NEW PATHWAYS TO E-COMMERCE

A GLOBAL MSME COMPETITIVENESS SURVEY

International Trade Centre

TRADE IMPACT FOR GOOD

NEW PATHWAYS TO E-COMMERCE

A Global MSME Competitiveness Survey

About the paper

This first ITC e-commerce survey provides valuable insights that will allow countries to shape policies and practices that address the real business needs on the ground.

To ensure that micro, small and medium-sized enterprises (MSMEs) can benefit from e-commerce, they need better access to e-platforms, payment and delivery services; streamlined customs procedures; and targeted skill building. These are the key findings from this ITC survey of 2,200 MSMEs in 111 countries. In addition, the survey reveals that the share of logistics costs over final price is nearly double in developing countries than in developed countries and that product return is a significant cost factor for enterprises from least developed countries.

Publisher: International Trade Centre

Title: New Pathways to E-commerce: A Global MSME Competitiveness Survey

Publication date and place: September 2017, Geneva

Page count: 45

Language: English

ITC Document Number: CEES-17-105.E

Citation: International Trade Centre (2017). *New Pathways to E-commerce: A Global MSME Competitiveness Survey*. ITC. Geneva

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For more information on E-commerce, see: http://www.intracen.org/itc/sectors/services/e-commerce/

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Foreword

E-commerce has opened a gateway of new opportunities for micro, small, and medium-sized enterprises (MSMEs) to access international markets, find new sources of demand, and build value through exposure to new technologies.

Stories of entrepreneurs building online business empires from their garages in Boston, Bangalore or Beijing are on the rise, and serve as new business models. Supported by social media, digital promotion and e-commerce platforms, MSMEs can promote their products and services to professional buyers and consumers across the world, and build a name for themselves beyond their geographical borders. Some of the best-known examples come from China, where new rural production centres are emerging from micro-enterprises that serve customers through common e-commerce platforms. Examples like these show that e-commerce is democratizing the playing field for businesses across the globe.

Beyond this optimistic picture, however, there are challenges, especially for MSMEs in developing countries. Barriers to setting up an online international presence often limit firms to the domestic market. This matters because e-commerce offers great potential to deliver economic growth, jobs and entrepreneurial opportunities.

Absence from international e-commerce is a missed opportunity. It is an important component of modern competitiveness. Access to digital technologies underpins the ambitions behind many of the United Nations Sustainable Development Goals. E-commerce can be an important engine for inclusive economic growth, empowering women and creating jobs for youth.

The 2017 International Trade Centre (ITC) competitiveness survey of more than 2,200 MSMEs across 111 countries goes beyond e-commerce success stories to understand the concrete issues that MSMEs face. Why are MSMEs from developing countries, and in particular Africa, so absent from cross-border e-commerce channels? Are there differences, perceived or experienced, in how women and men entrepreneurs engage in e-commerce? And most importantly, what can the international community do – through international regulation, capacity building, enhancing business environments and national public policy – to help more MSMEs tap into e-commerce potential?

This report reveals that while some e-commerce issues are common to MSMEs across the world, others are specific to developing countries, especially least developed countries. I would like to thank ITC's global network of partners, including trade and investment support institutions (TISIs) and companies around the world for their contributions to the survey.

It is our hope that the results can contribute to the work of the World Trade Organization's 'Work Programme for Electronic Commerce', which works to create a better policy environment for global e-commerce; and the 'eTrade for All' initiative of the UN Conference on Trade and Development, which aims to improve developing countries' ability to benefit from e-commerce. It is our expectation that the findings from this survey will provide trade negotiators, policymakers and TISIs with a deeper understanding of the concrete challenges MSMEs face when bringing their businesses online.

E-commerce is not a future trend. It is the way successful business is done today, and we need to help more entrepreneurs, especially in developing countries, connect to its tremendous economic potential.

Arancha González
Executive Director
International Trade Centre

Acknowledgements

This paper was prepared by Jimena Sotelo, Justine Lan, ITC international consultants, Annegret Brauss, ITC Junior Professional Officer and Quan Zhao, ITC Trade Policy Advisor, under the supervision of Marion Jansen, ITC Chief Economist, and Anders Aeroe, Director, Division of Enterprises and Institutions. Thanks are also due to Christophe Durand, ITC Quantitative Market Analyst for survey deployment and Mariano Musante, ITC international consultant, for support on data visualization.

Further thanks go to a group of colleagues, notably James Howe, ITC Senior Adviser, International Marketing and Branding and his team for their feedback and comments. ITC would also like to recognize ITC's Trade and Investment Support Institutions (TISIs) network, especially the Members of the ITC Advisory Board for their assistance in deploying the survey.[1] ITC would also like to acknowledge the support of ITC's TISI, SheTrades, and SME Trade Academy teams as well as e-commerce platforms, such as Mercado Libre and eBay, for distributing the survey.

ITC would also like to thank Cheryl Rosebush for review and editing, Natalie Domeisen and Evelyn Seltier, ITC, who oversaw editing, production and quality control. Kristina Golubic, Serge Adeagbo and Franco Iacovino, all ITC, provided graphic and printing support.

[1] The Board includes ITC and 11 trade and promotion organizations from Australia, Benin, Costa Rica, Finland, Malaysia, Mauritius, Morocco, Spain, Switzerland, United Arab Emirates and Zimbabwe.

Contents

Boxes, Tables, Figures

Acronyms

Unless otherwise specified, all references to dollars ($) are to United States dollars, and all references to tons are to metric tons.

APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
B20	Business 20
B2B	Business-to-business
B2C	Business-to-consumer
BIS	Bank for International Settlements
CETA	Comprehensive economic and trade agreement
EIF	Enhanced Integrated Framework
EPA	Economic Partnership Agreement
EU	European Union
FDI	Foreign direct investment
FTA	Free trade agreement
G20	Government 20
GATS	General Agreement of Trade in Services
GDP	Gross domestic product
ICT	Information and communications technology
IPR	Intellectual property rights
IRG	Immediate release guideline
IT	Information technology
ITC	International Trade Centre
LDC	Least developed country
MERCOSUR	Mercado Común del Sur
MSME	Micro and small enterprise
OECD	Organisation for Economic Co-operation and Development
RKC	Revised Kyoto Convention
SSL	Secure sockets layer
TFA	Trade Facilitation Agreement
TISI	Trade and investment support institution
TPO	Trade promotion network
TPP	Trans-Pacific Partnership
UN	United Nations
UNCITRAL	United Nations Commission on International Trade Law
UNCTAD	United Nations Conference on Trade and Development
U.S.	United States
WCO	World Customs Organization
WTO	World Trade Organization

Executive summary

E-commerce is transforming the global business and trade landscape at an unprecedented speed, opening up the international market, especially for micro, small and medium-sized enterprises (MSMEs). Cross-border e-commerce already accounts for 12% of global goods traded, and is expected to grow at twice the rate of domestic e-commerce. Yet, significant challenges remain for MSMEs, in particular from developing countries, to tap into the potential of e-commerce.

Against this backdrop, in February 2017, ITC worked with its global network of trade promotion organizations (TPOs) and trade and investment support institutions (TISIs) to connect with more than 2,200 MSMEs in 111 countries and identify the challenges they face when engaging in e-commerce. This broad and diverse survey sample, one of the largest ITC has ever assembled on the topic, includes firms from developed and developing countries, and pays particular attention to MSMEs from least developed countries (LDCs), and women-owned or led companies that, in many cases, face the greatest barriers to entry in e-commerce.

While previous reports on this subject have focused on policy analysis, this survey presents the MSME perspective to e-commerce, and offers new insights into what MSMEs, especially the ones focused on cross-border business-to-consumer (B2C) transactions, consider to be their main e-commerce challenges.

E-commerce is primarily domestic but becoming more international

The majority of the respondents indicated that their main operations are in the domestic market. Of those doing cross-border e-commerce, many do domestic e-commerce at the same time. Among those that are engaged in cross-border e-commerce, only 30% indicated that their main source of revenue comes from international sales.

Untapped potential in developing countries

Overall, respondents in developing countries are mostly micro and small-sized firms, whereas in developed countries, they are more evenly distributed between MSMEs. On average, companies in developed countries export to twice as many markets as those in developing countries, and three times as many as those in Africa. There is significant interest among the developing country companies on e-commerce: on average, more than half of the respondents not currently doing cross-border e-commerce have considered doing so, and this share is higher in developing countries (65%) and Africa (68%).

E-commerce opens doors to international trade

More than 80% of respondents that engage solely in cross-border e-commerce are micro or small-sized firms. These are essentially companies that were able to trade thanks to e-commerce. In LDCs, the average share of cross-border B2C transaction is twice as high as business-to-business (B2B). Considering that in general B2C has a lower entry threshold than B2B, this indicates that companies from LDCs are taking advantage of this new channel of trade.

The potential of e-commerce for women-owned enterprises

Being online levels the playing field for women-owned firms: the share of women-owned firms doubles when moving from traditional offline trade to cross-border e-commerce. For Africa, three out of four firms trading exclusively through e-commerce identified themselves as women-owned. However, the survey also shows that women-owned companies may face greater challenges in scaling up their business. On average, they export to nine markets, while men-owned or led firms export to 15 markets.

Misconceptions may lead to missed opportunities

Those enterprises not engaged in e-commerce activities have provided answers that reveal possible misconceptions about e-commerce, which include: e-commerce is only for goods, not for services; e-commerce is suitable for B2C, not B2B models; e-commerce entails mass production; and there are more counterfeits online than offline. Such misconceptions may be preventing companies from engaging in online sales, as a considerable number of respondents not engaged in e-commerce have indicated their company profile or products are not suitable for e-commerce.

Enduring need for commercial presence

The majority of respondents consider it is in their business interest to establish a commercial presence in the export market, even though they are operating through cross-border e-commerce. For firms conducting B2B trade, this perception is more pronounced. Reasons for this vary, from facilitating delivery at the destination market, to strengthening customer relationships and enhancing brand recognition.

Challenges in setting up and implementing e-commerce

The major bottlenecks for MSMEs when establishing an online business include lack of technical skills and business knowledge, expensive membership fees in e-commerce platforms, and difficulty in registering or complying with platform requirements. Companies in developed countries, by contrast, show concerns at a later stage, for instance, improving online visibility and finding warehouses abroad.

If MSMEs are able to overcome these initial barriers, many move on to struggle with limited access to e-payment solutions. The share of logistics cost over final price in developing countries is nearly double that in developed countries. This could be attributed to high delivery costs, limited choice of logistics and delivery service providers, and challenges in finding warehouses in the destination market. MSMEs, especially firms in LDCs, face several challenges in aftersales activities as well, including a lack of customer feedback, dealing with the costs of product return, and understanding consumer protection regulations.

Policy recommendations

An enabling policy environment is key to addressing the e-commerce challenges facing MSMEs. At the national level, targeted capacity building to improve knowledge and skills, improved access to cost-efficient platform, payment and delivery services, as well as trade facilitation and streamlined customs procedures could help MSMEs benefit more from the growing global e-commerce market.

In a broader context, e-commerce is on the agenda of many international organizations, and is becoming increasingly prominent in regional trade agreements. Cooperation at these levels can help advance regulations on payment and financial services, privacy and data flow, telecommunication and delivery services, consumer protection, protection of intellectual property rights, investment policies and innovation incentives. Achieving policy coherence on these issues and better regulatory practices can have a positive impact on shaping the e-commerce policy environment and business ecosystem.

INTRODUCTION

Global e-commerce (domestic and cross-border) totalled $25.3 trillion in 2015, of which $22.4 trillion was business-to-business (B2B) e-commerce, and $2.9 trillion was business-to-consumer (B2C) e-commerce.[2] E-commerce is transforming the global business and trade landscape and is playing an increasingly important role in promoting growth and job creation, providing strategic opportunities for countries' economic and social development.

