

# Driving Economic Growth Through Cross-Border E-Commerce in APEC: Empowering MSMEs and Eliminating Barriers



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APEC Business Advisory Council  
University of Southern California, Marshall School of Business  
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## *Executive Summary: Growing MSMEs Globally Through Cross-Border E-Commerce*

The wave of e-commerce is here. Traditional impediments to doing business are being shattered, incumbent industries are losing dominance, and governments are struggling to adapt to new forms of trade. For those that do not, it will be a tsunami of creative destruction. The change e-commerce brings will be severe. In this new interconnected global environment, there will be winners and losers at both the economy and business level. For MSMEs, the era of cross-border e-commerce provides both opportunities and risks. In this newly connected world, businesses both large and small face a clear choice: be part of the wave of change, or risk falling behind. Adoption can mean access to millions of new customers. Failure means extinction and irrelevance. The choice is yours: economies can either ride the wave of e-commerce prosperity or risk being left behind.

The APEC Business Advisory Council requested the University of Southern California to interview APEC business leaders and to capture their views and experiences on the challenges and opportunities of cross-border e-commerce for MSMEs in APEC economies. Our study concludes that the potential gains are well worth the focused attention of APEC policy makers. APEC MSMEs want more policy leadership within and across economies. From the more than 500 intensive interviews across the APEC business community, we learned that MSMEs face an environment that is unnecessarily complex, biased in favor of larger firms, and lacks a coherent cross-border e-commerce trade framework.

### **Our research included:**

- Developing a **comprehensive cross-border e-commerce framework** to assess the enablers and impediments affecting MSMEs engaging in cross-border e-commerce.
- **Interviewing 506 APEC business executives**, industry association leaders, consultants, and government officials, along with 244 survey respondents, across the APEC economies.
- Preparing selective **case studies on successful game-changing MSMEs** to serve as examples for other economies and MSMEs.
- Isolating **barriers that are most problematic** to MSMEs attempting to conduct cross-border e-commerce.
- Capturing **recommendations** designed to improve cross-border e-commerce opportunities for MSMEs.

### **Overall Findings:**

- **Cross-border e-services offer both the greatest growth potential and the easiest entry into the global value chain for MSMEs.** However, much more effort is needed to develop MSME capacity in cross-border e-services.
- **MSME's capacity and reach must be improved.** The single most critical limiting factor we observed was the lack of readiness and capability of MSMEs to engage in e-commerce. Problems of awareness, technical ability, access to talent, and financing all limit the potential of MSMEs.
- **Getting e-payments right is crucial.** E-payment solutions must expand beyond traditional banking solutions. Governments must allow for new, innovative e-payments solutions and avoid the vested interests of incumbents.
- **E-commerce marketplaces are critical enablers for MSMEs, but they are not benign players.** Marketplaces and platforms must be encouraged and supported, but care must be exercised to avoid allowing too much market control.
- **Complexity and cost of customs and trade rules destroy MSME opportunities.** If major improvements "at the border" are not made – online processes, simplified procedures, and special customs clearance accommodations for MSMEs – MSME participation in global trade will remain limited.
- **A harmonized coherent cross-border e-commerce regulatory framework is critical.** The lack of comprehensiveness and compatibility of e-commerce laws and regulations across economies remains a major impediment.

- **Lack of awareness on the potential of cross-border e-commerce.** There is a disturbing lack of awareness among most APEC governments, and among most MSMEs, of the potential opportunities in cross-border e-commerce, and of the developments and innovations in cross-border e-commerce in other economies.
- **The multi-ministerial “oversight” challenge is, perhaps, the single most critical impediment to meaningful policy leadership in e-commerce.** A core problem across all APEC economies was that governments have overlapping ownership or lack of ownership for e-commerce.
- **M-commerce is the future.** Policy makers must not get in the way. E-commerce is rapidly evolving into m-commerce with new challenges and opportunities.
- **Governments are trying to lead; MSMEs are seeking assistance.** Across APEC economies, we found governments are trying to lead and create programs for MSMEs. However, there is a real disconnect between the public and private sectors.
- **Cross-border e-commerce flourishes best in strong domestic e-commerce environments.** Developing strong domestic supporting institutions and players is critical to creating globally competitive cross-border e-commerce firms. In turn, globally competitive cross-border e-commerce firms enhance the competitiveness of domestic e-commerce.

### **Recommendations**

MSMEs are impatient. They want action. They want improvements. For them they feel they have been neglected for too long. It has been fifteen years since the 2000 APEC Small and Medium Enterprises Ministerial Meeting and progress since has been limited. Developing a truly integrated global e-commerce marketplace will take time, requiring lots of collective effort. Whether progress is smooth, awkward, or an utter failure depends critically on the policies put in place now by individual economies, the international community, and businesses.

#### **Recommendations for APEC:**

- Establish an APEC-wide action plan focused on creating a forward-looking e-commerce policy framework.
- Make e-commerce and m-commerce an APEC priority.
- Accelerate efforts to secure agreement on an APEC-wide framework for digital economy planning and agenda setting. Economy by economy approaches must be avoided at all cost.
- Increase discussions and efforts on harmonizing region-wide regulations especially on e-payments, e-signatures, customer protection, VAT, and limited liability protection.
- Expand and accelerate initiatives to simplify and expedite customs requirements specifically for MSMEs engaged in cross-border e-commerce, such as authorized economic operator programs. Moving to completely online processes is critical.
- Include cross-border e-commerce in the trade in services agenda.

#### **Recommendations for APEC Economies:**

- Tackle the multi-ministerial oversight challenge. Make e-commerce and cross-border e-commerce a national policy priority and a priority in the education agenda.
- Increase touch points with MSMEs to improve awareness of global opportunities, government sponsored programs, and MSME pain points. Expand capacity building programs for MSMEs.
- Get ahead of m-commerce. Work with leading firms to create policy frameworks to support and guide the development of m-commerce.
- Build MSME capacity and capability in MSMEs, in particular in services.
- Expand education and capacity building programs, such as the APEC-sponsored CBET.
- Engage in more public and private dialogues and partnerships on cross-border e-commerce, and find ways to get MSMEs involved.
- Governments should lead their economies to the digital economy by transitioning themselves to e-government.
- Foster and support e-commerce incubators, especially for the college educated unemployed youth.

#### **Recommendations for Business and Business Associations:**

- Engage in cross-industry and cross-economy dialogues on establishing mutually agreed upon standards and frameworks for cross-border e-commerce.
  - Encourage large e-commerce players to provide mentoring and training to MSMEs within their ecosystems.
  - Create collaborative communities to foster entrepreneurship and share best practices.
  - Engage universities and technical schools in developing education and training programs in e-commerce.
-



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## *University of Southern California - ABAC Coordination*

Since 2003, the Asia-Pacific Economic Cooperation's Business Advisory Council (ABAC) has engaged the University of Southern California in an annual research study on a topic of special interest to that year. Twelve University of Southern California MBA students are selected to conduct the study under the guidance of ABAC leaders and faculty advisors.

As part of the research, each student travels on a fact-finding mission to APEC economies to meet and interview business and government leaders. Through these candid, anonymous interviews, the research team gains a unique perspective to capture and report the voice of business. After synthesizing the feedback from the interviews and finishing a comprehensive report, the research team travels to the ABAC CEO meeting and presents their findings. The research is included in the annual prioritized advice report that ABAC provides to the 21 APEC Heads of State.

Topics that University of Southern California research teams have tackled in the past include foreign direct investment, the investment landscape of sustainable energy, and trade in services across APEC. Previous recommendations have contributed to the development of APEC action agendas and renewed focus on matters of economic importance. For example, the rules of origin study brought to light the high level of complexity in existing trade agreements that discourages business from actually using the trade agreements. University of Southern California's findings led to simplified trade language in new agreements.

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**Empowering  
MSMEs and  
Eliminating Barriers**



# *Introduction*

The APEC Business Advisory Council requested the University of Southern California Marshall School of Business to interview APEC business leaders and to capture their views and experiences on the challenges and opportunities of cross-border e-commerce for MSMEs in APEC economies. This report presents those findings.

ABAC commissioned this study because they believe that an APEC wide e-commerce connected environment is the most effective way to increase opportunities for MSMEs. After conducting over 500 interviews during the span of the last eight months, we could not more strongly agree with this statement. Throughout APEC, we talked with MSMEs that are trying to adopt cross-border e-commerce, but are running into barriers at every turn. Many more are not even trying to adapt. Governments, the business community, and international organizations like APEC must work together to reduce the friction points that are preventing MSMEs from succeeding.

Cross-border e-commerce is altering the global business landscape. Traditional impediments to doing business have been shattered, incumbent industries are losing dominance, and governments are struggling to adapt to new forms of trade. Nowhere is this clearer than in the world of services, where cross-border e-commerce allows MSMEs to access and sell services around the globe without obstruction from traditional barriers.

This evolving global e-commerce marketplace provides new opportunities for MSMEs to challenge the once dominant status quo of brick-and-mortar players. Industry shifts caused by cross-border e-commerce are creating a new hierarchy of market players, where global platforms are replacing the old titans of trade and commerce. Yet amid this tectonic shift, traditional powers are attempting to entrench the status quo.

For MSMEs, the era of cross-border e-commerce provides both opportunities and risks. In this newly connected world, businesses both large and small face a clear choice: be part of the wave of change, or risk falling behind. Adoption can mean access to millions of new customers. Failure means extinction and irrelevance. Policymakers and businesses should therefore be clear-eyed about what is at stake, and embrace these forces of creative destruction. Some products and services companies will thrive in this new environment, while others will be replaced.

Amid the rapid pace of e-commerce development, governments and regulators are falling behind, leaving innovative companies uncertain about their legal status. Many trade agreements still fail to address key e-commerce issues. Policy fumbles are preventing growth and holding businesses back. Rather than fighting the last war with outdated and misinformed regulations, governments and APEC leaders should focus on creating frameworks for the future.

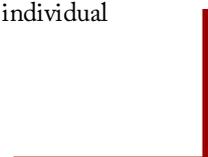
Several economies in APEC have already embraced the rise of cross-border e-commerce. The challenge for APEC moving forward is to enhance opportunities for the remainder of the economies in the region. A stronger APEC agenda, supporting MSME growth across the region, must be established. While solving problems of this magnitude is not easy, the benefits of enabling millions of MSMEs across APEC to engage in cross-border e-commerce are far too large to be ignored. To address the urgency of these needs, APEC must act quickly to build upon the work that has been put in place to promote MSME growth throughout the region.

Key activities that APEC should undertake include:

- **Build an inclusive government.** Governments should encourage new, innovative technology companies, rather than reign them in with burdensome regulations. Regulations should leave room for new, yet unimagined technology, rather than explicitly prescribing what is and is not allowed. Governments should work with businesses to direct policy that promotes growth instead of governing in a vacuum.
- **Provide meaningful educational opportunities.** MSMEs want education that meets the need of their business and is forward-looking. Education provided by the government is often under-funded and lags behind the realities of industry. Governments and industry groups should update their training to meet the demands of MSMEs and consider partnerships with large players to provide up-to-date content.
- **Simplify customs procedures.** Governments should expand and accelerate initiatives to simplify and expedite customs requirements for MSMEs engaged in cross-border e-commerce, such as authorized economic operator programs and increasing the de minimis threshold to at least \$200. Moving to completely online processes is critical. An APEC single window must be put in place.
- **Create a more harmonized, transparent and interoperable set of laws and regulations.** MSMEs have trouble finding up-to-date information on laws and understanding how to comply with them. Regulations must be transparent and easy-to-understand, rather than dense and inconsistent. Economies should work together to create harmonized laws to reduce barriers for MSMEs that want to move cross-border.

In 2000 at the APEC Small and Medium Enterprises Ministerial Meeting, the attendees recommended that APEC put a framework in place to coordinate standards, increase consumer confidence, and encourage private sector innovation. In the fifteen years since, APEC has not yet achieved these ambitious, vital objectives.

MSMEs are impatient. They want action. They want improvements. They feel they have been neglected for too long. Progress toward a truly integrated global e-commerce marketplace will take time, requiring lots of collective effort. Whether progress is smooth, awkward, or an utter failure depends critically on the policies put in place now by individual economies, the APEC community, and businesses.

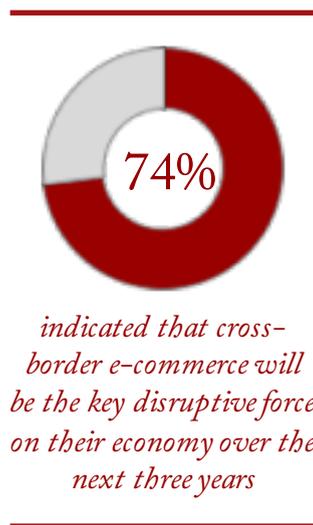


# Cross-Border E-Commerce Is the Next Big Thing for MSMEs

MSMEs are the building block for the economy of every APEC member, yet are too often ignored by governments. Cross-border e-commerce can drive MSME growth by shrinking the world and exponentially increasing the number of prospective customers. However, there are impediments, such as MSME readiness, customer willingness, logistics, customs, regulations, payment systems, and operational environment that continue to hold back MSMEs from capturing the full potential of cross-border e-commerce.

## MSMEs are key to the development of the APEC economies

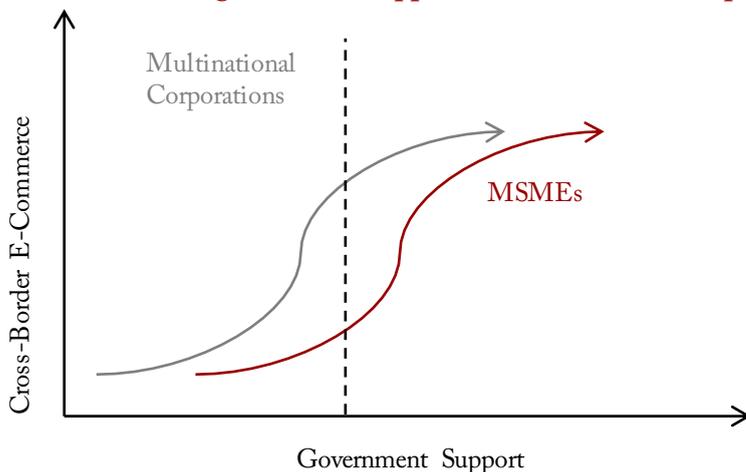
MSMEs account for over 95% of all businesses by number and comprise between 20 to 50% of total GDP in APEC economies. Many of the most global and disruptive businesses of today were MSMEs just 10 years ago. Yet, MSMEs too often think that their government is ignoring them by focusing resources on large multinational businesses. Additional government support for innovative and specialized MSMEs, rather than for just large corporations, will bring disproportionate benefits to APEC members' economies.



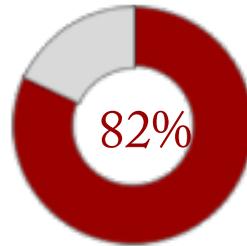
## Cross-border e-commerce brings significant benefits to MSMEs

1. **Enlarges markets and increases access to goods and services.** The global B2C cross-border e-commerce market is predicted to balloon in size from \$230 billion in 2014 to \$1 trillion in 2020, according to a report from Accenture and Alibaba. MSMEs with high Internet and technology usage grow 2.1x faster than MSMEs that do not leverage technology, regardless of the industry.
2. **Cross-border e-commerce empowers MSMEs and improves their survival rates.** Between 60 and 80% of e-commerce exporters survive their first year in business compared with a 30 to 50% survival rate for traditional businesses. Domestic-focused businesses on eBay grew an average of 58% between 2010 and 2014, while export-oriented businesses grew by an average of 91% during that same time frame.

## MSMEs need government support to make the next jump



**3. Cross-border e-commerce diversifies and mitigates risks.** E-commerce firms on average export to 30 to 40 different economies compared with 3 to 4 economies for traditional exporters. This ten-fold increase in the number of markets targeted by e-commerce MSMEs diffuses their business risk by decreasing dependence on any one market.

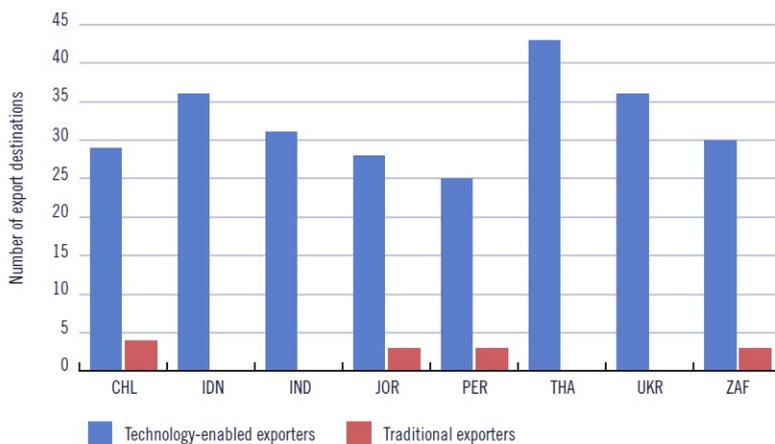


*indicated that cross-border e-commerce will have a greater impact on MSMEs over the next three years*

*With distances in the global value chain shrinking, more opportunities arise for cross-border e-commerce-ready MSMEs.*

The global business environment has opened up new opportunities for MSMEs to start cross-border business. Cloud services such as Amazon Web Services have removed the need for capital investment in data centers. 99Designs and Upwork have opened up professional design to small companies. Platforms such as the App Store and Google Play have extended the reach of small developers. More and more types of businesses are establishing global operations to capitalize on this cross-border trend.

**FIGURE 5: NUMBER OF EXPORT DESTINATIONS**



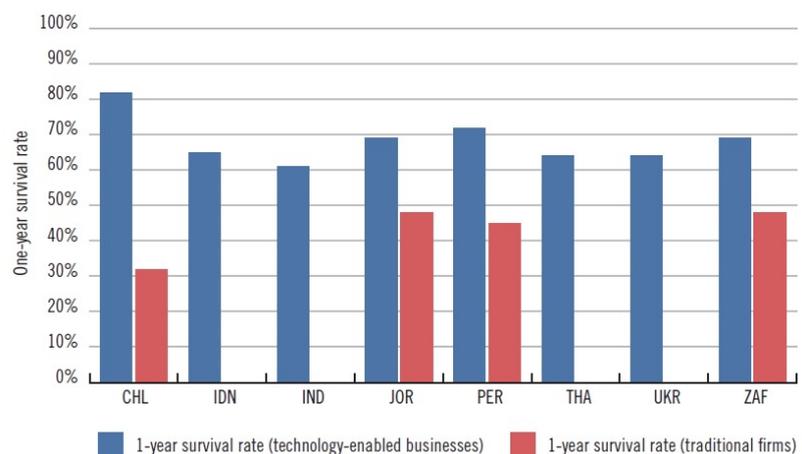
Source: eBay commerce 3.0 for Development Report

**4. Cross-border e-commerce creates positive externalities throughout the value chain.** There are positive externalities throughout the value chain of cross-border e-commerce firms. Consumers gain greater access to price information and more competitive markets. With regard to operations, the demands of cross-border e-commerce push firms to upgrade their infrastructure and procedures, increasing efficiency and providing a new basis for future learning. Transfer of money is improved by more sophisticated payment systems. Cross-border e-commerce also pushes improvements in logistics and supply chain management, while e-commerce can allow firms to source their key inputs at lower cost.

*These same shrinking distances have made it easier than ever for economies to efficiently provide e-commerce tools and training for their MSMEs.*

Social media dialogues with MSME constituents are free and scale easily to reach most MSMEs in an economy. Private-Public partnerships with platform players can provide MSMEs with the tools and knowledge to compete globally. For example, PROMPeru, a government association in Peru, has provided training programs, sponsored by the private Chinese company Alibaba, targeted to MSMEs who are making their first steps towards e-commerce.

**FIGURE 9: SURVIVAL RATES OF NEWCOMERS**



Source: eBay commerce 3.0 for Development Report

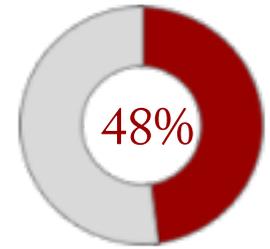
### *It is easier than ever for MSMEs to reach global customers*

The online population continues to grow steadily. Around 40% of the world population has an Internet connection today. The number of Internet users has increased tenfold from 1999 to 2013. This trend is expected to continue and intensify.

Social media and independent selling channels have segmented the customer base into more refined niches, making it easier for firms to locate customers with specific needs. Meanwhile Google and other advertisement services allow MSMEs to target their online advertising more precisely, and also, to track consumer trends in relevant product or service niches. Established marketplaces and platforms allow MSMEs to sell their goods or services to large established online markets. Social media is also providing MSMEs with alternative selling platforms.

### *Startup costs for MSMEs continue to decline*

While the demand side of cross-border e-commerce is growing rapidly, the cost of entering this business area are declining. There is an increasing number of value chain intermediaries that can provide MSMEs with key services, reducing costs through global outsourcing. Scalability is made available by pay-as-you-go services and cloud services, allowing MSMEs to avoid the excess costs incurred by minimum efficient scale. Platforms and marketplaces allow MSMEs to cut out middle men and sell directly to customers. Meanwhile, crowd-funding has the potential to overcome many of the capital constraints faced by e-commerce MSMEs, and is facilitating increasing rates of innovation in e-commerce goods and services, providing further cost reductions and efficiencies to other e-commerce firms.



*of businesses say that cross-border e-commerce will be a substantially greater priority for their company moving forward*

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Over the last 20 years, e-commerce has disrupted traditional ways of doing business and rewarded those companies able to adapt their business to the fast-moving online world. E-commerce lowers barriers to entry, permitting MSMEs to compete in new types of industries without needing an established global footprint. Disruption in global value chains will continue to come from innovative, specialized MSMEs that embrace the rising pace of technological change. In the future, involvement in domestic e-commerce will no longer be enough to allow firms to stay ahead of their competition. Their competitors, suppliers, and buyers will all be engaged in cross-border e-commerce as the world becomes increasingly connected. However, MSMEs that engage in cross-border e-commerce to reach global markets and to source goods and services in the most effective way can reap enormous rewards. Their challenge is to navigate the many barriers and frictions of cross-border e-commerce as they take this leap.

## *E-Commerce Business Models: B2B, B2C, C2C....*

The array of e-commerce business models is as vast as those of traditional commerce. All types of traditional business can be conducted as e-commerce. Over the last ten years, entrepreneurs have developed a variety of innovative business models to meet the shifting needs of consumers and companies. Categories of e-commerce are fluid and will continue to evolve as individuals find new ways to interact online. Categorizing business models by matrices helps crystallize the opportunities still available, and also provides a framework for exploring new expansion options for MSMEs. For government, these categories also provide a toolset for analyzing the impact of future regulations and digital economy roadmaps across the full spectrum of cross-border e-commerce business models.

**E-commerce models are far more varied than Amazon and Alibaba including....**

	B2B	B2C (B2B2C)	C2C	C2B	G2B	G2C
Description	Business-to-Business: The exchange of services or products between two businesses.	Business-to-Consumers: Businesses selling products or services directly to consumers. This segment comprises the majority of traditional e-commerce transactions	Consumer-to-Consumer: Customers selling directly to other customers. These types of transactions have the lowest barriers to entry	Consumer-to-Business: Consumers and individuals with skills offer their services directly to companies. Consumers and individuals with skills offer their services directly to companies.	Government-to-Business: Government providing products or services directly to businesses.	Government-to-Consumer: Government providing products or services directly to consumers.
Services	Professional firms, Back office (NightHawk Radiology, OrangeNow)	Travel, Entertainment, Software (Bookings.com, Netflix)	“Sharing Economy”, professional individuals (Uber, Airbnb, TelaDoc, updesk.com, App stores)	Freelancer (Amazon associates, freelancer.com)	Online Tax, certifications, registrations, Single Window.	Online Tax, Online ID, travel documents and visas, training and education, consumer protection
Manufactured Goods	Wholesale (Alibaba)	Retail, Flea market (Amazon, Taobao, eBay, Etsy, etc.)		Local artisan (Etsy)	Single Window	e-food stamps
Commodities	Bulk commodity (JUMORE)	Broad range of diverse players, Including agricultural goods			Single Window	e-subsidies

**Imports and exports are both economically significant...**

	Export	Import
Services	Labor cost advantages, specialized expertise	Foreign labor cost advantages, expertise unavailable in a local market
Manufactured Goods	Branded, specialized, high value added goods	Key manufactured inputs for domestic industry and consumer sector
Commodities	Resource rich economies	Key inputs for domestic industry and consumer sector

**Find your opportunity**

While there are already many MSMEs in each of these categories, there are still opportunities in the competitive e-commerce environment. Each economy should consider its own competitive advantages, identify its unique position in the global e-commerce market, and provide support for MSMEs to develop in specific categories and industries. A concentrated and focused effort will lead to greater success.

Cross-border e-commerce can grow the exports of each economy as well as helps the domestic economy grow through more efficient sourcing of key imports.

Innovation and disintermediation across the spectrum of e-commerce generates growth opportunities for MSMEs.

Growth Opportunities	B2B	B2C (B2B2C)	C2C	C2B
Services	<ul style="list-style-type: none"> <li>· Innovative business process outsourcing</li> <li>· Increasing collaboration across the global value chain</li> </ul>	<ul style="list-style-type: none"> <li>· Innovation in e-service products and delivery modes</li> </ul>	<ul style="list-style-type: none"> <li>· Disintermediation of traditional services (e.g. AirBnB)</li> <li>· Internet mediated collaboration</li> </ul>	<ul style="list-style-type: none"> <li>· New forms of supplier relationships (e.g. freelance specialists)</li> </ul>
Manufactured Goods	<ul style="list-style-type: none"> <li>· New suppliers, new buyers, new products</li> </ul>	<ul style="list-style-type: none"> <li>· Innovative products and delivery methods</li> <li>· New consumer groups and reach</li> <li>· Direct to consumer</li> </ul>	<ul style="list-style-type: none"> <li>· Online bartering economy</li> <li>· Artisans (e.g. Etsy)</li> </ul>	<ul style="list-style-type: none"> <li>· Room for future innovation</li> </ul>
Commodities	<ul style="list-style-type: none"> <li>· New suppliers, new buyers, new commodities</li> </ul>	<ul style="list-style-type: none"> <li>· New and niche commodities (e.g. Argan Oil)</li> <li>· New consumer groups and reach</li> <li>· Direct to consumer</li> </ul>	<ul style="list-style-type: none"> <li>· Room for future innovation</li> </ul>	<ul style="list-style-type: none"> <li>· Individual suppliers to large corporations</li> <li>· Direct to company, disintermediation of specialized commodity supply</li> </ul>

## Research Objectives, Design, and Methods

The APEC Business Advisory Council requested the University of Southern California Marshall School of Business to interview APEC business leaders and to capture their views and experiences on the challenges and opportunities of cross-border e-commerce for MSMEs in APEC economies. ABAC commissioned this study because they believe that an APEC wide-e-commerce connected environment is the most effective way to increase opportunities for MSMEs.

Specifically undertaken for ABAC, University of Southern California-ABAC field studies focus on obtaining extensive interviews with business executives in the APEC region. These field studies have as their goal gathering and reporting the APEC business perspective, in contrast to government perspectives, on trade and investment topics in APEC. They are specifically designed to complement existing policy and academic research. By highlighting the points of pain and frustration encountered by business, the hope is to better inform policy makers of the real issues that can then be more effectively addressed to strengthen and improve an economy's investment environment.

### Objective

The goal of the University of Southern California-ABAC study is on identifying, from a business perspective, what factors create or inhibit a strong cross-border e-commerce ecosystem and what businesses can do to participate. This report is intended to contribute to the emerging stream of research on the impact of cross-border e-commerce on MSMEs. In line with ABAC's role within APEC, the goal is to offer policy-makers a richer more fine-grained business perspective on specific problems and challenges that can better inform policy discussions focused on growing the cross-border e-

commerce environment for MSME participation. In addition, the study sought to capture from APEC business leaders their recommendations about specific barriers or challenges that if addressed, might have a multiplied impact on improving investment climates.

### Design of the study

The research design had four major phases. First, conducting a full analysis of existing reports; second, constructing interview protocols and questionnaires to identify relative importance of barriers and impediments in cross-border e-commerce especially for MSMEs; third, constructing analytical conceptual frameworks for analyzing, comparing, and reporting the data; and fourth, validating the data with available secondary information.

