	Logistics: Cost of logistics for cross-border transactions	Logistics: Market access (tariffs, trade policy) in my country's main export markets
4	Logistics: Total cost of delivery from my country to foreign buyers (exports)	Logistics: Customs procedures for e-commerce imports
5	Payments: Cost of cross-border online payments	Logistics: Customs procedures in main export markets
6	Logistics: Market access (tariffs, trade policy) in main export markets	Logistics: Infrastructure for cross-border transactions
7	Logistics: Infrastructure for cross-border e-commerce	Digital regulation: Copyright laws in other markets
8	Logistics: Postal services for cross-border e-commerce, import or export	Digital regulation: Censorship rules in other markets
9	Logistics: Customs procedures in main export markets	Overall regulatory environment: Tax rules in other markets
10	Digital regulation: Consumer protection laws in other markets	Digital regulation: Internet intermediary liability/safe harbour in other markets
11	Digital regulation: Interoperability of digital and e-commerce regulations with trading partner markets	Logistics: Postal services for cross-border e-commerce, import or export
12	Digital regulation: Legal liability laws for online sellers in other markets	Digital regulation: Data localization requirements in other markets
13	Digital regulation: Copyright laws in other markets	Over the Top (OTT) regulations (application of telecom and broadcast rules) in other markets
14	Digital regulation: Intellectual property protections in other markets	Digital regulation: Data privacy requirements in other markets
15	Overall regulatory environment: Tax rules in other markets	Payments: Cost of cross-border online payments

Box 10.1. Internet-based exporters in Latin America: Market access barriers and customs procedures

A study by Suominen (2017b) developed for the Inter-American Development Bank (IaDB) shows that the Internet is also a hugely important growth lever for Latin American and Caribbean (LAC) companies: it improves companies' interaction with customers, streamlines their operations, and helps them access new markets for their products and services, among other benefits. The Internet is also ingrained in the daily business of companies in LAC: the bulk of companies in the region would incur a productivity loss of 15% or more if the Internet were taken away (Figure 10.5).

Figure 10.5. LAC Companies' answers to the question: "What would be the loss on your organization's productivity (measured as the value of sales per employee) if it did not have access to the Internet or other digital networks?"

Estimated productivity loss by company revenue category

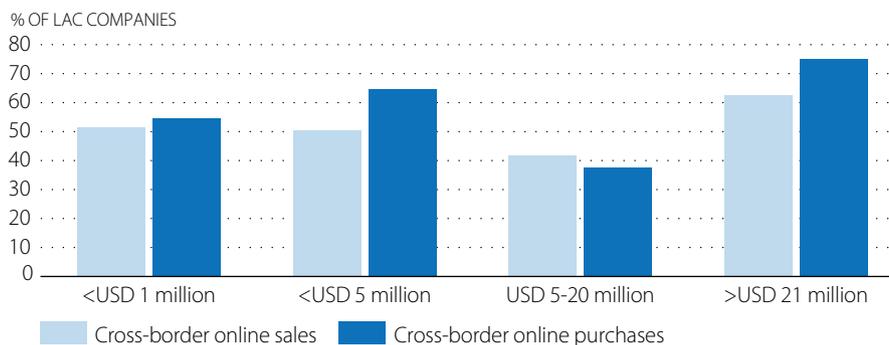


Source: Suominen (2017b), *Accelerating Digital Trade in Latin America and the Caribbean*.

StatLink  <http://dx.doi.org/10.1787/888933526956>

Traditionally, only a small fraction of LAC companies (some 13%) have exported, and often they have derived only a minor share of their revenues from exports. However, among the surveyed companies that have some online presence and typically some online sales, over 50% sell and buy online across borders (Figure 10.6), often deriving nearly 50% of their revenue from export sales. Online presence also has earned developing companies new foreign customers they did not have before selling online.

Figure 10.6. Percentage of online LAC companies with cross-border online sales or purchases in 2016, by revenue category

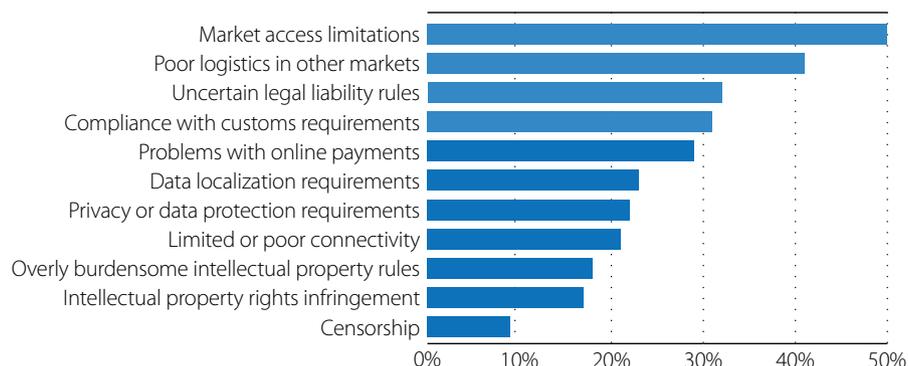


Source: Suominen (2017b), *Accelerating Digital Trade in Latin America and the Caribbean*.

StatLink  <http://dx.doi.org/10.1787/888933526975>

When physical goods sold online are shipped across borders, companies still confront the traditional hurdles to trade, such as market access barriers to trade in goods, and trade compliance costs. For example, among Latin American companies that already sell goods and services to, and buy these from, foreign markets, over 50% find market access barriers a "very significant" obstacle; over 40% give the same rating to poor logistics in other markets; and 32% award this rating to compliance with customs procedures (Figure 10.7). One-third of them see too many uncertainties stemming from Internet intermediary liability rules. Notably, these various barriers obstruct small companies much more than large ones.

Figure 10.7. Challenges to cross-border online sales rated as “very significant” by LAC companies, by type (cross-border sellers)

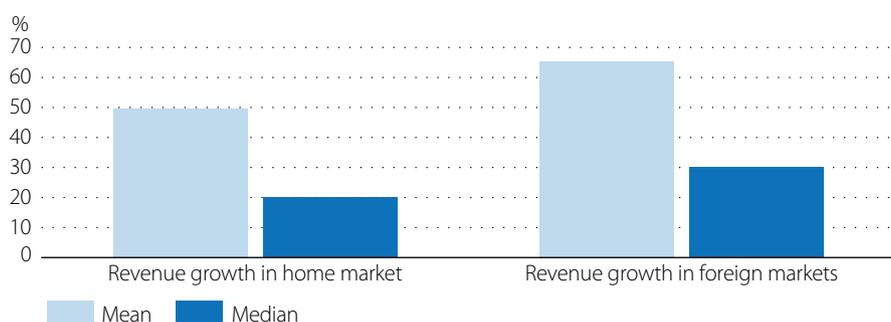


Source: Suominen (2017b), *Accelerating Digital Trade in Latin America and the Caribbean*.