Global B2B e-commerce is almost eight times as large as B2C, and yet most of the focus of the discussion and perceptions about e-commerce is on B2C. This is mainly because for B2B e-commerce transactions, an online presence is often a supplementary part to facilitate import and export that are conducted through traditional ways of international trade, where products are imported in bulk through container shipments, cleared through customs, and distributed through the importer or retailers.

B2C, on the other hand, is done through an entirely new process chain, where the seller sends the product directly to the buyer via express delivery or postal parcels, and the transaction is facilitated through an entire ecosystem that includes e-commerce platforms, e-payment providers, and delivery services. This new model presents challenges for regulators, particularly customs authorities, in handling the growing number of high-frequency, low-value items traded across borders. Thus, most policy discussions are related to the B2C operation, which is the focus of this survey.

Until recently, e-commerce has been mostly domestic, but it is becoming more and more international. In 2016, an estimated 12% of the global goods trade was conducted via international e-commerce.[3] Cross-border online retail is predicted to grow at twice the rate of domestic e-commerce until 2020.[4] Rapid growth of cross-border e-commerce opens new opportunities for companies from both developed and developing countries to expand into global markets.

The digital divide between developed and developing countries has been a major concern for policymakers, and it is true that there is a significant gap in terms of engagement in e-commerce. Nevertheless, projections show that developing countries will catch up quickly, especially with regards to infrastructure, which will provide opportunities for e-commerce growth in their countries.

The GSMA Association, representing the interests of mobile operators worldwide, estimates that by 2020, there will be more than 700 million smartphone connections in Africa, twice as many as the projected number in North America and similar to that in Europe.[5] In fact, some players from developing countries are already well established in the global e-commerce market, such as Alibaba in China, MercadoLibre in Latin America, Flipkart and Snapdeal in India, and Jumia in Africa. Mobile payment has grown at a faster pace in Africa than in developed countries. All of this points to the great potential that developing countries have in terms of benefiting from e-commerce.

The rapid growth of e-commerce and its development implications has reignited policy discussions that aim at creating an enabling environment for the growth of e-commerce, and for it to contribute to developmental goals. E-commerce is gaining prominence in many international fora, notably at the World Trade Organization (WTO). There has been an increasing number of submissions from WTO Members on e-commerce, and various discussions have been organized around this issue.

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[2] UNCTAD (2017).

[3] McKinsey (2016)

[4] DHL (2017).

[5] The Guardian (2016)

ITC's e-commerce competitiveness survey

Against this backdrop, ITC deployed a survey in 2017 to identify the challenges that enterprises face when doing e-commerce, and in particular, cross-border e-commerce. The survey aims to help bridge the gap between policy discussions and concrete challenges that e-commerce operators face on a daily basis.

The survey was distributed from February to August 2017 through ITC's network of 282 trade promotion organizations (TPOs) and trade and investment support institutions (TISIs) in 182 countries, and attracted 2,262 respondents from 111 countries, including least developed countries (LDCs). The survey was conducted online and all respondents are anonymous.

The majority of respondents were MSMEs already engaged in e-commerce activities, with a good balance between developed and developing countries. In the survey analysis, particular attention was given to the MSMEs, LDCs and women-owned or led companies that, in many cases, face the greater barriers to entry in e-commerce.

Survey questions covered both trade in goods and trade in services through e-commerce. The majority of the respondents were companies selling products or services though e-commerce, but also included some who identified themselves as e-commerce platforms or providing support services to e-commerce activities such as logistics, delivery or customs clearance services.

This survey does not address all facets of e-commerce activities but rather offers new insights into what MSMEs consider as the main e-commerce challenges they face. This report presents survey results and highlights the main findings.

Chapter 1 focuses on the issues that cut across all phases of e-commerce activities, and Chapter 2 examines in more detail the challenges identified by respondents in each of the four phases of setting up cross-border e-commerce transactions, namely establishing online business; international e-payment; cross-border delivery; and aftersales transactions.

CHAPTER 1 CROSS-CUTTING SURVEY FINDINGS

E-commerce is primarily domestic but becoming more international

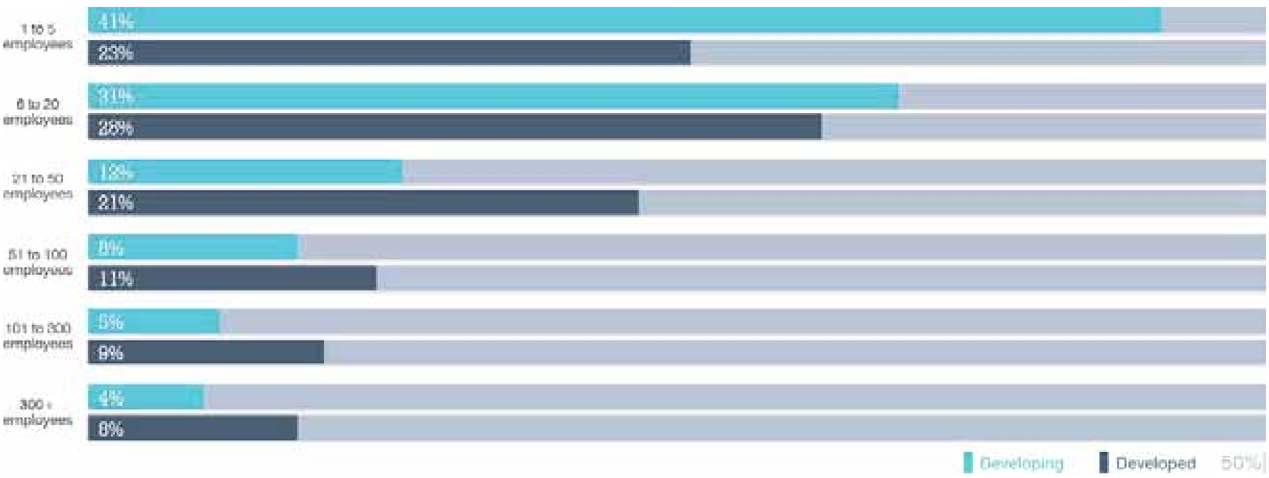
Overall, only 14% of respondents reported that their main operations are in a foreign country, which indicates that companies focus primarily on domestic market. The majority of companies that engage in cross-border e-commerce do domestic e-commerce at the same time. Among those that are engaged in cross-border e-commerce, only 30% indicated that their main source of revenue comes from international sales. [6]

For those companies engaged in cross-border e-commerce, 62% of them reported they are already engaged in international trade through operations offline. This indicates that e-commerce offers a complementary channel for companies in international trade to reach more markets.

Untapped e-commerce potential in developing countries

Overall, respondents from developing countries were mostly micro and small-sized firms, whereas respondents from developed countries were more evenly distributed between micro, small and medium-sized firms (see Figure 1).[7] The share of micro-sized firms (1 to 5 employees) in developing countries is almost two times as large as the share of micro-sized firms in developed countries. The share of very large firms (over 300 employees) in developing countries is half of that in developed countries.

Figure 1 Company size distribution in developed and developing countries



In terms of market diversification through cross-border e-commerce, companies from developing countries appear to be less competitive. Respondents from developed countries export via e-commerce on average to twice as many countries as those from developing countries, with an average of 15 and seven destination markets respectively. African firms sell through cross-border e-commerce to an average of five markets (Figure 2).

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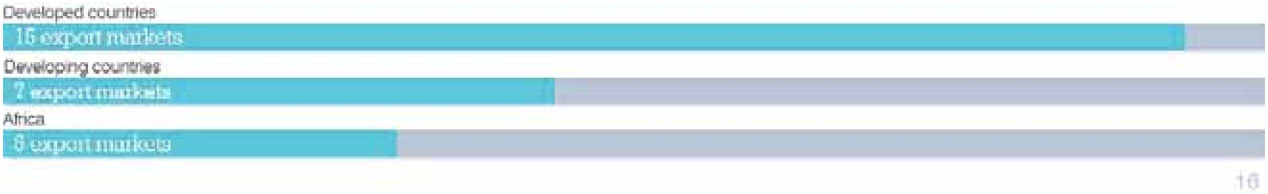
[6] 'Main operation' is defined as the cross-border segment of their business constituting 50% or more of their total e-commerce revenue.

[7] Firm size groupings are: 1-5 employees (micro), 6-20 employees (small), 21-100 employees (medium), 101-300 employees (large), 301 or more employees (very large).

Figure 2 Market diversification through e-commerce



However, there seems to be a higher level of interest for e-commerce among developing country respondents. The survey gathered responses from companies that are not yet engaged in e-commerce, and half of these firms responded that they have considered doing e-commerce. This share is higher in developing countries (65%) and Africa (68%). Women-owned or led companies on average are 1.5 times more likely to have considered doing e-commerce than men-owned or led firms. This underscores the urgency for an enabling environment and business ecosystem for e-commerce, as well as the need for education on the opportunities of e-commerce so that firms can realize their business plans.

For the companies that have their main operations in a foreign country, these overseas operations are usually located in a country of the same level of development as the company's home country. About 40% of them are companies from a developing country that operate in another developing country; 55% are companies from a developed country that operate in another developed country.

E-commerce exports from Europe and the Americas appear to be more concentrated within the region while e-commerce exports from Asia and Africa seem to be more cross regional. Close to 80% of e-commerce exports from Europe, and 51% of e-commerce export from the Americas, remain within the region. In the case of Asia, 28% of exports through cross-border e-commerce remain in the region and for Africa, 40% remain in the region.

E-commerce opens doors for micro firms to trade internationally

Cross-border e-commerce is particularly relevant for micro and small-sized enterprises – just over 80% of respondents that engage solely in cross-border e-commerce are micro and small in size. This indicates that for those without prior experience or entry to international markets, e-commerce opens new opportunities for micro and small-sized firms, to export through online channels.

'We would like to see more initiatives that support MSMEs so we can build our own websites. We want more training, workshops and opportunities to participate at international trade fairs.'

Survey repondent

On average, companies from developing countries reported a higher share of cross-border e-commerce transactions in their company's total e-commerce turnover (40% in developing countries, versus 31% in developed, and 37% for Africa). This is another indication that cross-border e-commerce offers opportunities for companies from developing countries, whereas companies from developed countries appear to be more focused on domestic markets.

In LDCs, the average share of B2C transaction is twice as high as B2B. Considering that, in general, B2C has a lower entry threshold than B2B, this also indicates that companies from LDCs are taking advantage of this new channel of international trade.

From a development perspective, B2B and B2C models have distinctive implications. B2B typically happens within, and in relation to, value chains, and impacted by adherence to related technical and other requirements and associated governance structures. Enterprises involved in B2B transactions are more likely to be mid to larger in size.

Those that responded to ITC's survey are primarily small to micro-sized enterprises involved with B2C transactions. If governments want to achieve broad socio-economic impact and associated poverty alleviation from e-commerce then a focus on B2C is relevant, as this will incorporate smaller and micro-sized enterprises and a high proportion of women-owned businesses. Supportive policies could also include entrepreneurship and capacity building for micro and small-sized firms.

The potential of e-commerce for women-owned enterprises

Being online levels the playing field for women-owned firms: overall, only a quarter of firms doing traditional offline trade identified themselves as women-owned, whereas for those trading exclusively through e-commerce, women-owned firms represent half of the total. This shows that the share of women-owned firms doubles when moving from traditional offline trade to cross-border e-commerce. For Africa, the ratio of women to men owned firms for offline trade is 1:1, whereas for those trading exclusively through e-commerce, three out of four firms are women owned. [8] E-commerce opens up new business opportunities, especially for women, even though they might face challenges in scaling up their business. On average, women-owned firms reported exporting to nine markets while men-owned or led firms export to an average of 15 markets.