**Using existing research.** The initial phase of the research project was to examine and evaluate all the recent existing research on the topic of cross-border e-commerce to identify the barriers and impediments that were found to have a significant impact on cross-border e-commerce for MSMEs. From this "desk" research, comprehensive lists of potential barriers and impediments were created for the interview protocols and the questionnaires. These factors were used, first, to help identify what business executives considered to be the most important factors for MSMEs to conduct cross-border e-commerce and, secondly, to assess how much of an impact each factor had in different economies.

in-person and phone interviews were conducted with over 500 business executives, industry experts, and government officials. Every effort was made to interview "multipliers" in economies that could speak for dozens, and sometimes hundreds of MSMEs. Researchers traveled to 17 APEC economies to do in-person

interviews. In the remaining economies, which includes Australia, Canada, New Zealand, and Russia, we conducted phone interviews instead. Many interviewees were able to offer information on multiple economies.

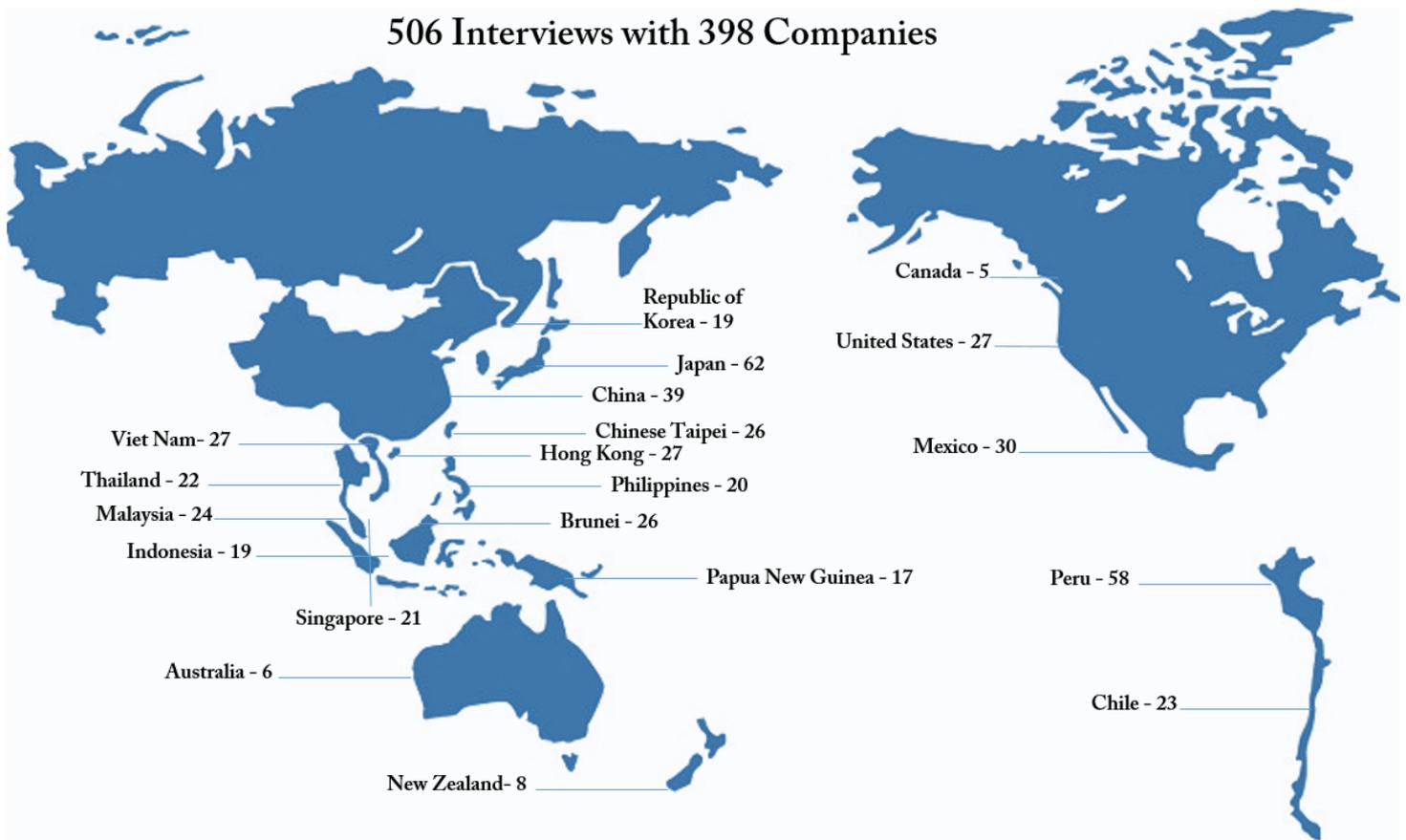
**Analytical conceptual framework.** A conceptual framework was created to classify barriers into the major pillars that impact the cross-border e-commerce business landscape. The framework that we constructed guides the structure, analyses, and findings of this report.

**Validating findings with secondary sources.** Given the inherent subjectivity problems of interview based research, an effort was made to compare the findings from the analyses of the interview data with secondary information. Comparable metrics and close proxies for factors found to be important in this study were drawn from A.T. Kearney's Global Retail E-commerce Index, the UNCTAD B2C E-commerce Readiness Index, the APEC E-Payment Index, and the BCG e-Friction Index. These second party rankings and data indexes generally validate the conclusions from our interviews and are presented later in this report.

### Area of future research: Online trade in services

A discovery that our research team reached late in the project was the growing importance of services for MSMEs that want to engage in cross-border e-commerce. Future research is needed to further explore the role of e-services and the importance they play for MSMEs who want to join the global value chain of e-commerce. The true opportunity for MSMEs to engage in cross-border e-commerce and compete with the large players is to specialize in offering high quality services. Subsequent studies should focus on these lines of research.

## Map of Interviews



Type of Participant	# of Interviews
MSMEs	157
Marketplaces & Platforms	68
Technology Providers	62
Government Agency	38
Logistics	37
Consultants & Services	35
Industry Association	29
Payments	25
Academics & Thought Leaders	20
Financial Services	20
"Big" E-Commerce Players	15

### Definition of Micro Small Medium Enterprises (MSMEs)

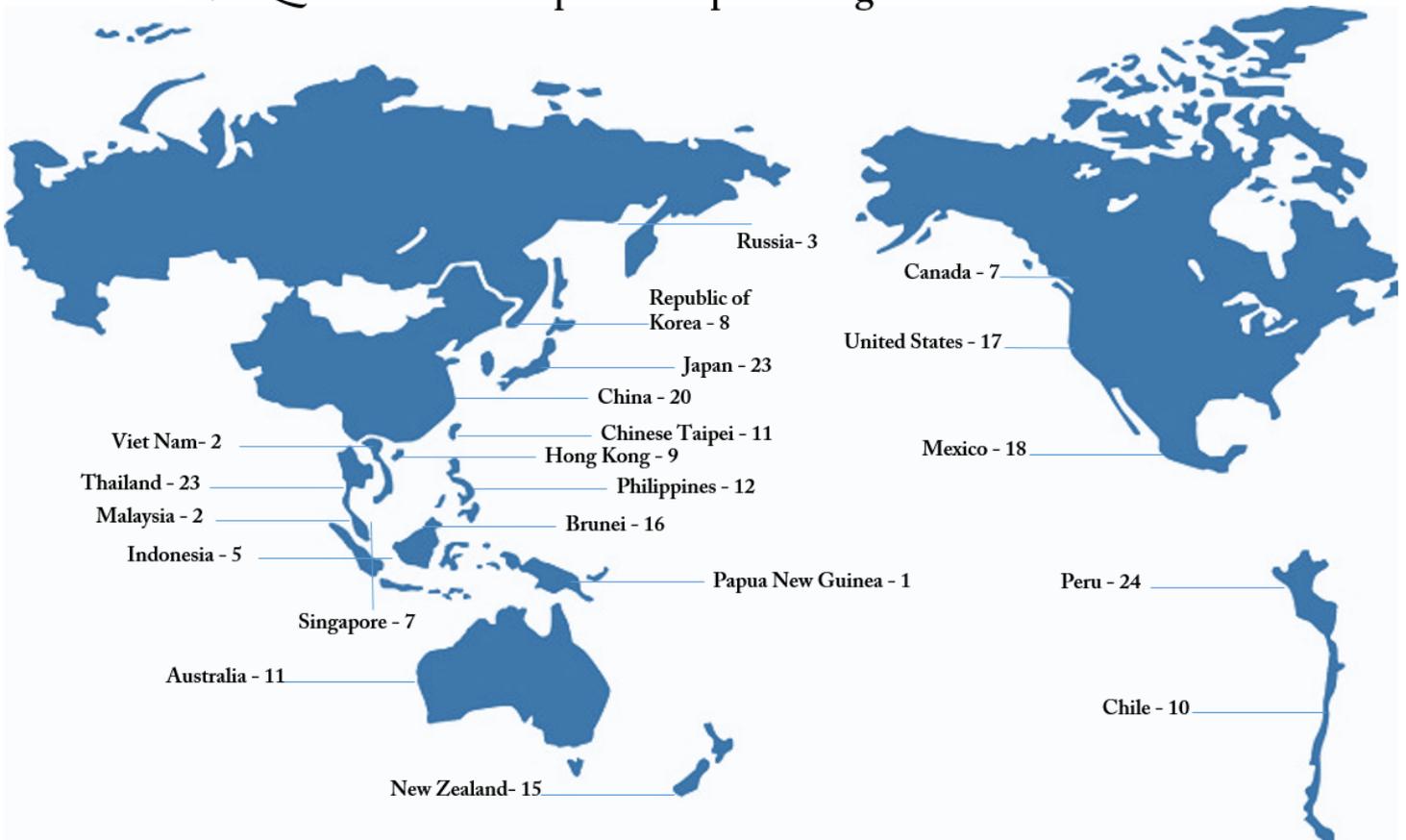
It is important to first define MSMEs, as there is no consistently applied definition across APEC. While each economy defines MSMEs differently, over 30% of 132 countries surveyed by the World Bank define Small, Micro, and Medium Enterprises as having less than 250 employees. Therefore, we adopt this definition for the purposes of this research project. Definitions of MSMEs by revenue shows a much higher variance due to differences in levels of economic development. We thus revert to defining MSMEs based off the number of employees, rather than revenues.

## Questionnaire

After completing analysis of the interview data, we created sector specific questionnaires based on the factors we identified as important. The goal of the questionnaires was to confirm that our cataloging of the most important barriers and impediments was correct, and that our ratings of the relative impact were consistent across economies. These questionnaires were sent out to all those who participated in the interviews, as well as additional business executives within the APEC region.

We received 244 responses to our survey and recorded at least one response from each economy in APEC. The survey takers represent a robust cross-section of the participants in the cross-border e-Commerce value chain. Throughout the report we include data from the survey, and in the appendix we explore the results in more depth.

### 244 Questionnaire Responses Representing All APEC Economies

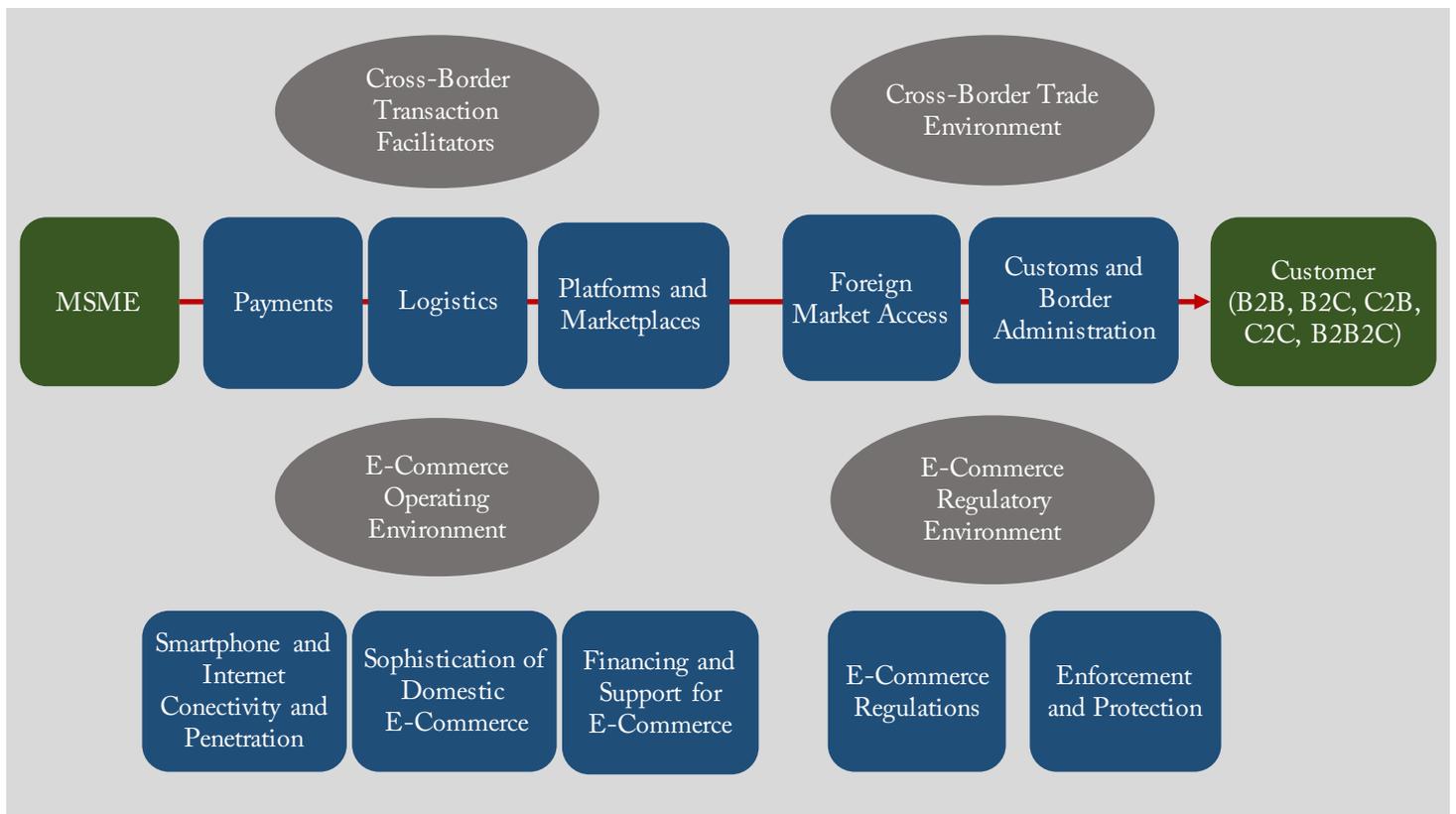


# Cross-Border E-Commerce Framework: Enablers and Impediments

The enablers and impediments framework forms the basis of analysis for the cross-border e-commerce ecosystem. Based on an extensive literature review, major issues were identified and aggregated into a set of pillars that are essential for cross-border e-commerce. Taking into account how products and services flow from micro, small, and medium enterprises (MSMEs) to end customers in the supply chain, the key pillars were then clustered by how they impact MSME participation in cross-border e-commerce. The elements of the framework were validated and updated based on feedback from the 500+ interviews we conducted across the APEC economies.

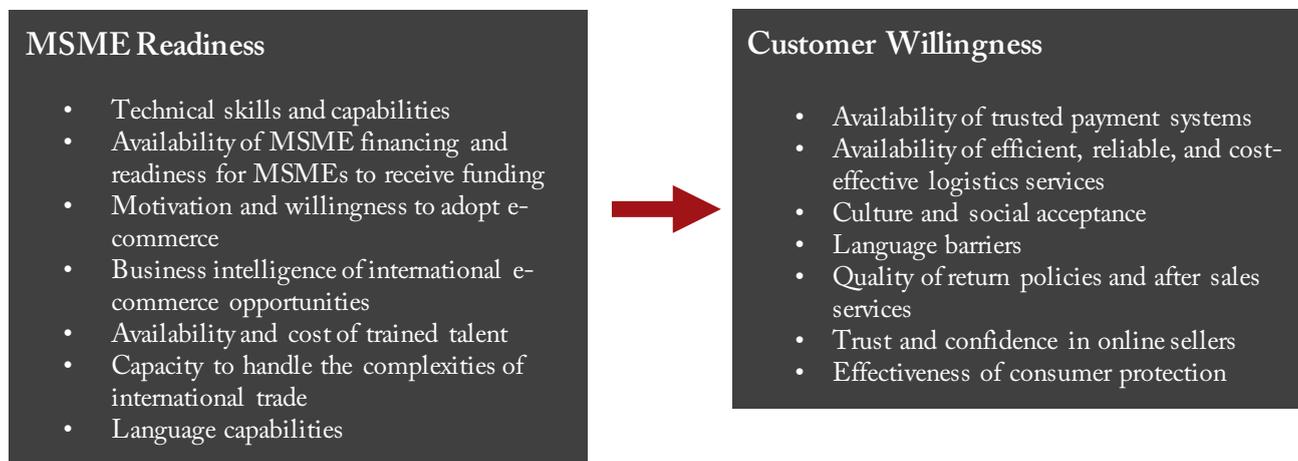
The four major clusters in the framework are:

- **Cross-border transaction facilitators** – encompasses the payments, logistics, and platforms pillars that support and enable e-commerce.
- **Cross-border trade environment** – includes the barriers that a MSME encounters when trying to enter a foreign market: foreign market access and customs.
- **E-commerce operating environment** – covers the basic operating needs of MSMEs and customers, such as Internet, mobile, financing, and training.
- **E-commerce regulatory environment** – captures the regulatory environment, legal and enforcement challenges that MSMEs face when conducting cross-border e-commerce.



In this report, we focus on identifying barriers and developing recommendations using the pillars and clusters to frame the issue. Each of these groupings is crucial to the success of cross-border e-commerce and is associated with friction points that cause problems for MSMEs. Problems in any of these areas can inhibit the development of cross-border e-commerce in an economy. Factors analyzed within each pillar and cluster are described below.

### *MSMEs and Customers*



### *Environmental Factors*

**E-Commerce Operating Environment**

- Extent of domestic Internet infrastructure, penetration, and bandwidth
- Cost of Internet access for MSMEs
- Extent of domestic mobile infrastructure, penetration, and bandwidth
- Cost of mobile data plans
- Access to e-commerce finance from both private and public sectors
- Access to e-commerce training and technical assistance from both private and public sectors

**E-Commerce Regulatory Environment**

- Accessibility, clarity and complexity of e-commerce regulations
- Coherence and coordination of e-commerce regulations across regulatory bodies and with other e-commerce policies
- Limits on cross-border data flows and data storage, as well as censorship and firewalls
- Effectiveness and timeliness of legal enforcement mechanisms, such as policing and the court system
- Consumer protection and dispute resolution mechanisms
- Intermediary and third party liability protections
- IP, copyright, and website domain protection
- Product labeling requirements
- Cyber-crime prevention and prosecution

## *Cross-border trade environment*

### Foreign Market Access

- Accessibility, clarity, and complexity of foreign market access rules and regulations
- Existence of tariffs and de minimis policies
- Non-tariff barriers, such as certification and labeling requirements
- FTAs that explicitly address e-commerce
- FDI restrictions that limit investment in certain industries
- Harmonized laws and regulations

### Customs and border administration

- Accessibility and clarity of customs rules, regulations and procedures
- Non-tariff customs costs
- Transparency and corruption in the customs process
- Online customs processing and single window systems

## *Transaction facilitators*

### Payments

- Availability of online payment methods
- Security and reliability of online payment methods
- Cost of online payment methods for MSMEs
- Existence of regional or global payment standards
- Laws for payment data sovereignty and security
- Level of credit card penetration
- Consumer protection for fraud
- Regulations that are inclusive of new payment methods

### Logistics

- Availability and quality of domestic and international transport and logistics provider
- Cost of logistics service for MSMEs
- Availability of shipping consolidators
- Integration of tracking and enterprise information communication technology (ICT) in logistics systems
- First and last mile delivery solutions
- Existence of standard address formats
- Reliability of cash on delivery services

### Platforms & Marketplaces

- Availability and quality of online platforms and marketplaces
- Cost of online platforms and marketplaces for small-scale users
- Availability and quality of training for MSMEs by platforms and marketplaces
- Regulation of domestic and global platforms and marketplaces
- Level of customer reach
- Customer protection and dispute resolution

# Cross-Border E-Commerce Assessment



# *Explanation for Cross-Border E-Commerce Assessment*

Based upon our more than 500 interviews, we assessed the strength of each economy in APEC in nine pillars that are crucial for building an environment conducive to cross-border e-commerce. The table on the next page shows the severity of issues for each economy on a five point scale displayed as colors ranging from red to green. Every economy has areas in which it can improve. A low level of preparedness in any one of the pillars can impede cross-border e-commerce from growing. At the end of the report, we have an explanation for each economy justifying its scores for each pillar. The appendix contains a more detailed description of our method.

## Qualitative e-commerce economy assessment

- **E-commerce operating environment:** Measures the quality and functionality of the e-commerce operating environment.
- **MSME readiness:** Measure the ability of MSMEs in the economy to engage in both domestic and cross-border e-commerce.
- **Customer willingness:** Measures the willingness of customers in the specific economy to engage in both domestic and cross-border e-commerce.
- **Platforms and marketplaces:** Measures the availability and quality of platforms and marketplaces as related to cross-border e-commerce.
- **Payments:** Measures the availability and quality of payment means, methods, and platforms for cross-border e-commerce.
- **Logistics:** Measures the availability and quality of logistics operators and options for domestic and cross-border e-commerce.
- **Customs:** Measures the quality of customs as related to cross-border e-commerce.
- **Foreign market access:** Measures the ability of foreign players to be able to access the domestic market, especially as related to cross-border e-commerce.
- **E-commerce regulatory environment:** Measures the quality of regulations as related to domestic and cross-border e-commerce.

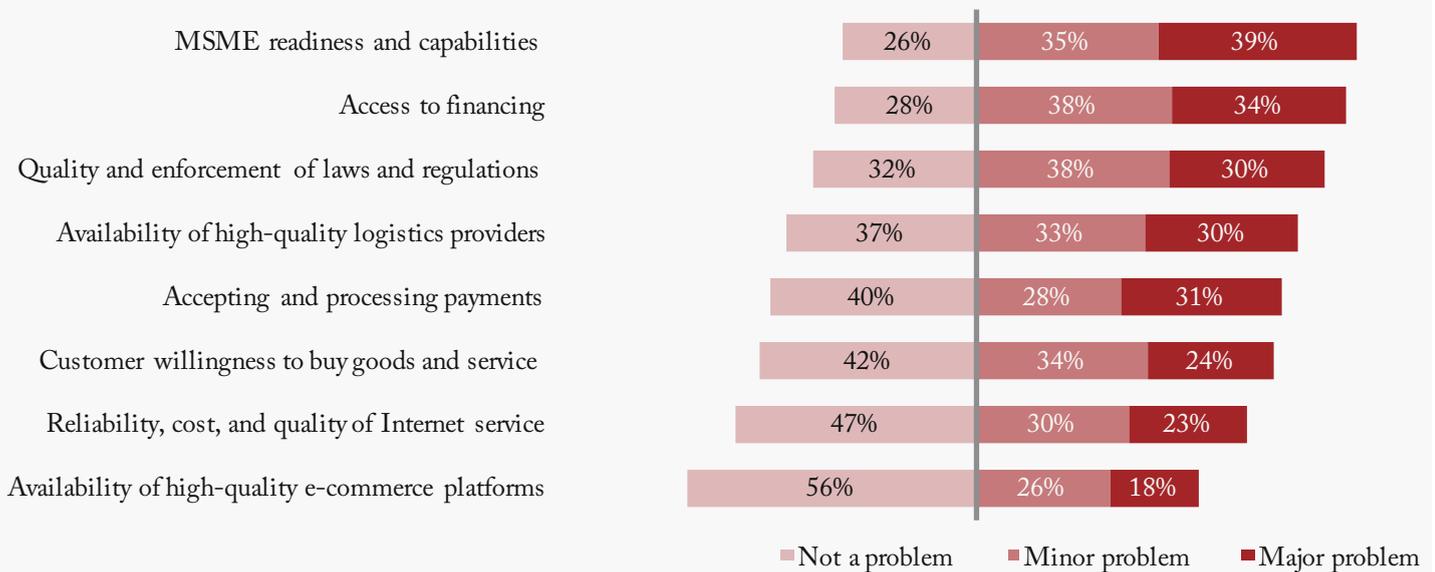
## APEC business community validates framework

In our survey we asked respondents to identify whether each major element of our pillar was not a problem, a minor problem, or a major problem. Every element except e-commerce platforms was identified by a majority of respondents as either a minor or a major problem. For domestic e-commerce, MSME readiness and access to financing were identified as the two largest problems facing MSMEs.

For cross-border e-commerce, quality of laws and regulations, as well as customs and foreign market access were the largest problems facing MSMEs. These findings suggest that while getting to domestic e-commerce is tough, moving cross-border is even a greater challenge for MSMEs. While all these areas need improvements, governments with limited resources should prioritize improving regulations and custom procedures.

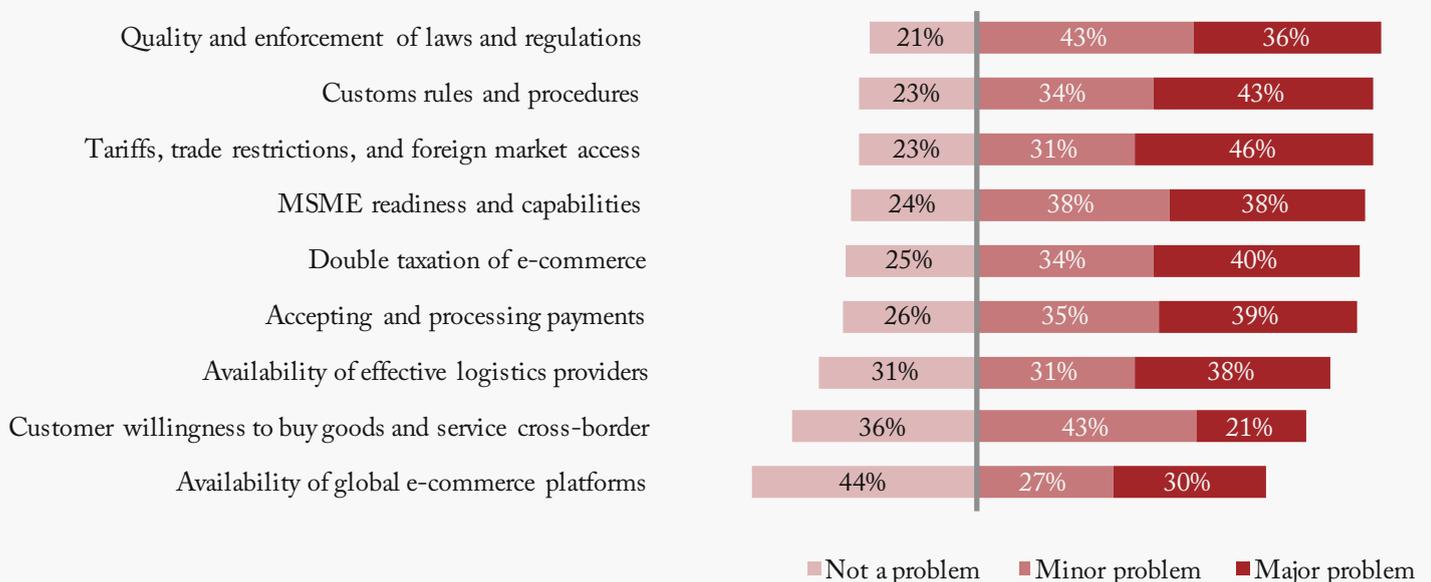
### MSMEs have trouble preparing to engage in domestic e-commerce.

Q: Please rate the following problems for doing domestic e-commerce.