StatLink  <http://dx.doi.org/10.1787/888933526994>

If these obstacles to selling online and across borders were removed, LAC companies report they would score an average of 65% revenue growth from international sales and 50% from domestic sales (Figure 10.8). Companies that are intensive digital traders (i.e. that derive over 50% of their online sales revenue from foreign markets) expect 90% growth in revenue from foreign markets and 51% in the home market if these obstacles are removed.

Figure 10.8. LAC companies perceived revenue growth at home and abroad if challenges were removed

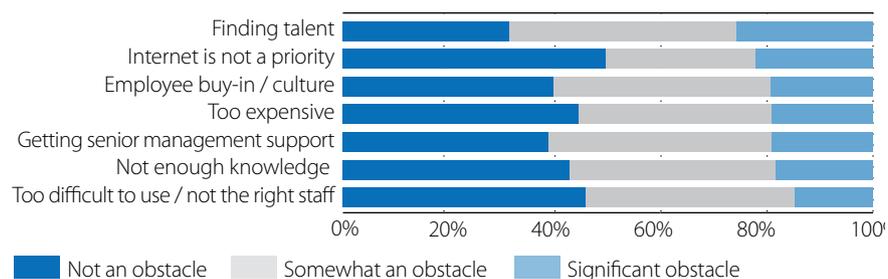


Source: Suominen (2017b), *Accelerating Digital Trade in Latin America and the Caribbean*.

StatLink  <http://dx.doi.org/10.1787/888933527013>

While some of the challenges to digital trade are external to companies, many are internal. LAC companies surveyed for this study find it challenging to grow revenues online due to lack of talent, difficulties in securing employee and management buy-in, and the need to gain knowledge on how to leverage the Internet (Figure 10.9). This, in part, reflects an external constraint: the region’s limited ICT skill levels. Regional consumers, meanwhile, are concerned about online fraud and the need to deal with shipping costs of items ordered from overseas.

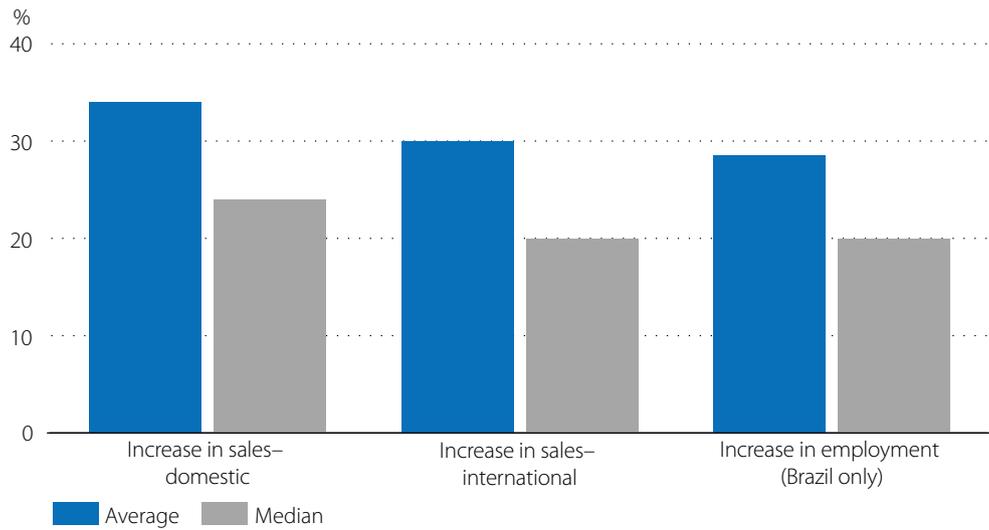
Figure 10.9. LAC companies’ perceived challenges to online sales



Source: Suominen (2017b), *Accelerating Digital Trade in Latin America and the Caribbean*.

StatLink  <http://dx.doi.org/10.1787/888933527032>

Figure 10.10. Revenue gains to companies if the top three barriers to e-commerce were removed, by market



Source: Suominen (2017a), *E-commerce development survey and index*.

StatLink  <http://dx.doi.org/10.1787/888933527051>

- **Companies that have yet to start selling online worry about the complexities involved in exporting using e-commerce and about the uncertainties related to returns on investment** (Figure 10.11). Companies in Latin America highlight logistics as a challenge, while companies in Africa mention the obstacle of the small size of the market.

Figure 10.11. Perceived priority barriers to starting to sell online, selected countries



Source: Suominen (2017a), *E-commerce development survey and index*.

StatLink  <http://dx.doi.org/10.1787/888933527070>

In sum, the two surveys reviewed here have highlighted that:

- The Internet has become a key means for small companies, in particular, to internationalize. Compared to the broader market of offline sellers, of which only a small fraction export or import, a significant share of the online companies sell and buy online across borders.
- Companies report access to trade finance, logistics and regulations as key challenges to their engagement in cross-border e-commerce. In practically every economy surveyed, small companies tend to be considerably more affected than large companies.
- Perceived challenges to e-commerce vary significantly across countries, which means that policies and investments need to be tailored to each country. Universally, companies see the nature of the overall business environment, e.g. tax policies, as critical for e-commerce success.
- Removing barriers to e-commerce would result in significant revenue and growth gains. The barriers surveyed here matter. If the top three barriers to e-commerce identified here were overcome, companies believe they could achieve annual revenue gains of over 30%.

The next section discusses some ways in which the private sector is seeking to address these challenges.

HOW THE PRIVATE SECTOR CREATES NEW E-COMMERCE ECONOMIES

Private sector entities are observing a number of challenges to e-commerce in their own economies, but they are also taking action. Businesses big and small are actively pursuing solutions, including efforts to connect the more marginalized segments of business and society in developing countries—small businesses, women entrepreneurs, and rural populations—to the online economy. These efforts have typically involved significant investments by the private sector and yielded results that should be of interest to donors and international agencies seeking to produce similar results. They can also pave the way for collaboration between the public and private sectors. Several of these initiatives are summarised below, as reported by the companies themselves.

