Private Sector Priorities for Ecommerce Development

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I. Introduction

A small number of "export superstars" – typically large multinational companies – currently shape the trade patterns of practically all economies.¹ Meanwhile, the majority of companies, particularly of small businesses, have yet to engage in trade. Firms' export participation rates for firms in East Asia and Pacific are 10.4 percent, in Latin America 12.4 percent, and in sub-Saharan Africa 9.8 percent.² Where companies do export, they are normally "narrow" exporters, selling on average to only 2-3 markets. However, exporters derive a significant share of their sales from exports. For example, about 50 percent of sub-Saharan African exporters' revenues stem from exports. Yet the volume of this trade is still small, as is the number of exporters, the largest exporters, typically account for over 80 percent of exports.³ Most new exporters, often at least 70 percent, do not last more than a year as exporters.

However, these patterns are now radically changing. Using the Internet and ecommerce platforms, companies of all sizes are much more visible to prospective customers and around the world and, research shows, much more poised to export and import and scale their sales than ever before. For example, in a survey of over developing country companies firms, Suominen (2017a) shows that while fewer than 20 percent of small offline sellers export, about 50 percent of small online sellers do, and while offline exporters tend to export to only one market, over 60 percent of online sellers export to two or more markets.⁴ Boston Consulting Group finds that small and mid-size enterprises that are heavy web users are almost 50 percent likelier to sell products and services outside of their countries.⁵

Similarly, eBay's data shows that in Chile, all companies that sell on eBay also export, as opposed to only 18 percent of brick-and-mortar companies, and sell on average to 28 different markets, as opposed to 2-3 markets that the median exporter sells to.⁶ Unlike offline sellers, most online exporters also survive as exporters year after year – partly precisely because they are so diversified across markets.

In short, digitization is breaking the "iron law" of international trade – that exporting was possible only for a few.

Digitization is not only impacting sales of goods across borders – it is disrupting trade in services. By leveraging cloud-based tools, developing country businesses can efficiently build a regional footprint and local following, and service customers around the world. For example, Indian software company Freshdesk has grown from two employees in 2010 to 800 today by helping 80,000 companies such as Cisco, Honda, and 3M worldwide to offer better customer experience.⁷ "Born-digital" companies like Freshdesk are often also "born global", able to launch in several markets in a quick sequence. Microwork platforms such as Upwork and Freelancer are

expanding opportunities for freelancers and small businesses in developing countries to sell their services, or engage in "trade in tasks", with business in other countries.

These findings also mean that digitization is opening entirely new opportunities for developing countries to promote entrepreneurship, job-creation, productivity growth, trade across borders. It enables countries to grow both their intensive and extensive margins in trade – that is, increase both 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 a lower cost, streamline trade operations and logistics, and access new data to create new operational efficiencies, deeper market insight, gain in competitiveness, and even productize data as a new revenue stream – all without building their own expensive IT infrastructures.⁸ As an example, by running its African and Middle East online booking operations on Amazon Web Services, South African travel booking website Travelstart has realized operational cost savings of 43 percent and reduced downtime by 25 percent.⁹

However, the gains from digitization are not automatic. The enabling environment for digital trade is suboptimal in many developing countries, impeding the translation of the new technologies into trade and growth. There are two challenges standing in the way of solutions.

- Lack of actionable, granular data on the enabling environment key to companies engaged in ecommerce. While the key components of the enabling environment for ecommerce are by and large understood, there is still relatively little data and mostly only anecdotal evidence as to the obstacles companies face when engaging in ecommerce in any given country.
- Lack of systematic collaboration between public and private sectors in many countries to fashion ecommerce policies and regulations, or pool efforts to unlock specific challenges to ecommerce together, through public-private partnerships.

The private sector is closest to the opportunities, challenges, and solutions to ecommerce development issues, and as such critical for informing and guiding policymaking on ecommerce issues around the world. Private sector is also engaged in a stunning array of projects to bring women, rural populations, and SMEs into the stream of ecommerce. Yet the gaps in data on private sector views and systematic public-private collaboration limit developing countries ability to fuel digital trade – to prioritize policy choices and investments in digitization and e-Commerce, or to build on the private sector's ongoing work to boost connectivity, fuel logistics, and indeed, to create entirely new ecommerce markets.

The purpose of this report is to tackle these challenges in three ways:

• Discuss the findings of two new surveys and an index developed by the author that get at the challenges of enabling environment for digital trade by asking those closest to these challenges – companies engaged in ecommerce as merchants, ecommerce platforms, IT companies, or payment or logistics providers.

- Provide highlights of the various projects being championed by the private sector to cultivate ecommerce worldwide, including among such segments as women and rural entrepreneurs.
- Based on these findings, map out policy pathways to undo priority challenges to ecommerce and to fuel public-private partnerships in ecommerce development.

The following section discusses the survey data, while section three turns to the various projects. Section four puts forth recommendations. Section five discusses a new framework for public-private dialogue and partnerships for ecommerce development. Section six concludes.

II. Bottlenecks to Digital Trade in Developing Countries: What Does the Private Sector Think?

Digitization 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 digitization to translate into trade and growth gains. These challenges include basic connectivity issues especially in LDCs, limited digital skills in many economies, logistics and market access bottlenecks, and 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 of contents such as user reviews on their portals.