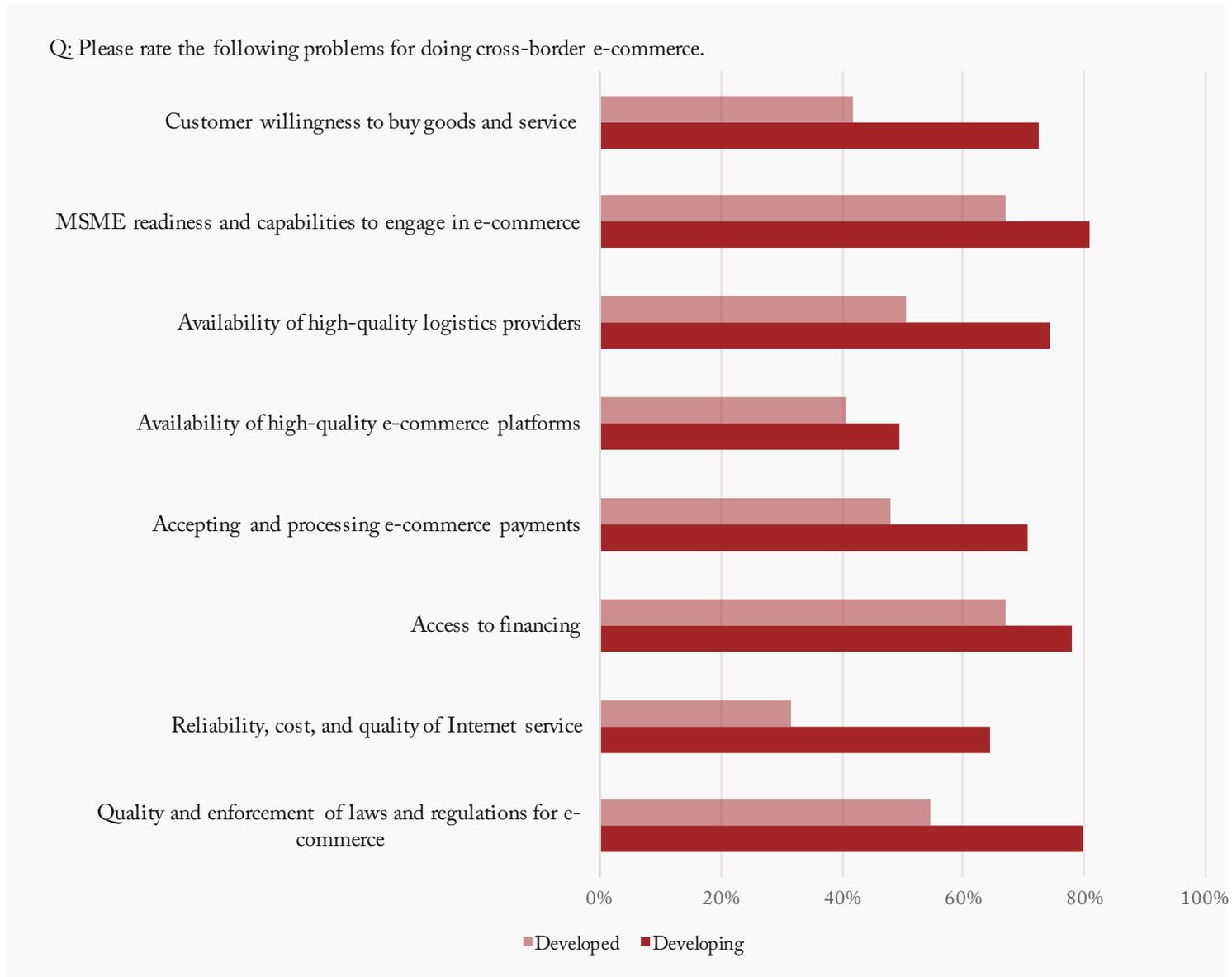
### Yet, the challenges for cross-border e-commerce are a magnitude greater

Q: Please rate the following problems for doing cross-border e-commerce.



## Developing economies face even more problems than developed economies

There is a great deal of variation between the magnitude of barriers for different APEC economies. Each section of our pillar was ranked as a greater barrier in developing economies than in developed economies. The quality of Internet service and the quality of laws and regulations were both significantly greater barriers in developing economies. Developing economies should prioritize closing these gaps.



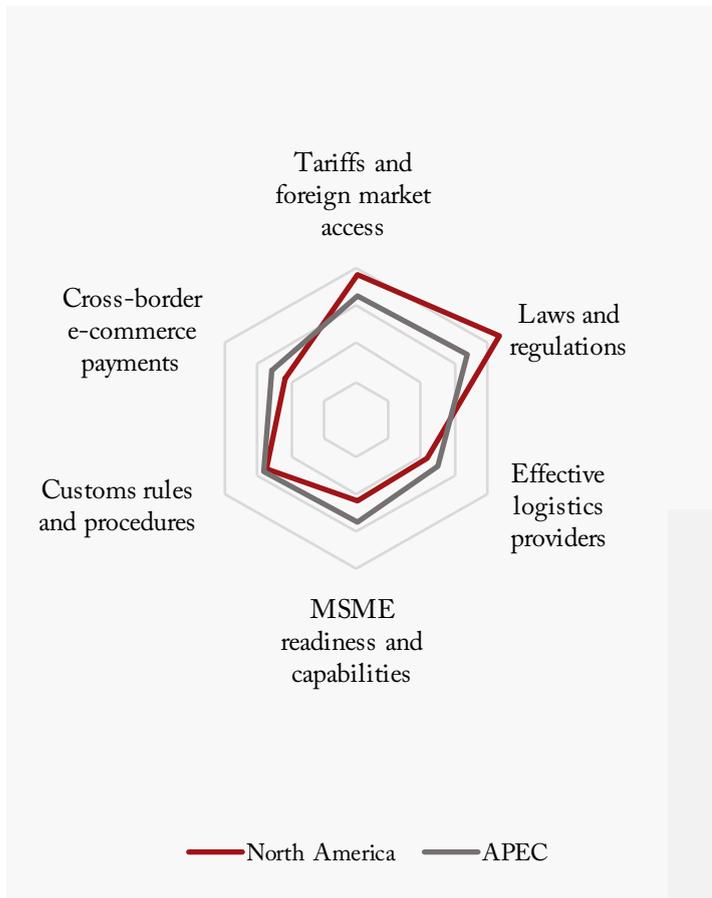
## Variations between APEC regions in readiness for cross-border e-commerce

Regions in APEC face different challenges in fostering a strong cross-border e-commerce environment. This section presents data from our survey on the pillars of our framework that are minor or major problems in each region, and compares that to APEC as whole. We focused on those pillars with the largest variance. The farther a point is from the center, the greater the challenge it poses for the region. The five APEC regions that we compare between are:

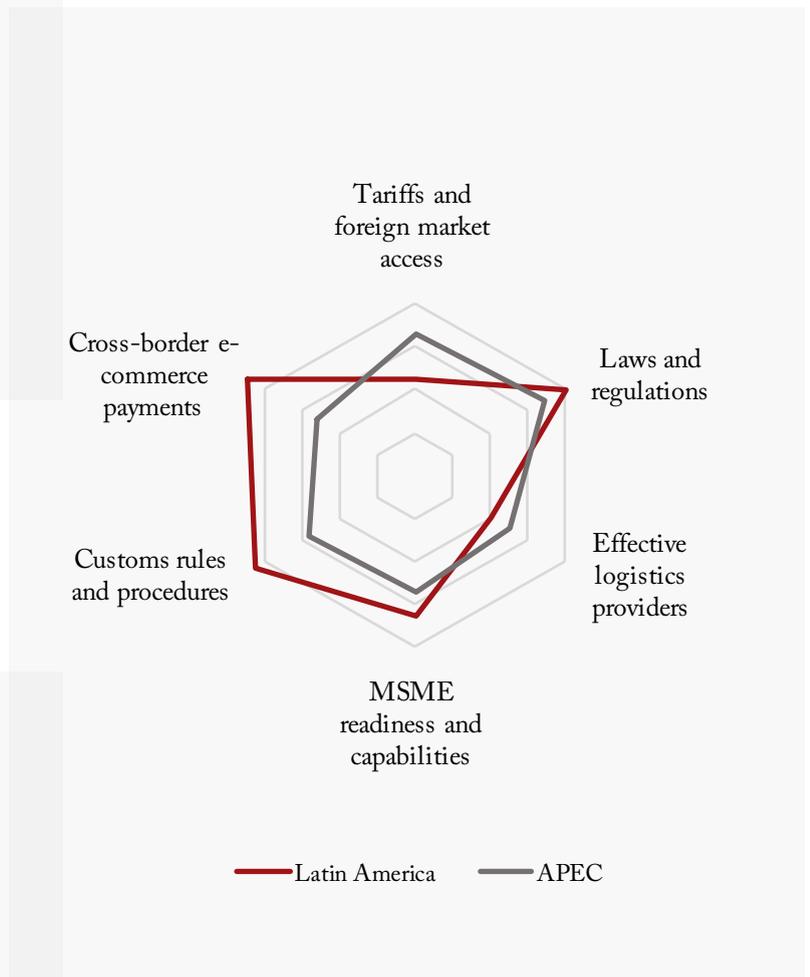
- North America: Canada and the U.S.
- Latin America: Chile, Mexico, and Peru
- Oceania: Australia and New Zealand
- Southeast Asia: Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore, Thailand, and Viet Nam
- North Asia: China, Chinese Taipei, Hong Kong, Japan, and Republic of Korea

Russia and Papua New Guinea are omitted from these comparisons, as they did not fit well within these regions.

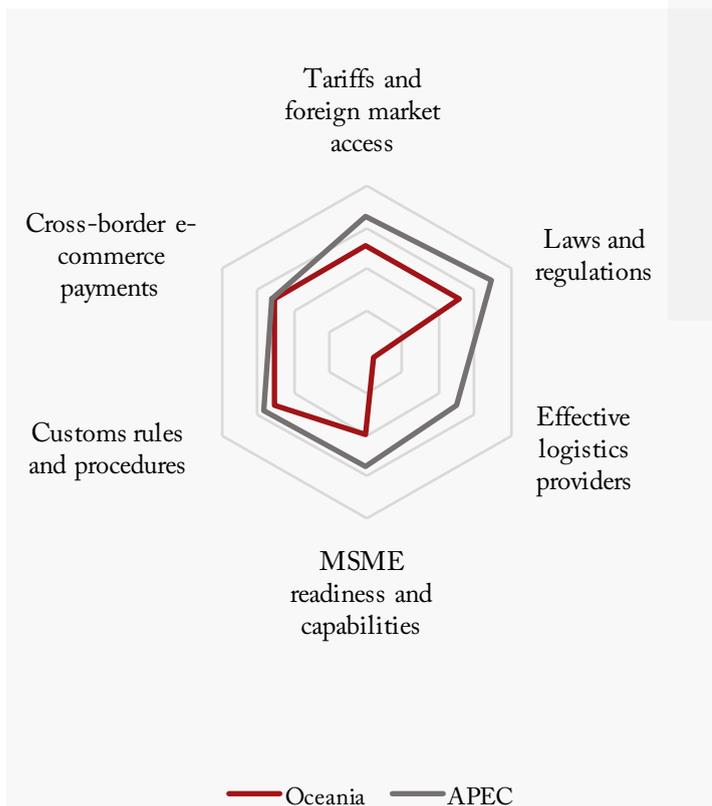
**North America lags APEC in quality of regulations and foreign market access rules**



**Latin America lags APEC in payments, customs rules, and regulations**

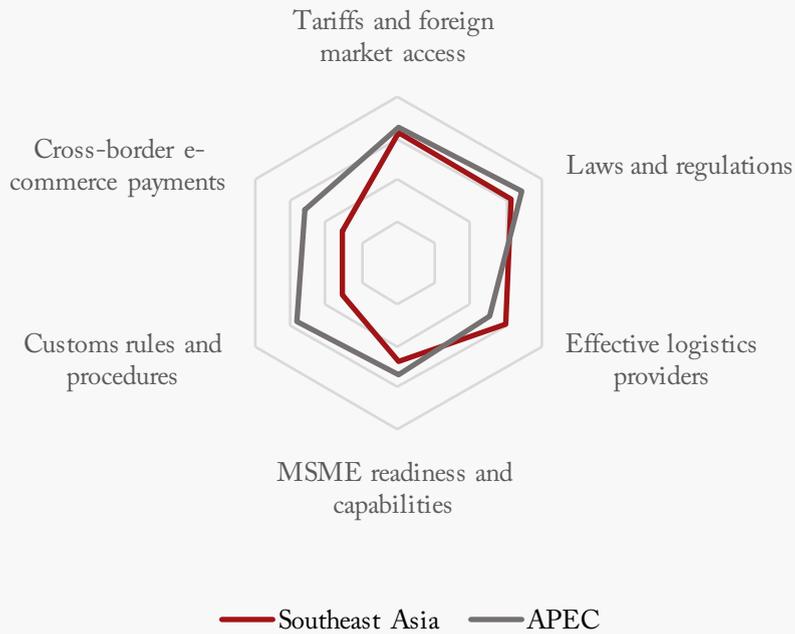


**Oceania ranks highly, but still has work to do**

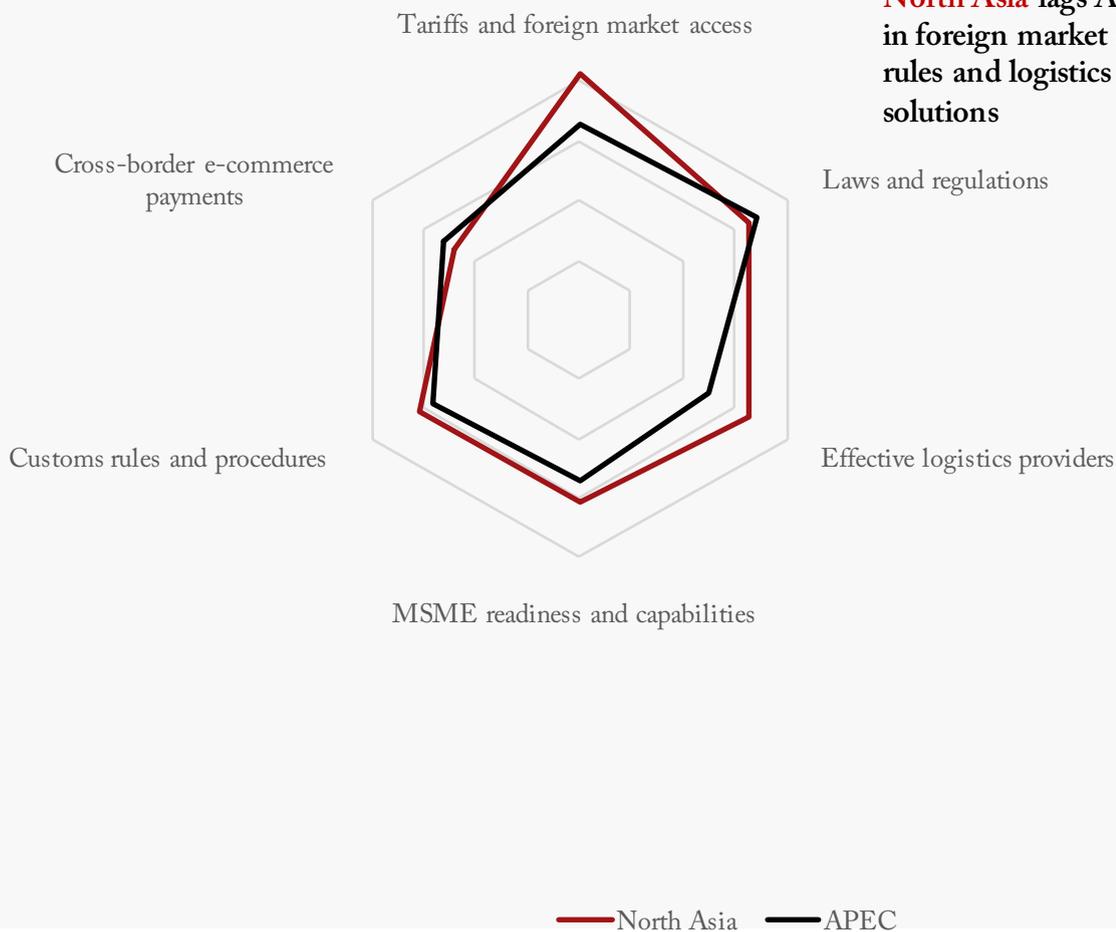


The farther a point is from the center, the greater the challenge it poses for the region

**Southeast Asia  
lags APEC in  
logistics providers**



**North Asia lags APEC  
in foreign market access  
rules and logistics  
solutions**



The farther a point is from the center, the greater the challenge it poses for the region





Enhancers,  
Chokepoints, &  
Stall Outs

# A Supportive Operating Environment Promotes MSME Growth

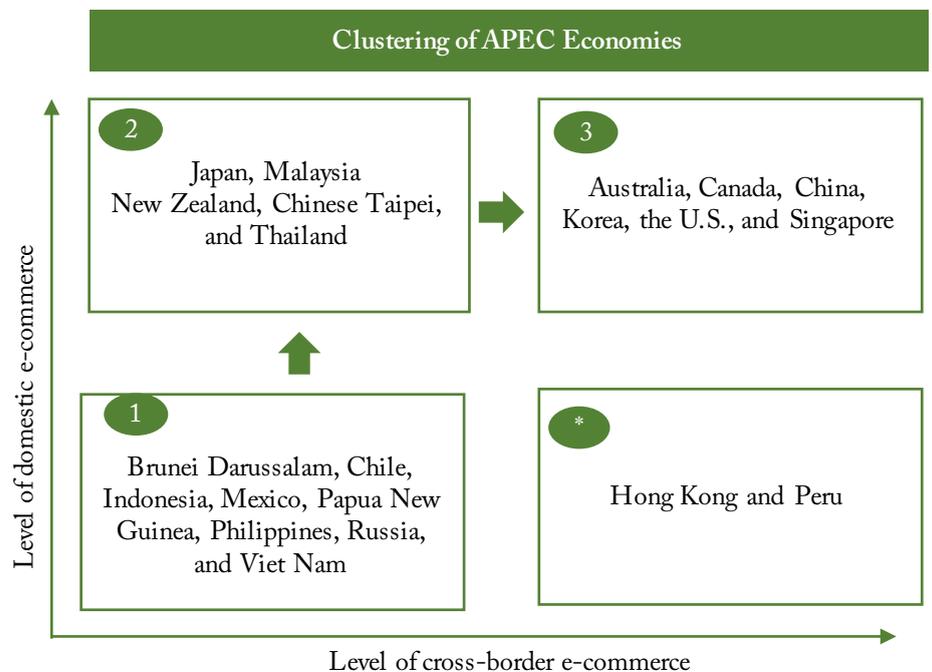
The growth of cross-border e-commerce is directly related to the quality of an economy's domestic e-commerce operating environment. Advanced e-commerce economies are based on extensive and reliable Information and Communications Technology [ICT] infrastructures, widespread and low cost Internet access, business-friendly regulations and legislation, the existence of e-commerce intermediaries to lower barriers to entry for MSMEs, and users willing and able to purchase goods and services online. Access to financing and e-commerce expertise and training are also critical to enabling MSMEs to engage in both domestic and cross-border e-commerce, and to compete globally.

## E-commerce boosts profitability for all types of industry

The Internet has the power to boost profits for nearly all types of traditional MSMEs. Research shows that, on average, 75% of the share of Internet profitability is captured by traditional business, while only 25% is captured by Internet companies.

## Domestic e-commerce boosts cross-border e-commerce, and vice-versa

A flourishing domestic e-commerce environment provides critically important support for cross-border trade. It is the bedrock on which cross-border e-commerce is built. On the other hand, cross-border e-commerce both stimulates the growth of domestic e-commerce, and improves it through the transfer of new technologies and business practices.



*“Mobile penetration is 40%, while landline Internet penetration is only 5%. The Philippines is going to have a direct transition to mobile commerce.”*  
- CEO of Filipino payments company

*“Not only does Internet costs ten times what it does in Fiji, but due to the unreliability we also need to build redundancy into all of our systems. We have no choice but to pass on the costs to our customers.”*  
- Bank executive in Papua New Guinea

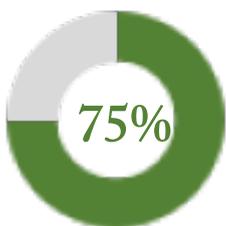
## The critical first step is connectivity

Obviously, no e-commerce can take place unless buyers and suppliers are connected to the Internet. Widespread and affordable Internet access is essential. This is becoming more and more feasible as mobile technologies are replacing landlines as the dominant infrastructure technology. Declining phone prices and increases in transmission infrastructure have connected hundreds of millions of new people to the Internet while avoiding the high costs of installing cable technology. Mobile technology is allowed many economies to leapfrog landline technology altogether.

Once e-connectivity is reached, MSMEs can begin to explore new ways to grow existing sources of revenue, develop new sources of revenue, use technology to streamline operations, transform their suppliers and supplier relationships, and communicate with their customers and employees. In this way, the Internet can transform productivity as well as markets. Existing research shows that a doubling of mobile data use increases the GDP per capita growth rate by 0.5% and a 10% increase in mobile penetration increases national productivity by 4.2%.

## Speed and bandwidth are also critical

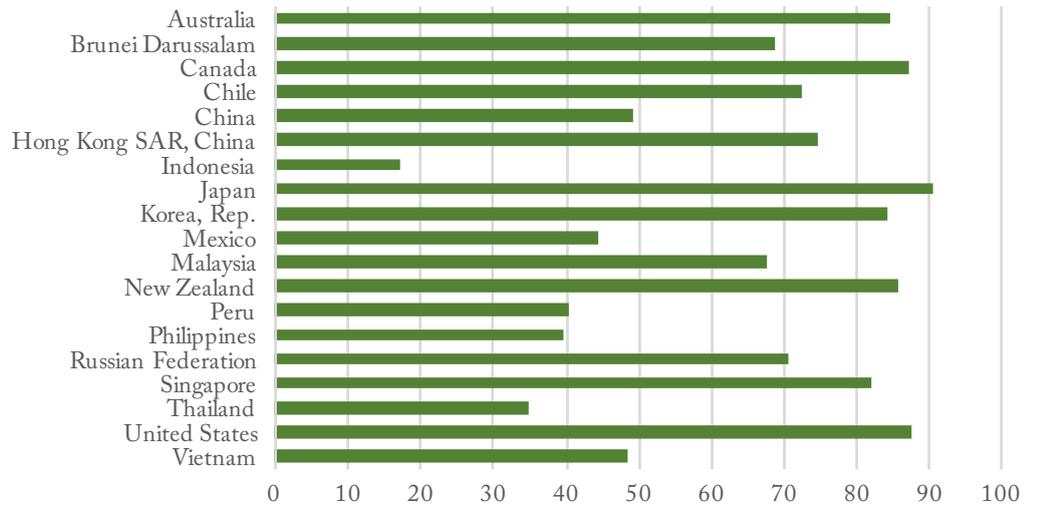
In order to capture the economic gains from e-commerce, it is essential that telecom companies and governments invest in bandwidth not only to meet current demand, but more importantly to stay ahead of future demand, so that important growth opportunities are not lost.



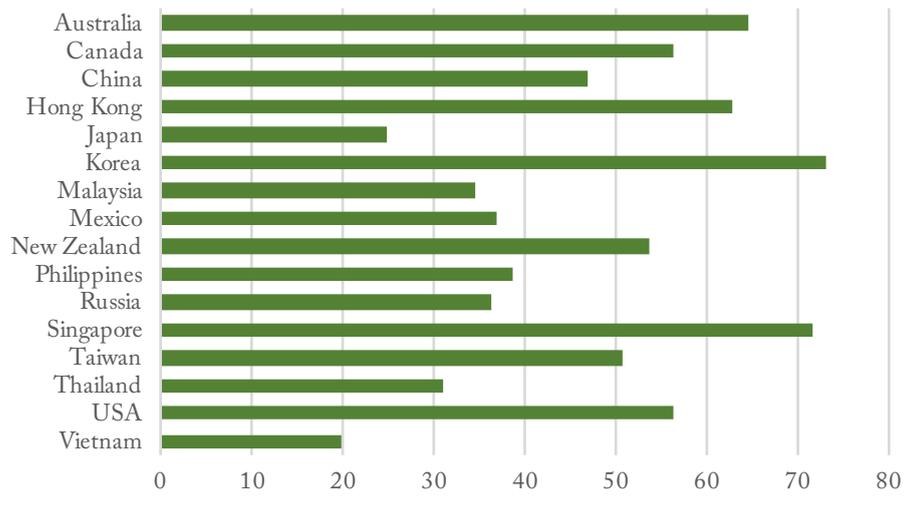
*indicated that Internet reliability was a problem for their business*

## Affordability and reliability are critical

Internet Users (Per 100 People) 2014, World Bank

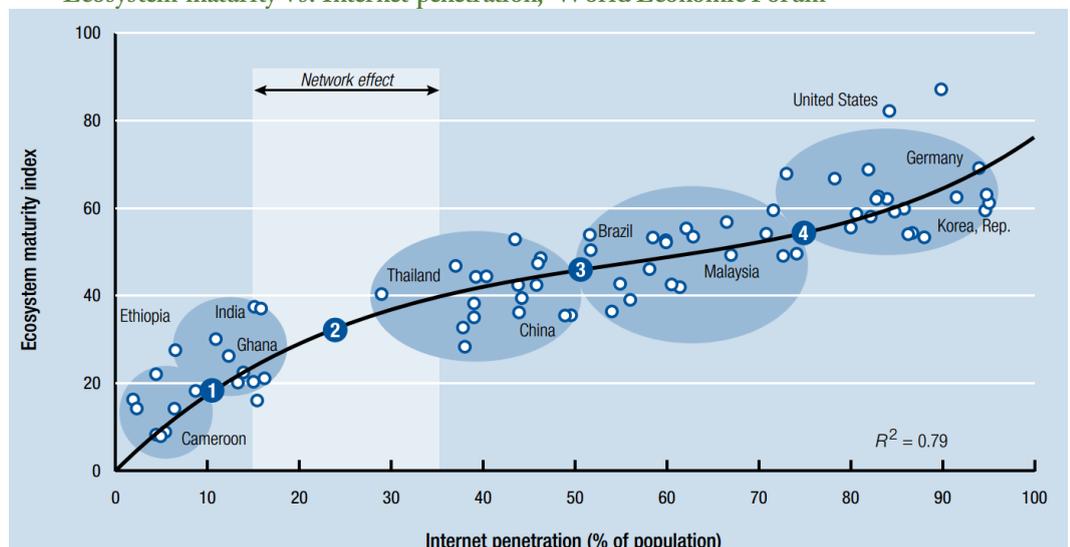


Smartphone Penetration (Per 100 People), World Bank



## ICT infrastructure stimulates growth in traffic and content development

Ecosystem maturity vs. Internet penetration, World Economic Forum



### Having the right telecommunications regulations and laws is vital

A flourishing e-commerce sector requires finely tuned telecommunications regulations that promote competition, provide for equal access, and enable data flows, as well as moderate tariffs on IT goods and services.

*“For cross-border e-commerce to work, systems need to be integrated and connected so that it is a seamless customer experience. But integration is costly and challenging.”*

*- U.S. Logistics provider*

Regulatory Goal	Purpose
Competitive telecommunications regulatory environment	The telecommunications industry should be liberalized to promote competition and minimize monopolistic power. Foreign players should be allowed to enter the market to exert additional pricing power on domestic players
Net Neutrality	Net neutrality ensures that MSMEs are allotted the same priority as larger players by the ISPs. Without net neutrality MSMEs may have to pay more to the ISPs in order to get their products noticed.
Free cross-border data flow	A wide range of traditional industries require cross-border data flow in order to manage global supply chains. Allowing these data flows increases the value of the Internet for e-commerce.
Reduced tariffs on IT goods	High tariffs on IT goods, increases the cost of telecommunications infrastructure. Lower tariffs will lower the cost of building out additional infrastructure
Allocation of mobile spectrum	Mobile spectrum should be allocated to multiple mobile operators to increase competition. Some spectrum should be saved for new operators.

### Intermediaries play a critical role in enabling e-commerce among MSMEs

E-commerce platforms and marketplaces, payment providers, digital marketing companies, and logistics companies all help to lower the cost of entry for MSMEs that want to sell their goods online, both domestically and cross-border.

However, MSMEs still face the challenge of integrating these different providers into a seamless system.

### MSMEs need capital to develop e-commerce

Access to capital was one of the biggest concerns reported by MSMEs during our interviews. Access was problematical for two reasons. First, in many economies, there is no access to venture capital funding.

Second, even where venture capital is available, many MSMEs we interviewed reported they found the process of applying for funds to be extremely burdensome.

There is known to be a significant positive correlation between strong venture capital and government funding institutions and the development, growth, and success of small businesses. In the absence of private venture funding, governments can help fund startups through grants, loans, and tax relief programs. Governments can also encourage foreign companies and venture capitalists to invest in domestic e-commerce firms.