The e-commerce industry has shown results in the Caribbean, Africa, Turkey and China

E-commerce is a relatively new industry that local entrepreneurs have often built from scratch, overcoming many of the issues cited in the above surveys.

One example is **Trini Trolley**, an online shopping platform in the Caribbean that has been in operation since 2009. Trini Trolley was motivated by the lack of online shopping platforms in the Caribbean. Orders from international companies had long delivery times and high costs; customers experienced difficulties with returns; and some international providers did not see a profit in shipping low volumes to the Caribbean region. Furthermore, international websites would not accept Caribbean credit cards and local customers risked losing money on fraudulent websites. In addition, fewer than 20% of Caribbean people had access to a credit card.

Trini Trolley initially learnt from international companies such as Amazon, subsequently developing innovative solutions for the local and regional markets. The company also carried out campaigns to educate the public on the ease and security of e-commerce. It responded to regional challenges to online shopping with its online platform, offering a 24/7 online store with over 12 000 products from international and local suppliers and delivering as quickly as within 24-48 hours to customers in Caribbean. The company also provided safe payment facilities and faster, more affordable delivery service and return options.

Trini Trolley introduced payment by cash or hand-held card-processing terminals for debit or credit cards, as customers were sceptical about providing credit card information online. International customers were offered the option of using PayPal to facilitate purchases for family and friends in the Caribbean. By 2011, the company expanded to offer shipping to the rest of the Caribbean and the world. Trini Trolley opened up its e-commerce platform at no cost to local entrepreneurs and others who did not have the knowledge or funds to create their own websites, or physical stores to display their items for sale.

When it started out, the company had to overcome several challenges, such as high start-up costs for inventory, marketing, and logistics; limited access to capital from commercial banks; scant regulatory guidance for the industry; unclear consumer protection laws; and inadequate payment systems. Trini Trolley is currently enabling exports to the United States (US), United Kingdom (UK), South and Central America and the Caribbean. The company foresees its main challenges as having to do with transportation and logistics, cybersecurity, and access to venture capital (*OECD-WTO aid-for-trade monitoring exercise 2017, Private sector case story 85*).

A 2010 survey of use of the Internet in Burundi, conducted by Burundi Internet General Applications Network (BIGAN), showed that more than 70% of respondents in rural communities felt that e-commerce could effectively address some of their business challenges, such as inadequate supply of inputs in remote areas. At the same time, the study identified several challenges to unlocking this opportunity, such as lack of Internet connectivity and skills; poor online payment systems; lack of logistics services for small businesses; and lack of trust in online transactions.

Burundi Shop has worked to address these gaps by setting up an online business distribution centre, where products and services of East African companies can be easily found and sold online as well as through agents operating across the country. The project locates “national agents” to help small traders build their online stores free of charge and enable customers to track their goods using the Internet or text messages. The agents are connected to four major East African platforms. Burundi Shop uses Isoko Courier Services to affordably deliver small shipments door-to-door. The main expected benefit from the project is that it will enable companies to order supplies directly from a manufacturer and thereby bypass brokers. Reduction in supply chain costs thanks to one-stop shopping will also reduce overall costs, with some of the savings passed on to the consumers.

There are also bilateral initiatives to build e-commerce markets in areas where they have yet to be opened. One example is the **China-Turkey cross-border e-commerce pilot**, launched by the Turkish Ministry of Transport, Maritime and Communications and the People’s Republic of China’s (hereafter China) National Development and Reform Commission. The effort was kicked off in November 2015 in Antalya, in the margins of the G20 Summit. The World SME Forum and DHGate were designated as the private sector implementing partners. The pilot’s objective is to enable a larger number of SMEs in both China and Turkey to engage in cross-border e-trade, for example by developing collaborative city pairs for cross-border e-commerce; boosting the development of cross-border e-commerce platforms; and strengthening the e-commerce and logistics infrastructures in both economies. The pilot project is aligned with the 2016 B20 Presidency’s priority of promoting the global e-commerce activity of SMEs by setting up cross-border e-commerce experiment zones based on international experiences and best practices.

Connecting rural areas helps to power e-commerce for their populations

E-commerce has provided a wonderful means of accessing retailers for rural populations, allowing their companies to access suppliers that are not present in their geographic vicinity. It is also enabling rural companies to “export” to major cities in their own countries and beyond.

The private sector is pursuing a number of projects to systematically unlock rural e-commerce. In China, Alibaba Group has fuelled the development of e-commerce in rural areas through the **Rural Taobao** initiative, which promotes trade between China’s rural and urban regions by removing bottlenecks in logistics and information flow. Alibaba Group

does this by building up rural e-commerce infrastructure, talent, and ecosystems, giving villagers access to a broad range of consumer products and services at a lower cost; offering them a convenient channel to procure much needed agricultural tools and resources; and enabling them to sell their specialty products beyond their regions. In turn, brands and retailers secure a new channel to unlock rural purchasing power.

As part of the Rural Taobao initiative, in October 2014, Alibaba Group announced that it would invest RMB10 billion (USD 1.6 billion) over the coming three to five years in building 1 000 county-level “Taobao rural operations centres” and 100 000 village-level “Taobao rural service centres” throughout China. These e-commerce outposts allow villagers to buy and receive the goods they need from Alibaba Group’s online marketplaces, and to start their own online businesses. As of mid-February 2016, more than 14 000 village-level service centres were opened in some 300 counties across more than 20 provinces. Alibaba has also empowered Taobao couriers working in both rural and urban areas (*OECD-WTO aid-for-trade monitoring exercise 2017*, Private sector case stories 21 and 22).

In Africa, the **GSoko** (Grain Soko Market) platform, a flagship initiative of the DFID-funded FoodTrade East and Southern Africa programme, aims to link small-holder farmers to grain buyers across East Africa. The Eastern Africa Grain Council, in partnership with various industry stakeholders (grain traders and buyers; policy and research bodies; trade and information agencies) has developed this private sector-driven market platform. The system uses innovative technology to provide information on market opportunities, track goods, enhance transparency and connect buyers and sellers. The GSoko platform is bringing structure to trade in grains by facilitating title transfer, market transparency, and price discovery. The objective is to ensure that farmers growing grains have access to regional markets (*OECD-WTO aid-for-trade monitoring exercise 2017*, Public sector case story 70).