Barriers to setting up e-commerce in developing countries

Survey results indicate that companies in developing countries face greater challenges earlier on in the establishment phase. About 37% of respondents from LDCs and 34% from developing countries report being held back from e-commerce by a lack of technical skills and business knowledge, whereas that figure is only 26% among respondents from developed countries.

By comparison, companies in developed countries report experiencing more challenges in the operational phase. Roughly 30% of respondents from developed countries reported that online visibility was one of their major bottlenecks in e-commerce, while only 24% of respondents from developing countries, and 19% in LDCs, reported this as one of their main challenges. Finding warehouses and delivery services in destination markets, and compliance with consumer protection regulations were also among the more acute concerns for companies from developed countries.

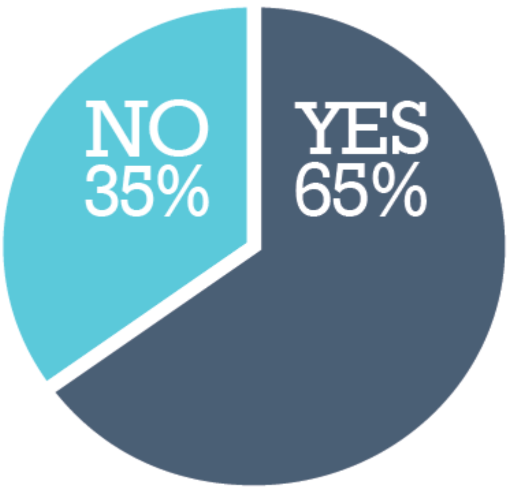
Enduring need for commercial presence

Contrary to the perception that cross-border e-commerce eliminates the need for commercial presence in export markets, the majority of respondents consider that it is in their commercial interest to have establishments in export markets whenever possible (Figure 3).

Respondents said that commercial presence in the export market facilitates operations (creating more predictability in delivery time and shipping costs), and allows a higher level of responsiveness and thus competitiveness to serve clients. Commercial presence allows companies to overcome restrictive customs procedures, and facilitates compliance with export standards.

It strengthens the relationship with clients, which is especially important for B2B operations, and it facilitates the provision of aftersales services, while promoting brand recognition and trust among potential clients. In a limited number of instances, respondents indicated that they are

Figure 3 Need for a commercial presence overseas



[8] The higher ratio of women to men owned firms in Africa is probably partly due to data collection through ITC's SheTrades initiative which aims at connecting women entrepreneurs to global market.

required by law to have a commercial presence for their cross-border operations, mostly for taxation purposes.

For establishment of commercial presence in the export market, reported challenges include burdensome registration requirements and procedures, the requirement of a local partner, and taxation-related regulations. In addition to these bottlenecks, respondents from Africa also highlighted foreign ownership related restrictions as well as foreign exchange related regulations as major challenges.

Market concentration may disadvantage smaller firms

E-commerce is often characterized as having “network effect”, that is to say the larger the user group of a platform or a service, the higher the value of using that platform or service to each user. This is why many Internet companies in the start-up stage rely on a rapid expansion model with subsidized fees to attract users. This business model raises concerns from MSMEs. Some respondents worry that once the dominant position in the market is solidified or the funding for subsidized access is exhausted, platforms may impose increased fees which would have a negative impact on their operations.

MSMEs have expressed concern over concentration in the markets for e-commerce platforms, e-payment solutions and cross-border delivery services. Some respondents highlighted the limited choice and high cost of e-payment and delivery services providers. Market concentration is especially a concern for MSMEs, as they have limited capacity and resources, and often rely on external suppliers for critical services for their cross-border operations.

Misconceptions may lead to missed opportunities

Figure 4 Bottlenecks preventing engagement in e-commerce

Note: The percentages represent the respective weight in the overall set of challenges.

While the majority of survey respondents are already engaged in e-commerce, there is also a considerable share of respondents that are not participating in e-commerce, neither domestically nor cross-border.

Analysing answers from these companies and comparing them with the answers from the firms already doing e-commerce, several misconceptions came to light that might prevent some MSMEs from engaging in e-commerce.

In many instances, for example, the respondents stated that they are not engaged in e-commerce because the profiles of their company and its products or services are not suitable for e-commerce (Figure 4).

Lack of technical skills and business knowledge are also identified as major challenges. Overall, it appears there are four main misconceptions about e-commerce and how to engage in it, as summarized below.

Misconception 1: E-commerce is only for goods, not services

Some companies offering services, such as consulting and logistics, stated that they are not engaged in e-commerce. They stressed the importance of maintaining a close relationship with clients when it comes to services. It appears that there could be an underlying assumption that e-commerce is only suitable for trade in goods.

In addition, those actually engaged in cross-border e-commerce in services seem not to be aware of that. This is due to a lack of understanding of how international trade in services can take place through different modes of supply. One of the firms surveyed reported to be doing domestic e-commerce exclusively as they have a platform dedicated to tourism. However, the firm also reports that the platform attracts foreign tourists who make bookings on the platform.

Misconception 2: E-commerce is only for B2C, not for B2B

Some firms doing B2B operations assume that e-commerce is a strict B2C model, therefore they did not engage in e-commerce. Those B2B companies who sell their products to distributors were concerned about stepping over their clients if engaging in e-commerce.

However, e-commerce could also be used to explore B2B opportunities or even B2C opportunities in markets where their clients (i.e. the distributors) are not present. B2C market diversification options through e-commerce will depend on how captive the distribution network is and the allocation of intellectual property rights, among others, but it could in fact be an option for producers to explore.

Misconception 3: E-commerce entails mass production

Some companies surveyed associated e-commerce with mass production and sales worldwide. They claim not to have the capacity and resources to enter the e-commerce market, making specific reference to insufficient working capital. They also expressed concerns over losing brand value or exclusivity, as mass production can compromise the image of the product.

On the contrary, e-commerce has actually proved to be a good distribution channel to market unique products internationally. For example, the e-commerce platform IvoryMall.com, established with ITC's support, convenes fashion designers that sell their exclusive products internationally under the slogan 'Crafted in Côte d'Ivoire'.

Misconception 4: There are more counterfeits online

Some companies cited intellectual property protection as a challenge for their e-commerce operations, or to explain their hesitation to move their business online. This appears to be a particular concern for MSMEs selling handicrafts and garments with original designs. Their products often attract competition from competitors that offer copies at lower prices.

While it is true that putting digital images online makes it easier to copy a product, it is also arguable that the same challenge may be encountered with offline operations. In fact, e-commerce may simply make it easier to be aware of the counterfeits (for both the seller of the original and the customer) as offerings are easily searchable online.

Some companies have worked out their own ways of combating counterfeits. One MSME selling luxury fashion online, for example, established its own knock offs. The enterprise uses these alternative brands to sell their own goods at a lower price to a non-luxury customer group, however, with a short delay after putting their original brand products online. This way, they try to undercut the sales of other unauthorized brands that may copy their products.

CHAPTER 2 CHALLENGES IN THE E-COMMERCE PROCESS CHAIN

This chapter presents a detailed analysis of the challenges identified by survey respondents along the four phases of cross-border e-commerce transactions: 1) establishing online business; 2) international e-payment; 3) cross-border delivery; and 4) aftersales.

ITC's SME Competitiveness Outlook provides a framework for assessing MSME competitiveness.[9] The framework distinguishes three layers of actions to address competitiveness issues, namely firm-level capabilities, the immediate business ecosystem, and the national environment. The matrix in Figure 5 illustrates the analytical framework used for this survey report.

Figure 5 Bottlenecks along the e-commerce process chain

PHASE / LAYER	ESTABLISHING ONLINE BUSINESS	INTERNATIONAL E-PAYMENT	CROSS-BORDER DELIVERY	AFTERSALES
Firm-level capabilities	- Knowledge - Skills - Online visibility			
Immediate business ecosystem		- Linking e-payment providers and banks - Availability of e-payment providers	- Costly postal and courier delivery - Warehouses and delivery at destination	
National environment				- Application of duties on returned products - Consumer rights and enforcement

It appears that in each of the four phases of the e-commerce process chain, different layers matter more at different phases. When establishing an online business, firm-level capabilities are the most important level to overcome challenges, with major bottlenecks being associated with a lack of knowledge and skills, as well as with a lack of online visibility.

With regards to international e-payment and cross-border delivery, the business ecosystem seems to be the appropriate layer at which to address challenges. MSMEs' payment concerns are mainly related to operational issues, such as the availability of e-payment solutions, as well as the link between e-payment providers and banks.

When it comes to cross-border delivery, primary concerns are the high cost of delivery services, finding warehouses and delivery at the destination market, as well as the difficulty to comply with customs procedures. Finally, bottlenecks for aftersales activities appear mainly at the national environment layer, including consumer protection and application of customs duties on returned products.

The following sections provide detailed analysis of the survey findings in each of the four phases.

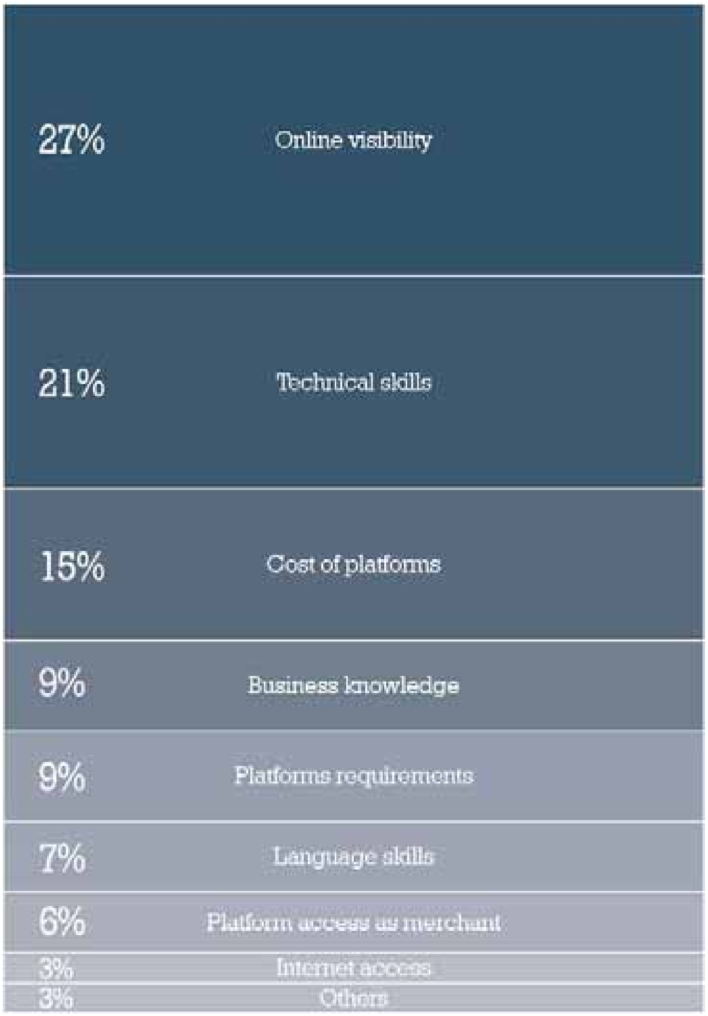
[9] ITC (2015). SME Competitiveness Outlook. Available from http://www.intracen.org/publication/SME-Competitiveness-Outlook-2015/

Establishing an online business

The first step for companies to engage in e-commerce is to establish an online presence, which could be through a virtual shop or an e-commerce platform, or adding an e-commerce module on a company's website. A set of questions in the survey were focused on identifying what MSMEs find to be the most challenging issues when they establish an online business (see Figure 6). It appears that the most frequently reported challenges are a lack of online visibility from potential customers from other countries, (accounting for 27% in overall reported challenges), a lack of technical skills (21%), and the high cost of membership fees in e-commerce platforms (15%). Below are the main takeaway messages for the survey findings related to establishing online business.