### More than just money

E-commerce startups can also benefit significantly from training, mentoring programs, and the development of co-working spaces, hubs, and incubators.



*More than 70% of MSMEs interviewed reported that access to financing was a problem for doing domestic e-commerce*

*“MDEC and the Magic Malaysia programs have helped accelerate my business. These funding, co-working space, and tax incentives have been influential to the growth and success of my business.”*

*- MSME in Malaysia*

## *Moving forward, areas to focus*

- ⊕ **Go mobile first.** Invest in fast, mobile infrastructure to quickly connect new consumers to the world.
- ⊕ **Enact smart telecommunication regulations.** Pass regulations that create a competitive telecommunications industry with lower prices for the consumer.
- ⊕ **Create work places with free Internet.** In places where Internet is prohibitively expensive for MSMEs, governments should step in to provide free or subsidized e-connectivity. A small investment will result in high returns from startup growth.
- ⊕ **Don't be afraid of global players.** Invite big telecommunication and platform companies into your economy to speed up development.
- ⊕ **Enact e-government.** Create e-government solutions that increase efficiency and the value that consumers get from being online.

# Facebook in the Philippines: Ushering in a New Wave of Mobile Users



Social media is a powerful tool that can increase Internet awareness, speed up Internet adoption, and even serve as a platform for e-commerce. In the Philippines, Facebook has successfully fulfilled these three functions.

In 2013, Facebook formed the “Free Facebook” partnership with Globe, a leading Filipino mobile carrier. At the time a high percentage of Filipinos had Facebook accounts, but many people did not understand the benefits of mobile phones. The first phase of the program lasted from October 2013 to April 2014 and led to a doubling of the number of data users on Globe networks. Many of the people who signed up for Globe during this period were first time Internet users.

Besides helping Facebook and Globe grow their market share, this partnership was effective in increasing mobile penetration rates. Filipinos purchased mobile phones in order to participate in the promotion, as made possible by the concurrent drop in mobile phone prices. Participants were also educated on how to set up their phones and in the process learned how to use additional features, besides Facebook.

Partially as a result of this partnership, Facebook has emerged as one of the top platforms for e-commerce in the Philippines. Facebook is not a complete e-commerce platform, as it does not provide options for delivery or dispute resolution.

Rather, it is an “online-to-offline” platform that typically requires that the buyer and seller meet in person. Still, Facebook is helping to create a culture of e-commerce and making people more comfortable with buying online. In the future, these users may migrate to a more complete e-commerce platform, such as Lazada.

Mobile companies in other economies should investigate forming a partnership with Facebook, or one of their competitors, to offset the price of mobile data. This initiative could increase the number of mobile users and serve as a local e-commerce platform.

# Electronic IDs Boost E-Government and Enhances Trust Between Online Players

PNG is in the processing of rolling out an e-ID system to meet the need for a secure form of citizen identification. Currently, many Papua New Guineans have no formal ID and there is a lack of a universally accepted ID. The new e-ID system is designed to close that gap by providing an ID that citizens can use for voting, opening a bank account, receiving health services, and electronic travel ticketing.

A well designed e-ID system can enable the government to provide better services to its citizens, as well as make it easier for businesses to participate in the digital economy. One of the largest barriers to e-commerce is the lack of trust between merchants and seller online. E-IDs have the potential to solve this problem by providing a secure and universal means of electronic identification.

Estonia has the most sophisticated e-ID system in the world that it has successfully used to deliver public and private e-services to nearly 90% of Estonians. The ID has a wide range of applications, including as a national health insurance card, a digital signature, for i-voting, and for filing taxes. The card contains a chip with 2048-bit key encryption to ensure individuals’ security.

When creating an e-ID system it is crucial to include input from the private sector. An e-ID system can enable businesses to authenticate online services and create legally-binding electronic signatures. PNG should take a forward thinking approach and continue to add features to support the growing e-commerce sector.

# Getting MSMEs Into Cross-Border E-Commerce Has Huge Economic Benefits. However, it Is Extremely Challenging.

MSMEs face very considerable challenges in trying to compete in cross-border e-commerce. The main challenges in terms of readiness for any MSME entering into e-commerce are in adopting new business models that require knowledge of digital marketing, in website design, and in order fulfillment. Those MSMEs that succeed in making the transition to domestic e-commerce face additional challenges to make the jump to cross-border e-commerce. Governments must provide MSMEs with training and technical support services to make this transition process easier for MSMEs with limited capabilities. They must also work to increase awareness of their programs among the MSME population as well as increasing awareness of the benefits of e-commerce.

## Many MSMEs are unaware of the potential of e-commerce

Getting traditional MSMEs who have never conducted business online to start e-commerce is difficult. First, awareness among entrepreneurs

about e-commerce is overall very low and they lack an understanding of the size of the potential market offered by e-commerce, as well as the future opportunities. This lack of awareness is not unique to MSMEs; it is often the case for their suppliers and their customers.

*“Our family business is satisfied with our current local market and is not willing to scale up.”*  
- Mexican MSME

### Huge hurdles for starting domestic e-commerce....

- Acquisition of knowledge and technical skills
- Business intelligence
- Accessing finance
- Most MSMEs are informal
- Cost for starting e-commerce
- Mindset
- Enhancing use of e-commerce by customers and suppliers
- Awareness about the e-commerce opportunities
- E-payments are not secure

MSMEs

### ....and the transition to cross-border e-commerce is still difficult

- Complexities of international trade and language barriers
- Finding potential overseas' customers
- Limited information to locate and analyze markets
- The cost of fraud
- Shortage of working capital to finance expert
- Lack of trust for e-payment

Domestic E-Commerce

Cross-Border E-Commerce

### MSMEs suffer significant gaps in the skills, capabilities and resources needed to enter e-commerce

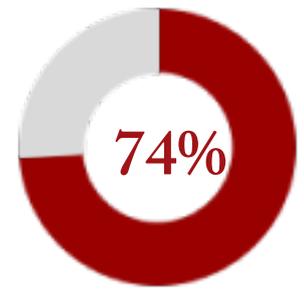
The second challenge is that many MSMEs do not have the knowledge and technical skills required for e-commerce. These companies often lack financing to buy computers, access to the Internet, or the funds to hire e-commerce specialists such as websites developers and e-marketing specialists. Furthermore, as most MSMEs are informal organizations and therefore do not have a formalized corporate governance structures, they are not ready for formal investment. Some MSMEs prefer to stay as informal organizations in order to avoid paying taxes and buying a business license.

### MSMEs feel overwhelmed moving to cross-border

The initial transition from offline to online is the highest hurdle for MSMEs, but there are additional, significant challenges for MSMEs that want to move to cross-border e-commerce. According to our interviews, the most challenging thing for cross-border e-commerce businesses is the complexities of international trade, such as customs clearance and international regulations. Many MSMEs have limited managerial bandwidth and lack the language skills needed to move cross-border. For example, in Japan MSMEs do not enter foreign markets because of their weak language capabilities. Translating websites to English and offering customer services in English is overwhelming.

### Disconnects between available resources can slow growth

Information gaps remain a critical challenge for MSMEs even in the current era of extensive information availability. MSMEs have limited information to locate and analyze potential markets. It is difficult for them to find potential overseas customers an access suitable international distribution channels. Access to financing is a leading barrier for MSMEs that limits their ability to invest in infrastructure, hire qualified people, and absorb the cost of high overseas fraud rates. Most MSMEs are afraid of diseconomies of scale in dealing with customs, cross-border logistics, and e-payments.

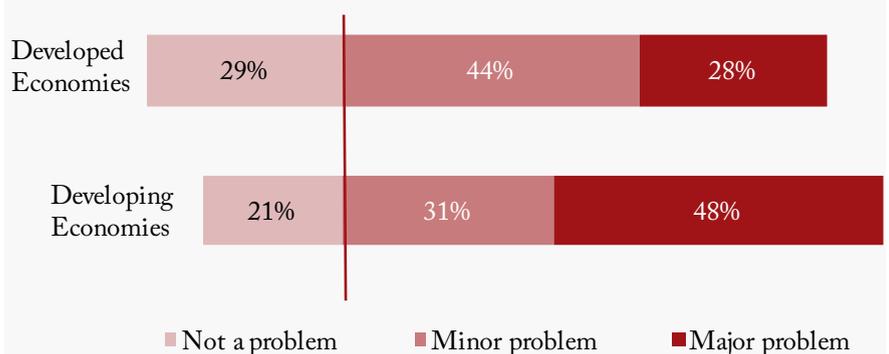


*identified technical skills and abilities for MSMEs to handle the complexities of cross-border e-commerce as a major problem.*

*“The leaders of the businesses do not have a 'do what it takes mentality' and are overwhelmed by the complexities of cross-border e-commerce. So instead of trying to figure it out, they end up abandoning the opportunity.”*  
 - Business executive in Chinese Taipei

### MSMEs in developed economies are more prepared to compete in cross-border e-commerce

Q: Please rate MSME readiness and capabilities to engage in e-commerce.



**It is tough to teach an old dog new tricks, getting MSMEs to transition into cross-border e-commerce is extremely difficult...**

Most MSMEs will not change, do not want to change, or perhaps cannot change even if they want to.

**We estimate perhaps 80% of MSMEs will never transition into cross-border e-commerce.**

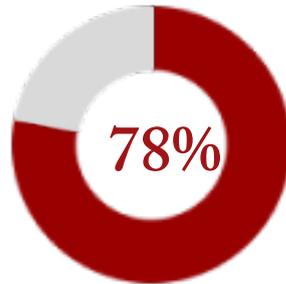
There are two main reasons:

First, many MSMEs are informal. Banks cannot easily lend money to informal enterprises, as these enterprises avoid contact with governments and lack proper documentation. Therefore, they struggle with getting funding.

Second, change is too disruptive for MSMEs because they are overly conservative, focused on local opportunities, and lack a global vision. New “pure-play” e-commerce business don’t have legacy problems and have the leadership, openness, and entrepreneurial attitude needed for cross-border. Some MSMEs will move towards e-commerce as the companies are passed down to the founders’ children.

*“If a startup can succeed in Asia it can succeed anywhere. But we need real success stories to gain momentum.”*

- *Venture Capitalist, Philippines*



*identified the availability of training programs for MSMEs in e-commerce as a problem.*

*“Most MSMEs don’t have enough skills and money to start e-commerce, and are worried about risks.”*

- *Government official, Japan*



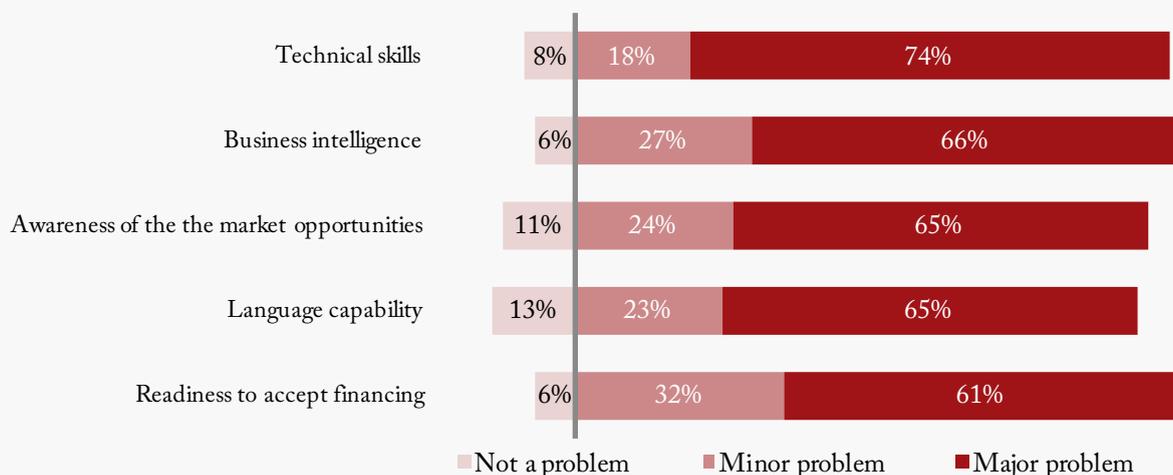
SME support, an organization that is operated by the Japanese Minister of Economy, Trade and Industry, helps MSMEs grow their business. SME support has provided online/offline seminars to MSMEs that includes domestic/cross-border e-commerce information and some individual counseling services. One seminar, ebiz academy, has a Facebook page to provide information to as many MSMEs as possible. They offered 358 seminars last year to 10,000 companies, out of which half were from the Tokyo area. The organization’s goal is to expand their activities to the more than 3.85 million MSMEs in Japan.

*“We would like government to increase the transparency of regulations and decrease the complexities and cost of international trade. Existing training about e-commerce actually doesn’t fit with our needs.”*

- *Japanese MSME*

**MSMEs lack the technical skills and business intelligence needed for cross-border e-commerce**

Q: Please identify the severity of each problem regarding MSME readiness for cross-border e-commerce.



## *Moving forward, areas to focus:*

### **For MSMEs:**

- ⊕ **Go m-commerce first.** MSMEs should create websites optimized for mobile to connect with their mobile only consumers.
- ⊕ **Take advantage of government training programs.** MSMEs should seek out training offered by governments focused on digital marketing, e-commerce, and exporting opportunities.
- ⊕ **Use best practices for accounting and record keeping.** MSMEs should think ahead by keeping high quality financial statements that meet the standards of potential investors, such as banks and venture capitalists.

### **For governments:**

- ⊕ **Promote the national brand in advertisements and road shows.** Foreign consumers are unaware of the quality and types of products produced by other economies in APEC.
- ⊕ **Embrace new technology and innovative business models.** Adopt inclusive regulatory frameworks that permit new types of businesses, especially those that solve problems in payments, logistics, and banking.
- ⊕ **Develop education and training programs to solve problems faced by MSMEs.** Governments should customize the types of training they offer based off the needs of MSMEs with focus in digital marketing, e-commerce, and exporting opportunities.
- ⊕ **Share success cases of other MSMEs.** Governments should highlight innovative MSMEs to serve as a role model for new entrepreneurs. MSMEs want success stories to motivate them to grow their business.
- ⊕ **Create an online FAQ focusing on key issues faced by cross-border e-commerce MSMEs.** Create an online resource with answers to common questions in areas such as international trade documentation, overseas fraud, target economy regulations, and enforcement.
- ⊕ **Offer investment incentives for MSMEs to modernize their businesses.** Governments should encourage MSMEs to adopt new technology by offering tax breaks and lowering tariffs on products related to information technology.

# Pyme al Mundo: Training Peruvian MSMEs to Participate in Cross-Border E-Commerce



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*"Make full use of the opportunity to export goods and services to places like China...use the Internet to know the other side of the world. Doing this will help make you business leaders in the world."*

*-Jack Ma*

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In July 2010, ComexPerú founded the program "the Peruvian SMEs to the World" in partnership with the Multilateral Investment Fund (MIF) of the Inter-American Development Bank (IDB) and Alibaba.com. The program seeks to develop the competitiveness of Peruvian companies by promoting the use of the e-commerce platform Alibaba.com (B2B) as a means to offer products and services both domestically and internationally.

Alibaba.com is among the world's largest B2B platforms. It has over 80 million users on the Chinese and international platforms, and every year this number increases by 50%. Alibaba.com users are located in 240 countries and trade products in 46 sectors and more than 5,900 categories. The company's scale and experience has enabled it to lead high quality training and kickstart e-commerce in the economies that it enters.

The Peruvian SME program has easily surpassed its objectives. By the end of 2012, the number of companies that registered with the program was 38% higher than as required by the agreement with the IDB and Alibaba.com. As a result, 34,474 companies are part of this initiative, compared to the 25,000 initially required. It should be noted that, of the companies registered in the program and that offer their products on Alibaba.com, 100% received at least one request for quotation, often only weeks after having exhibited their products.

Additionally, there's no commission for using the platform.

To achieve the program objectives, ComexPerú and its team of consultants have developed outreach activities in different media (newspapers, magazines, television, and radio) and provided a total of 256 events, including seminars, lectures, and workshops that were attended by over 22,600 people.

This program is free for Peruvian companies and includes training in exports, imports, logistics, customs, finance, and e-marketing, as well as a remote assistance service for companies outside of Lima. The program has led to the creation of a community of Peruvians active in cross-border business on electronics platforms, and allows the suppliers of these companies to gain access to new markets.

The second phase of the program began in May 2015 with the support of PromPeru and is focusing on MSMEs in their start-up stage with no exposure to e-commerce. The 29 MSMEs in the second stage attend bi-weekly classroom trainings and receive support in establishing their business. The future rollout plan is to create digital content and scale the training by offering it online. As a result of the program's success, other economies like Chile are striking similar partnerships with Alibaba to increase MSME access to cross-border e-commerce.

## Lack of Consumer Protection Laws Discourages Customers From Buying Online

A fear of fraud and a lack of trust over the Internet has hindered the growth of cross-border e-commerce. Fraud is a serious impediment for e-commerce in any economy that lacks stringent consumer protection laws and is compounded when dealing with foreign sellers located thousands of miles away. Governments should deal with fraud with a heavy hand to increase people's willingness to transact online. MSMEs should strive towards winning over customers by providing an easy ordering experience, meeting delivery times, and guaranteeing the quality of their product.

### MSMEs must build trust

Our interviews corroborate a major body of existing research on what encourages and discourages customers to engage in e-commerce transactions. A Nielsen survey found that the greatest deterrents for buying online are a fear of credit card fraud, confusing websites, high shipping costs, and not thinking of using the Internet for shopping. MSMEs must work hard to address consumers' fears in these areas as they build their business.

*My company ordered a \$20,000 machine from a large Chinese e-commerce company to make socks. It did not come with any instructions and the company we bought it from did not respond to our requests for help. There was no customer service and the platform did not help us seek a refund.”*  
 - American MSME

### Pactanda: Online cross-border dispute resolution

Pactanda is a website developed to settle e-commerce disputes in South America. Through a data enabled platform, Pactanda helps buyers and sellers to quickly reach an agreement over disputes. All the sellers on the website are monitored and receive ratings according to how they respond to disputes. Similar services can improve confidence particularly for cross-border transactions and make customers more comfortable when buying online.

Barriers	Enhancers
➤ Fraud	➤ Convenience
➤ Lack of social acceptance of e-commerce	➤ Reviews and ratings
➤ Poor affordability	➤ Low prices and discounts
➤ Poor quality of content and services	➤ Return policy
➤ Unreliable delivery	➤ Delivery tracking

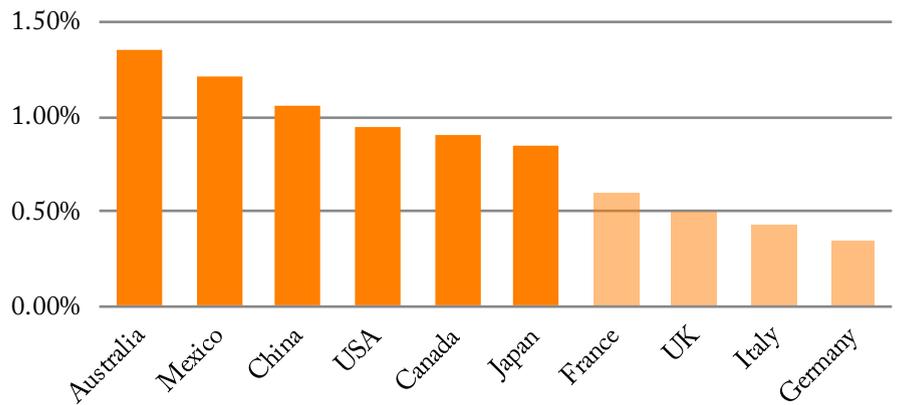
### Distance matters for cross-border e-commerce

For cross-border e-commerce, these issues are magnified further by the challenges of transacting with sellers located thousands of miles away, in addition to language and cultural barriers. Consumer protection, especially across borders, is the single greatest influencer of a customer's willingness to buy online.

### Cross-border fraud dispute resolution is necessary

In our survey, 95% of participants identified fraud as a problem in cross-border e-commerce, with 76% indicating that fraud is a major problem. Fraud dispute not only increases the delivery costs with returns, but also raises concerns regarding consumer protection. The European Commission found that 41% of survey respondents identified the high costs of fraud and non-payment as the greatest obstacle to cross-border trade development. In fact, ReD's customer data reveals that most APEC economies have higher level of fraud risk than European countries. Thus, better protection against counterfeit goods and product piracy are key drivers in the purchasing decision and require more attention.

Attempted Fraud Rate (EUR) by Percentage of E-Commerce Value



Source: ReD Cross-Border Fraud Study

### Logistics is a concern domestically, but even a greater issue across borders...

Consumers demand speedy and free delivery, a service that few MSMEs can provide. International shipping is often slow, prohibitively expensive, and lacks tracking systems. In Asia, shipping within 5-7 days is still the most selected option for internationally shipped orders. MSMEs must commit to delivering packages by the date promised to consumers. And since logistics will never be their main selling point, they must find alternative ways to add value.

*“Bad user experience, in terms of lack of trust, low quality of goods and services, culture difference, and hard to use, stands for the most important barriers for customers to embrace e-commerce.”*

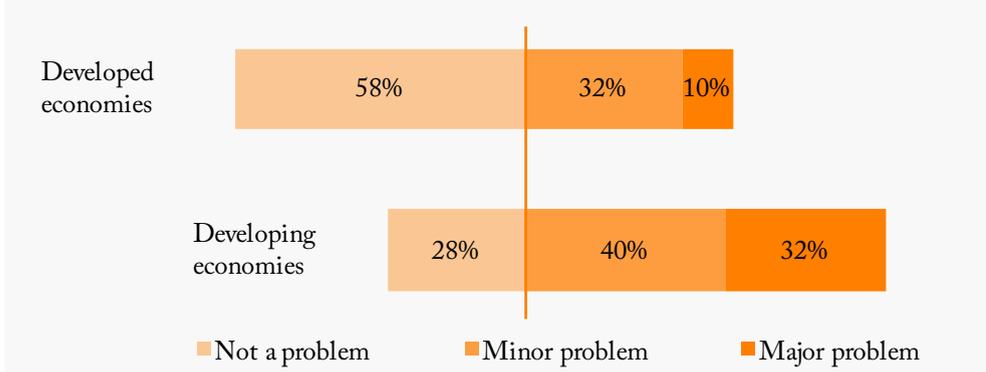
- MSME

*“I do not normally buy goods from overseas, but I found a really good deal for a jacket from China. When the package arrived two weeks later I found a purse inside instead. It was not worth my time to return the product.”*

- American consumer

### MSMEs in developing economies find it more difficult to find willing e-commerce customers

Q: Please identify the severity of the problem of customer willingness to buy goods and service via e-commerce.



### Cross-border e-commerce barriers

- Lack of international trusted payment methods
- Difficulties in cross-border fraud dispute
- Lack of efficient, cheap, and reliable logistic options
- Unsophisticated knowledge of customs and duties
- Minimal consumer protection and return policies for international transactions

### Cultural barriers to willingness play a roll in some economies, as well as generational differences.

Some economies may lack a culture of e-commerce and may be especially suspicious when transacting with online sellers. MSMEs must work hard to create a seamless, pleasant ordering process for the consumer. But, economies with younger populations are the most likely to see jumps in customer readiness in the next ten years. As young people graduate from school and enter adulthood, they will spend a growing percent of their discretionary income online.

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*“In Indonesia, shopping is a pastime and a way that we connect with our families. We spend an entire Saturday at the mall to relax and enjoy the time with the whole family. This is why E-commerce is not as developed here as in other countries.”*  
 - Indonesian Telecom leader.

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*“People like to shop in malls. Our whole culture revolves around malls; we even go to the church in malls. E-commerce is just for specialty products.”*  
 - Filipino Consumer

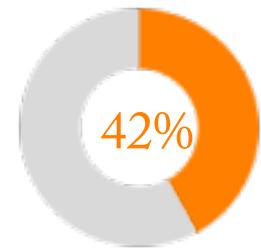
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*“The reason we are so successful cross-border is because of our customer service. We offer free returns without any questions and 24 hour customer service. You have to work hard to earn the trust of your customer.”*  
 - South Korean Retailer

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### Customer protection and return policies increase willingness

Many MSMEs have failed to adopt best practices for dealing with their customers and ensuring that they are satisfied with their purchase. In emerging economies, quality and protection against counterfeit goods and product piracy are key drivers in the purchasing decision. In our survey, only 53% of e-commerce MSMEs expressed that they have return policies for customers. At the same time, over 60% of customers will evaluate a retailer’s return policy before making a purchase. MSMEs must find cost-effective ways to offer return protection for their consumers.



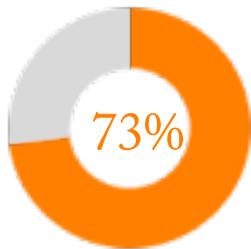
*percentage of shoppers who want to see retailers improve the ease of returns and exchanges, according to “Shop the World” survey*

### Lack of transparency in customs and logistics

Our survey and interviews revealed customs as being the number one problem for MSMEs that want to ship internationally. MSMEs, logistic companies, and governments must work together to move goods across borders and through customs in a timely and efficient manner. The end consumer should not have to worry about deliveries getting stuck in customs, or even need to participate in the customs process.

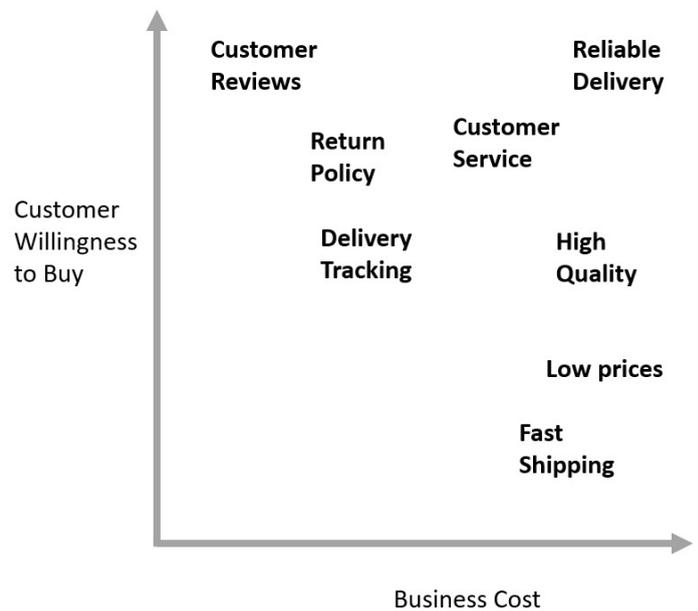
**Despite these challenges, there are ways to encourage and facilitate cross-border e-commerce**

*“People don’t buy online because it is too convenient to walk down the street. But that is beginning to change.”*  
 - Vietnamese consumer



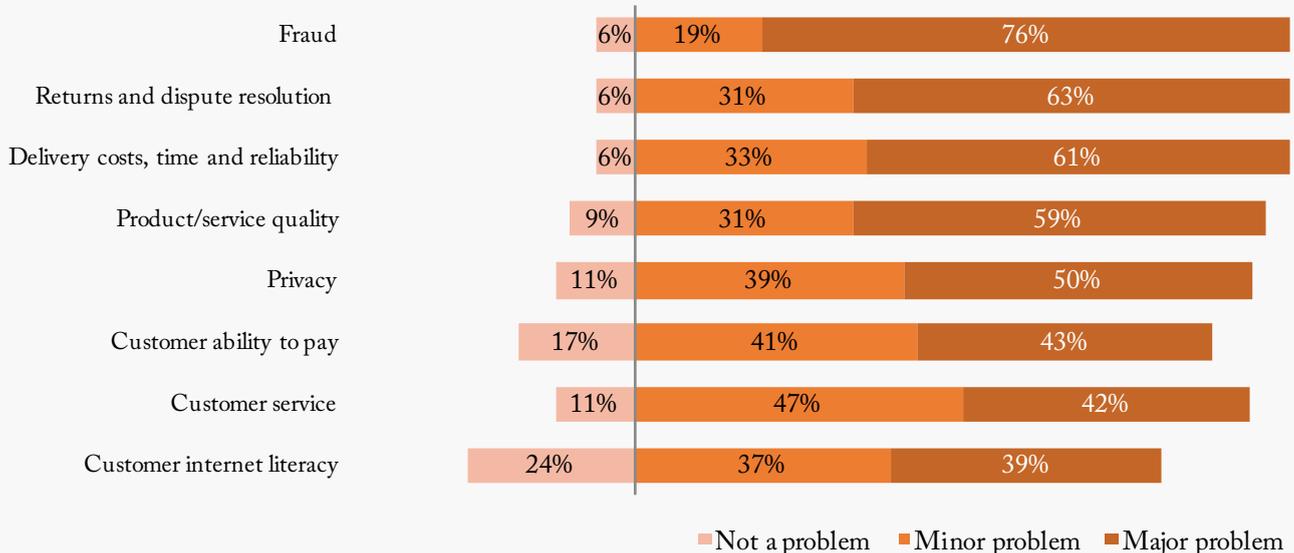
*indicated that there are enough customers online to make e-commerce business viable*

Companies should focus on adding features that increase customer willingness, while requiring a relatively low investment. The below charts provides a framework for how MSMEs should strategize about growing their company. Some features, like customer reviews, have a major impact on customer willingness to buy, while not having a major business cost.