There are also companies connecting rural regions to the Internet. For example, through its **Wireless Reach** project, Qualcomm has worked with various partners, including companies, government agencies, NGOs, and universities, to extend the benefits of wireless technology to underserved communities around the world. Qualcomm’s **Taroworks** project delivers new wireless tools for data collection and analysis to social entrepreneurs and NGOs working in rural areas in over 20 countries in Africa, Latin America, and Asia. As of March 2014, TaroWorks solutions supported more than 52,000 low-income microentrepreneurs and served more than 2 million beneficiaries. One example is Honey Care, which works to increase economic opportunities for Kenya’s smallholder farmers (*OECD-WTO aid-for-trade monitoring exercise 2017*, Private sector case story 51)

In Cambodia, Japan’s National Institute of Information Technology has developed and tested a wireless communications technology, **NerveNet**, that enables high-speed data communication. Using solar power suitable for deployment across rural and remote areas, it specifically addresses affordability issues in rural areas by reducing ancillary costs. Facebook’s **Express Wifi** empowers local entrepreneurs to provide quality Internet access to their communities and earn a steady income. Working with local mobile operators and Internet service providers, local entrepreneurs are able to use software provided by Facebook to connect their communities (ITU, 2017).

Empowering women helps to build the digital economy

E-commerce, online work platforms, and online payments are especially empowering to women. They help them to work and build companies in cultures where they are discouraged from entering the labour market, or where they may lack access to the professional networks and resources that are available to their male peers (World Bank, 2016b). For example, a 2015 survey of Pacific island exporters showed that firms that are active online are not only smaller and newer, but have a greater concentration of female executives under 45 years of age (ADB, 2015). These women are able to run their online businesses while handling household obligations, and see great potential to expand their market reach and earnings thanks to ICT.

However, girls and women often lag behind in accessing the Internet. Women are almost 25% less likely to be online than men; in Sub-Saharan Africa this figure is around 40%. Intel is seeking to change this through the **She Will Connect** programme and other digital empowerment initiatives, thereby empowering millions of women to connect to a range of new opportunities through technology. The initiative aims to bring five million women online in sub-Saharan Africa (*OECD-WTO aid-for-trade monitoring exercise 2017*, Public sector case story 18).

According to the GSM Association (GSMA), closing the gender gap in mobile phone ownership and use could unlock an estimated USD 170 billion in market opportunities for the mobile industry in 2015-20. GSMA's **Connected Women** project, sponsored by the UK Department for International Development (DFID) and the Bill and Melinda Gates Foundation, works with mobile operators and their partners to address the barriers to women's access to and use of mobile Internet and money services. The partners include players such as Airtel India, Orange Mali, and Turkcell. The programme has awarded 11 innovation grants to operators and NGOs in Africa and Asia. These grants act as seed money for the design and launch of products and services that increase women's access to and use of mobile phones and value-added services. The funders of this programme include Orange Mali, Airtel Uganda, Telenor India and Ooredoo Myanmar.

Facebook Innovation Lab's **She Means Business** programme is helping women entrepreneurs worldwide to grow and promote their businesses online, starting by leveraging their Facebook Pages (*OECD-WTO aid-for-trade monitoring exercise 2017*, Public sector case story 153).

In India, Telenor India has worked to educate women, youth and children in rural areas as to the use and benefits of Internet in their daily lives. **Project Prayaas** provides workshop modules to build awareness of the Internet, creating a window to the world that can help farmers to produce better crops, youth to find jobs, women to benefit from safety and healthcare applications and children to access knowledge. Telenor has also addressed gaps in mobile phone use in rural India, where in 2013-14 some 76% of men owned a mobile phone, compared to only 29% of women. In 2014, Telenor launched **Project Sampark** to enable easy-to-use mobile phone services for rural women. The project also was supported by GSMA's Connected Women programme. Telenor identified and trained anganwadi (health workers) to spread the message about why women should own and use mobile phones. These local women were aware of the local reality on the ground, familiar with the social structures, and easily accepted by locals. The approach of women selling telecom services to women has proved to be more successful than women having to buy a phone from a store with a male salesman. Within 18 months, the project had brought on board 72 000 female mobile phone owners (*OECD-WTO aid-for-trade monitoring exercise 2017*, Private sector case stories 45 and 46).

Tranzum Companies & Services (TCS) a global courier enterprise based in Pakistan, has been rolling out gender diversity initiatives aimed at increasing the participation of women in the workforce in Pakistan, where they make up 49% of the population but only 25% of the workforce. TCS has been working on increasing gender parity within its ranks through a series of women's initiatives like **Project Aghaz**, which provides a focused and customized female induction plan for TCS's corporate, consumer and operations departments. The company is exponentially growing its e-commerce services and understands the importance of improving the technological footprint. That is why a key element of Project Aghaz's four-pronged approach is enabling women to be part of the TCS e-commerce Platform. Through targeted position profiling, countrywide talent sourcing and training, Project Aghaz simultaneously empowers women and builds TCS's e-commerce business capacity.

People in rural Pakistan seldom have bank accounts. Telenor Pakistan and Tameeer Bank are helping to compensate for this with **Easypasia**, a mobile-phone banking service. This easy and secure way to transfer funds is helping young girls get access to education via mobile phones. Before this technology, the cost of disbursing stipends could sometimes exceed the amount of the stipends itself. Mobile banking has also ensured that the cash stipends reach the intended recipients.

Box 10.2. Private sector participation in initiatives to extend coverage

To target rural or underserved areas, solutions need to be low-cost, given that lower incomes often coincide with rural areas. Moreover, solutions need to be scalable and replicable to maximize the number of people being brought online. To this effect, a number of pilot projects are at the testing stage. For example, Alphabet's Loon Balloons in Sri Lanka, Indonesia and other countries is meant to provide Internet to rural and hard-to-reach areas at a low cost or for free; and Facebook's Connectivity Lab is developing new methods to deliver Internet, including lasers, drones, and artificial intelligence-enhanced software. Also, enhanced and more cost-effective satellite systems are being developed using high-throughput satellites (HTS) and non-geostationary satellite orbit (NGSO) systems in low-Earth or mid-Earth orbit with embarked digital technology, which is particularly suitable to address the rural-urban divide at a large scale.