However, to date, understanding is quite limited as to the policy priorities to unlock the enabling environment in any one country. Two recent studies by the author – one in 15 developing economies (Argentina, Brazil, Chile, Colombia, Mexico, Uruguay, Pakistan, Bangladesh, India, Philippines, Kenya, Nigeria, South Africa, and Ghana) covering altogether 3,500 merchants and ecommerce ecosystem companies (ecommerce and payment platforms, shippers, banks, IT firms, etc.), and another covering some 300 Latin American firms – aim to bridge these gaps, providing nuanced and actionable policy insight for governments to unlock their ecommerce economies.¹⁰ The former study also creates a new Ecommerce Development Index that enables tracking private sector views on ecommerce development in countries worldwide. The key findings from the former study include that:

• In every size category, companies with online sales are much likelier to export than companies that do not have online sales (figure 1).

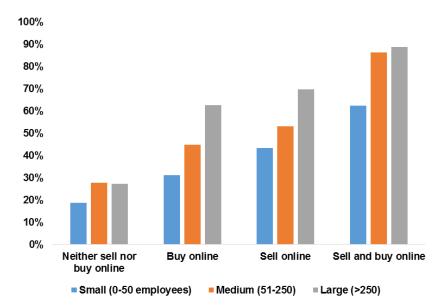


Figure 1 – % of Companies that Export, by Company Size and Online Activity

Source: Suominen (2017a).

• Online sellers are also more geographically diversified: some 63 percent of online sellers export to two or more markets, while only a third of offline sellers do, whereas surveyed companies that neither buy nor sell online typically export to only one foreign market (figure 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 faster-growing—they have 10 percent or higher annual revenue growth—than companies that grow slowly (at less than 10 percent per annum), controlling for company size.

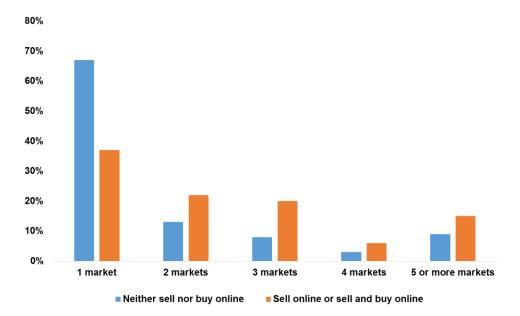
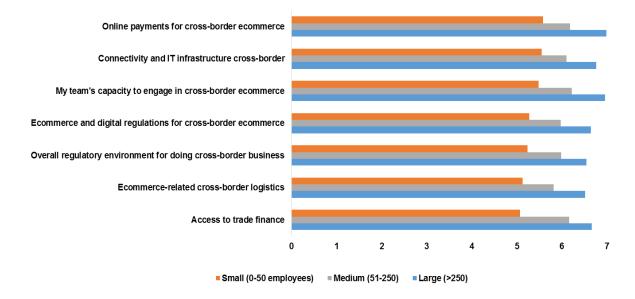


Figure 2 - Number of Markets Companies Sell Into, by Company's Online Sales Activity

Source: Suominen (2017a).

• As expected on the basis of firm-level studies in international trade, company characteristics shape companies' perceptions of barriers to ecommerce, with small businesses reporting being particularly hampered. Small companies tend to be considerably more affected by these various potential barriers to ecommerce than large companies in every country, with access to finance and ecommerce logistics posing particularly steep challenges for small businesses (figure 4). Midsize and large companies, meanwhile, wrestle most with logistics and digital and other regulations. The gaps are significant between small and large companies: for example, some 60 percent of surveyed small companies rate areas of ecommerce enabling environment 5/10 or below, while only a third of large companies do. These differences are echoed in responses to questions about cross-border ecommerce (figure 3).

Figure 3 - Merchants' Perceived Obstacles to Cross-Border Ecommerce, By Company Type and Size (10=Functions Extremely Well, Facilitates Ecommerce; 1=Very Significant Obstacle To Ecommerce)



Source: Suominen (2017a).

Perceived challenges to ecommerce vary very 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. This study asked companies to rank the functioning of the enabling environment for ecommerce from 1 (very poor, significant barriers to ecommerce) to 10 (excellent, facilitates ecommerce), both in broad categories (such as logistics) and in narrow subcategories helpful for designing policy interventions (such as, under logistics, last-mile delivery and customs procedures for ecommerce imports). The results show substantial variation. For example, in some countries such as Bangladesh, online payments are a leading problem to ecommerce; in others such as Argentina and Kenya, cross-border logistics and customs procedures are the most challenging (figure 4). In still other countries, such as Brazil, ecommerce and digital regulations and the overall regulatory environment complicate ecommerce. In Nigeria, access to finance issues and logistics dominate the list of problems. In Pakistan, the high cost of broadband and lack of Internet connectivity are reported to hamper ecommerce.

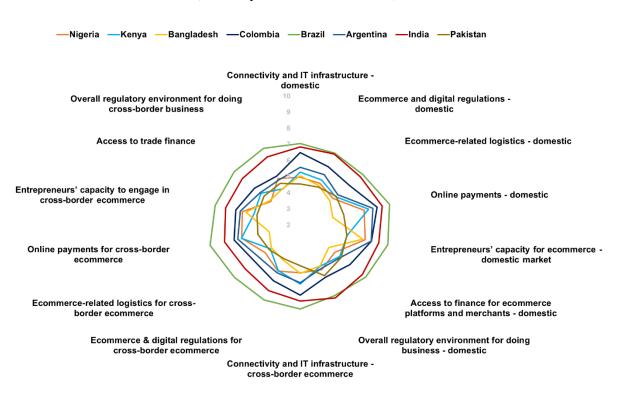


Figure 4 - Rating of Enabling Environment for Ecommerce and Cross-Border Ecommerce, Selected Countries

(1 = Very Poor; 10 = Excellent)

Source: Suominen (2017a).