**The greatest challenges faced by customers are fraud, returns, and dispute resolution**

Q: What are the biggest challenges faced by customers?



## *Moving forward, areas to focus:*

- ⊕ **Develop a 3rd-party cross-border certification system.** A universal certification system can increase trust by identifying websites that are honest, follow the rules, and are responsive to consumer complaints.
- ⊕ **Promote e-commerce days and school training programs events.** Organize e-commerce events that increase awareness and encourage e-commerce culture. Example are Singles Day in China and Cyber Monday in the U.S.
- ⊕ **Encourage internationally accepted payment standards..** Economies should encourage new payment methods that are global, have low transaction costs, and offer protections for both buyers and sellers.
- ⊕ **Join international consumer promotion organizations like ICPEN.** The International Consumer Protection and Enforcement Network (ICPEN) is a global organization that protects consumer interests around the world. All APEC economies should join to increase protections, and in turn increase consumer willingness.



## Airasia – Building Customer Readiness in Malaysia

Airasia, the low-cost carrier started in Malaysia that has since expanded to cover more than 100 routes across 22 countries with 6 subsidiaries, exemplifies how a private company can increase customer confidence in online e-commerce transactions. With some of the lowest fares in the world, Airasia (“Now everyone can fly”) made international travel possible for a new income group that once thought air travel was out of reach.

In order to achieve these low costs, however, Airasia used technologies that had little adoption in the region at the time, particularly amongst its customer base. Key among these technologies was online-only direct e-commerce ticket purchases from the Airasia website, using credit and debit cards. Airasia’s promotional prices incentivized customers to learn how to transact online, and effectively trained consumers in the benefits and conveniences of e-commerce. Positive Airasia experiences with trust, security and privacy have increased customer willingness to buy online, laying the foundation for today’s online-ready consumers

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*“AirAsia was the first big e-commerce leap. You couldn’t buy those RM1 airline tickets [on promotion] if you weren’t willing to conduct an online transaction. You had to use your credit card; you had to buy online.”*

*-Lim Kok Hing, founder of online payment systems provider iPay88.*

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Driving improved customer readiness to buy online.:  
The positive feedback loop.



# Marketplaces and Platforms Are the Biggest Enablers for MSMEs To Go Cross-Border, but They're not Benign Players

E-commerce platforms are essential springboards for MSMEs that lack the scale, capacity, and reach to go cross-border alone. Platforms provide the tools, training, and support to help MSMEs with limited capabilities to engage in e-commerce. However, high switching costs, and a limited selection of platforms has led to the emergence of monopoly-like players. Governments must remember that platforms are not benign players and that there is a real danger that they will squeeze MSMEs by charging exploitative listing fees.

## They're re-shaping the cross-border e-commerce landscape...as aggregators

Platforms act as global information aggregators. They introduce transparency on global prices, variety, availability, and they allow smaller players to attain cross-border reach at lower cost and higher efficiency. Platforms also serve to enhance and improve customer willingness to buy products through consistent purchase experiences and built-in consumer safeguards. MSME branding is also enhanced through platform tools, such as customer reviews, platform branding and certification programs.

Marketplaces accelerate market access and market reach for sellers by aggregating consumers and providing fulfillment, payment, marketing and other transaction services. With their global reach and scope, e-commerce marketplaces such as Alibaba, eBay, and Amazon have lowered the cost and manpower requirements for MSMEs to engage in cross-border e-commerce. Marketplace mechanisms, such as customer reviews, search, and discovery tools also increase customer willingness to buy from new vendors.

**MSME Support**

In 2010, e-commerce giant Alibaba, in partnership with ComexPeru and two financial institutions in Peru, provided e-commerce training to 34,474 MSMEs. As a result 33,514 new products were listed on the platform.

## ...As transaction enablers

Platforms serve a vital role in the cross-border e-commerce ecosystem by providing MSMEs with end-to-end solutions, from discovery to payment to fulfillment. The economies of scale and scope that the largest platforms provide to MSMEs also significantly lowers individual transaction costs, while providing more consistent and reliable service. Global platforms also spur cross-border growth through translation and customs services.



*...As educators and rule setters*

Platforms have a natural incentive to build capacity through seller training programs to on-board MSMEs. As they grow, platforms build out and educate consumer and producer (MSME) bases in new economies. Platforms also extend and enhance consumer protection standards in new markets. Through platform-independent trust marks, buyer and seller protection services, and customer reviews, the best platforms establish global standards for security and transaction simplicity.

*And they're creating tremendous value for both buyers and sellers...*

*Benefits from platforms for buyers include...*

- Saved money and time, while gaining access to global goods and services
- Able to buy literally ANYTHING
- Seamless purchasing experience
- Consumer protection, reviews, after-sale support, insurance, and payment escrow services

*Benefits from platforms for sellers include...*

- Reduced investment requirements as a barrier to entry for MSMEs
- Digital marketing solutions to increase access and reach to global markets
- Enhanced credibility
- A full stack of services at costs MSMEs cannot obtain on their own
- Training to get started
- Market intelligence to guide MSMEs in creating a business strategy
- Set rules to ensure fair play, such as seller protection

*There are different types of platforms ranging from simple search engines to fully integrated*

Buyers leverage the Internet to purchase goods and services through a multitude of gateways, from fully integrated solutions such as Alibaba, to single offering services such as search. Social media platforms such as Instagram are quickly becoming important showrooms for MSMEs, especially in emerging economies.

MSMEs utilize platforms to increase their revenue and reach. Levels of integration and reach of these platforms varies from marketing only, such as search, to full business enablers, such as T-Mall, where the platform will perform almost all of the non-core business processes.

*Types of marketplaces and things they do for buyers*

Kinds of marketplaces	Purchasing Process				Example
	Discover	Order	Pay	Deliver	
Search Engines	<i>e</i>				Google, Yahoo, Instagram, Pinterest
Semi-Integrated Marketplaces	<i>e</i>	<i>e</i>	<i>e</i>		Facebook**, eBay, Etsy
Fully Integrated Marketplaces	<i>e</i>	<i>e</i>	<i>e</i>	<i>e</i>	Alibaba Amazon DHGate
Individual Marketplaces		<i>e</i>	<i>e</i>	<i>e</i>	Nike.com

*Types of marketplaces and things they do for sellers*

Kinds of marketplaces	Selling Process						Example
	Design & Produce	Marketing*	Order	Payment Management	Supply Chain**	Customer Service***	
Advertiser		<i>e</i>					Google, Instagram, Pinterest
Semi-Integrated Marketplaces		<i>e</i>	<i>e</i>	<i>e</i>			Facebook, eBay, Etsy, individual websites
Fully Integrated Marketplaces		<i>e</i>	<i>e</i>	<i>e</i>	<i>e</i>	<i>e</i>	Alibaba (Taobao), Amazon, DHGate
Business Partner	<i>e</i>	<i>e</i>	<i>e</i>	<i>e</i>	<i>e</i>	<i>e</i>	Alibaba (T-mall), Amazon, DHGate

**Remember that platforms are not benign player**

Monopoly positions for platforms can lead to unfair terms and unfair private-label competition. Platform lock-in can occur in two ways:

MSMEs cannot move away from a platform even if the terms are unfair because of their built-up reputation through customer reviews that will not transfer to a new provider, and MSMEs can also be tied up to the services provided by the platform, such as training, IT services, financing and operational processes so that they find a move to a new provider too costly. Our survey revealed that high switching costs were MSME’s greatest concern regarding platforms.

As the large e-commerce players in the market, governments will naturally turn to them for advice on policy. With unrivaled monopoly power, compared to regulated industries such as telecommunications or airlines, platforms will have the tendency to skew policy in favor of themselves. Governments must be aware of this tendency and listen to the smaller players in the market as well.

**Platforms are bridges to cross-border e-commerce success... but be wary of the tolls**

Governments need to guide, advocate for, and protect MSMEs as they engage with platforms. Given the huge potential upsides that platforms bring, governments should not be afraid to engage with foreign players to find a way to bring them into the economy to build out nascent ecosystems. The platforms should facilitate knowledge sharing and provide channels for MSMEs to learn from each other’s e-commerce success stories.

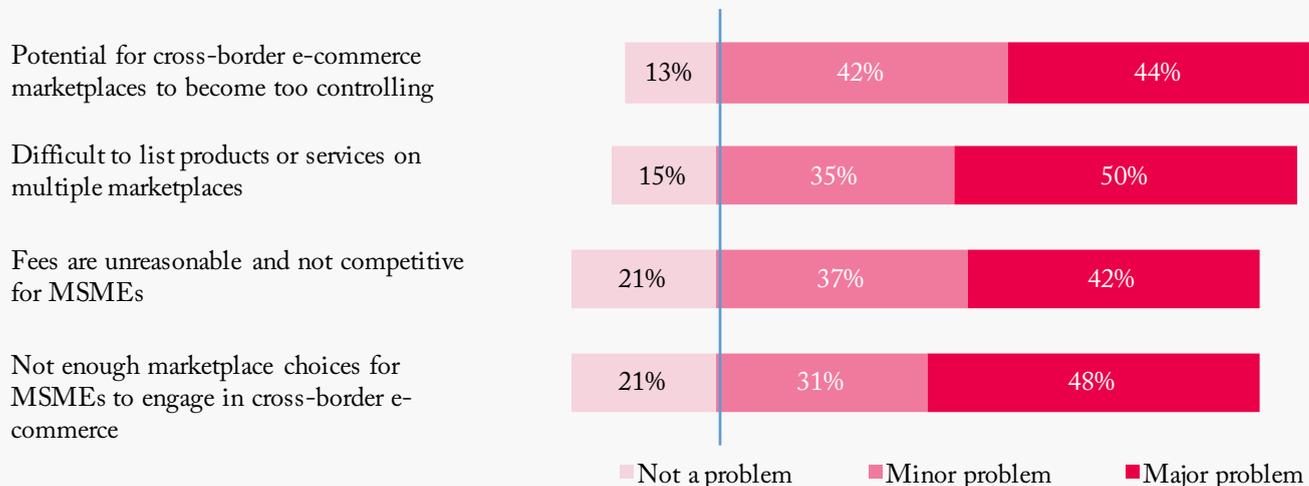
Existing platform rules can also be elaborated upon to build a consistent set of customer protection, data privacy, and general e-commerce regulations. By working with the platforms, economies can also empower their agencies to more effectively police and enforce these regulations. In general, it is in the best interests of economies and platforms to work in concert to maintain a light regulatory touch that allows for maximum growth, with a hard line on anti-competitive practices, such as monopoly pricing and high switching barriers.

*“The hotel listing platforms raised their charge rate again, now I’m looking for cheaper alternatives”  
-Hotel Owner in Peru*

*“Alibaba program changed my life entirely, it was a blessing”  
-MSME in Peru*

**MSMEs are worried about the potential for platforms to become too controlling of the e-commerce ecosystem**

Q: Rate the severity of the following problems regarding platforms for cross-border e-commerce.



## *Moving forward, areas to focus:*

### **For governments:**

- ⊕ **Engage with foreign players.** Governments should bring in foreign companies, such as Alibaba and Amazon, to increase competition and fill gaps in local markets
- ⊕ **Highlight MSME success stories of selling on platforms.** MSMEs want examples of companies that have already made it that they can relate to. Sharing case studies and best practices can help motivate MSMEs and increase awareness of e-commerce.
- ⊕ **Create public and private dialogue to solicit feedback from MSMEs on their experience with platforms.** If necessary, governments should create regulations to protect MSMEs from being “bullied” by platforms.

### **For platforms:**

- ⊕ **Platforms should provide training to make it easy for MSMEs to get started.** By providing training, platforms can lower friction points for MSMEs that want to get online, but don’t know how.
- ⊕ **Platforms should serve as arbitrators of online disputes to increase both consumer and seller confidence online.** By creating a level playing field for both parties, platforms can grow trust and interest in transacting on platforms. Platforms should evenly weigh the interests of consumers and buyers.

# Rakuten: A Vertically Integrated Platform With Global Ambitions



Rakuten Ichibam, Japan's largest e-commerce platform, sells products from over 420,000 companies. What's more, over 100,000 of those companies sell internationally. What gives consumers in over 173 countries around the world confidence in purchasing goods off of Rakuten Ichibam? The key is twofold. First, Rakuten's certification system, which helps foster customer trust in the quality of the products being sold on Rakuten's website. Second, Rakuten offers seminars and training programs to provide MSMEs with support for selling overseas.

Rakuten Group has developed a rich ecosystem of services to better serve their customers. Unlike other major platforms, merchants on Rakuten have the ability to design their own sites and engage directly with their customers through social networking services. E-commerce consultants help merchants overcome the challenges of setting up their own sites and may assist in developing customized sales growth strategies. The company also offers highly popular Rakuten Super Points that are earned through shopping and are used for purchases and travel. This loyalty program also assisted Rakuten in developing a footprint in the credit card and financial services industry.

In addition to vertical integration, Rakuten has expanded by entering new global markets. In 2012, Rakuten adopted English as its official language to increase the company's global competitiveness. Since 2010, Rakuten has acquired websites including Buy.com and Priceminister, while making significant investments in the Chinese travel site CTRIP and the American picture sharing social network Pinterest. The company also founded the Rakuten Institute of Technology where academia and industry collaborate to develop Internet technologies to support cross-border e-commerce. The most recent branch of the Institute is located in Boston and focuses on machine learning, artificial intelligence, and deep learning.

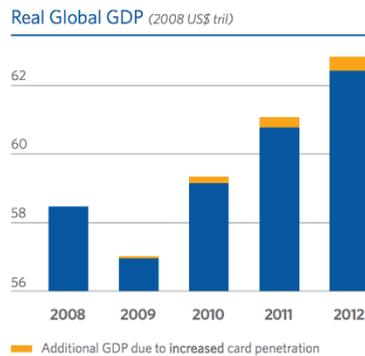
Platforms should look at Rakuten as an example in how to better meet the needs of MSMEs. Many platforms do not allow merchants to individualize their webpage or to interact directly with their customers. As a result, it is difficult for these MSMEs to develop a strong brand and to scale their business. MSMEs need more options like Rakuten as they look to expand their business cross-border.

# Payments: Facilitate, Don't Over Regulate

For cross-border e-commerce to grow, payment solutions must expand beyond the traditional banking system as e-commerce requires new, innovative payment solutions. Governments must establish a framework for secure cross-border transactions that allows for innovative payment solutions to flourish. For a MSME to reach consumers via their preferred online payment method in each APEC economy, it would need to enable multiple different payment types across 21 currencies. Governments must do more to promote interoperability between payment systems. Multi-ministerial governance over e-payments regulations must also be avoided at all costs. APEC-wide regional harmonization will boost e-payments, and in turn, cross-border e-commerce.

## Payments improve economic performance

The development of electronic payment methods has been a major contributing factor for the growth of e-commerce and in turn, the GDP of economies. But developing economies still heavily depend on cash transactions. As of 2013, 85% of the world's retail transactions were cash based, which costs economies 1.5% of GDP in cash management costs. For this reason, governments need to enhance regulations in order to support cashless transactions, promote e-commerce and in turn improve the GDP.



Source: *The Impact of Electronic Payments on Economic Growth, Moody's analytics*

Cumulative Contribution to GDP Growth from Greater Card Penetration  
\$ billion, (2008 – 2012)

Argentina	8.1
Australia	20.8
Canada	9.7
Chile	6.4
China	374.5
Hong Kong	2.8
Indonesia	9.1
Japan	24.5
South Korea	23
Mexico	7.8
Malaysia	4.2
New Zealand	3.5
Peru	1.7
Philippines	2
Russia	36
Singapore	3.3
Thailand	1.8
United States	127.4
Vietnam	1.2

Source: *The Impact of Electronic Payments on Economic Growth, Moody's analytics*

## Innovations in e-payments



Source: *Payment Regulation for Asia Pacific A Model for Innovation and Growth*  
October 2013

Greater use of electronic payments added

- \$983 billion in global economic growth (2008 – 2012)
- Growth in GDP equivalent to creating 1.9 million jobs
- A 0.8% increase in GDP in emerging markets and 0.3% increase in developed markets

### The sophistication of payments varies widely across APEC, but all economies have areas to improve

The PECC study ranks APEC economies in their payments readiness across four metrics:

- Regulatory and policy environment** captures the maturity of regulations for both the information and communication technology (ICT) and business sectors.
- Infrastructure** measures investments in building a reliable and secure physical network to deliver e-payments nationwide, particularly to rural areas.
- Demand** captures the level of latent and actual demand for e-payments from businesses and consumer.
- Innovative products and services** focuses on the readiness of economies and businesses to develop innovative payment solutions and business models by looking at the level of competitiveness, venture capital availability, the and presence of international players.

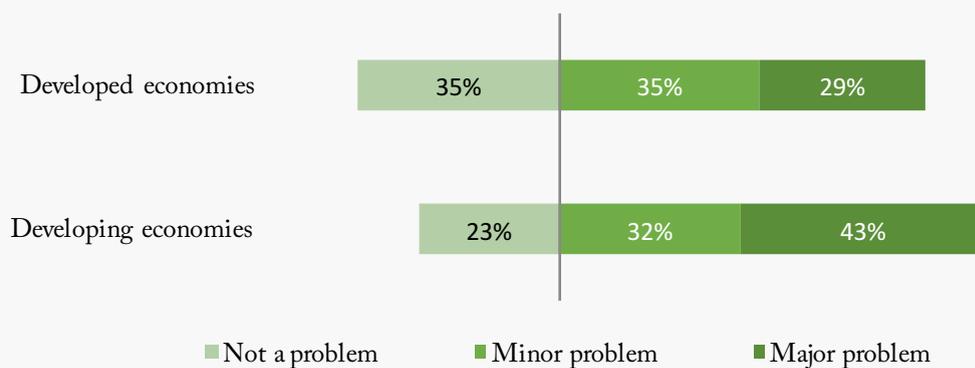
Economies with developed e-commerce have a high level of electronic payments penetration, primarily attributed to strong consumer protection mechanisms and a more conducive payment regulations environment. Developing economies have a higher reluctance to adopt electronic payments due to fears of payment and product fraud. Cost is a huge barrier, especially for MSMEs to adopt e-payment systems. MSMEs also often lack the capability to handle payment disputes efficiently. While developing economies have low credit card penetration, there is a trend of innovative payment mechanisms tailor-made to local e-commerce markets. However, these solutions such as cash-on-delivery (COD) face challenges from local municipalities and conventional players such as banks.

### PECC e-payment readiness study

Overall Rank	Economy	Regulatory and Policy Environment	Infrastructure	Demand	Innovative Products and Services
1	United States	6	2	2	1
2	Singapore	1	7	6	4
3	New Zealand	4	5	4	8
4	Australia	9	3	3	6
5	Canada	5	4	1	9
6	Hong Kong	2	8	9	3
7	Republic of Korea	13	1	5	7
8	Japan	7	6	10	2
9	Chinese Taipei	8	9	8	5
10	Malaysia	3	13	11	11
11	Brunei	11	11	7	17
12	Chile	10	12	12	14
13	China	12	14	16	10
14	Russia	20	10	13	13
15	Thailand	16	15	14	15
16	Indonesia	14	19	21	12
17	Philippines	17	17	18	16
18	Mexico	19	18	15	18
19	Peru	21	16	17	20
20	Vietnam	18	20	19	19
21	Papua New Guinea	15	21	20	21

### Developing economies find payments a greater challenge to overcome

Q: Please identify the severity of the problem of payments for MSMEs engaged in cross-border e-commerce.



## Fraud in e-payments is the biggest barrier to their growth

As consumers' preferences continue to shift toward mobile and apps for daily banking activities, financial fraud has become increasingly complex and recurrent across all banking channels. Criminals today coordinate fraud schemes across all transaction channels and threshold detection systems often cannot keep up with the wide array of attacks on persona data. The wide range of access points for financial information - including smartphones, tablets, office, and home computers - gives fraudsters an array of options to plan and execute their attack. To keep up with this rapidly growing threat, banks must evolve from the traditional, siloed method of fraud detection to a proactive, analytic approach.

Fraud liability has a major impact on the level of e-payments adoption in any economy. Some economies such as the United States have managed to transfer fraud liability to the consumers' bank or to the seller depending on the point of fraud. Escrow payments that offer some protection to both buyer and seller have seen a welcome growth due to the payment and product fraud protection it offers. Economies have to implement strong dispute addressal mechanisms and a strict penalties for fraudsters.

*"In the online banking system, the biggest concern is internal security, instead of external hackers"*

- Mexican payment firm

*"More than actual fraud, the perception that fraud levels are high is a major factor preventing people from using online payment methods"*

- Director of a global payment firm in Hong Kong

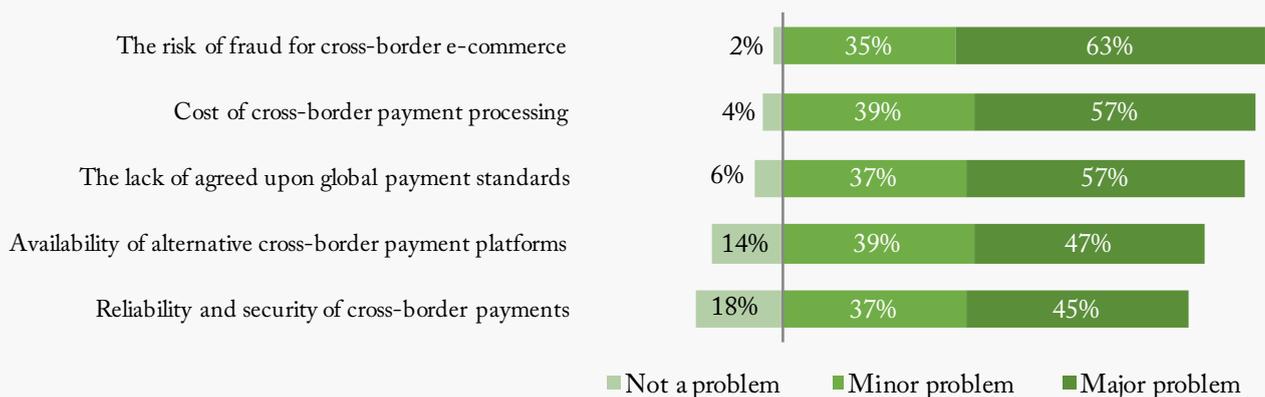
Verified by  
**VISA**  
**MasterCard**  
**SecureCode.**

### 3D Secure

In many developing economies, regulatory bodies mandate the use of an additional layer of security for credit card payments. This requires the customer to authorize the transaction with a unique pin or One Time Password (OTP) forwarded to their cell phone. This decreases the level of fraud for "Card Not Present (CNP)" transactions and improves the trust among customers, motivating them to use their credit cards more frequently online. Some economies, such as the United States, have not yet mandated such security features, due to the added cost and technical burden for merchants. Merchants also complain of the increased drop-off rates that result from this added step in their purchase workflow. Economies must weigh the benefits of reduced fraud versus the economic implications of mandating an additional step in the purchasing funnel.

## Fraud and payment processing are the largest barriers for MSMEs.

Q: Please identify the severity of each problem regarding payments for MSMEs engaged in cross-border e-commerce..



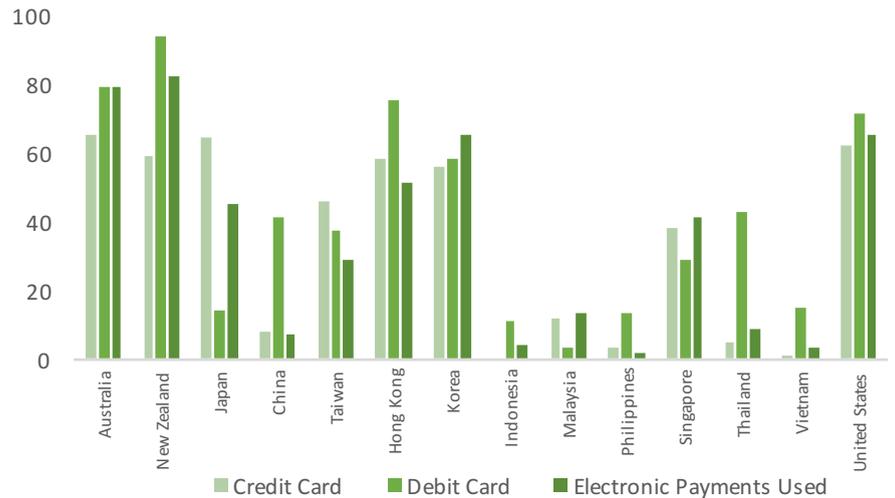
**....closely followed by costs of electronic payments adoption for MSMEs**

Moving payments online leads to new costs for MSMEs. There are fees for using a payment channel such as Visa and MasterCard, as well as initial set up costs including bank account modifications. For this reason, MSMEs retain an affinity for cash based payment methods rather than online systems. When moving cross-border there are additional charges the form of foreign currency transaction fees and interest rates by banks. Even alternative payment solutions such as PayPal levy a transaction fee 2.9% plus \$0.30 for each transaction.

**....and lack of availability of cross-border e-commerce payment methods for consumers**

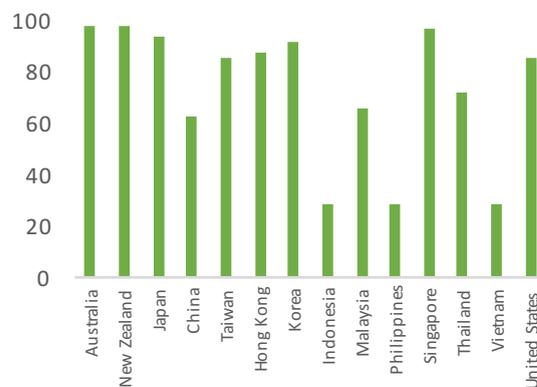
Low credit card penetration is directly correlated to the amount of e-payment transactions- at least for the time being. The low rates are a result of the large unbanked population across APEC, that lacks access to traditional payment methods that are still often needed to transact online.

**Wide variation exists among APEC economies in payment methods**



Source: Payment Regulation for Asia Pacific. A Model for Innovation and Growth October 2013

**Access to Bank Accounts (%)**



*"The current pricing for online payment methods is exorbitant. When we accept prepaid cell-phone credit, we are forced to pay 20+% to Telco. The reason we have to do this is because the credit card penetration isn't high enough."  
- Vietnamese business owner*

*"It is tough for Chinese consumers to buy products in the U.S., as their credit cards are not accepted on U.S. platforms. We have had to step up as a payments intermediary to help complete transactions."  
- U.S. logistics provider*

**A Special Note: Cash-On-Delivery**

With lack of trust and skepticism for e-payment, cash-on-delivery (COD) has emerged as an alternative payment option for e-commerce, especially in the south-east Asian economies. E-commerce players have been forced to invest in COD solutions to reach the majority of their markets.

But COD has major problems :

- Not practical for cross-border e-commerce
- Expensive for merchants and platforms
- Reduces transparency
- Increases delivery cost for logistics firms
- Introduces the potential for theft and cash-counting errors

*"In order to win South-East Asia's e-commerce sphere, companies need to invest in Cash-On-Delivery, no matter how difficult. Just as same day delivery was Jeff Bezos' challenge at Amazon, we see COD as a new standard of service required for our market."*

*Paul Srivorakul,  
Group CEO, aCommerce &  
Executive Chairman, Ardent Capital*

## Payment regulations and lack of coordination within economies also slows e-payments growth

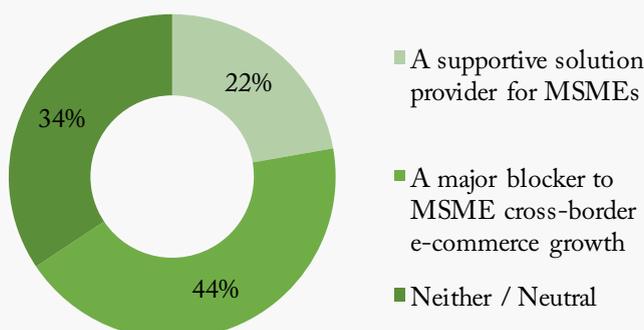
In some regions, traditional Know Your Customer (KYC) anti-money laundering (AML) laws still apply. These regulations require consumer information to be collected in processes that no longer apply in the modern e-payments era. Within the Asia Pacific region, there are instances of multiple regulators having oversight responsibilities over different elements of e-payments regulation. Regulatory jurisdiction over AML laws and consumer protection may sometimes overlap, at times creating redundancy in compliance efforts.