Given the large rural offline populations across Africa and Asia and the Pacific, many initiatives in these regions focus on rolling out infrastructure or providing public access in underserved areas using fixed, mobile or satellite technology. For example, the American Tower Corporation is launching partnerships with governments and other stakeholders in Nigeria and India to create Digital Town Squares as primary points of connectivity. South Korea has introduced The Information Network Village, which aims at enabling rural communities to become self-sustainable through the provision of high-speed Internet access.

Vodacom has partnered with Intelsat in the Democratic Republic of Congo to extend its services to over 700 rural sites using satellite broadband. Other satellite initiatives include the project led by Intelsat, together with the Office des Postes et Telecommunications of French Polynesia, to provide KU-band satellite solutions on Intelsat 18; this is designed to enable expansion of wireless infrastructure across French Polynesia. In Myanmar, the Internet service provider Bluewave has introduced a satellite broadband service called Easy IP Solution, which uses capacity on the EUTELSAT 70B satellite. Another solution being pursued by Intelsat, together with SkyNet de Colombia, entails lending support to the Colombian Ministry of Information Technologies and Communications to connect schools in rural areas using satellite solutions.

Source: ITU (2017)

E-commerce can bring small and medium enterprises into world trade

As the above surveys show, SMEs that have yet to start selling online tend to struggle with in-house skills for e-commerce. And while typically realizing that e-commerce is a great way to access global customers, SMEs at the same time worry about their capabilities to handle export operations. Many private companies have stepped in to fill this gap.

Jumia Market (formerly Kaymu) has helped to economically empower tens of thousands of traders in Africa through e-commerce, improving their digital literacy. This has enabled them to create and manage e-mail accounts, use the platform to update their online shops independently, and deploy social media and instant messaging to promote their activities, among others. Beyond education, Jumia has opened up access by these companies to delivery partners, as a means of helping them deliver their products beyond their own cities; it has also advised them in product sourcing and has shared lessons learnt in similar markets (*OECD-WTO aid-for-trade monitoring exercise 2017*, Private sector case story 74).

eBay has entered into a partnership with the International Trade Centre (ITC) to help SMEs in developing countries take advantage of the opportunities offered by e-commerce. Under the agreement, the eBay marketplace offers export-ready companies supported by ITC's **e-Solutions** programme the possibility of connecting with over 162 million buyers around the world. Enterprises that participate are given the opportunity to open "anchor stores" on eBay, giving them greater online visibility and enabling them to reach more clients. SMEs participating in ITC's e-Solutions programme also have access to the eBay network of fulfilment centres, making logistics more cost-effective; in addition they can access eBay's e-commerce research, allowing them to leverage this knowledge so as to better position their offerings in selected target markets. Finally, eBay provides training to complement the training offered by ITC; the issues covered include optimisation of product listings, best practices in online promotion, and skills in analytics and inventory management.

eBay also has a special project in Mexico, where only one in ten SMEs has a website to sell its products or services. **Crece Con eBay** is a new platform whose main focus is to support the international growth of entrepreneurs and SMEs in Mexico. The platform (www.crececonebay.com) focuses on three main objectives: providing useful information to users about the process of exporting their products through eBay; guiding users step by step through interactive programmes; and providing support and chats 24/7 to SMEs (*OECD-WTO aid-for-trade monitoring exercise 2017*, Private sector case story 28).

The African platform **Kopo Kopo** helps SMEs overcome what is often the biggest bottleneck for online sales: payments. Kopo Kopo accepts mobile payments and builds relationships with customers. In 2011 it was one of 25 finalists in the Pivot 25 (now Pivot East) mobile startup competition, winning the opportunity to incubate at m:lab's East Africa iHub. Kopo Kopo partnered with Safaricom to bring the Lipa Na M-PESA Buy Goods service to small and medium businesses throughout Kenya. At iHub, what began as a two-man team grew to 12 employees, soon ballooning to a staff of 50. Today, Kopo Kopo serves 15 000 businesses throughout Kenya and recently processed its millionth transaction. Kopo Kopo has designed a robust payment platform with various functionalities and value additions, which have been segmented into products with the aim of positioning them in various market verticals.

The private sector can help open up markets for artisans around the world

There are countless initiatives across the developing world promoted by the private sector to cultivate certain products for online sales. For example, **Earth Divas** is a fair-trade company that works with artisans in Nepal to design and produce handbags, hats, backpacks and other accessories made from natural fibre; they are imported into the US and sold via e-commerce channels to consumers and retail stores. It works primarily with women tailors, returning all proceeds to the women via direct cash payments. Earth Divas adds value by removing intermediaries from the various layers between the producer in Nepal and the consumer in the US. Using online, hosted platforms they are able to reduce costs and improve communication and work-flow to ensure that a consistent, high-quality product is delivered to the US market, on time.

Shop Soko is an e-commerce site that sells jewelry made by African artisans on the global market. The start-up received support and training through Nailab, funded by a World Bank Group project. It also participated in the World Bank Infodev's Startup Camp in 2013. Today, Shop Soko is considered one of Kenya's success stories and has become an Etsy for African jewelry. Their site has sold over 100 thousand products, generating over USD 800 thousand in income for the over 1 300 artisans with whom it partners.

Fulfillment by Amazon (FBA) has empowered numerous entrepreneurs worldwide to scale their sales. One example is Lanna Clothes Design—a small woman-led business in rural Thailand—which FBA helped to expand internationally through e-commerce. Within ten months of its enrolment in FBA, Lanna Clothes Design grew by 70%, with sales on Amazon comprising 85% of total sales. Amazon's e-commerce services have enabled the owner of Lanna Clothes Design, Praew, to fulfil her dream of improving the lives of her family, employees and community. Based on her own e-commerce success, Praew plans to help other local designers grow their businesses (*OECD-WTO aid-for-trade monitoring exercise 2017*, Private sector case story 88).

BUSINESSES CAN HELP POLICY MAKERS FIND PATHWAYS FOR CATALYSING E-COMMERCE

For trade policy makers, the challenges articulated by companies engaged in e-commerce require a rethink of the policy toolkit for trade, including trade rules, export promotion, trade facilitation, export credit, and trade infrastructure. In all these areas, trade policy makers intent on catalysing e-commerce need to work closely with ICT, finance ministries and regulators, as well as with the private sector. Businesses have a first-hand grasp of the challenges to e-commerce, as well as the solutions to them. Aid for trade certainly can play a catalytic role in addressing basic connectivity and ICT infrastructure issues, and in overcoming the connectivity challenges faced by the LDCs in particular.