• Driving ecommerce development requires actionable insight into specific bottlenecks. While it is useful to know that ecommerce 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 ecommerce imports. When asked about specific challenges, developing country merchants see such challenges as total cost of delivery, legal liability rules, and customs procedures for ecommerce imports as key challenges in cross-border ecommerce (table 1). Ecosystem companies meanwhile also see logistics as a bottleneck – but also highlight a range of digital regulations as challenging for cross-border ecommerce.

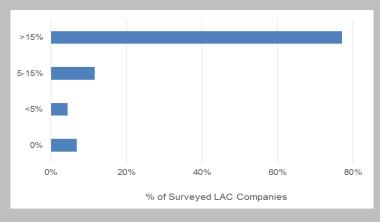
Ranking of challenges	Merchants	Ecosystem
1	Finance - Availability to trade finance for merchants	Logistics - Total cost of delivery from my country to foreign buyers (exports)
2	Logistics - Customs procedures for ecommerce imports	Digital reg IP protections in other markets
3	Logistics - Cost of logistics 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 ecommerce 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 ecommerce	Digital reg Copyright laws in other markets
8	Logistics - Postal services for cross-border ecommerce - import or export	Digital reg Censorship rules in other markets
9	Logistics - Customs procedures in main export markets	Overall regulatory environment - Tax rules in other markets
10	Digital reg Consumer protection laws in other markets	Digital regInternet intermediary liability / safe harbor in other markets
11	Digital regInteroperability of digital and ecommerce regulations with trading partner markets	Logistics - Postal services for cross-border ecommerce - import or export
12	Digital reg Legal liability laws for online sellers in other markets	Digital regData localization requirements in other markets
13	Digital reg Copyright laws in other markets	OTT regulations (application of telecom and broadcast rules) in other markets
14	Digital reg IP protections in other markets	Digital reg Data privacy requirements in other markets
15	Overall regulatory env Tax rules in other markets	Payments - Cost of cross-border online payments

Table 1 – Small Companies' Rating of Top-15 Challenges in Enabling Environment for Cross-Border Ecommerce, by Subcomponent

Box 1- Internet Bolsters Exporters in Latin America – but Market Access Barriers and Customs Procedures Stand in the Way

A study by Suominen (2017b) developed for the 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.¹¹ The Internet is also ingrained in LAC companies' daily business: the bulk of regional companies would incur a productivity loss of 15 percent or more if the Internet were taken away (figure 1).

Figure 1 – % LAC Companies' answering "what would be the loss on your organization's productivity if it did not have access to the Internet or other digital networks"



Source: Suominen (2017) of Connectamericas.com companies.

Traditionally only a small fraction, some 13 percent, of LAC companies have exported, and often derived only a minor share of their revenues from exports. However, over 50 percent of the surveyed companies with some online presence and typically some online sales, sell and buy online across borders (figure 2), and often derive nearly 50 percent of their revenue from export sales. Online presence also has earned developing companies new foreign customers they did not have before selling online.

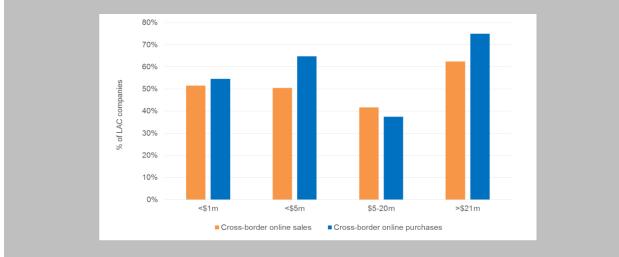


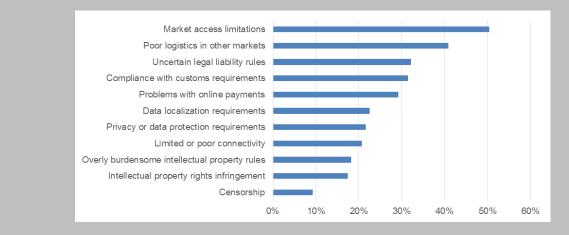
Figure 2 – % of Online LAC Companies with Cross-Border Sales or Purchases in 2016, by Revenue

Source: Suominen (2017) of Connectamericas.com companies.

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 and buy goods and services to and from foreign markets, over 50 percent find market access barriers a "very significant" obstacle, over 40 percent find the same for poor logistics in other markets and 32 percent for compliance with customs procedures.¹²

Of those LAC companies that already buy and sell goods and services to and from foreign markets, 50 percent find market access barriers as a "very significant" obstacle to their digital trade, while over 40 percent find the same for poor logistics in other markets and 30 percent for online payments as well as customs procedures (figure 3). A third see uncertainties stemming from Internet intermediary liability rules. Notably, these various barriers obstruct small companies much more than large ones.

Figure 3 - Challenges Experienced as "Very Significant" by LAC Companies to Cross-Border Online Sales, by Type (cross-border sellers)



Source: Suominen (2017) of Connectamericas.com companies.

If these obstacles to selling online and cross-border were removed, LAC companies report they would score an average of 65 percent revenue growth from international sales and 50 percent from domestic sales (figure 4). Companies that are intensive digital traders – that derive over 50 percent of their online sales revenue from foreign markets – expect 90 percent revenue growth from foreign markets and 51 percent in the home market if these obstacles were removed.