### ... and banks act as both enablers and impediments

Banks are not just an enhancer, but also a barrier to MSMEs. Banks may decline credit and debit cards transactions originating from “not-so-big” companies or companies that were previously victims of fraud. They also act as an impediment by blocking the growth of non-conventional payment methods by lobbying for obstructive regulations and blocking alternate payment service providers access to bank accounts.

### MSMES worry that banks are blocking innovation in payments.

Q: How do you view banks and existing financial industries as participants in the cross-border e-commerce ecosystem?



*"We wanted to work with Brunei, but the government regulations did not allow us to enter the market."*

*-International payment company executive*

*We strive to adopt the most efficient and cost-effective practices in cross-border payments, but sometimes government regulations tend to stifle initiatives over safety and other regulatory issues."*

*-Senior manager, treasury team, Samsung*

### Digital Currencies



Virtual currencies such as Bitcoin are likely to emerge as a major game changer, with or without the support of the governments. Crypto-currencies have the potential to eliminate most of the barriers related to customs and payment regulations, and to quickly earn the trust of consumers.

"Bitcoin uses peer-to-peer technology to operate with no central authority or banks; managing transactions and the issuing of bitcoins is carried out collectively by the network. Bitcoin is open-source; its design is public, nobody owns or controls Bitcoin and everyone can take part. Through many of its unique properties, Bitcoin allows exciting uses that could not be covered by any previous payment system."

Advantages of virtual currencies include:

- Low cost of transactions
- Potential for micro-transactions at values below 1 cent
- Cross-border transactions do not require conversion
- Transaction anonymity is established

Current disadvantages include

- Large fluctuations in value
- Uncertain regulatory status
- Lack of support from incumbents
- Taxed as a product in some jurisdictions (although the EU recently established that Bitcoin should be treated as a currency for tax purposes, and VAT should not be assessed for purchases/sales of Bitcoin)

## *Moving forward, areas to focus:*

### **For MSMEs:**

- ⊕ **Go m-payments first.** MSMEs should create payment options optimized for mobile devices to connect with their mobile only consumers.
- ⊕ **Establish a central regulatory body for payments.** APEC should put in place a regional body responsible for harmonization of payments regulations across multiple jurisdictions, such as the EU's European Payments Council
- ⊕ **Target flexibility in regulations to encourage innovation.** Any new regulations put in place should be technology neutral guidelines that take into account the cost of compliance. Recognize that self-interested incumbents such as banks are slow to develop innovative solutions, and do not establish licensing restrictions that further slow down the pace of innovation and development
- ⊕ **Develop cross-border payment fraud enforcement mechanisms.** Economies must work together to establish trust in cross-border payments systems. Empower government agencies to address cross-border fraud and data privacy and security concerns. Educate consumers on liability risks, while establishing clear customer recourse channels in case of fraud. Facilitate APEC-wide working groups targeted at cross-border fraud discovery and prevention. Sharing knowledge will help improve the entire ecosystem.

# Korea – Payments, Regulations, and Unintended Consequences

Korea's e-commerce market is among the most advanced and robust in the world. In the late 1990s, the government took concerted steps to advance domestic e-commerce. Years later, however, those same—but dated—policies would undermine the economy's e-commerce potential.

Proactive actions to increase trust in online payment systems have worked in multiple economies. The Government of Korea actively encouraged the growth and development of the country's e-commerce industry during the late 1990s. But e-payments were still relatively new, and many consumers worried about Internet security and sending credit card or banking information online.

In an attempt to alleviate consumer concerns, the Government of Korea passed a law in 1998 that required shoppers to download security software and take a set of authentication steps prior to making an online purchase. As the Washington Post reported, “the government created its own system to authenticate the identities of online buyers. To make purchases, shoppers had to supply their names and social security numbers and apply for government-issued ‘digital certificates,’ which they could present to sellers as proof of ID.”<sup>1</sup> One Korean consumer told our team “the proprietary software [gave] us a certain sense of security” regarding making payments online.

This system, which relied on Microsoft's ActiveX technology, is still in place today.

## Unintended consequences

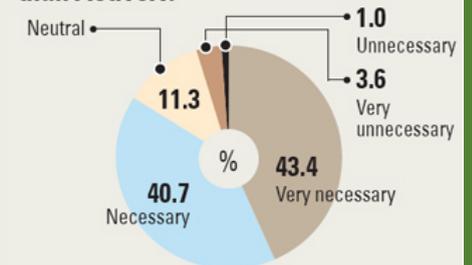
A decade after implementation, however, Korean consumers complained the confidence-building system had outlived its purpose and complicated many online purchases. The e-commerce security law still applied to domestic transactions over 300,000 won, or roughly \$280, and complicated efforts to purchase online goods using non-Windows based operating systems.

Industry solutions have also been introduced in other markets that outperform the required solution in terms of both security and usability.

In April 2015, the Ministry of Science, ICT, and Future Planning announced plans to lift the software requirement.

## Federation of Korean Industries poll on ActiveX

### Do we need other program rather than ActiveX?



### When do you most feel discomfort with ActiveX? (Unit: %)



Federation of Korean Industries poll on ActiveX authentication software— conducted May 23, 2014. n = 700

## *Logistics: An Expensive and Insurmountable Challenge for MSMEs?*

High shipping costs continue to inhibit MSME growth. As a result, MSMEs face a seemingly insurmountable challenge selling goods across borders. With global logistics companies struggling to adapt to changing e-commerce demands, solutions empowering MSMEs will come from intermediaries able to develop new approaches to aggregate cross-border shipments and deliveries. Governments should be sensitive to changes in this critical industry and avoid temptations to over regulate and stifle much needed innovation.

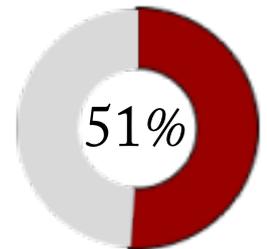
### **An ongoing problem...still waiting to be addressed**

APEC's recent Small and Medium Enterprises Ministerial Meeting did not address capacity-building initiatives for logistics. The absence of logistics from ministerial statements suggests a fundamental misunderstanding of what is required to accelerate MSME growth in cross-border e-commerce. If APEC truly seeks to enable MSME growth in the cross-border e-commerce space, logistics cannot continue to be ignored.

### **Distance creates obstacles that will limit the types of goods sold across borders**

Logistics systems and long distances inherently delay the time it takes for a customer to receive a good. After all, it takes time for a package to travel from Manila to New York. This increases costs for businesses and customers. As one MSME-owner in Japan told us, "Logistics cost [are] sometimes more expensive than the actual product cost."

Distances and costs will lead MSMEs and economies towards e-commerce specialization, where customers purchase unique or specialized products from MSMEs across borders while relying on local platforms or stores to purchase items needed in a shorter amount of time. As one MSME-owner in Korea stated, "Shipping costs are my biggest challenge. Until I am able to open a distribution facility overseas closer to my target customers, there is really little I can do."



*identified that their company usually offers a return policy for cross-border e-commerce*

***"Logistics is the number one cross-border e-commerce barrier for me because it is too expensive..."***

***- MSME Executive in Chinese Taipei***

## The economics are not yet there

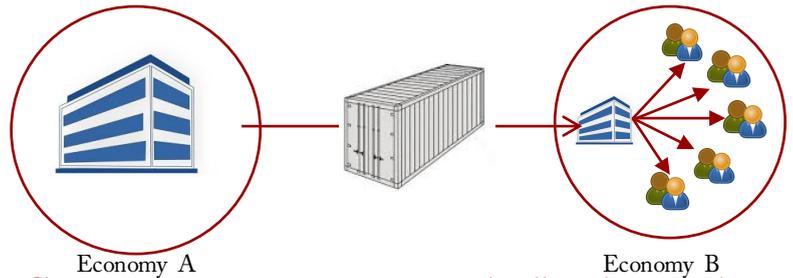
Changing consumer behaviors, driven largely by the rise of e-commerce and cross-border purchases, have altered traditional cross-border logistics needs. For global logistics firms such as UPS, DHL, and FedEx, MSME cross-border e-commerce volumes are not yet large enough to make business profitable. Moreover, as one U.S.-based logistics company told us, “The core competence of FedEx and UPS is not personal parcel delivery but document delivery, leading to inefficient and costly delivery options for smaller businesses...”

Indeed, the Wall Street Journal recently reported FedEx and UPS would increase fuel surcharges in part to makeup for fewer letters being mailed, higher package weights, and more home deliveries. Together, these factors increase the cost and complexity of delivering, shipping, and tracking goods across borders. While “e-commerce has taken off,” the Wall Street Journal reported, “margins on that business are narrower because of the higher costs of making deliveries to scattered homes.” As one small logistics operator in Latin America told us, large logistics firms “are just not that interested in doing business with MSMEs.”

## The development of logistics systems will determine the future direction of cross-border e-commerce.

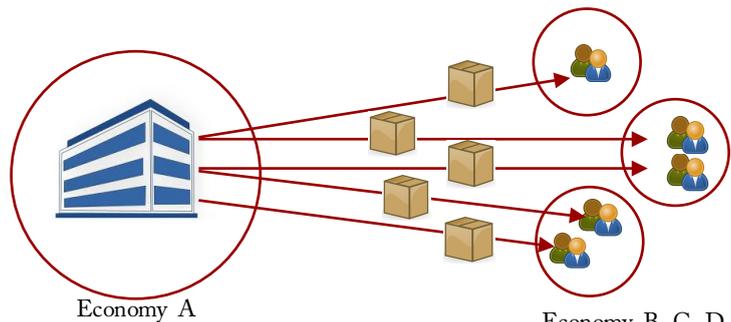
Domestic e-commerce players have taken actions in recent years to increase speed and innovation in order to enhance delivery options for consumers. But why is this acceleration unique to domestic e-commerce and not cross-border?

### Traditional Engagement Model



Ship 1000 units in 1 container to a partner/reseller, who moves the goods domestically to the end-customer.

### B2C Cross-Border Engagement Model



Ship 1000 boxes to 1000 end-customers, incurring time and fee costs for packing, labeling, shipping, clearance and other logistics costs independently.

### *New Zealand Post's Youshop*

The New Zealand Post's YouShop provides customers a warehouse delivery address on the ground in the United Kingdom, United States, and China. Customers in New Zealand can then purchase goods from a variety of pre-approved vendors in these overseas economies and send their purchases to Youshop's centralized warehouse in that country. New Zealand Post then consolidates each buyer's multiple purchases into a single container that they then ship and deliver the buyers address in New Zealand. For e-commerce aficionados, the website states, “consolidation will generally save you money on international postage if you are consolidating 3 parcels or more.” This service is particularly useful to New Zealand businesses which source from a wide variety of overseas suppliers

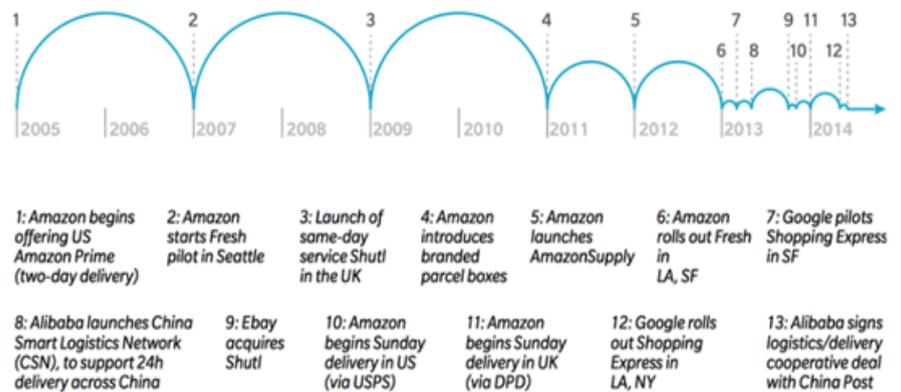
## The quickening pace of e-commerce logistic development

### Restrictive domestic regulations limit the growth of international logistics companies

The coveted “last-mile” of the logistics chain is frequently the most expensive, complex, and important aspect of the delivery process. When it comes to cross-border e-commerce, it also causes the biggest headache; numerous economies continue to hold in place policies that hinder logistics development for importers. Indeed, 63 percent of survey respondents said the availability of high-quality logistics in target markets providers is a problem for doing domestic e-commerce. Policies that restrict foreign companies from operating domestic logistics chains - either through investment restrictions or forced joint ventures - increase the cost of shipping internationally - adversely impacting MSMEs. An MSME in Indonesia told us “government regulations have reduced international competition, raising last mile domestic shipping costs” for many companies in Indonesia.

### The lack of tracking for foreign goods also presents a barrier

Numerous business owners throughout the APEC region told us that the lack of tracking options creates a problem of confidence and trust for many cross-border e-commerce consumers. Indeed, one logistics provider in Japan complained about the fact that once their products enter Chinese territory, they can no longer track the product. This prevents companies from providing services to their customers. In Vietnam, a business leader told us “logistics systems are not connected, leaving companies to figure it out and build it out on their own...” It is no wonder 69 percent of our survey respondents said the availability of effective logistics providers was a problem for doing cross-border e-commerce.



Source: Disruptive Logistics – The New Frontier for E-Commerce

Another major logistics provider operating in the Asia-Pacific region lamented that local governments frequently forced major providers to “play by different rules,” in that they were forced to either purchase security equipment, adapt to constantly changing regulations, or compete with artificially low subsidized competitors.

One global logistics company currently operating throughout multiple economies in APEC identified a series of challenges at the individual economy level that limited the company’s ability to serve MSME customers. Specifically, the individual mentioned regulations limiting its ability to acquire or expand, mandated investments in customs clearance machinery, and uncompetitive domestic parcel prices driven by local subsidies.

### International logistics: hope on the horizon?

As e-commerce volumes grow, international logistics players and domestic postal services are searching for innovative approaches to support MSME businesses and lower costs.

In Peru, Serpost’s Exporta Fácil program helps small and medium sized businesses export goods to the United States and global markets through a convenient and easy to use online system. Business owners can easily use the website to file forms and research delivery and pricing options.

Singapore’s Singapore Post Limited (SingPost) and Alibaba expanded a series of initiatives designed “to increase ecommerce logistics collaboration in the future to build a leading ecommerce logistics platform to service the rapidly growing ecommerce businesses across Asia Pacific and beyond.”

**In some economies, new intermediaries are emerging which offer MSMEs more efficient logistics solutions**

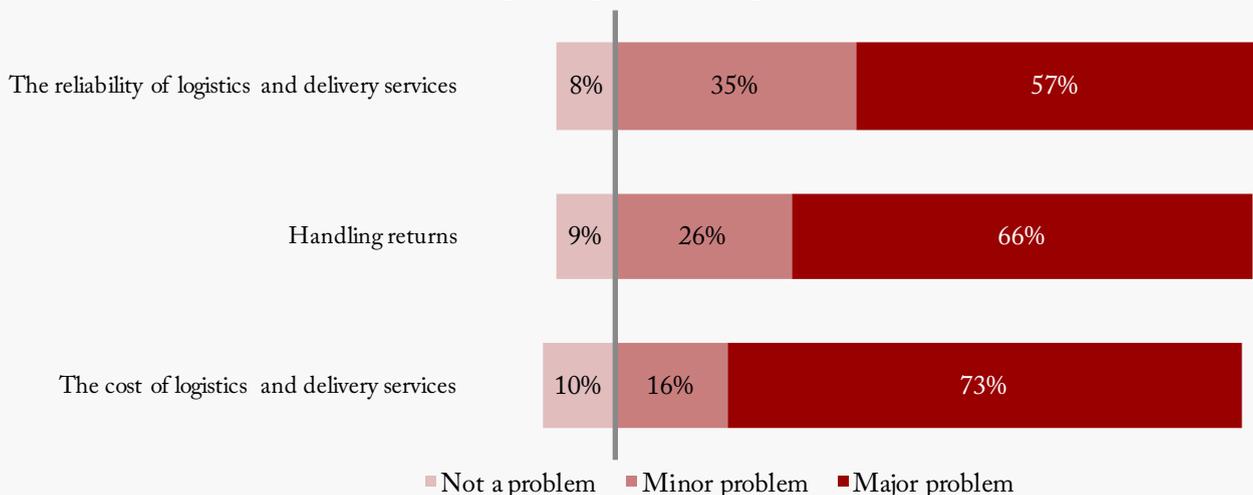
As an example Mexican retailers have struggled to address home delivery challenges related to logistics or frequently used cash-on-delivery payments. Some retailers address the problem using convenience stores for providing buyers with a collection facility. A consumer purchases a good online, selects a convenience store location for pickup, and prints a special redemption voucher with a unique barcode. The consumer receives an email when the package arrives and can pick up the product by redeeming the voucher at the given convenience store.

*“We get this everyday - people ask our team for a shipping quote then run away because they think the costs are too high. But the challenge is not just about high costs or complex shipping declaration forms. To properly do the entire logistics chain for cross-border, e-commerce companies need to find the right logistics company that understands the entire cross-border logistics chain and knows how to address any perceived challenges.”*  
 - one logistics intermediary based in China

**Export logistics intermediaries can fill the much-needed void for MSMEs**

Intermediaries provide value by specializing in regional shipments, providing international tracking, translation skills, and valuable knowhow about how to overcome international shipment challenges such as country-specific government regulations, currency/language barriers and local consumer behavior. United Courier Service (UCS), for example, specializes in providing total solutions and assistance to U.S. companies shipping online purchases to China. UCS is fully integrated with China Customs (for seamless Customs Declaration/Clearance) and China EMS (for track-able in-country delivery). U.S.-based MSMEs can utilize UCS as a full service logistics company to enter a new market and reach new customers throughout China each and every day.

**The reliability and cost of cross-border logistics poses major problems for MSMEs.**



## Awareness: Getting the message out!

Cross-border e-commerce can be complicated, so it is a good thing valuable intermediaries and government how-to websites exist to assist MSMEs go cross-border. The problem is that neither seems to know the best strategy to increase awareness amongst MSMEs.

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*“We need to have more training and support to help us learn how to [do] cross-border e-commerce.”*

*– MSME Owner*

*The following day a government official told us “We already have those programs available.”*

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## *Moving forward, areas to focus:*

### For MSMEs:

- ⊕ **Encourage public-private logistics integration.** For example, the United States Postal Service and Alibaba’s logistics affiliate, Cainiao, signed a Memorandum of Understanding in September 2015 to expand collaboration and integration in the e-commerce space.
- ⊕ **Accept digital documents.** MSMEs face a number of challenges when it comes to cross-border e-commerce. Allowing digital documents reduces costs, simplifies procedures and allows MSMEs and logistics intermediaries to save time exporting goods
- ⊕ **Support 3rd party education platforms.** Cross-border e-commerce is complicated and it is important to educate MSMEs on what services are available to assist them in the process. Nonprofit or government websites should be created to communicate important steps to cross-border e-commerce. Public-private engagement with trusted third-party logistics providers specializing in logistics can also accelerate education in certain economies.
- ⊕ **Regulations should encourage private sector growth and efficiency.** Restrictive regulations hindering foreign companies from operating domestic logistics chains and preventing competition discourage efficiency across the logistics chain. MSMEs are disproportionately impacted by high shipping costs.

# aCommerce: A Complete Logistics Solution for E-Commerce Brands

aCommerce is a start-up that provides end-to-end e-commerce solutions in Thailand. The company was founded in June 2013 with a simple goal: helping e-commerce vendors navigate the challenges of logistics operations in Southeast Asia.



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*“aCommerce is solving a major pain point in ecommerce logistics and backend fulfillment, and is helping to accelerate ecommerce market growth across Southeast Asia.”*  
-Josephine Chan, Vice President of Sumitomo Corporation Equity Asia (Investor in aCommerce)

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aCommerce seeks to address many of the challenges e-commerce companies face in Southeast Asia. After all, the market is extremely diverse with multiple distribution channels. Moreover, low credit card penetration means customers in up to 90 percent of local markets prefer cash-on-delivery payments to credit cards.

Enter aCommerce. The company makes it easy for brands and retailers to sell goods online by providing ‘turnkey’ services and products across the region, offering services such as customs assistance, web development, digital marketing, local language customer service support, payments, fulfillment, and collection-on-delivery. The company also helps brands manage the end customer by providing clients with data and analytics of the entire customer experience. This includes information on different customer touch points, such as content marketing, packing orders, and payment collection.

With revenues on the rise, aCommerce recently raised \$10.7m in a series A round- the largest series A for a Thai company. The investments will enable aCommerce to expand its logistics infrastructure, delivery fleet, technology platform, and channel management in each of its current markets. The company also seeks to develop partnerships with other logistics and e-commerce companies in key markets. Finally, aCommerce plans to invest in customs clearance, FDA certification, and local business operating licenses for international companies that want to break into the Southeast Asia market.

aCommerce is successful because it found a way to help customers address the complexities of cross-border e-commerce logistics. Today, aCommerce has four offices with fulfillment centers and over 250 employees in Thailand, Singapore, Indonesia and the Philippines. The young company provides services to brands such as L’Oreal, HP, Line Chat, and Groupon.

## *Complexity of Trade Rules and High Unit Costs of Customs Destroy MSME Margins*

Complexity of customs and trade rules is the biggest inhibitor to MSME growth in cross-border e-commerce. MSMEs face such an overwhelming complexity of trade and customs rules that they avoid economies with burdensome regulations. E-commerce companies are so discouraged by the lack of customs consistency across economies and the lack of transparency on rules, that they are forced to find work-arounds, such as taking advantage of personal consumption rules. Simplified filing processes, a truly online customs platform, and a fast track processing system would go a long way towards increasing MSME participation in cross-border e-commerce.

### **Customs are designed around freight containers, not e-commerce**

Cross-border e-commerce presents a new challenge for Customs Agencies that for the last hundred years have specialized in processing goods by the container. E-commerce requires checking thousands of small, low-value packages each hour to ensure that they have the proper forms and comply with a myriad of regulations. It is time for customs to enter the 21st century by implementing digital systems, increasing transparency, and ending the need for redundant forms.

### **Customs frictions are exacerbated by lack of development in policies and procedures**

While our interviews show that customs are a major issue across APEC, ASEAN, and Latin American economies have shown considerable lack of development compared to the remainder of the economies. There is a need to bring these two regions in line with the rest of APEC.

*“Because it takes so long to find what paperwork to file, I avoid international orders at all costs.”*  
- Indonesian MSME

*“Customs policies change quickly, irregularly, are not transparent, and lack consistency across cities within China. This makes it very difficult and costly for MSME’s to research and correctly comply with documentation”*  
- Japanese MSME

### **Quinoa in Peru:**

*According to a Quinoa producer in Peru, “we received an order from Turkey and due to lack of resources and knowledge, it took nearly six weeks to figure out how to classify and ship to that country.”*

**\$58.7**  
billion

*Savings achieved by lowering customs transaction costs by 5% between 2006 and 2010, according to APEC’s Achievements in Trade Facilitation Report*

### Accessibility and Consistency of Customs Rules and Regulations is Critical

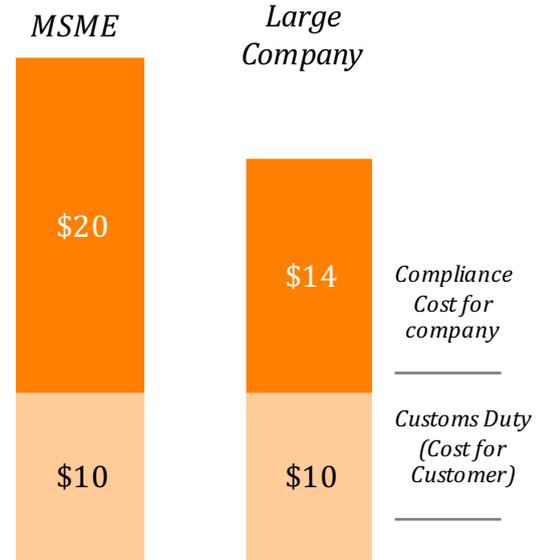
MSMEs are often discouraged from selling to economies due to their inability to find information regarding the customs rules and regulations. All information regarding customs should be published on a user friendly website with content in multiple languages. Ultimately, there should be one website for APEC with information on how to export to each economy.

Custom administrations should ensure that goods of the same types are always classified in the same way when moving through customs. Ambiguity in customs rule makes it difficult for MSMEs to know in advance the total cost of customs. When there is high variability in the cost of customs for the same good, a MSME may decide that shipping to that economy is no longer worth the risk.

### Complexity and lack of scale destroy MSME margins

MSMEs are at a disadvantage in terms of economies of scale due to the large amount of time and energy it takes to learn how to ship to a new economy. Costs are approximately 30-40% higher for MSME's. Big businesses have more resources to research evolving customs requirements and due to the large scale of their operations they have greatly reduced costs per package.

### Costs of completing a customs transaction



Source: World Bank Logistics Performance Index

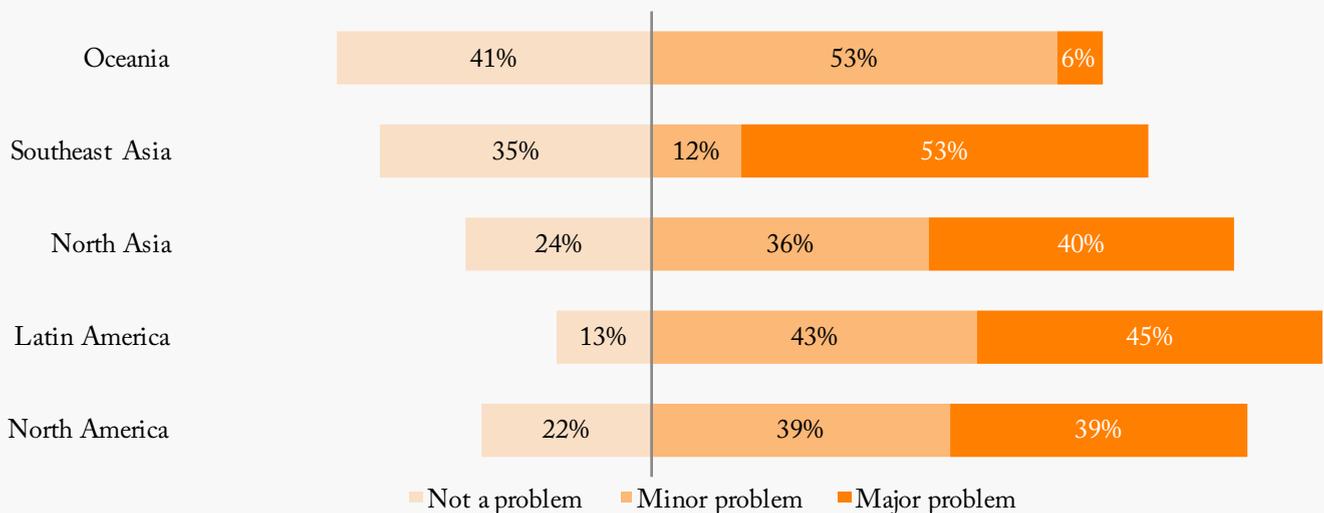
*“It is estimated that \$22 billion per year is owed to government treasuries worldwide because of misclassification alone.”*

### Smuggling

A small business owner we interviewed in an East Asia country explained how smuggling shoes under buses and paying the driver can get goods across the border is much cheaper and quicker than going through the traditional customs process. The business would not be profitable if using the traditional methods. It takes over a month for shoes to go through customs and at times can cost more than the shoe is worth.

### Customs is a challenge for MSMEs for all regions of APEC.

Q: Please identify the severity of the problem of customs rules and regulations for MSMEs engaged in cross-border e-commerce.