As governments focus on boosting their digital economies, development partners also need to get behind initiatives to address the demand side, working with governments, the private sector and civil society to tackle key Internet adoption barriers related to capability (e.g. ICT skills), relevance (e.g. local language content) and affordability (e.g. costs of devices). They also need to address the many challenges that add to the costs and operational complexities faced by companies that are already selling online and seeking to export and import, such as logistics and customs procedures, and cross-border online payments. The United Nations Conference on Trade and Development's multi-stakeholder eTrade for All initiative brings an important focus on these efforts. It brings together developing economies, 20 agencies participating in the Aid for Trade Initiative (including the WTO), donor economies, and the global private sector to further e-commerce development and cross-border e-commerce globally. eTrade for All and Aid for Trade are powerful underwriters of the development of digital trade worldwide.

Some of the priorities for empowering small businesses in e-commerce follow.

Facilitating e-trade requires new approaches and capacities

The surveys reviewed here show that online sellers of physical goods are often most hampered by well-established offline trade challenges, such as arcane customs procedures and logistics. As e-commerce and low-value shipments mushroom, and more and more small enterprises with limited trade compliance capacity engage in trade, customs and other border agencies needs to rethink their approaches. The Trade Facilitation Agreement (TFA) is an excellent instrument for addressing problems in the movement of goods worldwide. Implementation of the TFA will need to consider key issues arising from e-commerce, in particular the rising importance of small parcel trade, often shipped by small players.

New approaches, and capacity-building around them, are needed, for example:

- **Higher *de minimis* thresholds.** The silver bullet for fuelling SME trade is raising *de minimis* thresholds—the ceiling below which goods may enter a country duty- and tax-free. Economists have repeatedly shown that low *de minimis* thresholds defeat their own purpose, both because the costs of collecting the duties and taxes outweigh the revenue raised, and because the mark-ups of tariffs and taxes are detrimental to consumers and companies importing goods and inputs that are above the *de minimis* threshold. Numerous studies show that higher *de minimis* thresholds provide net economic gains (Halloway and Rae, 2012; Rae, 2012). Suominen (2016b, 2017) has proposed a solution to governments' hesitancy to introduce higher *de minimis* thresholds: a negotiation on *de minimis*.
- **Simplified, paperless, one-stop clearance processes.** Governments need to make better use of the established mechanisms to fuel trade, such as increasing customs clearance availability to 24 hours per day; putting in place electronic filing of customs documents via single windows for one-stop compliance; and enabling the collection and remittance of taxes for goods above the *de minimis* threshold in locations other than the border. Since the ability for the customer to return an item is a pillar for competitiveness among e-commerce retailers, there should also be simplified, duty-free returns on items sold online by domestic sellers to foreign buyers.

Box 10.3. The Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific

The United Nations Economic and Social Commission for Asia and the Pacific's (UNESCAP) Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific (FA-PT) is intended to enable the exchange and legal recognition of electronic trade data and documents across borders. The FA-PT is a UN treaty open to all interested among the 53 ESCAP member states. Its objective is to “promote cross-border paperless trade by enabling the exchange and mutual recognition of trade-related data and documents in electronic form and facilitating interoperability among national and sub-regional single windows and/or other paperless trade systems, for the purpose of making international trade transactions more efficient and transparent while improving regulatory compliance” (Article 1). The FA-PT was finalized as a UN treaty in May 2016.

It is expected to be a useful tool to support and improve the implementation of the WTO Agreement on Trade Facilitation, building on the fast growing bilateral and regional single window and cross-border paperless trade initiatives. The FA-PT provides a multi-layered institutional arrangement for parties to facilitate mutual recognition of electronic trade-related data and documents and promote interoperability among paperless trade systems, including national single windows.

To date, most of the paperless trade systems in the ESCAP region have focused on facilitating information exchange among stakeholders domestically. However, to facilitate international trade, trade information also needs to flow across borders, along international supply chains, not only among domestic stakeholders. The flow of electronic trade information generated domestically encounters both technical and legal barriers beyond the border, requiring traders to maintain conventional paper-based trade practices and thereby reducing the overall benefits and returns on investment from paperless trade systems.

It is estimated that implementation of cross-border paperless trade in Asia and the Pacific could reduce export costs by 15-30% on average, increasing the export potential of the region by USD 257 billion when fully implemented.

Source: OECD-WTO aid-for-trade monitoring exercise (2017), Public sector case story 86, www.oecd.org/aidfortrade/casestories/casestories-2017/CS-86-Framework-Agreement-on-Facilitation-of-Cross-border-Paperless.pdf

- **Trusted eTrader programmes tailored to the needs of SMEs** (Suominen, 2015). Trusted eTrader programmes would balance the need for trade facilitation for small shipments with the imperative of securing trade. They can rest on two components: incentivising SMEs' trade compliance; and leveraging anonymised big data held by major online platforms for risk-targeting in trade. These efforts could be tailored along the lines of the Air Cargo Advanced Screening programme that the US piloted a few years ago with major shippers such as FedEx, DHL, and UPS.

Governments can help new traders access finance

Export credit agencies have traditionally helped exporters to guarantee working capital loans issued by banks. Today, however, small online sellers often need much smaller and faster working capital loans (often just USD 3 000) to respond to surges in demand. They also are typically nascent in their lifecycles and need equity financing, such as venture capital, to accelerate their expansion when there is high demand for their products at home or abroad. Banks do not effectively provide either. There are a number of creative ways for governments to facilitate new traders' access to finance:

- **Help back online lenders of small, fast-disbursing working capital loans.** FinTech is on a tear. Developing country export credit agencies could work with FinTech and online lenders to guarantee smaller loans than those banks are usually willing to make, or to make loans to businesses that may not meet the banks' lending criteria (Suominen, 2016a). For example, export credit agencies could guarantee diversified pools of small loans and thus manage their own risks, leveraging the non-traditional but typically effective underwriting criteria and scale of online platforms. This could lower the cost of capital for export-driven SMEs and incentivise the entry into markets by lending platforms.