Online visibility: A greater challenge than Internet access

Figure 6 Bottlenecks in establishing an online business



Note: The percentages represent the respective weight in the overall set of challenges.

Contrary to the perception that Internet infrastructure is a major bottleneck for developing countries and LDCs, only a small number of respondents (3%) reported that lack of reliable Internet access is a challenge to establish their online business, and there is no visible gap for developing and African country respondents.

This could signal that the Internet infrastructure in developing countries has been improving in recent years, but it might also be due to the way the survey was conducted. As it was an open online survey, responses were mainly from those who already have Internet access.

The far more prominent challenge highlighted by the majority of respondents was the lack of visibility from potential customers (27% of overall challenges). Online shops do not automatically attract customers.

Even with a fully functional online shop, companies still need to invest substantially in online and offline marketing to draw business to their online operations.

This finding is further supported by many companies' supplementary comments that indicated that even when they had already established an online shop, it generated little, or in many cases zero, transactions.

To improve online visibility, some respondents emphasized the need to master online marketing tools and gain better knowledge about potential markets and platforms.

For certain products such as agricultural products and handicrafts, specialized online distribution channels might be better than general e-commerce platforms.

Investing in improving online visibility often implies substantial financial commitment. However, MSMEs find it challenging to commit already limited financial resources into online marketing without knowing the return and success rate of such investments.

Access to finance is also a challenge for MSMEs who want to expand their online business, as highlighted by a cooperative of 45 farmers who suggested that there should be financial support for online promotion, such as marketing through AdWords.

Technical skills and business knowledge: Key challenges in establishing online businesses

Technical skills required to set up online operations may include coding, editing images, providing accurate product description and navigating e-commerce platform memberships. Business knowledge refers to the ability to analyze the business success of e-commerce operations, including understanding market demand and defining growth strategies.

Respondents ranked lack of technical skills and business knowledge second and fourth in all reported challenges, accounting for 21% and 9% respectively.

> *'As a small company selling food, our main difficulty with e-commerce is that express couriers normally do not offer refrigerated shipping. The use of dry-ice is often insufficient to keep food at the right temperature, especially in the summer.'*
>
> *Survey respondent*

In addition to coding and image processing skills, some respondents also said they lacked other technical skills specific to e-commerce, such as maintaining and managing a reliable stock system, and using international article numbers for their products, which are required by some e-commerce platforms.

For business knowledge, the common challenges among respondents were a lack of market information and understanding of successful business models for e-commerce. While the majority see e-commerce as a channel for distribution, some companies also use it as a way of gathering market information.

For instance, some firms reported they open accounts on online platforms mainly for the sake of collecting price information in different markets, and testing demand for their products in foreign markets. Some respondents also mentioned they do not know how to trade internationally, often lacking familiarity with customs procedures, documents and requirements.

Developing country firms face more set up challenges

Whereas technical skills and business knowledge are related to the establishment phase, when companies attempt to create their online business, lack of online visibility is a major obstacle in the operational phase, when the shop is online and operational. In the survey findings, there is a clear distinction between developed and developing countries in terms of these two phases.

Companies from developing countries reported more challenges in the establishment phase. Technical skills and business knowledge combined represented 34% of total challenges for companies from developing countries, versus 26% in developed countries. Language skills were also mentioned as hampering firms' ability to establish an online business for cross-border e-commerce (7%).

Companies from developed countries reported more challenges in the operational phase. Online visibility accounted for 24% of total challenges for developing country companies, versus 30% for companies from developed countries. This does not necessarily mean that developing country MSMEs face less challenges in the operational phase, but rather only reflects that they encounter challenges earlier than companies from developed countries.

Online visibility in the operational phase is also a knowledge and skill issue. However, compared with the knowledge and skills required for setting up a virtual business, improving online visibility involves much more sophisticated technical skills, such as search engine optimization, and business knowledge to operate in different markets and manage online marketing and promotions.

E-commerce platform access and fees: Greater issues for developing country firms

The cost of membership fees in cross-border e-commerce platforms ranked third among all major challenges (15%), and this was a more prominent challenge for companies in African countries (19%). In addition to, or in place of, membership fees, some e-commerce platforms charge a relatively high commission on the sales conducted through the platforms. Some e-commerce platforms, for example, may charge up to 40% commission on sales. Large international platforms usually charge between 7% and 15% commission.[10] These rates are set depending on the estimated or perceived operational costs and risks, which means that rates are usually higher in developing countries and LDCs.

Access to e-commerce platforms is also a more prominent issue for companies from developing countries (9%; 10% for African countries) than developed countries (3%).

Respondents highlighted several reasons for being denied access to e-commerce platforms, such as: the e-commerce platform does not allow registration by companies from their country; companies were unable to provide proof of formal company registration, trading history, identity of directors or managers of the firm; companies did not have access to an online payment mechanism. Companies from Africa find it more challenging to meet documentation requirements, particularly trading history, and respondents from Africa reported more instances where their shops were closed down following repeated customer complaints.

As identified in previous ITC and UNCTAD studies, not all e-commerce platforms offer their services in all countries.[11,12,13] For instance, Amazon allows registration as seller from 103 countries. Among the countries not allowed to register, many are LDCs.[14] To register as a seller on Amazon, companies or individuals need to be a resident of one of the 103 countries allowed, have a local phone number and have an internationally chargeable credit card. To obtain an internationally chargeable credit card could already be a challenge for some micro-sized firms operating in LDCs.

Interoperability and transferability of data between e-commerce platforms are also reported as challenges for some MSMEs. Companies often cannot freely transfer their data from one e-commerce platform to another, and need to manually recreate their online shops if they want to operate on a new platform. Apart from the additional cost of manually creating a new shop, the greatest challenge is non-transferability of transaction records.

Transaction records are a verifiable trace of a company's performance and trustworthiness, which is vitally important for online businesses to attract new consumers or partners. E-commerce platforms typically claim ownership over these transaction records and other transaction-related data, which may imply a high platform-switching cost for MSMEs.

Policy Implications

The main challenges when establishing an online business (lack of knowledge and visibility from potential customers, as well as a lack of understanding of e-commerce) lie at the firm level. Actions could be conducted both nationally and internationally to strengthen firms' capacity and to improve their understanding of e-commerce.

'It would be great to have an online single contact point to receive consultations on how to operate an online business in the export market.'

Survey repondent

[10] Amazon services seller central (n.d.)

[11] ITC (2016). Bringing SMEs onto the E-commerce Highway

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

[13] UNCTAD (2015). Information Economy Report 2015: Unlocking the Potential of E-commerce for Developing Countries

[14] Amazon (n.d.)

At the national level, capacity-building efforts could be tailored through different TISIs. There are national associations exclusively dedicated to e-commerce such as the Argentinean Chamber of Electronic Commerce.[15] Formed in 1998 as a non-profit organization, this chamber gathers more than 1,000 enterprises from different sectors of the industry, and is the main national institution that promotes new technologies and business models. They conduct an annual study on e-commerce and organize the E-Commerce Day, Cyber Monday and Hot Sale in Argentina. Such activities contribute to increasing firms' knowledge while offering visibility from potential clients at least at the domestic level.

Similar initiatives take place at the regional level. E-commerce Europe, for instance, is an association founded by national e-commerce associations and represents more than 25,000 companies selling online to consumers in Europe.[16] They offer an online certification for companies to obtain a European Trustmark label in order to increase consumers' trust when purchasing across European countries.

At the global level, international organizations and donors can play a role in helping developing countries and LDCs improve their e-commerce readiness by providing assistance, and encouraging information sharing and cooperation.[17] Aid for Trade (see Box 1) and technical assistance are important to ensure a more inclusive participation in e-commerce, both in terms of countries and types of firms involved.[18]

Box 1 Examples of International capacity-building initiatives

In order to level the playing field for MSMEs to establish an online business as well as overcome other obstacles along the e-commerce process chain, the WTO-led Aid for Trade initiative seeks to mobilize resources to address trade-related constraints identified by developing countries and LDCs.

Efforts have focused on both supply-side (e.g. broadband availability) and demand-side (i.e. regulatory environment and awareness building). For LDCs, the Enhanced Integrated Framework (EIF) is helping to bridge the gap between demand and supply through Aid for Trade, and to mainstream trade (including through e-commerce) into national development plans. EIF provides a procedure for prioritising key needs for trade-related assistance and capacity building, including trade infrastructure, supply and productive capacity.

UNCTAD's eTrade for All initiative aims to address MSME challenges in e-commerce, including through enhancing private-public dialogues while maximizing synergies among partners. The initiative was launched in July 2016 at the UNCTAD's 14th Ministerial Conference in Nairobi.

ITC focuses on building the capacity and competitiveness of MSMEs, particularly in developing countries, and connects them to international markets. ITC works at the firm level, intervening at different stages of the e-commerce process chain through the E-Solutions Programme. This programme helps MSMEs acquire key capabilities that are not readily accessible, affordable or understood by smaller enterprises in developing countries in order to fully tap onto the potential of e-commerce.

Regulatory environment is also key for sound development of the e-commerce sector. The B20 policy recommendation in 2017, for example, calls for G20 members to, 'align their e-commerce-related policies with existing international principles and guidelines.'[19]

Other examples of international initiatives that provide helpful frameworks to ensure compatible national regulations include: the United Nations Commission on International Trade Law

'If I create a food delivery app, then I should not be required to have a food licence, but the restaurants operating on my app should have one.'

Survey respondent

[15] Cámara Argentina de Comercio Electrónico (n.d.)

[16] E-commerce Europe (n.d.)

[17] WTO communication from Singapore on behalf of ASEAN Members on 29 May 2017

[18] WTO communication from EU and other countries on 1 August 2016

[19] The Business 20 (B20) is the official G20 dialogue with the global business community. The B20 strives to deliver concrete, actionable recommendations to the G20.

(UNCITRAL) Model Laws on Electronic Signatures and Electronic Commerce; the United Nations Convention on the Use of Electronic Communications in International Contracts; OECD Guidelines for Consumer Protection in the Context of Electronic Commerce; and Guidelines created by regional organizations such as the Asia-Pacific Economic Cooperation forum.

Modern trade agreements also increasingly focus on e-commerce. For example, the Trans-Pacific Partnership (TPP) has a stand-alone chapter on e-commerce, which contains provisions that aims to ensure companies and consumers can access and move data freely (subject to safeguards), prohibits the imposition of customs duties on digital products, and requires members to respect consumer protection laws related to fraudulent and deceptive commercial activities online.

WTO's Work Programme on Electronic Commerce has been examining the trade-related aspects of e-commerce since 1998. Members have agreed at each WTO Ministerial Conference to continue the practice of not imposing customs duties on electronic transmissions.

There has been a significant increase in the number of submissions related to e-commerce and discussions are geared toward enhancing the exchange of best practices and finding ways to address developmental challenges. On e-signature, for example, Argentina, Brazil and Paraguay shared their approach within MERCOSUR, addressing e-signature and advanced e-signature, its principles, mutual recognition, liability, and protection of personal data.[20]

Regarding access to online platforms, there are also policy initiatives that could be explored to allow better access for developing country MSMEs. In some instances, access to platforms is linked to the availability of e-payment solutions. In the case of Paypal, it was not possible to set up a merchant account in 120 countries in 2015, with this restriction going down to 20 countries when setting up a personal account to make purchases.[21]

For transparency purposes, international arrangements require e-payment solutions providers to know the identity of their clients. Countries that lack a system for verifying an individual or a company's identity may be excluded from international payment solutions, as e-payment providers cannot perform due diligence on the identity of individuals and businesses.[22] Improving information exchange among regulators could contribute to a better understanding of these requirements, and help to explore solutions.[23]

International e-payment

For international e-payment, the main challenges reported in the survey included a missing link between third-party e-payment service providers and local banks. This obstacle is more prominent in developing countries (26% of total reported challenges; 28% for African countries), than developed countries (16%).