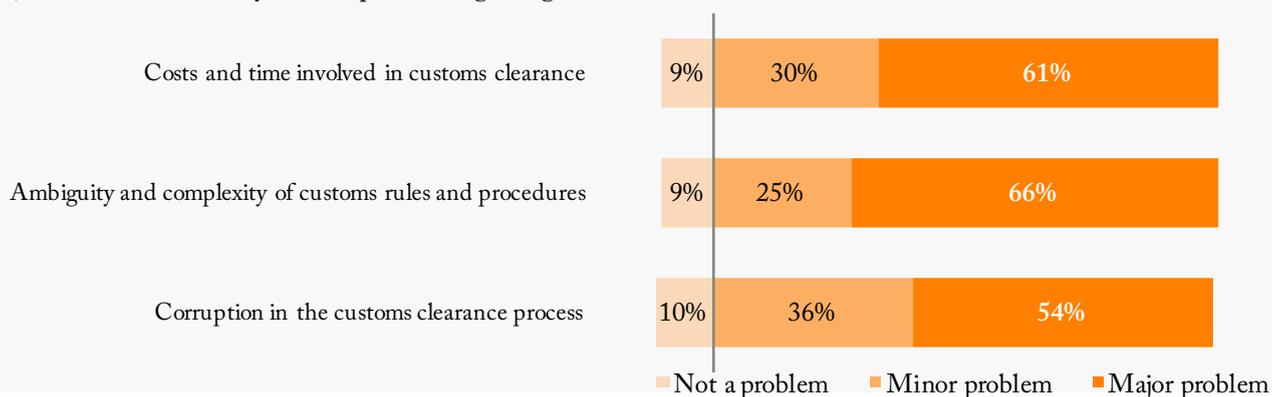


Economy	Burden of customs procedures 1-7 (worst to best)	Lead time needed (days)		Documents needed (#)	
		To export	To import	To export	To import
Australia	5.2	2	2	5	7
Brunei	4.7	..	..	5	5
Canada	4.9	1	2	3	3
Chile	5	1	1	5	5
China	4.3	2	3	8	5
Hong Kong, China	6.1	1	1	3	3
Indonesia	4	3	4	4	8
Japan	5.1	2	2	3	5
Korea, Rep.	4.4	1	1	3	3
Malaysia	5.2	1	1	4	4
Mexico	4	2	2	4	4
New Zealand	5.9	2	3	4	6
Papua New Guinea	..	..	..	7	9
Peru	4	3	2	5	7
Philippines	3.5	2	2	6	7
Russian Federation	3.6	2	4	9	10
Singapore	6.1	2	2	3	3
Thailand	3.9	1	1	5	5
United States	4.8	2	2	3	5
Vietnam	3.6	1	1	5	8
<b>APEC Economies</b>	<b>4.6</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>6</b>
<b>World</b>	<b>4.1</b>	<b>3</b>	<b>3</b>	<b>6</b>	<b>7</b>
Low income	3.4	4	5	8	10
Middle income	3.7	3	4	7	8
High income	4.8	2	2	5	5
East Asia & Pacific	3.8	2	2	6	7
Latin America & Caribbean	3.7	3	3	6	7
South Asia	3.8	2	3	8	9

Source: World Bank Logistics Performance Index

### Cost and time involved in customs clearance, ambiguity in rules, and corruption all inhibit MSMEs.

Q: Please rate the severity of each problem regarding customs for MSMEs.



### MSMEs are forced to “Work Around” to sustain profitability

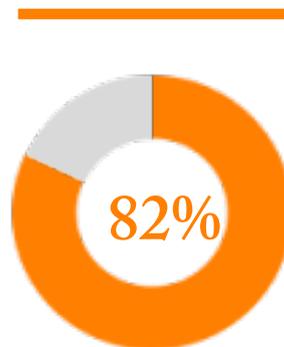
In an effort to ease the complexities and costs associated with cross-border trade, companies are using alternate methods of classifying and labeling goods. Some methods are illegal, while others are simply loopholes that in the end cost the government money.

The most common example of this is using personal consumption to transport across borders to customers free of tariffs and without daunting paperwork or procedures. Others are labeling as a gift, misrepresenting the HS code that classifies the product, and declaring an incorrect value of the good.

There are two main issues that these “work around” present. First, they do not lead to sustainable, scalable businesses and primarily limit MSMEs to C2C e-commerce. Second, government loses the collection of duties, while still having to handle the package. Although governments may be tempted to crack down on illegitimate types of e-commerce, they should instead focus their energies on encouraging legitimate e-commerce that is creating jobs for communities.

### MSMEs cannot get around corruption...

In some economies, the customs agent is given leeway in how goods are classified and in turn the tariff that is charged. This behavior puts honest MSMEs at a disadvantage and rewards companies based on their ability to navigate the intricacies of the customs system. Corruption in customs is projected to cause \$700b in harm a year. The reduction in government revenues as a result of corruption, may also force them to increase tariffs to even higher levels. Government must take a tough stand on corruption to create a more inclusive e-commerce environment.



*indicated that raising the de minimis to \$200 would have a strong impact on cross-border e-commerce.*

### Increasing the de minimis reduces the burden...

The de minimis, the valuation floor for goods below which no duty or tax is charged, speeds up customs processing by exempting duties on express and postal shipments. For low value e-commerce packages, the cost of collecting duties may even exceed the tariff revenue. And the extra time spend in transit increases the chance that the good will spoil if it is perishable, or that the buyer will lose interest.

Reducing the costs for low value shipments will disproportionately benefit MSMEs engaged in cross-border e-commerce. The Organization for Economic Cooperation and Development (OECD) found that MSMEs have trade transaction costs 30-45% higher than larger firms. Adopting a de minimis is especially beneficial for MSMEs that otherwise have trouble navigating customs bureaucracy.

### The de minimis for APEC Economies

Economy	De Minimis
Australia	\$719
Brunei	\$286
Canada	\$19
Chile	\$30
China	\$8
Chinese Taipei	\$93
Indonesia	\$50
Japan	\$83
Korea, Rep.	\$100
Malaysia	\$118
Mexico	\$50
New Zealand	\$254
Papua New Guinea	\$88
Peru	\$200
Philippines	\$0
Russian Federation	\$122
Singapore	\$286
Thailand	\$28
U.S.	\$200
Viet Nam	\$44

**...but it is not the cure all**

Some government officials and retailers are concerned that the de minimis favors e-commerce over traditional businesses that pay the full price of tariffs on the goods that they import. Other officials see raising the de minimis as politically impossible due to the importance of customs for government revenue. An Asian government official shared that, “De minimis is for protecting domestic industry and therefore is very difficult to raise.” Furthermore, a DHL customs official explained, “a higher de minimis would help MSMEs doing e-commerce, but it is unrealistic given that customs is the second largest source of government revenue.”

Many economies in APEC already have a de minimis at or exceeding \$200, while other economies have agreed to increase the de minimis to this threshold. A uniform de minimis level of \$100 will result in a net economic benefit of \$20b per year for APEC. While there are valid concerns about the de minimis, we recommend that economies raise the de minimis to \$200 as part of their customs strategy.

**Reduce friction and the number of forms**

The 21 APEC economies should implement a Single Window paperless customs system by 2020 and then work towards a regional standard. The Single Window is an online, virtual system that allows companies to submit a single administration document that is automatically shared with the relevant government agencies. Currently 14 APEC economies have Single Window systems, while the sub-committee on Customs Procedures has set a goal of all economies having Single Windows by 2020. The next step is to create an integrated Single Window system between APEC economies. Governments need to ensure that the Single Window system is easy to use and offer training as needed in order not to discourage MSMEs with limited capabilities.

**Trusted trader programs do not solve MSME’s problems**

Trusted trader programs were recently introduced in the U.S., Canada, and Australia to simplify customs procedures for major shippers. However, these programs do not help MSMEs shipping in small quantities. Economies should focus on developing Authorized Economic Operator (AEO) programs that simplify customs screening for companies and logistics firms that meet minimal supply chain security standards. These programs should be developed in partnership with MSMEs and made available to logistic providers who can pass on the benefits to their customers, including MSMEs.

*“Singapore single-window makes it very easy to participate in cross-border e-commerce with that country.”  
– Indonesian MSME*

<b>Single Window Benefits</b>	
<b>Shorter processing times</b>	Goods can move faster through customs, which reduces delivery times for e-commerce. Since Japan introduced the Single Window system in 2010 import processing times have fallen from 25.7 to 13.4 hours.
<b>Less forms</b>	Getting goods through customs can require up to 10 forms for an APEC economy. The Single Window System will reduce the number of forms required and could reduce the number to one.
<b>Less bureaucracy</b>	In some economies, getting through customs requires waiting in lines at all the relevant agencies that regulate the type of good being shipped. By making the entire process electronic, the Single Window system can speed up this process.

### *Moving forward, areas to focus:*

- ⊕ **Implement all sections of the Boracay Action plan.** The Boracay Action plan sets a forceful agenda for reducing friction points related to customs. APEC and individuals economies should prioritize implementing these items.
- ⊕ **Provide up-to-date and transparent information.** All information on customs procedures, tariffs, and import licensing requirements for the 21 APEC economies should be easily accessible on one website.
- ⊕ **Develop and promote the APEC Trade Repository.** The repository was proposed at the First Meeting on Trade and Investment in February 2015 to improve MSME's access to trade information by serving as a single reference points on tariffs and trade regimes. APEC economies should stay actively involved in this project.
- ⊕ **Raise the minimum de minimis to at least \$200 for all economies.** Raising the de minimis lowers friction points for MSMEs sending low-value shipments between economies. The current inconsistency in de minimis between economies confuses MSMEs.
- ⊕ **Introduce authorized economic operator (AEO) programs.** AEO is a key element of the World Customs Organization's Framework of Standards to Secure and Facilitate Global Trade (SAFE) that streamlines procedures for companies that maintain basic supply chain security standards. Adopting an AEO program should take priority over Trusted Trader, due to its greater benefits for MSMEs.
- ⊕ **Implement Single Window systems.** All economies should prioritize the adoption of the Single Window Strategic Plan created by the Sub-Committee on Customs Procedures. Key elements are moving customs entirely online and reducing the number of forms to streamline export-import procedures.

# Singapore Single Window – Streamlining the Customs Process

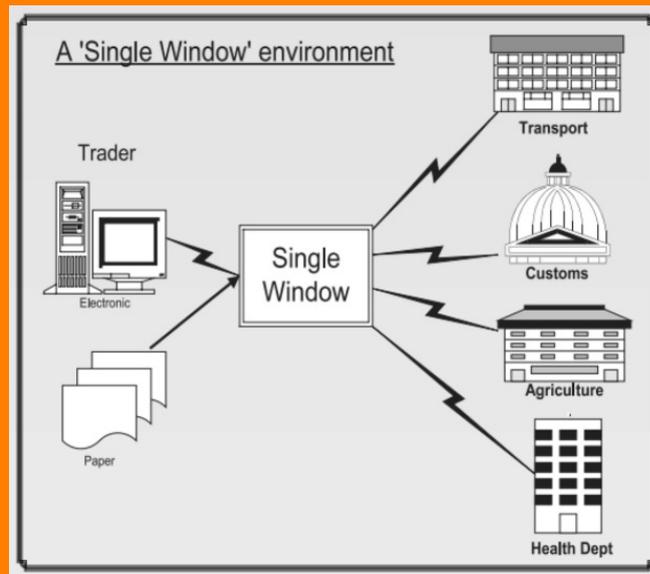
The Singapore single window system, Tradenet, was started in 1989 and is now one of the most effective in the world in streamlining customs processes and reducing at-the-border frictions for trade. Before the Single Window was implemented it took two days to process trade documents; now it takes under 10 minutes.

At first, it was difficult to convince people to switch from the old paper method to electronic trade declaration. To increase awareness, Singapore rolled out a national ad campaign to prepare users. The government provided training and assistance for people new to the new computerized system. As a further incentive, manual fees were raised from \$7, while the electronic fee was only \$4. The adoption of the Single Window successfully reduced the number of possible forms from over 20 to just 1 form and now processes over 30,000 declarations a day.

Other economies should look at Singapore as a role model when designing their own single window systems. Government and the trade community should partner together to build a single window that meets the needs of all parties. Additionally, the single window should meet international standards and be user-friendly. Like in Singapore, the government should proactively educate MSMEs on the benefits of the single window and how to integrate it into their business.

*“Often times, electronic procedures are duplicated with manual mandatory procedures and does not include all major government agencies involved in cargo clearance. Fully automated and integrated procedures, developed in consultation with business, would ensure success of a Single Window system.”*

-Asa Larsson, DHL’s Senior Director of Corporate Public Policy



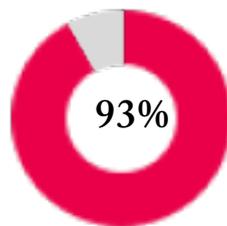
Source: Doing Business’ Implementing trade single windows in Singapore, Colombia and Azerbaijan

## Complex and Confusing Foreign Market Rules Block Cross-Border Opportunities for MSMEs

Multinational companies often feel overburdened by confusing and restrictive market access laws and regulations. This issue is further magnified for MSMEs due to their limited size and resources. Complex, inaccessible, and inconsistent tariffs and registration requirements overwhelm MSMEs, forcing them to abandon cross-border e-commerce – instead choosing to focus on domestic markets. Laws and regulations must be clarified, simplified and harmonized to reduce the burden and allow for continued MSME participation in cross-border e-commerce.

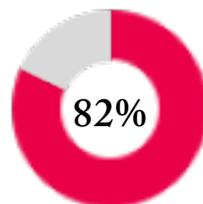
### MSMEs can not comply if they do not comprehend

Foreign market access laws and regulations are often confusing, unclear, and inconsistent across economies. Too often this means an MSME going cross-border must research the regulations and laws for each economy it seeks to enter. It also means hours of research on different government websites, endless paperwork, and frequent guesswork related to unclear foreign requirements. Indeed, MSMEs we spoke with during our interviews repeatedly worried about the consequences of improperly interpreting foreign regulations. It is no wonder many MSMEs find the costs associated with going cross-border just too high to bear.



*identified the complexity of foreign trade rules and regulations for MSMEs doing cross-border e-commerce as a problem for cross-border e-commerce*

*“You just do not know if the regulations your company prepared for today will be the same in two years...”*  
 - Korean MSME



*say the primary reason they don't go cross-border is inconsistent and complex rules and regulations in target markets*

### Low tariffs and high de minimis values are key enhancers.

Governments that proactively implement policies that lower barriers, streamline regulations, and increase market access increase opportunities for MSMEs' cross-border growth. Yet too often, governments use tariffs to prevent foreign goods from entering a market. When governments retaliate, the result is a cycle of discriminatory practices that hurt MSMEs across economies.

Lastly, companies we spoke with stressed the importance of a low de minimis, the valuation floor for goods below which no duty or tax is charged, as a key factor for cross-border goods. However, in spite of its importance as an enhancer to cross-border e-commerce, de minimis rates are not consistent across APEC.

## Sign FTAs with e-commerce specific language

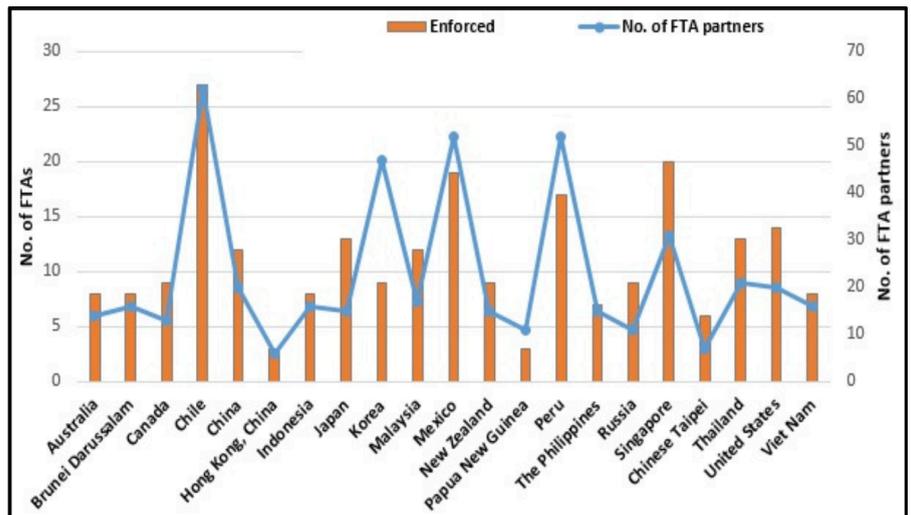
The barriers presented by free-trade agreements (FTAs) and the lack of harmony regarding requirements once again challenges the capacity of MSMEs.

FTAs- and regional trade agreements between more than two economies— are important tools to overcome restrictive tariffs and regulatory practices. FTAs increase trade between economies and regions by simplifying rules and lowering or eliminating tariffs. If multiple economies are involved, the same rules apply across multiple economies. In the proposed Trans-Pacific Partnership Agreement (TPP), for example, the agreed upon trade rules would apply across all 12 economies. For MSMEs, this means understanding just one set of rules, for all 12 economies.

Moving forward it is critical that FTA agreements include specific e-commerce language. The TPP agreement, for example, includes a chapter on Electronic Commerce, but the details of the agreement remain to be seen. The United States-Korea Free Trade Agreement, which entered into force in March 2012, took a positive step forward by including specific language allowing the digital transfer of information between banks.

There are major disadvantages for MSMEs in economies that do not actively negotiate or are excluded from participating in free-trade agreements. MSMEs in Chinese Taipei frequently complained that the void of FTAs in their economy put them at a competitive disadvantage when trying to engage in cross-border e-commerce.

## Number of FTAs and FTA partners



Source : “Do FTAs Matter for Trade?” APEC Policy Support Unit, May 2015

### TPP Implications

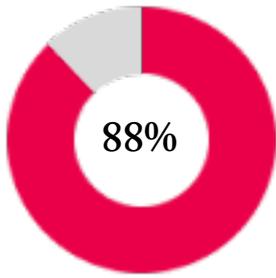
The Trans-Pacific Partnership (TPP) when released will have dedicated sections for e-commerce and the digital economy. In close coordination, TPP economies will align their internal regulations and trade polices to further help MSMEs by guaranteeing non-discrimination across borders for Internet and Internet enabled services. The agreement should also harmonize the customs and regulatory environment to simplify the process of importing and exporting goods. The TPP should, if implemented correctly, have broad reaching positive impact on cross-border e-commerce.

### Non-tariff barriers must be addressed...

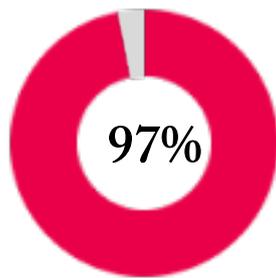
Nontariff barriers are another means of preventing MSMEs from accessing foreign markets. Barriers include—but are not limited to—quotas, excessive and burdensome documentation, requests for irrelevant propriety information, or arbitrary laws prohibiting goods and products for import that contain certain materials. More often than not, these onerous barriers cause endless hours of paperwork and limit the growth of MSME cross-border e-commerce opportunities.

*“Lack of clarity about tariffs in other countries can be overwhelming. We need to have a tool that can help estimate the tariff...”*  
- MSME in Japan

*“The tariff threshold is too low for cosmetics, forcing us to offer only a cheap and limited product selection in our market.”*  
- Chinese cross-border e-commerce platform



*identified non-tariff barriers in target markets as a problem keeping MSMEs from doing cross-border e-commerce. Examples include quotas, levies, and sanctions*



*identified protectionism (specific rules and restrictions against foreign companies) as an problem for trying to conduct cross-border e-commerce*

*“I had to constantly re-register my products as “Halal cosmetics” in every market that I wanted to sell to. It would have been much easier if there was one Halal governing body that could approve my products rather than repeating this process for every market.”*

*- MSME from Malaysia*

*“In Indonesia, completely new labels have to be created and applied in the local language prior to arrival rather than allowing for a simple Indonesian language sticker .”*

*- Asian market access consultant*

## And restrictive laws that inhibit cross-border e-commerce must be reformed.

Still, restrictive laws continue to hurt MSMEs. Foreign Direct Investment (FDI) limitations prevent foreign companies from investing in marketplaces or other parts of the e-commerce ecosystem. As one American logistics company told our team, “We were not able to enter the Chinese market without a JV partnership – something that was difficult to navigate and complete. Ultimately leaving us to abandon certain provinces for business.” Similarly, protectionist policies designed to enhance domestic players—such as “protected industries” that require majority local ownership—reduce competitiveness and limit development of the e-commerce ecosystems.

## Moving forward, areas to focus:

- ⊕ **Harmonize and simplify FTAs and RTAs.** Economies should use standard language for each FTA they sign to increase transparency and reduce confusion. At the same time, FTAs should simplify and clarify market access laws and regulations.
- ⊕ **Sign more FTAs with language specific to e-commerce.** FTAs need language specific to e-commerce to increase clarity on how e-commerce imports are taxed and regulated. Greater clarity is especially needed for e-commerce services.
- ⊕ **Keep an up-to-date database with all regulations and laws related to foreign market access.** The Services Trade Access Requirements (STAR) is a business-friendly tool that lists the rules and regulations for service companies interested in exporting to APEC economies. APEC and governments should work together to keep STARS up to date and increase awareness among MSMEs.
- ⊕ **Increase participation and engagement in FTAs and RTAs.** Economies in APEC should look to sign more meaningful FTAs that reduce barriers for MSMEs that want to engage in cross-border e-commerce.

## Cross-Border E-Commerce Requires Comprehensive and Fine-Tuned Regulations

Effective and comprehensive regulations and legislation is critical for ensuring trust and reliability in e-commerce relationships between businesses, consumers, and government institutions. Regulation in key areas - e-transaction laws, consumer protection, privacy, data protection, and cyber-crime - are essential for increasing users' confidence in e-commerce. Disproportionate costs of compliance for MSMEs continue to put an undue burden on businesses attempting to conduct cross-border e-commerce. Without clear and concise regulations, MSMEs will never be able to legally comply with or understand the rules of the road.

### Gaps in regulation and legislation

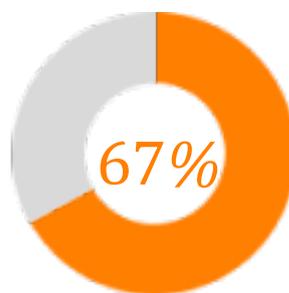
At present, two regulatory challenges are impeding the growth of e-commerce. First, many governments lack effective and comprehensive regulations and legislation in critically important areas that impact e-commerce

Second, there is often poor coordination and harmonization between different national regulatory regimes. Correcting this inconsistency is vital for the growth of cross-border e-commerce.

These gaps create serious problems for businesses and consumers alike. Often, businesses must devote resources towards bridging critical gaps. Frequently, these gaps block e-commerce opportunities altogether.

*"Banks in Mexico don't recognize credit card e-signatures and some customers know this. They call their banks and refute the charges, and when the bank asks us for the inked documents, we obviously don't have them."*

*- Mexican e-commerce Marketplace*



*identified inconsistent standards and regulations a major barrier to cross-border e-commerce*

*"I sent a gem stone to a customer in Europe. I took and sent photos of the stone. I received a deposit.*

*I sent the stone. Then the customer refused to pay the remainder. He sent back false photos of another stone. I tried to get the authorities in the country to help. But their laws are different, so I just gave up."*

*- Peruvian gem stone exporter*

While regulatory gaps are currently a major issue for MSMEs, many businesses also face uncertainty over future regulations and legislation that could quickly alter the outlook of existing business operations or e-commerce industries.

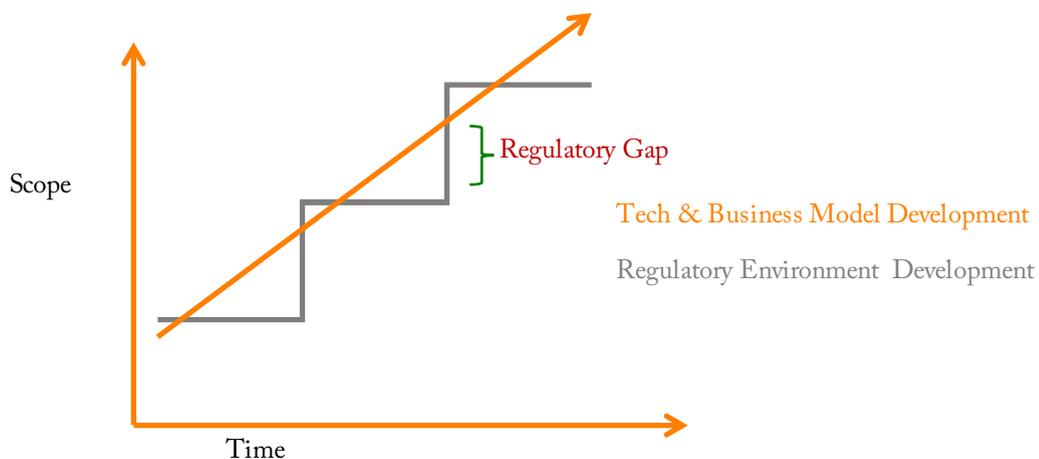
### Gaps in regulations and legislation are being exacerbated by innovations in technology and business models

Innovations in companies, technologies, products, and services, are rapidly changing the e-commerce landscape. However, regulations often lag far behind, with the result that e-commerce innovations and innovators are inadequately protected. For example, the Guidelines for Consumer Protection in the Content of Electronic Commerce, which is the main international reference framework for online consumer protection, is only now being revised – a gap of 15 years in which many important innovations have changed the e-commerce landscape. Care must be taken to enact forward-thinking legal frameworks as technology growth will continue to outpace regulators' ability to act.

Criminals are also innovators. As technology and business models change, so does cyber crime.

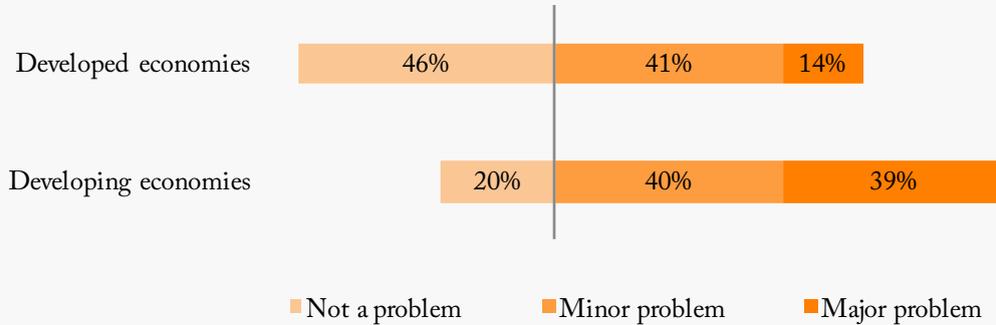
*“There is no regulation governing my lending business. If regulations are put in place that ask for retroactive fees, my entire business is at risk. We’ve been forced to allocate too many resources towards covering this regulatory gap, instead of growing our business.”*  
 – MSME manager

### Regulations are not keeping pace with technological and business model innovations or with advances in cyber-crime



### MSMEs in developing economies experience more problems with the adequacy and enforcement of e-commerce regulations and laws

Q: Please identify the severity of the problem of quality and enforcement of laws and regulations for e-commerce.



### Gaps in regulation and legislation are more prevalent in developing economies

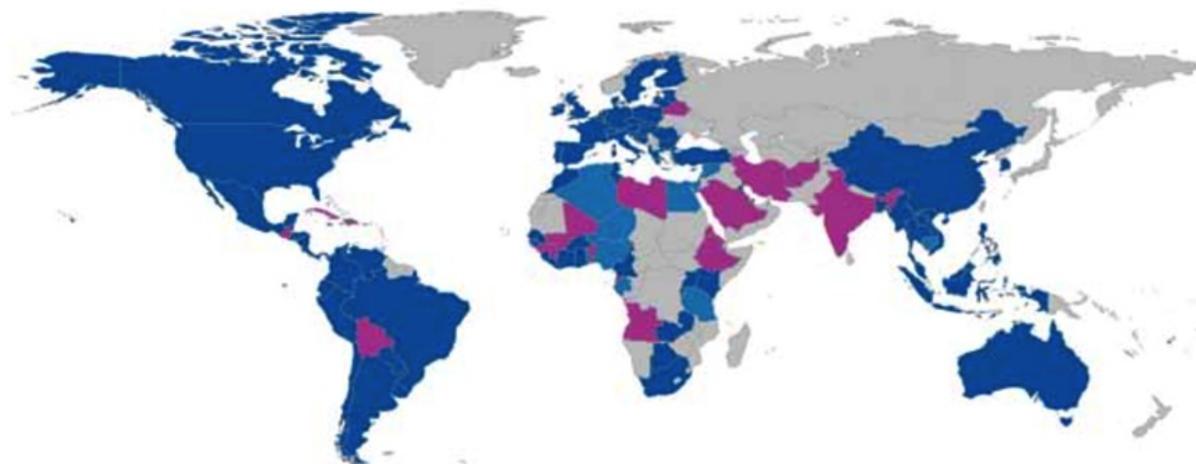
The UNCTAD report shows that some developing economies have critical gaps in e-commerce regulation and legislation. For example, the map below shows which economies currently have laws protecting e-commerce consumers.