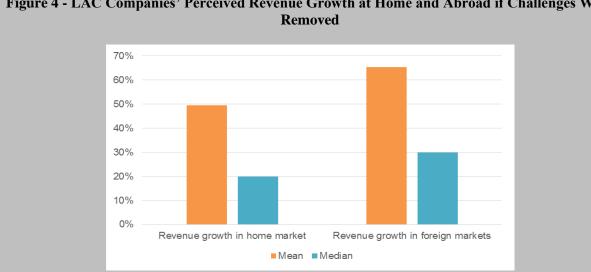


Figure 4 - LAC Companies' Perceived Revenue Growth at Home and Abroad if Challenges Were

Source: Suominen (2017) of Connectamericas.com companies.

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, securing employee and management buy-in, and gaining the knowledge on how to leverage the Internet (figure 5). This, in part, reflects the external constraint - region's limited ICT skill levels. Regional consumers meanwhile are concerned about online fraud and ability to deal with shipping costs of items ordered from overseas.

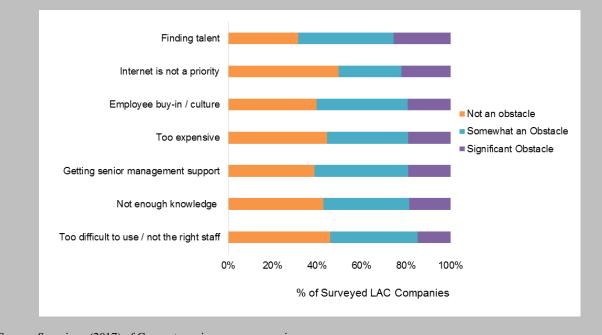


Figure 5 - LAC Companies' Perceived Challenges to Online Sales

Source: Suominen (2017) of Connectamericas.com companies.

• Companies believe that undoing barriers to ecommerce would result in significant revenue and growth gains. If their top-3 perceived challenges to ecommerce were removed, developing country companies believe they would score annual revenue gains of 34 percent in their domestic markets and 30 percent in international markets (figure 5). Small companies report gains of 37 percent domestically and 34 percent internationally.

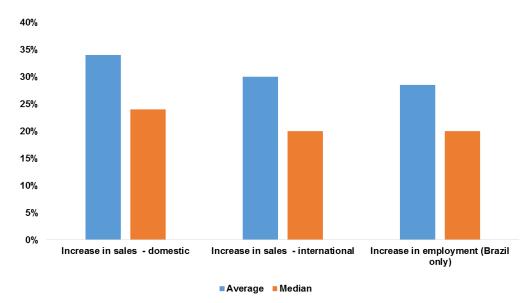


Figure 5 – Revenue Gains to Companies if Top-3 Barriers to Ecommerce Were Removed, by Market

Source: Suominen (2017a).

• Companies that have yet to start selling online worry about complexities in exporting using e-Commerce and uncertainties related to the return on investment (figure 6). Companies in Latin America highlight logistics as a challenge, while companies in Africa mention small size of the market as an obstacle.

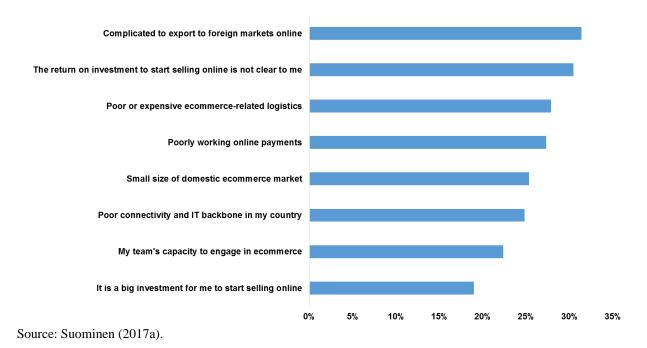


Figure 6 – Perceived Priority Barriers to Starting to Sell Online, Selected Countries

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 exports or imports, 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 ecommerce. Small companies tend to be considerably more affected than large companies in practically every economy surveyed.
- Perceived challenges to ecommerce vary significantly across countries, which means that policies and investments need to be tailored to country. Universally, companies see the overall business environment, such as tax policies, as critical for ecommerce success.
- Removing barriers to e-Commerce would result in significant revenue and growth gains. The barriers surveyed here matter. If the top-3 barriers to ecommerce were unwound, companies believe they could achieve annual revenue gains of over 30 percent.

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

III. How Private Sector Creates New Ecommerce Economies

Not only is the private sector observing a number of challenges to ecommerce in their economies; it is also taking action. Businesses big and small are actively pursuing solutions, such as efforts to connect the more marginalized segments of business and society – small businesses, women entrepreneurs, and rural populations – to the online economy in developing countries. 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 hit similar metrics. As such, they can also pave the way for collaboration and projects between the public and private sectors as well. This section highlights various of these efforts, as reported by the companies themselves.

Creating Ecommerce as an Industry

Ecommerce 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 an online shopping platform in the Caribbean. Orders from international companies had long delivery times at high costs; customers experienced difficulties with returns; and some international providers did not see a profit in shipping low volumes in the region Caribbean. International websites would not accept Caribbean credit cards and local customers risked losing money on fraudulent websites; in addition, fewer than 20 percent of Caribbeans had access to a credit card.