'I have created my apps and shared them online, but I cannot offer paid app or in-app purchase. This is a great loss for me.'

Survey respondent

Only a small portion of respondents (8%) mention difficulties with e-payment security, such as signing up for an secure socket layer (SSL) certificate. In written comments, some respondents drew attention to the long time required for processing payments, or inability to make withdrawals from e-payment accounts or transfer to their local banks.

[20] MERCOSUR is Southern Common Market, a sub-regional bloc aiming to promote free trade and the fluid movement of goods, people, and currency. Its full members are Argentina, Brazil, Paraguay and Uruguay

[21] Liyanage, H. (2016)

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

[23] WTO communication from China and Pakistan on 16 November 2016

Figure 7 Bottlenecks with international payment

The limited availability of e-payment solutions was frequently reported as a bottleneck, with a visible gap between developed (14%) and developing countries (20%).

One respondent stated, 'It seems we would need an overseas financial account (credit card and bank) for conducting business using e-commerce platforms. I am not sure how a bank account based in my country could be involved in e-commerce.'

Foreign exchange controls were also mentioned frequently by respondents from both developed and developing countries (20%). Some reported on the high cost of exchanging currencies, and difficulties in processing wire transfers and accepting foreign credit cards.

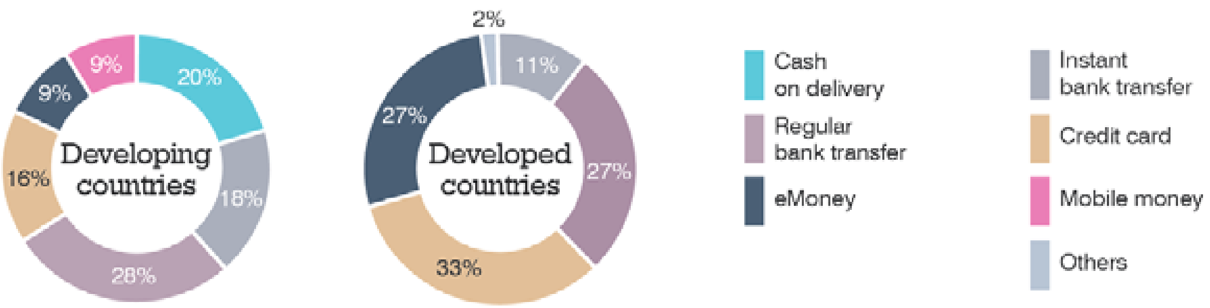
Overall, the majority of concerns in this phase are more related to the operability of online payment systems.

For e-commerce services exporters, companies report that international e-payment is the largest bottleneck in the process chain, compared with other phases, such as establishing online business and cross-border delivery.

Due to the nature of services supplied via the Internet, survey findings confirm that cross-border delivery seems to be less of an issue for trade in services than it is for trade in goods.

In terms of payment methods, there is a visible distinction between respondents from developed and developing countries. In developed countries, almost 90% of survey respondents rely on three main payment methods: credit cards (33%), e-money (27%) or regular bank transfers (27%). In developing countries, however, a more diverse mix of payment methods are used, including regular bank transfers (28%), cash on delivery (20%), instant bank transfers (18%), and credit cards (16%) (Figure 8).

Figure 8 Payment methods



While traditional bank transfers are used by respondents from both developing and developed economies at almost the same rate, instant bank transfers are applied more frequently in developing countries (18% in developing and 11% in developed). This could be due to the lack of alternative e-payment solutions that allow immediate money transfers.

Below are the main takeaway messages for the survey findings related to international e-payment.

Cash on delivery still prominent in developing countries

'Only 2% of my clients can pay online. I need to arrange cash-on-delivery or cash-on-receive service for my clients.'

Survey respondent

Around 20% of survey respondents in developing countries use cash on delivery as a method of payment for their e-commerce transactions, compared to the negligible use of cash payments in developed economies. Survey results also show that cash on delivery is more important for women than for men (13% vs. 9%).

Overall, there are different reasons for strong reliance on cash on delivery in developing countries. Lack of access to e-payment solutions is the major factor behind the prevailing use of cash payments in developing countries. In addition, a lack of trust in e-payments may also be an underlying reason for low uptake from both consumers and companies. Survey respondents for instance reported on fraud with credit cards, and cash payment is often perceived to be as a safe and universally accepted payment method.

From an e-commerce perspective, reliance on cash results in higher transaction costs, as cash on delivery can only take place if the buyer is present to both receive and pay for the product. Statistics covering the Indian e-commerce platform Flipkart show that 1.2 delivery attempts were required per order in 2015, when 80% of all orders were cash on delivery.[24] This implies an increase of 24% in labour cost in last-mile delivery, i.e. from warehouse to the consumers.[25]

Cash on delivery significantly reduces the possibility to conduct cross-border transactions, as it might be difficult to find delivery services in the destination market that can collect cash payment on behalf of the seller. Also, lack of payment records in cash on delivery transactions diminishes the trustworthiness of transaction records and may make it easier to generate fake transaction records.

Electronic and mobile payment solutions on the rise

Though cash on delivery is still prominently used in developing countries, new payment methods are on the rise, including eMoney (such as PayPal), and mobile money.

In developing countries in particular, mobile money has enjoyed an increase in uptake (9%), as opposed to a negligible number of respondents in developed countries. Particularly in Africa, 22% of respondents use mobile money to complete their cross-border e-commerce transactions.

A prominent example of this is M-Pesa, through which Kenya managed to leapfrog the development of its payment industry and achieve increased financial inclusion. More than 40% of Kenya's GDP flows were run through M-Pesa in 2013.[26]

The increased uptake of mobile money and eMoney may be due to the financial needs that e-commerce has created (such as making more frequent small value payments) and that often cannot be effectively fulfilled by traditional payment systems. E-payment has certain advantages over cash, including the ability to pay instantly, chargeback protection and traceability.

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[24] BI Intelligence (2017)

[25] Ibid.

[26] Forbes (2015)

However, there are still some challenges in using these new payment solutions. Lack of awareness and trust from customers is a major bottleneck. In fact, even though e-commerce platforms may offer e-payment options, if the majority of customers prefer to use traditional cash on delivery, the sellers may be obliged to arrange for those options.

One survey respondent noted, ‘Online payment is one of the key features of standard e-commerce platforms. However, my clients do not have online payment cards. Only 2% of my clients can pay online. I need to arrange "cash on delivery" or "cash on receive" services.’ Enhancing legal and regulatory frameworks to prevent fraudulent practices may help further development of e-payment in e-commerce.

Policy implications

Challenges in online payments find their roots on the demand and supply side, as well as in regulatory barriers.[27] The high reliance on cash on delivery in developing countries is the result of a mismatch between supply and demand of e-payment solutions. Providers might not offer their services in certain markets since consumers are reluctant to use such services or do not have the need for those from the outset.[28] Consumers might be reluctant because they are not familiar with, or do not have trust in, these new services, making this a chicken and egg problem.

Thus, both demand and supply-side challenges need to be addressed for increased adoption of e-payment solutions. Regulations can work towards solving such barriers, but could also constitute barriers in their own right. For instance, no digital consumer protection would reinforce the demand-side barrier of lack of trust in e-payment solutions, whereas a solid protection framework would act in the opposite way.

E-payment is a dynamic sector and financial regulations need to be constantly updated to reflect market developments. Interoperability issues, such as the missing link between third-party e-payment service providers and local banks, could be addressed through establishing enabling regulatory frameworks, with a functional approach to regulation. Such approach would allow banks and non-bank providers to compete and establish partnerships to offer innovative services, as advocated by the Bank of International Settlements (BIS) and the Financial Stability Board.[29]

Interoperability results in further competition and can generate efficiency gains for both service providers and customers. In fact, many developing countries have already taken measures to address the interoperability challenge. Mobile money services in Bolivia, Peru and Mexico, for instance, are already linked to the banking system, while account-to-account interoperability for mobile money services is ongoing.[30]

In the international context, the Bank for International Settlements (BIS) and the Basel Committee has set out best practices and guidance to the international banking community. For example, adoption of the BIS Core Principles for Payments and Financial Markets Infrastructure can be useful for developing countries that are in the process of improving and/or building payment systems to meet the demands for safe and efficient transaction and management of domestic and international payments.

To facilitate the development of appropriate supervisory approaches to the management of risks in electronic banking and electronic money activities, the Basel Committee developed principles to be used as tools by national supervisors and implemented with adaptations to the market. These tools could be useful for developing risk management systems that are conducive to the growth of the e-payment market.

The increasing use of innovative payment systems in developing countries, as shown through the survey findings, reflect the encouraging steps towards financial inclusion. Mobile network operators, e-payment

[27] WTO (2016). S/FIN/W/88/Add.1

[28] This could be due to cultural factors, overall low income availability, high fees of e-payment services and others, usage of a family member’s account, among others.

[29] Marchetti, J. (2017)

[30] Ibid, p.15.

providers, micro-finance institutions, card companies, postal networks and financial cooperatives may all contribute to reaching under-served populations.[31]

Innovations in payment systems may pose new challenges to regulators, as new technologies and business models may offer ways of potentially circumventing regulations that protect legitimate public objectives, such as fighting money laundering or terrorist financing. The Basel Committee also recognizes that e-banking and e-money activities carry risks that must be balanced against the benefits.

To mitigate risks, inter-governmental bodies such as the Financial Action Task Force that develops and promotes policies to protect the global financial system, have issued guidelines for a risk-based approach for prepaid cards, mobile payments and Internet-based payment servicesin order to prevent such circumvention.[32]

In addition to regulations, for some developing countries and LDCs, addressing the challenges of infrastructure and financial literacy may also be important. For a functional e-payment system, providers need to be able to recognize the identity of their users, comply with standards and offer uninterrupted and reliable services. Adequate infrastructure for e-payment, in terms of telecommunication and banking networks, electricity, and ID systems, needs to be in place for a functional e-payment ecosystem. Supporting financial literacy may also be important to increase awareness and knowledge, and encourage greater uptake of e-payment.

Studies have shown that e-payment may contribute significantly to financial inclusion. Within the different payment alternatives, mobile money is gaining traction in developing countries, significantly contributing to financial inclusion, with 37% of female users and 47% of users living in rural areas globally.[33] Moreover, 19 markets in Sub-Saharan Africa already have more mobile money accounts than bank accounts.[34] The adoption of mobile money is rapidly increasing with 134 million 90-day active accounts, close to the 173 million active PayPal users worldwide.[35]

The business community has made the issue of financial inclusion a high priority. B20 policy recommendations in 2017, for example, call for the G20 to, “implement the G20 High Level Principles for Digital Financial Inclusion, to ensure that MSME’s specific needs are sufficiently addressed, and to boost MSME’s awareness of, and ability to engage in, digital finance, including electronic invoicing and settlement, as well as digital trade and supply-chain finance.”

E-payment is a vital component for e-commerce, and it may imply cross-border supply of financial services. In the WTO context, the General Agreement on Trade in Services offers a framework with a functional approach to discuss issues related to banking and other financial services including electronic payment services. Countries may choose to commit to open their payment market to international operators for greater competition and efficiency, depending on the circumstances and strategies best fitting their development objectives.

Nevertheless, before broadening competition, policy makers need to set out the necessary regulatory framework supporting payment operations.[36] Preconditions for new payment service providers to enter the market should include compliance with different regulatory requirements, including financial regulation (e.g. foreign exchange controls, multi-currency limitation, anti-money-laundering regulations, banking licenses), as well as technical regulation (e.g. IT requirements, data localization).

[31] World Bank Group (2016)

[32] Financial Action Task Force (2013)

[33] GSMA (2015)

[34] Ibid, p.31

[35] Ibid, p.31

[36] WTO communication by EU and co-sponsors on 14 July 2016

Cross-border delivery

The survey examined challenges for cross-border delivery of both goods and services. Survey respondents said their main challenges were costly postal and courier delivery services (27%), and problems finding warehouses abroad (18%) (Figure 9).