- **Pay attention to access to growth capital.** Another important consideration is the fact that companies worldwide are entering global markets earlier in their life cycles than ever before. These companies are often not in need of trade finance or small loans, but rather require growth capital (Suominen, 2016c). Growth capital is not aimed at any one trade transaction, but rather at expanding a company's production and sales capabilities. When a small company observes strong demand for its products or services in world markets and wants to seize the opportunity quickly, it tends to need more cash on hand that it is able to secure affordably from lenders. Without picking winners, export credit agencies can help investors identify born-global companies that seek equity financing, lowering the per-deal search and transaction costs for the investors and supporting promising globalising companies in the process.
- **Leverage multilateral development banks.** Multilateral development banks are expanding the range of instruments they make available to support banks and companies in developing countries. This is particularly useful for bankable companies. In a recent survey, over 75% of banks reported that the trade finance programmes of multilateral development banks help to narrow trade finance gaps (WTO, 2016).

It is important to get the regulatory environment for e-commerce right

Companies benefit from transparent rules, freedom to innovate, a level playing field and interoperability across economies. The surveys referred to above show that even small online merchants often struggle with digital regulations when seeking to export. While there are numerous policy issues to take into account, the following elements can be considered critical for enabling countries to fuel cross-border trade in the digital era:

- **Legal liability protections.** Internet intermediaries such as e-commerce sites post user reviews of the goods and services sold on their sites, and in doing so need to be protected from liability for this content. To encourage Internet intermediaries to serve local markets, developing countries can create and modernise “safe harbours” that limit intermediary liability from user-generated content. For example, several countries have put in place liability limitations for certain intermediaries regarding unlawful content.
- **Intellectual property protections.** As products and services digitise, and as millions of microenterprises and consumers create or copy content, designs, and 3D printed products, intellectual property is becoming harder to protect. Case law is already reshaping the rules around intellectual property in the digital era, such as on 3D printable designs. Policy makers need to balance the protection of intellectual property rights with the development of new Internet services and platforms, updating copyright laws to include limitations and exceptions such as fair use, the doctrine that permits limited use of copyrighted material without acquiring permission from the rights holders.
- **Consumer protection laws.** Consumer trust in products and services sold online, delivery systems, online payments, and other online services is critical for digital economies to grow. Consumer protection laws help build that confidence. Regulations need to be balanced. They need to safeguard consumer rights and information and to combat trade in counterfeit goods, among other measures. Yet they also need to be fashioned with input from the e-commerce industry, with companies' compliance costs in mind.
- **Interoperable online payments.** Online payments are critical for cross-border online transactions. Online payment platforms have proliferated worldwide—there are to date more payment platforms than there are countries—and this is a positive development. Some countries have made important strides in ensuring the interoperability of payments. However, more work needs to be done, both within and across countries, to enable buyers and sellers to transact regardless of their respective payment methods.

- **Dispute settlement.** Dispute settlement is critical in the digital era, enabling governments and market participants to build confidence in online transactions. There are millions of claims for resolution of commercial disputes in e-commerce. Given technological advances, arbitration and resolution can be made swifter and more automatic; the technology of dispute settlement can evolve to provide faster digital arbitration and resolution among private parties.

Critically, policies such as these should be designed and implemented in collaboration between government and industry so as to optimise the policies and mitigate undue compliance costs for market participants. The rules are also ideally set at the regional level so as to ensure interoperability across economies. Building governments' capacity to develop policy frameworks and work together can be an important area of aid-for-trade support.

PUBLIC-PRIVATE PARTNERSHIPS CAN CREATE A NEW DEVELOPMENT PARADIGM

In numerous countries there are concerted efforts by the public and private sectors to cultivate e-commerce in their economies. For example, in Turkey the two have come together in a specialised e-commerce council that is road-mapping policies and solutions for issues such as e-commerce regulations and SME participation in e-commerce. In Mexico, the export promotion agency and the ministry of the economy are consulting with the e-commerce ecosystem on appropriate regulations and export promotion needs. In Bangladesh, the IT and e-commerce industry associations have fashioned regulatory solutions working in close co-operation with the government. Other countries can learn from these efforts, which illustrate very simple but effective means for development partners to support and systematize e-commerce across developing economies.

Pursue public-private funding partnerships

For development partners intent on attaining the Sustainable Development Goals, delivering concrete results from each project is essential. In e-commerce, development partners have a terrific opportunity to put in place a new *modus operandi* that will help them to secure robust results: innovative public-private partnerships that leverage the insight and existing, voluminous work of the private sector. There are three ways in which the public and private sectors can come together to run and finance projects:

1. The private sector seeds, the public sector scales.

The range of projects the private sector is driving to connect people to the Internet, create e-commerce markets in rural regions, bring women to the online economy and so on presents a great opportunity for the Aid for Trade Initiative's development partners. These efforts have typically involved significant investment by the private sector and yielded quantifiable results in areas of keen interest to development partners. A low-hanging fruit would be to take the best of these projects, seeded by the private sector, and use public sector funds to scale them up or replicate them. In other words, the private sector identifies problems, then creates and seeds solutions; and then the public sector comes in as a provider of growth capital for proven projects. This is low-risk, high-yield development opportunity for the public sector. A more sophisticated version is to craft entire portfolios of private sector-led projects, complete with performance metrics, and enable the public sector to invest in these portfolios—in the process diversifying their risk.

2. The private sector provides ideas and data, the public sector funds.

The public and private sectors can also work together to design and create e-commerce development projects, with the private sector providing guidance; real-time, granular data; and insights to help the public sector optimise its investments.

3. Fund e-commerce development via social impact bonds.

Still another model to follow in funding projects that are conducive to boosting e-commerce and inclusiveness, leveraging the ingenuity and resources of the public and private sectors, is the social impact bond model proposed by Suominen (2016). In this model, private foundations, social impact investors, and/or e-commerce platforms make the initial investment in e-commerce projects, such as an SME training programme, and get compensated at a premium by the government and public development agencies if and when the programme meets certain pre-established performance indicators, such as the creation of a target number of e-commerce-related jobs or the generation of an agreed amount of new online exports (Suominen, 2016d).

Social impact bonds (also known as development impact bonds) have been successfully used to help cure malaria and save rhinos. They lend themselves very well to e-commerce, given the considerable interest of the private sector in bringing new online sellers to market, as well as the push for inclusiveness that is behind impact funds. The instrument is superb for incentivising investors and project implementers to deliver the results desired by the public sector. Upon success, backed up by sound metrics, governments secure trade gains as well as economic and social returns. In the case of failure, they incur no cost: this is risk-free, performance-based development. Resting on rigorous measurement of results, this model would by default create transparency in project evaluation. Aid for trade can offer a powerful means of bringing public sector agencies together to support such an instrument.