Trini Trolley initially learnt from international companies such as Amazon, and subsequently developed innovative solutions for the local and regional market. The company also carried out campaigns to educate the public on the ease and security of ecommerce. It responded to the regional challenges to online shopping with its online platform providing a 24/7 online store offering over 12,000 products from international and local suppliers and delivering as quickly as in 24-48 hours. The company also provided safe payment facilities and faster and 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 skeptical about providing credit card information online. International customers were provided with the option of using PayPal to facilitate purchases for family and friends in the Caribbean. By 2011, the company expanded to include shipping to the rest of the Caribbean and world. Trini Trolley opened up its ecommerce platform to local entrepreneurs and those who did not have the knowledge or funds to create their own websites or physical stores to display their items for sale at no cost.

Starting 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 US, UK, South and Central America and the Caribbean. The company foresees as challenges transportation and logistics, cybersecurity issues, and access to venture capital.

In Burundi, a 2010 survey "Use of the Internet in Burundi" conducted by Burundi Internet General Applications Network (BIGAN) showed that more than 70 percent of respondents in rural communities felt that ecommerce can significantly 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 business; and lack of trust in online transactions.

Burundi Shop has worked to address these gaps by setting up an online business distribution center 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 places "national agents" to help small traders to build their online stores free of charge, enable customers to track their goods using the Internet or by text messages, and use Isoko Courier Services to affordably deliver small shipments door-to-door. The agents are connected to four major East African platforms. The main expected benefit is that the project will enable companies to order supplies directly from a manufacturer and thereby bypass brokers. Reduction in supply chain cost from the one stop shopping will also reduce costs, with some of the savings passed onto the consumers.

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

Connecting Rural Areas – and Powering Rural Ecommerce

Ecommerce has provided a wonderful means for rural populations to access retailers and rural companies access suppliers that they do not have 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 ecommerce. In China, Alibaba Group has fueled the development of ecommerce in rural areas through the "Rural Taobao" initiative that promotes trade between China's rural and urban regions by removing bottlenecks in logistics and information flow. Alibaba Group does so by building rural ecommerce infrastructure, talent, and ecosystems, giving villagers access to a broader range of consumer products and services at a lower cost, and 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 it would invest RMB10 billion (USD1.6 billion) over the next three to five years to build 1,000 county-level "Taobao rural operations centers" and 100,000 village-level "Taobao rural service centers" throughout China. These ecommerce outposts give villagers access to buy and receive goods they need from Alibaba Group's online marketplaces, and start their own online businesses. As of mid-February 2016, more than 14,000 village-level service centers were open in some 300 counties across more than 20 provinces. Alibaba has also empowered Taobao couriers that work in both rural and urban areas.

In Africa, GSoko (Grain Soko Market) platform is a flagship initiative of the DFID funded FoodTrade East & Southern Africa (ESA) programme and aims to link small-holder farmers to grain buyers across East Africa. The Eastern Africa Grain Council (EAGC), 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, to 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 – to ensure that farmers growing grains have access to regional markets.

There are also companies connecting rural regions to the Internet. For example, through its Wireless Reach project, Qualcomm has worked with various partners, such as 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 that works to increase economic opportunities for Kenya's smallholder farmers increase economic opportunities for Kenya's smallholder farmers.

In Cambodia, the National Institute of Information Technology of Japan has developed and tested a wireless communications technology "NerveNet" that enables high-speed data communication with solar power suitable for deployment across rural and remote areas, specifically addressing affordability in rural areas by reducing ancillary costs.¹³ Facebook's Express Wifi empowers local entrepreneurs to provide quality Internet access to their communities and make 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.

Bringing Women to the Digital Economy

Ecommerce, online work platforms, and online payments are especially empowering to women. They help women to work and build companies in cultures where they are discouraged to enter the labor market or may lack the professional networks and resources that their male peers can access.¹⁴ 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.¹⁵ These women are able to run their online businesses while handling household obligations, and see great potential of ICT to expand their market reach and support earnings.

However, girls and women are often still behind in accessing the Internet. Women are almost 25% less likely than men to be online; in Sub-Saharan Africa this figure is around 40%. Intel is seeking to change this through Intel® She Will Connect program and other digital empowerment initiatives, whereby Intel is empowering millions of women to connect to a range of new opportunities through technology. The initiative aims to bring 5 million women online in Sub-Saharan Africa.

According to GSMA, closing the gender gap in mobile phone ownership and usage alone could unlock an estimated \$170 billion market opportunity for the mobile industry in 2015-20. GSMA's Connected Women project sponsored by the UK Department for International Development (DFID) and Bill and Melinda Gates Foundation works with mobile operators and their partners to address the barriers to women accessing and using mobile internet and mobile money services. The partners include such players 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 which increase women's access to and use of mobile phones and value-added services. Benefactors of this programme include Orange Mali, Airtel Uganda, Telenor India and Ooredoo Myanmar. Facebook Innovation Lab's She Means Business program is helping women entrepreneurs worldwide to grow and promote their businesses online – starting from leveraging their Facebook Pages.

In India, Telenor India has worked to educate women as well as youth, women and children in rural areas about the usage 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 which can help the farmers to produce better crops, youth to find jobs, women to benefit from safety and healthcare applications and children access to knowledge. Telenor has also addressed gaps in mobile phone use in rural India, where in 2013-14 some 76 percent of men owned a mobile phone, whereas only 29 percent of women owned one. In 2014, Telenor launched Project Sampark to enable easy-to-use mobile services for rural women. The project was supported also by GSMA's Connected Women program. Telenor identified and trained Anganwadi (health workers) to spread the message why women should own and use mobile phones. These local women were aware of the ground realities, 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. The Project had, within 18 months 72,000 female mobile phone owners.