Bottlenecks related to customs procedures (total of 27%) were also reported as a major challenge, which includes cumbersome customs procedures and rules of the application of duties and taxes (11%), difficulty to prepare required documentation (7%), and difficulty to anticipate the amount of duties and taxes payable (9%).

'Charges for international deliveries are sometimes more expensive than the value of the product itself which discourages international clients from purchasing our products.'

Survey respondent

For cross-border delivery of services (Figure 10), respondents said their major challenges included: difficulty to adjust services to technical standards and requirements in the destination market, data localization requirements, difficulty to prepare required documentation (e.g. contracts, obtain licenses in the destination market) and lack of language skills.

Figure 9 Bottlenecks in cross-border delivery of goods

Note: The percentages represent the respective weight in the overall set of challenges.

Figure 10 Bottlenecks in cross-border delivery of services

Note: The percentages represent the respective weight in the overall set of challenges.

Below are the main takeaway messages for the survey findings related to cross-border delivery.

Logistic costs are higher in developing countries

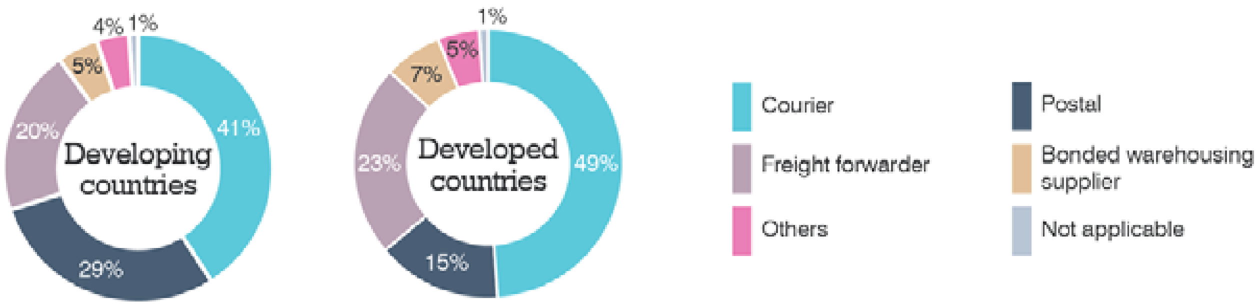
Firms in both developed and developing countries reported costly postal and courier services as the major bottleneck when doing cross-border delivery. The estimated share of logistics cost over final price in developing countries is nearly double that in developed countries (see Figure 11). There could be different reasons for this large gap. It could be the result of either on average lower prices of e-commerce shipments or higher cost of logistic services in the developing world.

Figure 11 Estimated share of logistic costs over final price

In terms of delivery methods, almost half of the respondents use courier services to deliver cross-border e-commerce shipments. Companies in developed countries depend more on couriers (49%) and freight forwarders (23%). Companies in developing countries also rely on couriers (41%), but use postal services (29%) more than freight forwarders.

Women tend to use postal services more often than men (27% vs. 13%), which indicates that they are financially constrained to use more expensive courier services. Limited choice of service suppliers, especially for cross-border delivery, is also a major concern for some respondents, stating that international delivery services are dominated by a handful of players and thus leading to overpriced offerings.

Figure 12 Logistics providers used for cross-border e-commerce



Some respondents also expressed concerns about the quality of delivery services. For instance, a survey respondent complained that their customers paid for door-to-door delivery services by post, but were asked to pick up the parcel at the post office since door-to-door delivery was claimed not possible for security reasons.

Companies from developing countries said they often found it difficult to find a reliable courier or postal service provider that can deliver to the customer's address. This is partially addressed in some countries by universal service obligations that require providing a baseline level of services to every resident of a country.

Customs duty exemptions cover only a third of e-commerce transactions

Overall, respondents indicated that 36% of their operations received *de minimis* treatment, that is to say, shipments under a certain value may qualify for reduced or exempted customs duties and VAT, or expedited customs clearance procedures. Companies in developed countries claimed that 38% of their operations qualify for this special treatment, while for those in developing countries, the percentage is 31%.

Companies from LDCs seem to use *de minimis* much less than other groups. On average, the share of exports of developing country firms that receive special customs duty treatment is double that of LDC firms, indicating that there is potentially a lower level of awareness among the latter group about these special treatments. Implementation of *de minimis* treatment seems to be effective, as 94% of respondents reported that they were not denied exemptions and/or reductions when the shipping value was below the threshold.

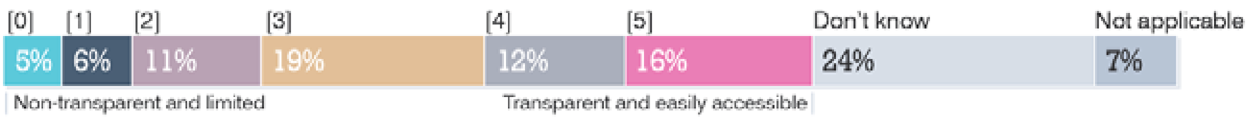
Smaller firms outsource customs procedures

In terms of customs clearance, about 60% of respondents said they outsource completion of customs procedures, mainly to logistics and delivery service providers (25%), specialized customs clearance service providers (16%), and e-commerce platforms (9%). Around 40% of companies surveyed said they take care of completing customs procedures on their own. This could be linked to the finding that only 22% of respondents reported having encountered challenges with customs clearance since the majority of firms outsourced their customs clearance procedures.

To measure the transparency of customs-related regulations, respondents were asked to rate the accessibility of customs information on a scale of 0 to 5 (see Figure 13). About 11% reported that it was very difficult to find relevant information, while 16% reported that information was easily accessible. The majority were in-between the two extremes, and there were no significant gaps among respondents from developing and developed countries.

About a quarter of respondents answered ‘I don’t know’ or ‘applicable’ to this question, reflecting the fact that many companies outsource customs clearance to third parties, and do not have to actively search for customs-related information on their own.

Figure 13 Accessibility of information on customs, duties, taxes and related procedures in their destination markets



Note: 0 = non transparent; 5 = transparent and accessible

Developed country companies struggle finding warehouses and delivery services at destination

Respondents from developed countries are more concerned about finding warehouses and delivery services at the destination market than those from developing countries (21% versus 13% respectively). This finding suggests that developed and developing countries face challenges at different stages of the value chain when engaging in cross-border e-commerce.

Enterprises in developing countries seem to be blocked earlier in the process, while those in developed economies have more concerns at a later stage regarding how to make delivery smoother in the destination market. This suggests a stronger business engagement from companies in developed countries, that are looking for ways to expand their business beyond doing door-to-door delivery from the origin.

The question about warehouses in destination markets naturally leads to investment considerations. As it has been mentioned, courier companies rely on extensive distribution networks to deliver their services more efficiently. This is also the case for many e-commerce platforms.

Data localization: A bottleneck for cross-border service delivery

Overall, respondents indicated that the major issues they face when doing cross-border delivery of services include difficulty to adjust services to technical standards and requirements in the destination market, and difficulty in preparing required documentation (e.g. obtaining licenses in the destination market). However, respondents from both developed and developing countries said limited access to export markets online due to data localization requirements accounts for a quarter of all bottlenecks they encounter for cross-border delivery of services.

Figure 14 shows companies' perceptions of how data localization requirements affect their operations. Their challenges include: it is technically not possible to localise data (e.g. data need to be stored in the cloud); high cost of data localization; company security policy; regulatory requirements in the home country preventing international transfer of certain data; and high risk for a security breach.

Figure 14 How data localization requirements affect cross-border e-commerce

Policy implications

Cross-border delivery is at the heart of international trade, and involves close cooperation between policymakers, in both import and export countries, to make transactions possible. Some of the issues, for example, trade facilitation and *de minimis*, have been discussed extensively at the WTO and WCO. Below are the four key areas that cross-border delivery policies should address.

Facilitation of customs procedures

The WTO's Trade Facilitation Agreement (TFA), which entered into force in February 2017, is mainly dedicated to the facilitation of cross-border delivery, and many provisions in the TFA are useful in the context of e-commerce. For instance, TFA addresses the release and clearance of goods including expedited shipments. As such, payment of customs duties could be made after the release of goods, against the provision of a guarantee. TFA also proposes a single window to submit customs documentation. All these measures are useful for facilitating e-commerce operations.

The increasing number of low-value shipments and the challenges this poses for customs clearance has also been widely discussed in the World Customs Organization (WCO). WCO's Immediate Release Guidelines (IRG) are relevant for the cross-border delivery aspect of the e-commerce value chain. The Revised Kyoto Convention from June 1999 acknowledges how the pattern of trade has changed as a result of e-commerce, and includes a provision on *de minimis* values.

Trade facilitation could take place either in general, or in the specific context of e-commerce operations.[37]

[37] WTO communications from Singapore et al. on 10 February 2017 ; WTO communication from EU et al. On 14 July 2016 ; WTO communication from China and Pakistan on 16 November 2016

However, the scope in which customs procedures could be facilitated in an e-commerce context could be sensitive to define across WTO membership, as interests could be in different e-commerce segments.[38]

Regarding *de minimis*, several countries, including the United States of America, have increased their *de minimis* threshold in recent years to facilitate cross-border e-commerce.[39] Other countries, such as Mexico, have two different *de minimis* thresholds depending on the delivery method (e.g. one for postal and another for courier). While determination of a common threshold could possibly facilitate e-commerce, this may also be challenging, as the cost of collecting customs duties and their importance as revenue sources vary across countries.

All these customs issues reinforce the need for further transparency and simplification of customs procedures at the national level. Some countries have published the rules that apply when buying through e-commerce from foreign countries, as many consumers might not be aware of the fact they are actually importing. With the increasing volume of cross-border B2C transactions, there is a clear need for raising consumers' awareness on the customs requirements for these transactions.[40]

Interoperability and competition issues

The relatively higher logistic cost in developing countries could also be the result of limited access to postal, express delivery services, e-commerce platforms as well as limited e-payment options.[41] In addition, market concentration could be another factor affecting logistics costs.

It is important to strengthen interoperability and competition of the enabling services needed for cross-border delivery.[42] Cooperation among logistic providers is essential to increase interoperability and avoid market concentration. In this regard, the Universal Postal Union has a number of recommendations and initiatives to increase interoperability of postal and delivery services.[43]

> *'What we need are: harmonization of postal rates, lower rates for quick deliveries, a tracking system for packages, simplified custom duties and ultimately a platform that centralize all of these.'*
>
> *Survey respondent*

Competition is relevant for e-commerce policy discussions, as network effects are characteristic of the industry.[44] In the case of e-commerce platforms, market imperfections could be one of the factors behind MSMEs' inability to make their offering visible to potential customers. Exploring competition mechanisms at the international level could be useful considering the market power that economic agents have in cross-border delivery as well in e-payment globally.[45]

International bodies such as the International Competition Network, an informal venue comprising 104 competition agencies, could help countries to work towards coordination of best practices by sharing information and enhancing exchanges among regulators.

Encouraging smaller firm participation in e-commerce

Within B2C e-commerce, there are different business models that may have different implications for MSMEs' participation in e-commerce. In the marketplace model, for example, e-commerce platforms act as a facilitator for the B2C retail MSMEs that are operating on the platform, while each MSME manages its

[38] WTO communication from China and Pakistan on 16 November 2016 shows a willingness to focus on B2C operations.

[39] U.S. Customs Protection (2016)

[40] European Commission (n.d.)