CONCLUSIONS

Technology-powered trade is changing the patterns, players and possibilities of world trade. The private sector—from online merchants to e-commerce platforms, logistics companies, payment providers, IT companies, and others—makes digital trade move. The private sector is closest to the opportunities, challenges, and solutions to e-commerce development issues—and thus central to informing and guiding policy making on e-commerce issues around the world. By partnering with the private sector, the public sector can develop new solutions to unlock e-commerce markets and stimulate cross-border e-commerce.

Yet gaps in data regarding private sector views on the enabling environment for e-commerce, and lack of systematic public-private collaboration, limit the ability of developing countries to prioritise policy choices and investments in digitisation and e-commerce. This chapter has discussed new data that show that trade finance, logistics, and digital regulations are often suboptimal, making it difficult for developing country companies to engage in cross-border e-commerce. The chapter proposes innovative solutions to these challenges, such as pluri-lateral agreements on *de minimis* thresholds and a new facility for export credit agencies to guarantee micro-working capital loans for e-commerce merchants. This chapter has also highlighted ways of operationalising public-private partnerships in e-commerce development, as well as fresh ways of financing them, such as social impact bonds.

Twenty-first century digital trade offers the opportunity for creating a medieval town square where buyers and sellers come together—at the global level. A market where anyone can sell to anyone, anywhere anytime, and where no one is kept from participating by their location. To realize this aspiration, development partners will need to stay attuned to the concrete challenges online buyers and sellers face, co-create with the private sector practical solutions to these challenges, and partner with companies that have already done the legwork to identify opportunities and craft business models that will bring people to the opportunities of the online economy. ■

REFERENCES

- ADB (2015), Aid for Trade in Asia and the Pacific: Thinking Forward About Trade Costs and the Digital Economy, Asian Development Bank, Mandaluyong City, Philippines, www.adb.org/sites/default/files/publication/167344/aft-report-2015.pdf
- Amazon Web Services (n.d.), "AWS Case Study: Travelstart", webpage, <https://aws.amazon.com/solutions/case-studies/travelstart/>
- eBay Mainstreet (October 2013), Commerce 3.0 for Development, www.ebaymainstreet.com/sites/default/files/eBay_Commerce-3-for-Development.pdf.
- Freshdesk (n.d.), Who We Are, Freshdesk website, accessed 1 January 2017, <https://freshdesk.com/company/about>
- Freund C. and M. D. Pierola (2013), "Export Superstars", The Review of Economics and Statistics, December 2015, Vol. 97, No. 5, Pages: 1023-1032 Posted Online December 8, 2015, doi: [10.1162/REST_a_00511](https://doi.org/10.1162/REST_a_00511)
- Holloway, S. and Rae, J. (2012), "De-minimis thresholds in APEC", World Customs Journal, Vol.6 No.2, pp. 31-62, [http://worldcustomsjournal.org/Archives/Volume%206%2C%20Number%201%20\(Mar%202012\)/04%20Holloway_Rae.pdf](http://worldcustomsjournal.org/Archives/Volume%206%2C%20Number%201%20(Mar%202012)/04%20Holloway_Rae.pdf)
- Jeffrey Rae (23 July 2012), The Economic Impact of Increased *de minimis* Thresholds on ASEAN Economies, Presentation at the ASEAN Regulatory Reform Symposium, Manila, <http://aadcp2.org/wp-content/uploads/The-Economic-Impact-of-Increased-De-Minimis-Thresholds-on-ASEAN-Economies.pdf>
- Zwillenberg, P., D. Field, and D. Dean (20 January 2014), "Greasing the Wheels of the Internet Economy" Boston Consulting Group, https://www.bcgperspectives.com/content/articles/digital_economy_telecommunications_greasing_wheels_internet_economy/
- Suominen, Kati (2015), "Fueling the Online Trade Revolution: New Customs Security Framework to Secure and Facilitate Small Business Ecommerce": CSIS Policy Paper, Centre for Strategic and International Studies, <https://www.csis.org/analysis/fueling-online-trade-revolution>
- Suominen, Kati (2016a), "Here's What We Really Should Be Debating When It Comes To Trade," GE Reports, www.gereports.com/heres-really-debating-comes-trade/
- Suominen, Kati (2016b), "Silver Bullet for Helping Small Businesses Trade: Plurilateral Agreement on *de minimis*, "E15 Initiative, <http://e15initiative.org/blogs/silver-bullet-for-helping-small-businesses-trade-plurilateral-agreement-on-de-minimis/>.
- Suominen, Kati (2016c), "Growth Capital Gap Vital to Debate on Trade Finance Gap," BRINK News, www.brinknews.com/growth-capital-gap-vital-to-debate-on-trade-finance-gap/
- Suominen, Kati (2016d), "How The Global Fund For Ecommerce Is Helping Entrepreneurs In Developing Countries Enter The Digital Era", GE Reports, <http://www.gereports.com/kati-suominen-how-to-help-entrepreneurs-in-developing-countries-enter-the-ecommerce-era/>
- Suominen, Kati (2017a) "E-commerce development survey and index", for United States Agency for International Development, http://pdf.usaid.gov/pdf_docs/PA00MP8T.pdf.
- Suominen, Kati. (2017b). "Accelerating Digital Trade in Latin America and the Caribbean" IDB Working Paper Series N° IDB-WP-790, Inter-American Development Bank <https://publications.iadb.org/bitstream/handle/11319/8166/Accelerating-Digital-Trade-in-Latin-America-and-the-Caribbean.PDF?sequence=1>

World Bank (2016), Exported dynamics database, World Bank, <http://data.worldbank.org/data-catalog/exporter-dynamics-database>

World Bank (2016b), World Development Report 2016: Digital Dividends, World Bank, Washington, DC, www.worldbank.org/en/publication/wdr2016

World Bank (2017), *Enterprise Surveys* (database), World Bank, www.enterprisesurveys.org/

WTO (2016) *Trade finance and SMEs: Bridging the gaps in provision*, WTO, Geneva, www.wto.org/english/res_e/booksp_e/tradefinsme_e.pdf

NOTES

1. The selection of the countries was based on: the aim of covering several geographical regions; the ease of reaching large sets of firms; and the initial data that spontaneously came in. The country samples cover companies of all sizes, numerous sectors, various growth trajectories, exporters and non-exporters, as well as online sellers and offline sellers; the respondents range from staff-level employees to senior vice-presidents and chief executive officers.