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 women 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 that provides a focused and customized female induction plan for TCS's Corporate, Consumer and Operations departments. The company is exponentially growing its Ecommerce solutions 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 Ecommerce Platform. Through targeted position profiling, countrywide talent sources and training, Project Aghaz simultaneously empowers women and builds TCS's ecommerce business capacity.

People in rural Pakistan seldom have bank accounts. Telenor Pakistan and Tameeer Bank are correcting this with Easypasia, a mobile-phone banking service. This easy and secure way to transfer funds is helping young girls to 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 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 also need to be scalable and replicable to maximize the number of people to be 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 are meant to provide Internet to rural and hard-to-reach areas at low cost or for free, and Facebook's Connectivity Lab is developing new methods to deliver Internet, including lasers, drones, and new artificial intelligence–enhanced software. Also, new, more enhanced and more cost effective satellite systems which 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 are particularly suitable to address the rural/urban divide at a large scale.

Given the large rural offline populations across Africa and Asia-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, 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, and South Korea has introduced 'The Information Network Village' that 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 using satellite broadband to over 700 rural sites. Other satellite initiatives include the provision by Intelsat together with the Office des Postes et Telecommunications of French Polynesia of KU-band satellite solutions on Intelsat 18 to enable expansion of wireless infrastructure across French Polynesia69, and in Myanmar Internet services provider Bluewave has introduced a satellite broadband services "Easy IP solution" that uses capacity on the EUTELSAT 70B satellite. Intelsat together with SkyNet de Colombia is supporting the Colombian Ministry of Information Technologies and Communications to connect schools in rural areas using satellite.

Source: ITU¹⁶

Using Ecommerce as a Tool to Bring SMEs into World Trade

As the above surveys show, SMEs that have yet to start selling online tend to struggle with inhouse skills for ecommerce. And while typically realizing that ecommerce 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 empower economically tens of thousands of traders in Africa through ecommerce, by improving their digital literacy to create and manage an e-mail account, use the platform to update their online shop independently, deploy social media and instant messaging to promote their activity, and so on. Beyond education, Jumia has opened these companies access to delivery partners aiming at helping them deliver their products beyond their cities, advised them in product sourcing, and shared lessons-learned from similar markets.

eBay has entered into a partnership with the International Trade Centre to help SMEs in developing countries to take advantage of the opportunities offered by commerce. Under the agreement, the eBay marketplace provides export-ready companies supported by ITC's e-Solutions program the opportunity to connect with over 162 million buyers around the world. Enterprises that participate are given the opportunity to open "anchor stores" on eBay – providing them with greater online visibility, and the opportunity to reach more clients. SMEs participating in ITC's eSolutions program will also have access to the eBay network of fulfilment centers, making logistics more cost-effective, and they access eBay's ecommerce research, allowing them to leverage this knowledge and better position their offerings in selected target markets. In addition, eBay provides training to complement that offered by ITC on issues including how to optimize 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 international growth of entrepreneurs and SMEs in Mexico. The platform, found at: www.crececonebay.com, focuses on three main objectives – provide useful information to its users about the process of the export of their products through eBay; guide its users step by step through interactive guides; and provide support and chats 24/7 to SMEs.

African platform Kopo Kopo helps SMEs overcome what is the often the biggest bottleneck for online sales, payments. Kopo Kopo accept mobile payments and build relationships with their customers. It was in 2011 among 25 finalists in the Pivot 25 (now Pivot East) mobile startup competition, and won the opportunity to incubate at mlab's East Africa iHub, and partnered with Safaricom to bring 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, and soon ballooned to staff of 50. Today, Kopo Kopo serves 15,000 businesses throughout Kenya and recently processed its 1,000,000th transaction. Kopo Kopo has designed a robust payment platform that has various functionalities and value additions which have been segmented into products with the aim of positioning them in various market verticals.

Disrupting Markets for Artisans around the World

There are countless initiatives across the developing world propelled 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 of natural fiber materials, which are imported into the U.S. and sold via ecommerce 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 disintermediating the various layers between the producer in Nepal and the consumer in the U.S. Using online, hosted platforms we are able to reduce costs, and improve communication and work-flow to ensure a consistent, high-quality product is delivered to the U.S. market on time.

Shop Soko is an ecommerce site that sells jewelry made by African artisans for a global market. The start-up received support and training through Nailab funded by a World Bank Group project, and participated in 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 100k products, generating over \$800k in income to the over 1,300 artisans with whom they partner.

Fulfillment by Amazon (FBA) has powered numerous entrepreneurs worldwide to scale their sales. One example is Lanna Clothes Design - a small woman-led business from rural Thailand – which FBA empowered to expand internationally through ecommerce. Within 10 months of its enrollment in FBA, with Lanna Clothes Design grew 70%, with sales on Amazon making up 85% of total sales. Amazon's ecommerce services have enabled the owner of Lanna, Praew, to fulfill her dream of improving the lives of her family, employees, and community. Based on her own ecommerce success, Praew plans to help other local designers grow their businesses.