[41] WTO communication by Singapore on behalf of ASEAN members on 29 May 2017

[42] WTO communication from China and Pakistan on 16 November 2016

[43] The EMS Cooperative was created in 1998 among 182 postal administration members that offer postal express delivery service for both documents and merchandise

[44] WTO communication from the African Group on 21 July 2017

[45] DotEcon (2015)

own supply chain and inventory. For the inventory-based model, on the other hand, the e-commerce site manages its own inventory and dispatches orders directly to customers, while also allowing for participation from other firms on the platform. Fulfilment service is usually provided through the inventory-based model.

The difference between the two models is important, as it could determine whether cross-border delivery takes place in small, low-value shipments (vendor to consumer directly) or at a larger scale (through fulfillment services).[46] These offer different approaches for MSMEs to participate in cross-border e-commerce. Policy approaches to these models may also vary. For instance, India enacted regulation in 2013 that allows for 100% foreign direct investment in B2B e-commerce and in B2C e-commerce only under the marketplace model.[47]

Data localization requirements

Survey findings show that data localization requirements could have an implication on the delivery of services. These requirements exist to define the jurisdiction that applies to data that are increasingly being generated for cross-border transactions. The spirit of this kind of regulation aims to ensure certain protections such as privacy, national security, online consumer protection, and/or sovereign control in the privatized world of Internet governance.[48] However, this could generate additional costs, as companies could be obliged to invest in local IT infrastructure or contract local service providers to store data.

This topic has gained attention in recent years, as some countries have started to institute data-related legislation. The B20 policy recommendation in 2017, for example, calls for the G20 to, "strengthen efforts for interoperable data protection standards, facilitate the use of the accountability principle, and pursue additional bilateral and plurilateral agreements that enable cross-border data flows consistent with privacy and data protection requirements."[49]

Some trade agreements already include provisions related to data localization requirements, including US-Chile Free Trade Agreement (FTA), Korea-US FTA, Japan-Mongolia Economic Partnership Agreement (EPA), and the Trans-Pacific Partnership (TPP) agreement. Countries that are part of these agreements have also championed discussion on data localization requirements in WTO discussions, while others consider that dealing with this issue at an early stage could be risky for further industry development.[50]

In the WTO framework, specific commitments on cross-border data flows already exist for financial services. The WTO Understanding on Commitments in Financial Services states that, 'no Member shall take measures that prevent transfers of information or the processing of financial information, including transfers of data by electronic means, or that, subject to importation rules consistent with international agreements, prevent transfers of equipment, where such transfers of information, processing of financial information or transfers of equipment are necessary for the conduct of the ordinary business of a financial service supplier.'[51] It balances this obligation with the right, 'to protect personal data, personal privacy and the confidentiality of individual records and accounts.'[52]

Determining data localization requirements needs be proportional to the policy objective those intend to protect. The EU-US Privacy Shield Framework, for example, proves that parties with different priorities on data can reach an agreement and comply with data protection requirements for cross-border data flows.[53]

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[46] WTO communication from China and Pakistan on 16 November 2016

[47] Section 5.2.15.2. E-commerce activities of the Consolidated FDI Policy

[48] Mishra, N. (2016)

[49] B20 Germany (2017)

[50] WTO communications from Japan on 21 July 2016 ; WTO communication from Japan on 25 July 2016 ; WTO communication from the U.S.1 July 2016 ; WTO communication from the African Group on 21 July 2017

[51] WTO Understanding on Commitments in Financial Services

[52] Ibid.

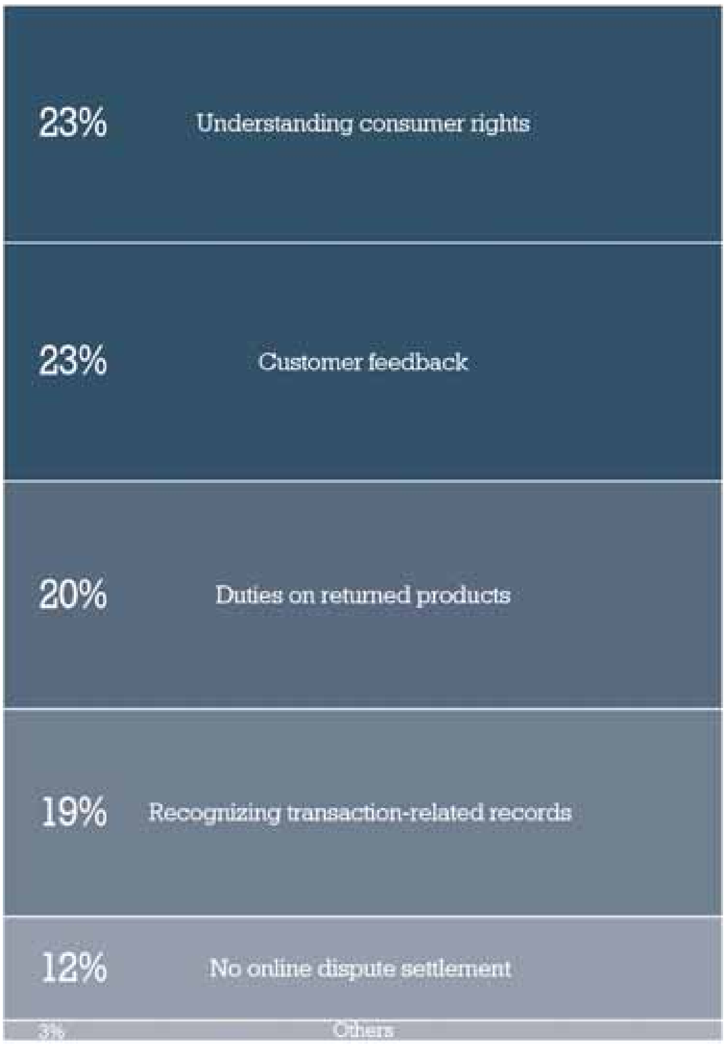
[53] Privacy Shield Framework (n.d.)

Aftersales

Aftersales is an important and often neglected phase in the e-commerce process chain. There are two main activities that businesses need to undertake in this phase: receiving feedback from customers on the product, service or transaction, and dealing with customer complaints, product returns and maintaining customer relations. Aftersales is especially important for online business, as customers rely heavily on product and transaction reviews for making purchase decisions, whereas for offline transactions, sales pitch and marketing techniques might play a larger role.

Aftersales is an integral part of the process chain that contributes to the overall e-commerce operation. For example, customer satisfaction reflected in reviews shapes the company's transaction records and affects its future business. Feedback from customers on the quality of services provided by e-commerce platforms, e-payment and delivery services are important for companies to make strategic decisions related to partnerships with these service providers.

Figure 15 Bottlenecks in aftersales



Note: The percentages represent the respective weight in the overall set of challenges.

Concerns in this phase are more or less evenly distributed (Figure 15), with major ones being: lack of understanding of consumer rights and enforcement (23%); lack of customer feedback (23%); application of duties on returned products (20%); and access to mechanisms for recognizing the validity of transaction-related records, such as payment records, delivery records, and chat records with sales persons (19%).

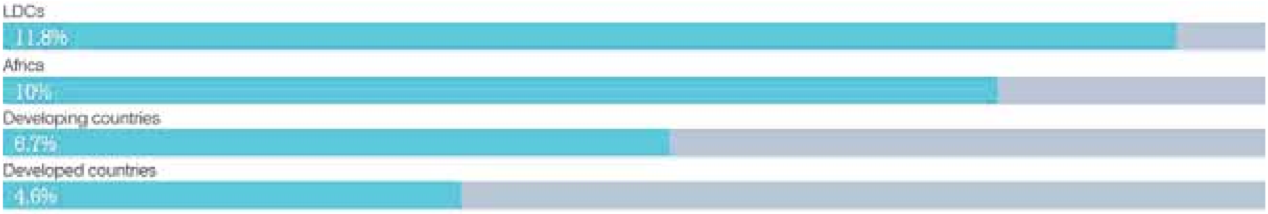
Concerns about access to online dispute settlement are more of an issue in developing versus developed countries (19% vs. 8% respectively), reflecting higher trust issues and probably a weaker regulatory environment covering digital transactions.

Product return: A substantial cost factor

Overall, the estimated percentage of transactions involving product return, refund, cancellation or dispute resolution is almost 6% of the total number of transactions.

This percentage is higher in developing countries (7%) and African countries (10%), which means that up to one in 10 transactions could incur additional costs related to product return (Figure 16). In fact, some MSMEs reported product return as a significant cost factor for their operations. Companies might be trapped in a vicious circle where they operate at a higher cost due to lack of competitiveness, leading to lower customer satisfaction and higher product return rate, which in turn adds to the burden of high operating costs.

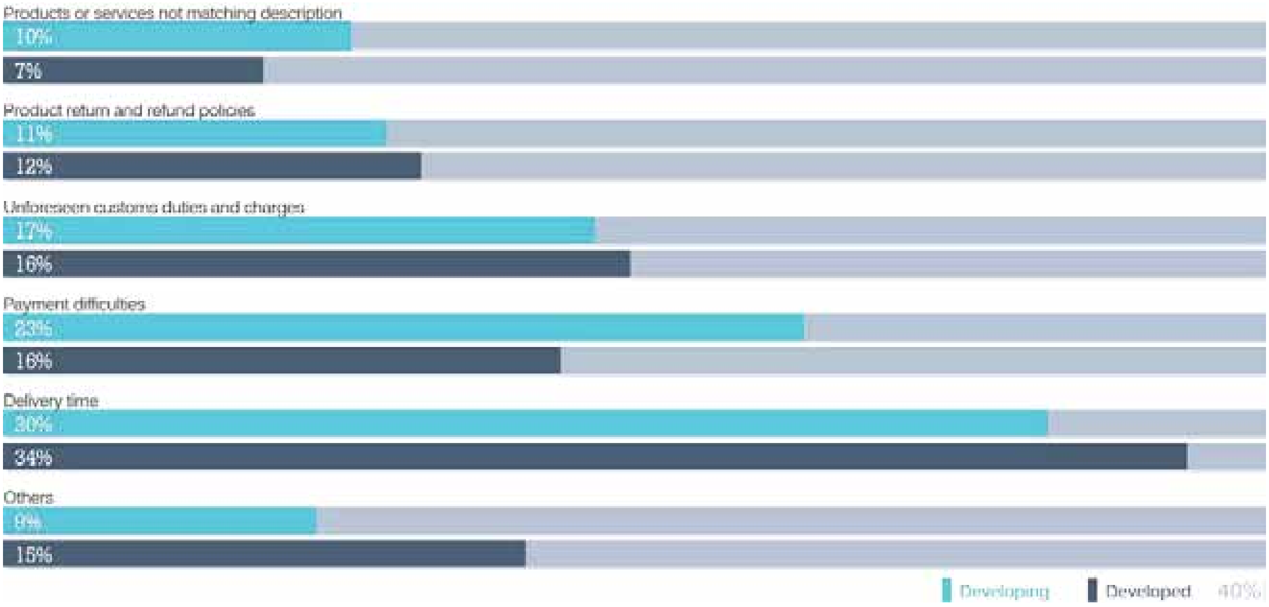
Figure 16 Aftersales product return/refund/cancellation



MSMEs surveyed were asked to list the most frequent issues mentioned in their customer feedback. These included complaints about delivery time (34%), unforeseen customs duties (16%), return and refund policies, difficulties with payment, and products or services not matching the description (Figure 17).

Some respondents also mentioned issues with re-shipment cost for returns, aftersales support and lack of customer services in native languages. In developing countries, more customers complained about payment difficulties (23% in developing vs 16% in developed countries), and products or services not matching description, which reconfirms the finding related to the lack of access to e-payment in developing countries.

Figure 17 Common customer complaints



Understanding and enforcing consumer rights are major concerns

In the aftersales phase, almost a quarter of respondents (23%) identified the lack of understanding of consumer rights and their enforcement as a main bottleneck. This could be the result of lack of clarity of online consumer rights and enforcement at the policy level, or the lack of firm-level capabilities to deal with it. Box 3 summarizes three approaches to deal with consumer protection at the national level.