IV. Policy Pathways

For trade policymakers, the challenges articulated by companies engaged in ecommerce 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 policymakers intent on catalyzing ecommerce need to work closely with ICT, finance ministries and regulators – as well as with the private sector, given that it is businesses that have the first-hand grasp of the challenges to ecommerce and solutions to them. Development agencies can certainly play a catalytic role in addressing basic connectivity and ICT infrastructure, in light of the connectivity challenges faced by 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 address key internet adoption barriers related to capability (e.g. ICT skills), relevance (e.g. local language content) and affordability (e.g. costs of devices), as well as the many challenges adding to the costs and operational complexities of companies that are already selling online and seeking to export and import, such as logistics and customs procedures, crossborder online payments. An important focus to these efforts is UNCTAD's multi-stakeholder eTrade for All initiative that brings together developing economies, 20 agencies including the WTO and many development partners that have formed part of Aid for Trade, donor economies, and the global private sector to further ecommerce development and cross-border ecommerce globally.

Some of the priorities to empower particularly small businesses in ecommerce are as follows.

Facilitate eTrade

The surveys explored 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 ecommerce and low-value shipments mushroom and more and more small enterprises with limited trade compliance capacities 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 the issues arising from ecommerce – small parcel trade, often shipped by small players.

New approaches and capacity-building around them are needed, such as:

- **Higher** *de minimis* **levels.** The silver bullet for fueling SME trade is raising *de minimis* levels the ceiling below which goods enter duty- and tax-free. Economists have over and again shown that low *de minimis* levels defeat this purpose, both because the collection costs of the duties and taxes outweigh the revenue raised, and because the markups of tariffs and taxes are detrimental to consumers and companies importing goods and inputs above the *de minimis* threshold. Study after study show that higher *de minimis* levels provide net economic gains.¹⁷ Suominen (2016b, 2017) has proposed a solution to governments' hesitancy to introduce higher *de minimis*: a plurilateral negotiation on *de minimis*.¹⁸
- Simplified, paperless, one-stop clearance process. Governments need to make better use of the established mechanisms to fuel trade, such as increase customs clearance times 24 hours per day, put in place electronic filing of customs documents via "single windows" for one-stop compliance; and enable the collection and remit of taxes for goods above the *de minimis* level from away from the border. Since the ability for the customer to return the item is a pillar for the competitiveness of ecommerce retailers, there should also be a simplified, duty-free returns on items sold online by domestic sellers to foreign buyers.

Box 3 – UNESCAP's Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific (FA-PT)

The FA-PT is dedicated to enabling the exchange and legal recognition of electronic trade data and documents across borders. The FA is a UN treaty open to all interested 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 subregional 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 the better and deeper better 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 between 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 between stakeholders domestically. However, facilitating international trade inherently requires trade information to flow also across borders along international supply chains, not only among domestic stakeholders. As a result, 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, thus reducing the overall benefits and return 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 to 30% on average, increasing export potential of the region by \$257 billion when fully implemented.

Source: UNESCAP¹⁹

• **"Trusted eTrader" programs tailored to the needs of SMEs in trade** (Suominen 2015).²⁰ Trusted eTrader programs would balance the need for trade facilitation for small shipments with the imperative to secure trade. They can rest on two components – simplifying and thus incentivizing SMEs' trade compliance; and leveraging anonymized Big Data held by major online platforms for risk-targeting in trade. The effort could be tailored after the Air Cargo Advanced Screening program that the United States piloted a few years ago with major shippers such as FedEx, DHL, and UPS.

Open Successful Companies' Access to Finance

Export credit agencies have traditionally helped guarantee exporters' working capital loans issued by banks. Today, however, small online sellers often need much smaller and faster working capital loans (often just \$3,000) to respond to surges in demand. They are also typically

nascent in their lifecycles, and need equity financing, such as venture capital, to accelerate their expansion when they observe a 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 FinTechs and online lenders to guarantee smaller loans than banks would like to touch with businesses that may not meet banks' lending criteria.²¹ For example, ECAs could guarantee diversified pools of such loans and thus manage their own risks, and leverage online platforms' nontraditional but typically effective underwriting criteria and scale. This could lower the cost of capital to export-driven SMEs and incentivize lending platforms to enter markets.
- **Pay attention to access to growth capital.** Another important consideration is that companies worldwide are entering world markets earlier in their life cycles than ever before. These companies are often in need not of trade finance or small loans, but growth capital criteria.²² 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 it quickly, it tends to need more cash on hand that it is ever able to secure affordably from lenders. This typically means it needs access to growth capital. Without picking winners, export credit agencies can help identify such "born global" companies seeking equity financing for investors, lowering lower investors' per-deal search and transactions costs for promising globalizing companies.
- Leverage multilateral development banks. Particularly useful for bankable companies, multilateral development banks are expanding the range of instruments to support banks and companies in developing countries. In a recent survey, over 75 percent of banks reported that the trade finance programs of multilateral development banks help to narrow trade finance gaps.²³

Get Regulatory Environment Right for Ecommerce

Companies benefit from transparent rules, freedom to innovate, level playing field, and interoperability across economies. The survey here shows that even small online merchants often struggle with digital regulations when seeking to export. While there are numerous policy issues to consider, the following elements can be considered key for countries to fuel cross-border trade in the digital era:

• Legal liability protections. Internet intermediaries such as ecommerce sites inherently post user reviews of goods and services sold on such sites, and need to be protected from liability for such content. To encourage Internet intermediaries to serve local markets, developing countries should create and modernize "safe harbors" that limit intermediary liability from user-generated content. For example, several countries have in place limitations for the liability of certain intermediaries for unlawful content.

- **Intellectual property protections**. As products and services digitize, and as millions of microenterprises and consumers can create or copy content, designs, and 3D printed products, IP is becoming harder to protect. Case law is already reshaping rules around IP in the digital era, such as on 3D printable designs. Policymakers need to balance the protection of IP rights with the development of new Internet services and platforms, and update 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. While regulations need to be balanced and safeguard consumer rights and information and combat trade in counterfeit goods, among other measures, they need to be fashioned with input from the ecommerce industry, with companies' compliance costs in mind.
- Interoperable online payments. Online payments are critical for cross-border online transactions. Positively, online payment platforms have proliferated worldwide there are to date more payment platforms than there are countries. Some countries have made important strides ensuring 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, for 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 change to faster, digital arbitration and resolution among private parties.

Critically, these policies should be deisgned and implemented collaboratively by government and industry, so as to optimize 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 support for eTrade for All as well as for Aid for Trade.

V. Creating a New Development Paradigm, with Public-Private Partnerships

Further public-private policy dialogue on ecommerce policies

In numerous countries there are concerted efforts by public and private sectors to cultivate ecommerce in their economies. For example, in Turkey, the two have come together in a specialized ecommerce council that is roadmapping policies and solutions for such issues as ecommerce regulations and SMEs' participation in ecommerce. In Mexico, the export promotion agency and the Ministry of the Economy are consulting with the ecommerce ecosystem on appropriate regulations and export promotion needs. In Bangladesh, the IT and ecommerce

industry associations have fashioned regulatory solutions closely together with the government. These efforts are instructive for countries that have yet to adopt them – and a very simple but effective solution for development partners to support and systematize across developing economies.

Pursue public-private funding partnership

For development partners intent to attain Sustainable Development Goals, delivering concrete results in each project is essential. In ecommerce, development partners have a terrific opportunity for a new modus operandi to secure robust results – via innovative PPPs that leverage the insight and existing, voluminous work of the private sector. There are three way sin which the public and private sectors can come together to run and finance projects:

• Private sector seeds, public sector scales

The side range of projects the private sector is driving to connect people to the Internet, create ecommerce markets in rural regions, bring women to the online economy, and so on present a great opportunity for governments and development agencies. These efforts have typically involved significant investments by the private sector, and yielded quantifiable results in areas of keen interest to the development partners. A low-hanging fruit is to take the best of these projects seeded by the private sector and use public sector funds to scale or replicate them. In other words, the private sector identifies problems and creates and seeds solutions, and the public sector comes in ass a provider of growth capital in proven projects. This is low-risk, high-yield development for the public sector. A more sophisticate version is to craft entire portfolios of private sector-led projects, complete with performance metrics and enable public sector to invest in these portfolios – and diversify their risk thereby.

• Private sector ideates and provides data, public sector funds

Public and private sectors can also work together to architect ecommerce development projects, with private sector providing guidance, real-time, granular data, and insight to help public sector optimize investments.

• Funding Ecommerce Development via Social Impact Bonds

Still another model to fund projects conducive to more ecommerce and inclusiveness, leveraging the ingenuity and resources of the public and private sector, is a social impact bond model proposed by Suominen (2016). In this model, private foundations, social impact investors, and/or ecommerce platforms make the initial investment in ecommerce projects, such as an SME training program, and get compensated at a premium by the government and public development agencies if the program meets certain per-established performance indicators, such as target number of ecommerce-related jobs created or amount of new online exports.²⁴

Social impact bonds (also known as development impact bonds) have been successfully used to cure malaria and save rhinos. They lend themselves very well to ecommerce, given the considerable interest by private sector to bring to market new online sellers, and impact funds'

interest in inclusiveness. The instrument is superb at incentivizing investors and project implementors to deliver results desired by the public sector. Upon success and metric hit, governments secure both trade gains, economic and social returns. Upon 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 could be a powerful means to bring these public sector agencies together to support such an instrument.

VI. Conclusion

Technology-powered trade is changing the patterns players, and possibilities of world trade. It is the private sector, from online merchants to ecommerce platforms, logistics companies, payment providers, IT companies, and others, that makes this digital trade move. The private sector is as such closest to the opportunities, challenges, and solutions to ecommerce development issues – and thus central to informing and guiding policymaking on ecommerce issues around the world, and partnering with the public sector to develop new solutions to unlock ecommerce markets and cross-border ecommerce.

Yet gaps in data on private sector views on the enabling environment for ecommerce and systematic public-private collaboration limit developing countries' ability to prioritize policy choices and investments in digitization and ecommerce. This report has discussed new data that show that trade finance, logistics, and digital regulations are often suboptimal, hampering developing country companies' ability to do engage in cross-border ecommerce, and proposed innovative solutions to these challenges, such as a plurilateral agreement on *de minimis* and a new facility for export credit agencies to guarantee micro-working capital loans for ecommerce merchants. This report has also highlighted ways to operationalize public-private partnerships in ecommerce development, and fresh ways to finance them such as by using social impact bonds.

In 21st century digital trade lies an 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 hampered by their location from participating. To realize this aspiration, development partners do best by being attuned to the concrete challenges online buyers and sellers face, co-create practical solutions with the private sector to them, and partner with companies that have already done the legwork to identify opportunities and craft business models to bring people to the opportunities of the online economy.

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¹⁰ The countries were selected to cover several geographical regions and for the ease of reaching large sets of surveyed, firms and in part because these were the ones where initial data spontaneously came in. The country samples cover companies of all sizes, numerous sectors, various growth trajectories, exporters and non-exporters, online sellers and offline sellers, and respondents that range from staff-level employees to Senior Vice-Presidents and Chief Executive Officers.

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