Box 2 Consumer protection approaches

Government supervision: This type of regulatory mechanism for e-commerce is based on the government's administrative regulations, and the belief that consumer protection cannot be left to individual enforcement, as market inefficiencies may lead to unwanted mistrust by consumers and the under-development of markets and production.

Government authorities endeavour to monitor misbehaviour in markets in order to protect weaker parties. In keeping with this approach, governments can set up entities or agencies dedicated to consumer protection for e-commerce transactions. A number of countries have adopted this approach, including China, which although it lacks a law dealing exclusively with consumer protection in ecommerce, has adopted a consumer code that applies to both traditional and online transactions.

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

Hybrid approach: This is a consumer protection mechanism that entails private sector enforcement and state-based market supervision that makes use of market forces, and results from a convergence between the other two mechanisms.

Source: ITC, Bringing SMEs onto the e-commerce highway, Geneva: ITC, 2016 http://www.intracen.org/publication/Bringing-SMEs-onto-the-e-Commerce-Highway/

Removing duties on returned products could help smaller firm

As previously discussed, product return is a significant cost factor for MSMEs. On top of related logistics costs, many MSMEs also highlighted that the application of duties on returned products is a major bottleneck. This concern is more acute in developed economies (25%) versus developing economies (16%). Only a limited number of companies (10%) report that they have been exempted from import duties on returned products.

The costly return of products from a customs and logistics perspective is an acute issue especially for cross-border e-commerce. Some respondents indicated it is often more economical to abandon the shipment when it was rejected by the customer rather than having it sent back for replacement. Moreover, in many instances, the packaging or the product itself is compromised and the returned product is often not fit for reselling.

Respondents underscored other aftersales issues, including the difficulty in filling customs documentation for re-importation, and non-refunded paid duties and taxes in the destination market, on top of the imposition of import duties and VAT for the returned product in the origin country.

It is possible in some countries, such as Switzerland, to claim a refund of import duties and VAT for returned and re-exported products under certain conditions. Such conditions include the return of goods to the sender of unmodified items within three years due to non-acceptance, cancellation of the contract under which they were initially imported, or due to

> *'Returning products to Kenya is hard as we would have to pay import duty. The only option we found was a pick-and-pay distribution center to handle distribution and exchanges. To do this, I would need to invest a large quantity in stock and make sure I get them right in style and size according to the market's needs.'*
>
> *Survey respondent*

non-saleability. In case of deficiencies, reimbursement is also granted when the goods are re-exported after modification.[54]

Concerns about returns are not just financial but also related to complying with consumer protection law. One of the survey respondents referred to the long period of time it takes to reship goods, which is often over the 14-day limit stipulated by the European Union (EU). Consumers in the EU have the right to cancel and return any good or service bought online or outside of a shop (via telephone, mail order, from a door-to-door salesperson) within 14 days from the day the product is received. No justification is needed to exercise this right.

Another respondent highlighted the burden of being obliged by law to refund the delivery cost to consumers in case of return. In the EU, any additional payment – including those related to shipping – requires express consent from the buyer. According to EU rules, using a pre-ticked box on the seller's website does not constitute consent. Therefore, consumers are entitled to reimbursement for those extra charges.[55]

Policy implications

Understanding consumer protection and enforcement is a major issue in aftersales. There are an increasing number of regional trade agreements that have gone further in this area to specifically address online consumer protection. This is the case with the TPP, the Comprehensive Economic and Trade Agreement (CETA), the Korea-US FTA, and ASEAN-Australia-New Zealand FTA.

> *'The lack of a stable and foreseeable business playing field makes any sort of commerce, especially e-commerce business difficult to operate, as many rules for e-commerce have not been established.'*
>
> *Survey respondent*

For instance, the latter agreement requires that protection for consumers using e-commerce be at least equivalent to that provided to consumers when doing traditional commerce.[56] The TPP agreement recognizes the importance of cooperation between national consumer protection agencies and other bodies on activities related to cross-border e-commerce in order to enhance consumer welfare.[57] CETA encourages a dialogue on e-commerce that addresses the protection of consumers and businesses from fraudulent and deceptive commercial practices, among others.

There are already several regional initiatives seeking to increase cooperation in consumer protection, including: the Consumer Protection Cooperation Network and the European Consumer Centres Network in the EU; the Iberoamerican Forum of Consumer Protection Agencies in Latin America, Spain and Portugal; the Central American Council of Consumer Protection in Central America; the ASEAN Coordinating Committee on Consumer Protection in South-Eastern Asia; and the Consumer Forum of East Asia Nations in China, Japan and Korea.

Further cooperation would increase consumers' trust as well as online sellers' certainty and predictability, to clarify what they are committing to when selling online to a broad range of markets. The EU has mechanisms that allow for online consumer protection and online dispute resolution for e-commerce transactions at the regional level.

Consumer confidence-enhancing measures could be included in the scope of e-commerce issues being discussed and explored at the WTO, including regulatory approaches for consumer protection, privacy protection, cyber security, and unsolicited communications.[58]

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[54] Swiss Federal Customs Administration (n.d.)

[55] Europa.eu (n.d.)

[56] ASEAN-Australia-New Zealand FTA. Art 6, Chapter 10

[57] TPP Chapter 14: Electronic Commerce Art 14.7. Online consumer protection.

[58] WTO communication from the European Union and co-sponsors on 14 July 2016

Regarding double imposition of duties and taxes when returning products, this could be addressed through coordination among customs authorities across countries.[59] As previously mentioned, products being returned from Switzerland can qualify for duty drawback. For the imposition of import duties when the product returns to its origin market, provisions in the WTO TFA on Temporary Admission of Goods could provide guidance on handling duties on returned products.

Overall, knowledge of regulations in the destination market is key as online sellers might not be aware of the obligations they are beholden to when selling to certain markets. The jurisdiction that prevails might differ from case to case. In general, a better understanding of potential obligations arising from cross-border online transactions could prevent aftersales problems and save extra costs.

Cross-border e-commerce presents new challenges when it comes to regulatory compliance. Usually, the exporter has more control over regulatory compliance in the destination market when doing traditional offline trade versus doing cross-border e-commerce. The exporter decides where to export when participating in traditional trade –provided there is demand – having time to assess regulatory compliance in the destination market before embarking on the operation.

However, it is the importer in cross-border e-commerce that triggers the obligation of the exporter to comply with local regulations in the destination market, with no previous warning. This holds true when it comes to both understanding consumer rights and the application of duties on returned products.

[59] WTO communication from China and Pakistan on 16 November 2016 mentions the need to consider « clarifying policies applicable to returned goods, including tax policies »

CHAPTER 3 CONCLUSIONS

Survey findings show there is a clear gap between developed and developing countries when it comes to engaging in e-commerce. On average, e-commerce companies from developing countries are relatively smaller in size and export to less international markets.

They also face greater challenges in establishing an online business, due to inadequate skills and knowledge, as well as lack of supporting e-payment and delivery services. Nevertheless, the survey also shows that developing countries are catching up in certain areas, particularly through the adoption of new business models and innovative payment technologies.

The development dimension of e-commerce is also reaffirmed through the survey. MSMEs and women who are traditionally less engaged in international trade may benefit significantly from the opportunities provided by cross-border e-commerce. By lowering the entry barriers for MSMEs to engage in trade, and leveraging the efficiency of the entire e-commerce ecosystem, MSMEs and marginalized groups may gain better access to new markets for their product and services.

MSMEs face greater challenges across all phases of the e-commerce process chain. Some of the key bottlenecks lie within the firm-level capabilities, particularly for MSMEs from developing countries. Awareness raising and capacity building may strengthen supply side capacity, and encourage greater uptake of e-commerce in developing countries.

The business ecosystem provides essential services that enable cross-border e-commerce, such as international e-payment and cross-border delivery services. Logistics costs are significantly higher in developing countries, which constitutes a major barrier to engage in e-commerce. Trade cost partly determines a country's ability to participate in global trade. A more robust services sector can spur the growth of e-commerce and help unlock its untapped potential, especially in developing countries.

Finally, policies play a key role in fostering an enabling environment for e-commerce growth. Specifically, trade-related policies would have a direct impact on cross-border e-commerce, such as measures for trade facilitation, *de minimis*, and streamlining customs clearance procedures. In a broader context, regulations on data flow, consumer protection, protection of intellectual property rights, investment policies and innovation incentives could also have a significant impact on shaping the e-commerce policy environment.

Policies could also have an indirect effect through their impact on the business ecosystem for e-commerce. Investment and competition policies in IT, and payment and delivery services could encourage new entrants, boost competition and drive down costs of services provided by e-commerce platforms, e-payment providers and logistics suppliers. Improved infrastructure and a stable policy environment should be pursued to attract investment into these key sectors, and offer more choices and competitive services for e-commerce companies, and MSMEs in particular.

Cooperation at the international level can help achieve policy coherence and better regulatory practices. B20 policy recommendations in 2017, for example, call for G20 members to, "adapt their e-commerce-related policies, for instance on digital authentication, online payment, and consumer protection to international standards and best practices. For this purpose, they might consider model legislation and principles developed by UN bodies, the OECD, and regional organizations such as APEC."[60]

E-commerce is on the agenda of many international organizations that have developed tools and provided forums for discussions. As the rules-setting agency for international trade, the WTO is particularly relevant, and its membership's increasing attention to the topic of e-commerce could generate greater international cooperation to facilitate the growth of the global e-commerce market and promote the development dimension of e-commerce.

[60] B20 Germany (2017)

APPENDIX ITC'S SME E-COMMERCE COMPETITIVENESS SURVEY

Survey design

The survey was designed to capture business interests in current policy discussions on e-commerce, which relate to a broad set of policy areas. The questionnaire consisted of an anonymous online self-assessment. Respondents were presented with different sets of questions depending on their answers on how they do business through e-commerce, and the type of product they commercialize (B2B or B2C, goods or services), among other characteristics. The questionnaire included both multiple-choice and open-ended questions. The survey was available in English, French and Spanish. The target audience of the survey was enterprises, and especially MSMEs, that were doing e-commerce or were considering doing so. The inclusion of this last group remains relevant considering that bottlenecks might be severe enough as to prevent them from engaging in e-commerce operations.

The identification of barriers was structured around the framework proposed by the ITC e-commerce process chain. This process chain consists of the following four phases: establishing online business; international e-payment; cross-border delivery; and aftersales. Furthermore, there is a distinction of three layers for each of the phases, namely: firm-level capabilities; immediate business ecosystem; and national environment (see Table 1). Both the questionnaire design and this report follow this framework to better understand where the issues are, and at which level they could be actionable.

Table 1 E-commerce process chain

PHASE / LAYER	ESTABLISHING ONLINE BUSINESS	INTERNATIONAL E-PAYMENT	CROSS-BORDER DELIVERY	AFTERSALES
Firm-level capabilities				
Immediate business ecosystem				
National environment				

Considering that the target audience of the survey was primarily MSMEs, the survey only focused on the policy areas that are relevant for businesses' interest from an operational perspective. Thus, questions regarding infrastructure and improving metrics on e-commerce, although important, were not the main focus of this survey.

Method of deployment

The main distribution channel of the survey was through ITC's TPO/TISI network. Distribution reached 282 TISIs in 182 countries. In Africa, 76 TISIs were approached covering 45 countries. Members of the ITC Advisory Board provided special assistance in deploying the survey. ITC also distributed the survey through its SME Trade Academy, the SheTrades initiatives, as well as ongoing projects in developing countries. Additional distribution channels included e-commerce platforms such as Mercado Libre and eBay. The questionnaire consisted of an online self-assessment and the time for completion was estimated at around 30 minutes. It was accessible from end of February to mid-August 2017. Total responses over this period totaled 2,262 from 111 countries.

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WTO communication from the African Group on 21 July 2017

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