### Compliance costs are higher for MSMEs

Another factor that is very important for the development of cross-border e-commerce among MSMEs is the differential costs of compliance faced by these firms. Regulatory compliance costs tend to be fixed costs. These can prove to be extremely burdensome to small firm.

*“Officially you need a minimum of five employees to form a corporation, but many e-commerce businesses can run with less than that. We’ve been forced to pay unnecessary costs to meet these regulations.”*  
 - Filipino MSME manager

### World map of laws addressing consumer protection online, 2014



**Legend**  
 Dark blue – countries with legislation  
 Light blue – countries with draft legislation  
 Violet – countries with no legislation  
 Grey – countries with no data

**Compliance costs are particularly high for cross-border e-commerce**

Companies we interviewed frequently stated that their costs of compliance for cross-border e-commerce were very high. These included translation costs, adaptation of contracts in the face of uncoordinated regulatory and legal regimes, the difficulty of dispute resolution between different national enforcement agencies, and limits on cross-border data flows and data storage.

**MSMEs are calling for clear, comprehensive and simple regulations to facilitate cross-border e-commerce**

This was a consistent theme raised in the interviews we conducted across all the APEC economies. Ease of compliance and predictability are considered critical as MSMEs lack the resources to deal with complex regulations.

In our interviews, MSMEs cited the following challenges most frequently:

- The complexity of regulations governing cross-border e-commerce
- The high costs of compliance
- Difficult in building trust between remote parties in the absence of effective regulations
- Potential legal costs
- Inability to afford specialists to comply with regulations
- Limited financial resources for adaptation to, and compliance with, changes in regulations

*“We are simply overwhelmed by the time and expense of dealing with the laws and regulations. First, you can’t find them. [i.e. Foreign regulations governing cross-border e-commerce.] Second, we have a language problem. And then these laws are written for lawyers. We are really afraid that we are going to be wrong. And it will cost us money. We’re a small business. We can’t afford lawyers”*  
 – Mexican e-commerce startup

**MSMEs face a number of regulatory challenges when trying to go cross-border**

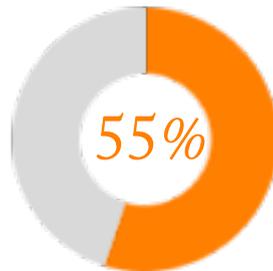
Q: Please indicate the severity of each problem for doing cross-border e-commerce in other countries.



## Regulations and legislation must be enabling as well as protective

Effective regulations enable, as well as protect, e-commerce. This calls for careful fine-tuning of regulations to ensure that transactors' interests are protected without compromising legitimate trade and future innovations.

With the development of technology and the increased number of e-commerce platforms and e-payment solutions, it is crucial for governments to create enabling frameworks that allow enterprises and governments to take full advantage of all the opportunities that arise with e-commerce.



*identified enforcement of existing standards as a major barrier for MSMEs*

## Effective enforcement is also critical

Regulations must be effectively enforced if they are to enable cross-border e-commerce. National governments may lack the resources and/or institutional mechanisms for effective enforcement, particularly in developing economies.

## Moving forward, areas to focus:

- ⊕ **Collaborate across APEC to build harmonized e-commerce regulations so businesses can easily interpret foreign laws and regulations.** By working together, APEC can create a more harmonized, transparent set of regulations that lower barriers for MSMEs that want to expand their global network.
- ⊕ **Allow for the legal recognition of e-signatures and electronic contracts.** Governments should set standards for electronic contracts and give them the same legal recognition as a traditional contract signed in ink.
- ⊕ **Join global consumer protection agencies, such as the International Consumer Protection and Enforcement Network (ICPEN), to expand consumer confidence in cross-border purchases.** Cooperation between local Consumer Protection agencies is needed to investigate and prosecute consumer complaints arising from cross-border trade. Strong enforcement of consumer protection increases consumer willingness to buy online.
- ⊕ **Permit the free flow of information across borders.** The APEC Data Privacy Subgroup has promoted the policy of free data flow across borders, while endorsing meaningful protections for safeguarding that data. More economies should join the APEC Cross Border Privacy Rules (CBPR) system, which was endorsed by APEC Leaders in 2011.
- ⊕ **Create an inclusive regulatory environment that protects consumers and allows MSMEs and entrepreneurs to flourish.** When technology advances faster than the pace of regulations, legal hurdles block innovation. Governments should seek to develop broad legal frameworks that allow creative businesses to develop unimagined business models.

# Philippines 2020 Roadmap- Role Model in Forward-Thinking E-Commerce Regulation

The Philippines is in the process of finishing the “Philippines e-commerce 5-Year Roadmap,” an ambitious plan with the goal of 25% of GDP coming from e-commerce by 2020. Work on the roadmap began in August, 2014 when Senator Bam Aquino tasked the Department of Trade and Industry to come up with a plan to implement the “Electronic Commerce Act.” While the Act was passed in 2000, the government has been slow to enforce some of its key provisions. The new Roadmap is designed to increase enforcement of consumer protection and fill regulatory gaps across the entire e-commerce value chain.

The Roadmap is designed around five main pillars: information security, data privacy, e-payment, consumer protection, and logistics. In addition, there are recommendations for upstream industries, such as Internet access, logistics, e-payment, and e-banking. Working groups of around forty experts representing both private and public interests were created to discuss each pillar. Each group identified major friction points, came up with a solution, and devised a timetable for implementation. For example, one issue was ambiguity in the authority responsible for monitoring e-payments by non-bank companies and enforcing consumer protection.

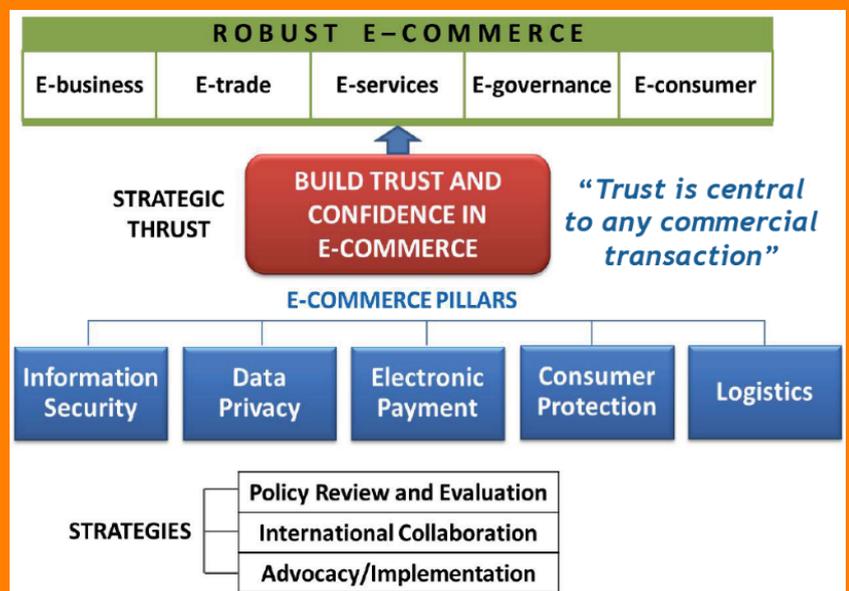
In response, the Department of Trade and the Central Bank are working with companies across the financial ecosystem to devise new standards for e-payments and e-banking that should be published later this year. Other initiatives includes creating a digital certificate to record online transactions, designing a seal of trust to identify companies following best practices, and adding new diplomas in e-commerce at colleges and vocational schools.

One of the main recommendations of the Roadmap is to create an office within the Department of Trade solely responsible for e-commerce. While an e-commerce office does currently exist in the Philippines, it lacks the power necessary to regulate e-commerce. One suggestion is for the new office to be a one stop shop for registering an Internet business. This would enable entrepreneurs who are discouraged by the burdensome process currently required to register their company.

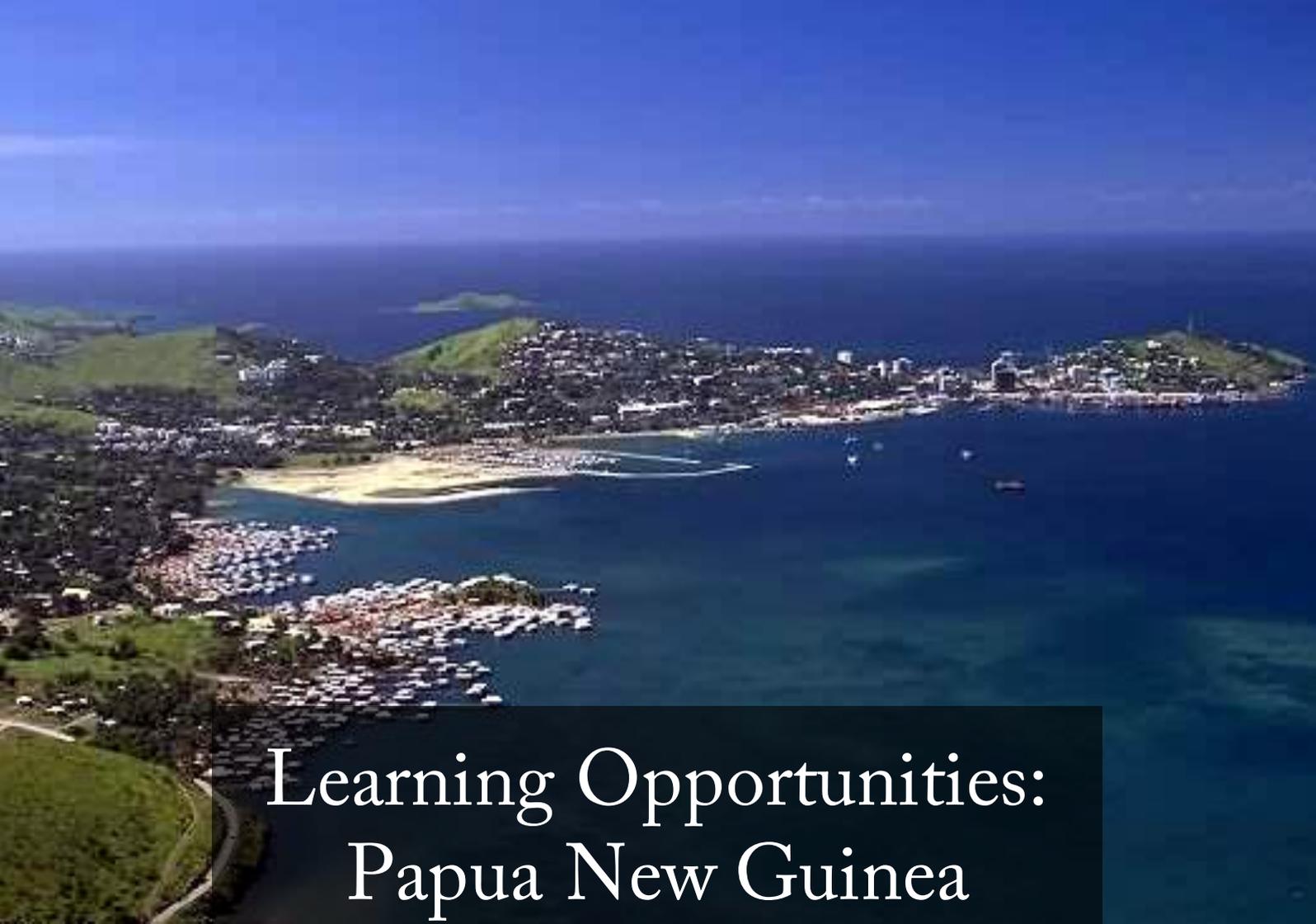
It may be five years until the impact of the initiatives outlined in the Roadmap are fully known- that is assuming that they are ever implemented. Still, other countries may learn by following the Philippine’s comprehensive approach driven by a partnership of private and public stakeholders.

*“The coming years will be bullish for Philippine e-commerce and come 2020, our strategies and plans for the industry will exhibit a 20/20 vision—utterly perfect and accurate.”*

*-Undersecretary Prudencio Reyes Jr. in the E-Commerce Forum.*







Learning Opportunities:  
Papua New Guinea  
&  
China



## Papua New Guinea: How to Get Started in Cross-Border E-Commerce?

The case study of Papua New Guinea (PNG) provides a thought experiment on how to develop a mature e-commerce ecosystem from a blank slate in the shortest possible amount of time. We outline the path an economy can take to facilitate the development of cross-border e-commerce by benchmarking the successes and avoiding the mistakes made by other economies in APEC.

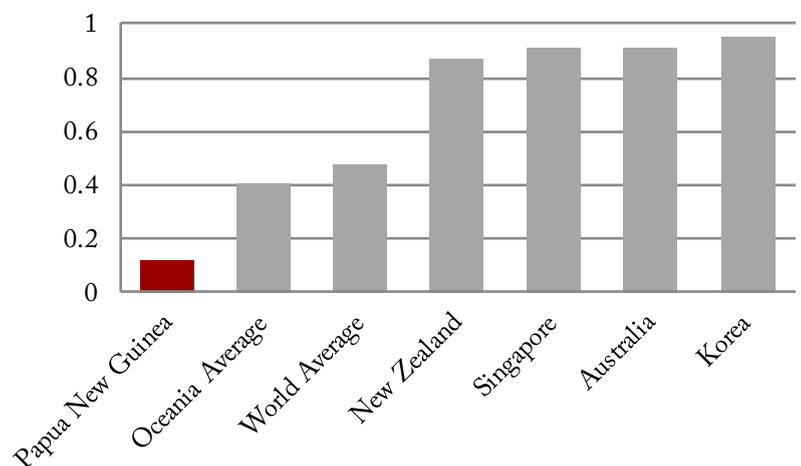
PNG is just starting to enter the digital age and does not yet engage in significant levels of e-commerce. The economy needs to take a forward-looking view in developing the regulations framework that will enable MSMEs to incorporate e-commerce into their business. Fortunately, other economies in the region have already navigated the intricacies of developing a robust e-commerce ecosystem and can serve as guides for PNG.

The U.N. ranks economies around the world every year on telecommunications infrastructure, availability of online services, and human capacities. These three metrics are used to come up with the e-government index. In 2014 PNG was ranked 188 out of 193 economies and was the lowest ranked economy outside of sub-Saharan Africa.

*“The government and the telecoms need to work better together. When they built the mall in Port Moresby, the contractor forgot to tell the telecom company to put in the fiber cables. These types of mistakes are hurting everybody.”*  
*-Telecommunication executive*

PNG lags in a number of important development indicators. Only 2.3% of PNG uses the Internet and 37.8 out of 100 people have mobile subscriptions. The price of Internet in PNG is among the most expensive in the world and is reportedly 100 times more expensive than in Australia, a country less than 100 miles away. However, there are reasons to be optimistic about PNG’s future as these numbers continue to rise and the price of Internet has decreased in recent years.

E-Government Development Index



U.N. E-Government Survey, 2014

**PNG can help its MSMEs achieve e-commerce proficiency faster than early e-commerce adopters by skipping unnecessary steps and copying best practices. Infrastructure is the initial building block to success.**

The first step in developing e-commerce is to build physical infrastructure to connect most of the people of PNG to the rest of the world. 10 years ago the only way to achieve this was by laying expensive Internet landlines. Now, mobile towers and other newer technologies can be used to achieve the same positive impact.

Despite the high potential, it will be difficult to connect the remainder of PNG to the Internet through either broadband or mobile. In interviews mobile operators claimed that it already does not make financial sense to build out new infrastructure in rural areas due to low population densities, security concerns, high electrical costs, and illiteracy. The PNG government will need to actively address these concerns.

**Mobile infrastructure**

Mobile infrastructure must be expanded to remote areas, and speeds upgraded to 4G in urban areas. The government should encourage mobile companies to share cellular towers in order to reduce capital expenses and maintenance costs.

**Broadband infrastructure**

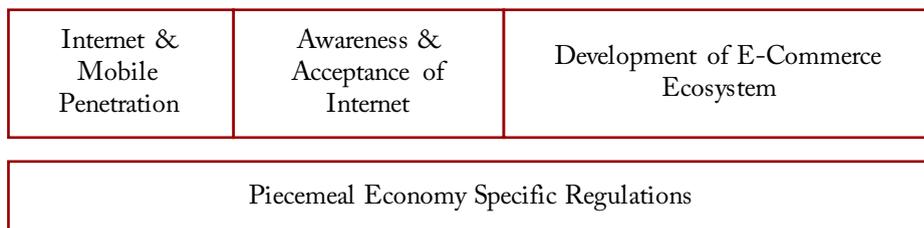
PNG is connected to the world by two Internet cables: one of which is connected directly to Australia and the second to Australia via Guam. The PNG government has announced plans both to upgrade these cables and to build an additional cable from Hawaii via Guam. These investments should have a significant positive impact on the Internet in PNG.

**Leapfrog infrastructure opportunities**

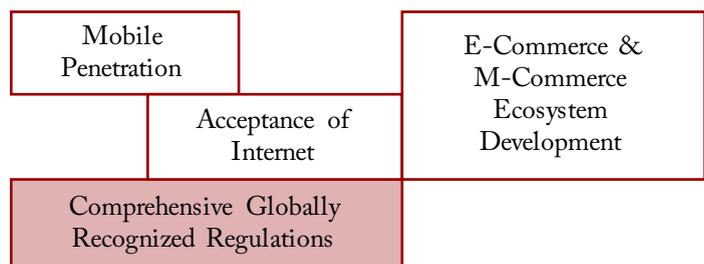
Companies are pursuing alternative means of delivering Internet, such as with satellites, drones, and balloons. These new technologies require small infrastructure investments and have the potential to dramatically lower the cost of delivering Internet in rural areas. PNG should begin a dialogue with companies and NGOs active in this area, such as Facebook, Internet.org and SpaceX. Key selling points in enticing these foreign companies may be PNG's extreme infrastructure problem, proximity to Australia, and the English speaking population.

The development of Internet infrastructure requires a regulatory environment conducive to private investment that also makes the Internet more attractive for MSMEs. Other APEC economies serve as excellent examples of how to get these regulations right and are also illustrative of regulatory missteps.

**EARLY ADOPTERS**



TIMELINE



**LATE ADOPTERS**

**PNG can accelerate e-commerce by enacting regulations that are successful in other economies.**

To realize the benefits of cross-border e-commerce in services, PNG needs to lower the cost, improve the reliability, and increase the speed of the Internet in key cities. Mobile may be sufficient for people in more traditional industries, but the selling of services online requires a fast Internet connection.

Regulations governing e-commerce need to be adaptable, forward thinking, internationally compatible, and meet the needs of the business community. International frameworks should serve as the basis for regulations in PNG regarding e-commerce.

In many economies, the responsibilities for legislating, regulating, and enforcing e-commerce are shared by multiple agencies. While it is important to involve many government stakeholders, one department should be designated as head of e-commerce. Key responsibilities of that department include building a cohesive framework of laws, disseminating information to the public, and building private-public partnerships to incorporate feedback from the private sector.

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*“It would be helpful to see what MSMEs are in doing in other economies. We know very little about e-commerce and need role models to learn from.”*  
**-MSME in PNG**

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*“Papua New Guinea is a very traditional society. In other industries there are not many good opportunities for women. At tech companies no one cares what your gender is; they just care about ideas.”*  
**-Young entrepreneur in PNG**

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**With support, the young people of PNG will develop the technical literacy to create e-commerce companies and engage with rest of the world.**

Business and government must enable these entrepreneurs. New entrepreneurs in PNG that want to create an e-business are unable to afford a landline Internet connection for their company. The Young Entrepreneur Scheme is a new incubator type program sponsored by the National Development Bank that is enabling entrepreneurs to start new businesses. The program is a good start, but these businesses do not yet have the tools or Internet access required to create businesses in e-commerce.

Type of Law	Model Law	Key Elements	PNG Progress
E-transaction laws	U.N. Model Law on Electronic Commerce	Technology neutrality, non-discrimination of electronic communications, cross-border recognition of e-signatures	PNG has drafted legislation, but is the only APEC economy without legislation in place
Consumer protection laws	U.N Guidelines on Consumer Protection	Protections against fraudulent commercial practices and enforcement mechanisms	PNG does not have consumer protection laws addressing online purchases, but is a member of International Consumer Protection and Enforcement Network
Privacy and data protection laws	Asia-Pacific Economic Cooperation Privacy Framework	Laws regarding sharing data with third parties, security of information, enforcement mechanism	PNG has no legislation in this area
Cybercrime laws	Council of Europe Convention on Cybercrime (Budapest Convention)	Identification of cybercrime offenses, harmonization of laws between nations, domestic criminal powers for prosecution of offenses	PNG has drafted legislation
Telcom Regulations	World Bank Public Private Partnership in Infrastructure	Competitive telecommunications regulatory environment, net neutrality, cross border data flow, reduced tariffs on IT goods and services, allocation of mobile spectrum	NICT Act established in 2009

### *Learning from fellow APEC members will help accelerate this development*

Start-Up Chile is an ambitious program funded by the Chilean government to attract entrepreneurs from around the world to move to the country in return for seed funding and free office space. PNG can pursue a scaled back version of this program that gives entrepreneurs developing e-commerce business office space and free Internet. This program could be set up by a private-public partnership between government and the telecommunication companies. The telecommunication companies will benefit from the development of the e-commerce ecosystem, as it will grow demand for the Internet. In economies like the Philippines, telecommunication companies are betting that the rise of new tech and e-commerce companies will be good for business by funding new start-ups.

There needs to be more education in the universities teaching students about information technology and e-commerce. Programs in PNG that send people abroad for university have resulted in a small group of people who are familiar with e-commerce and understand its potential. These people need to be encouraged to teach classes on the subject at Port Moresby Technical College and at other schools.

APEC used to run a train-the-trainer workshop focused on e-commerce. One of the interviewees said that the course gave him the tools to teach a class on e-commerce, but that he needs a refresher course in order to continue teaching it. More classes like this that encourage the sharing of know-how between economies will have a positive impact on education

### *PNG needs to take action now...*

- ⊕ **Task an existing agency or a new agency to enforce regulations regarding the Internet and e-commerce, and to ensure harmonization of laws and procedures related to e-commerce.**
- ⊕ **Pass regulations that meet world standards for consumer protection, cyber-crime, data privacy, and e-transaction.**
- ⊕ **Engage with global companies and non-governmental organizations for assistance in developing the e-commerce ecosystem. PNG should initiate dialogues with:**
  - \* **The World Bank's Global Infrastructure Facility.** This new global platform has the goal of facilitating public-private partnerships to develop infrastructure in developing economies.
  - \* **Innovative providers of Internet services, such as SpaceX, Internet.org and Facebook.** Companies are looking at new ways to deliver Internet with drones, balloons, and satellites that require less fixed infrastructure investments. PNG should apply to join these trials.
  - \* **Global e-commerce platforms, such as Alibaba, eBay, and Amazon.** If one of these companies entered PNG it would grow awareness of e-commerce and encourage more tech investment. While these companies may not yet be ready to formally enter PNG, they may be willing to lead training seminars or offer other assistance.
  - \* **Social media platforms, such as Facebook and Wechat.** In other economies Facebook has made deals with mobile companies to provide free Facebook to users. These promotions have led to increased mobile adoption.
- ⊕ **Establish public and private support for entrepreneurs with businesses in tech and e-commerce.** The government should work with the telecommunication companies to provide a space with free or subsidized Internet for MSMEs. PNG should also support programs like YES that provide loans or subsidies to entrepreneurs.
- ⊕ **Increase training opportunities in tech and e-commerce.** PNG should work with APEC to deliver Cross-Border e-commerce Training (CBET) locally (either in person or online), as well as develop additional training opportunities at the universities.

## China: A Special Case

### What's Now and What's Next?

China surpassed the US in total e-commerce sales in 2013, symbolizing the creation of a new online global super-power. China's cross-border e-commerce trade is projected to reach USD 1.1 trillion by 2016. With only 14% of the population buying online, there's still huge growth potential for tomorrow.

China's rapid development of cross-border e-commerce is driven by a mobile first strategy, innovative e-commerce platforms, and agile regulations. While China is in many ways a unique case, other APEC economies should still look at China as a role model when developing their own e-commerce regulations.

### Not everything that China is doing can be copied...

The simultaneous jump in discretionary income and Internet infrastructure in the early 2000s set the stage for China becoming a world leader in e-commerce. China has a thriving middle class and is riding on the wake of a social media and mobile Internet revolution. The lack of available physical goods, in combination with concerns about counterfeit domestic products, pushed consumers towards cross-border e-commerce options and laid a solid foundation for China's e-commerce development. Furthermore, the population size allows businesses to flourish that otherwise would not succeed in smaller markets.

High-profile Chinese entrepreneurs, such as Jack Ma, have led Chinese MSMEs to become more innovative and start more businesses. In many places we interviewed, local entrepreneurs complained about the lack of success stories in their economies and the lack of role models. China has a rich history of entrepreneurship and, as a result, does not experience this problem.

### Why China is leading?

Challenges in offline retail market provide online retail opportunity

China's offline retail market faces significant challenges due to few nationwide brick and mortar retailers, an underdeveloped physical retail infrastructure, limited product selection, and inconsistent product quality. These challenges in China's retail infrastructure, which are particularly acute outside of tier 1 and 2 cities, are causing consumers to skip the offline retail market and move straight to online and mobile commerce.

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*"The competition in China is very wired. There are lots of opportunities but you need to be really good, and fast in action."*  
- A MSME from Shanghai, China

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Heavy investment in infrastructure has made it possible for logistics firms to reach hundreds of millions more customers

Over the past few decades, China has made great strides to catch up to the level of industrialization in other major economies. At the heart of this transformation has been a massive wave of infrastructure investment and an unprecedented urbanization movement in support of export-led manufacturing. The improvement in international trade infrastructure and the emergence of new technologies in logistics, finance, and the Internet has propelled growth in international trade.

China's mobile first strategy gave an unprecedented number of people Internet access during a period when consumption was growing by 10% a year

Mobile devices are quickly becoming people's first choice device for Internet surfing. For instance, 64% of Chinese mobile users play mobile games, versus 20% of German mobile users. According to iResearch data, of the 618 million Internet users in China, 500 million use a mobile device as the primary vehicle for accessing the web- that's over 80 percent of Chinese Internet users. Mobile penetration at these levels allows for China to leapfrog past landline Internet installation.

Due to underdeveloped offline retail infrastructure, consumers go straight to online and mobile commerce. Increased mobile Internet access on mobile devices allows Chinese Internet users to shop anytime, anywhere.

Synergistic e-commerce transaction facilitators have led the development of a robust e-commerce ecosystem.

Marketplaces like Taobao, Tmall, and Alibaba let customers purchase millions of products at low price points that are competitive with brick-and-mortar establishments. Additionally, they have developed highly efficient and easy-to-use logistic and payment solutions with the aid of their partners.

Rapid development of China's distributed logistics infrastructure and nationwide express delivery networks has been driven by the growth of e-commerce and will continue to support the unique demands of consumers and merchants conducting these transactions.

Chinese consumers now have greater access to international markets because of the rise in alternative payments, along with greater Internet and mobile connectivity. This has fueled trust in credit spending, a payment method that until recently was rarely used. Recent figures from Payvision indicate that non-cash payments are witnessing a sharp increase, stemming from many available third party payment options.

*"Everyone in Shanghai sits with 6 smartphones and tablets a day. There is no longer a computer in every child's hand, instead, it is tablet and smartphone. Consumers skipped computers for purchasing online."*

*- An e-commerce consumer from Shanghai, China*

### China is a leader in mobile commerce



Source: PayVision: Tapping into China - Comparing Chinese Ecommerce Trends And Opportunities With The West, 2014

Early passive government regulation allowed the rise of e-commerce giants. Not every area of e-commerce needs regulation; in excess, regulation cripples innovation. The Chinese government stood by and watched as digital companies developed new ways of doing business in the early years (2004-2007). By avoiding over-regulation, China let MSMEs with new ownership structures and new ways of thinking flourish.

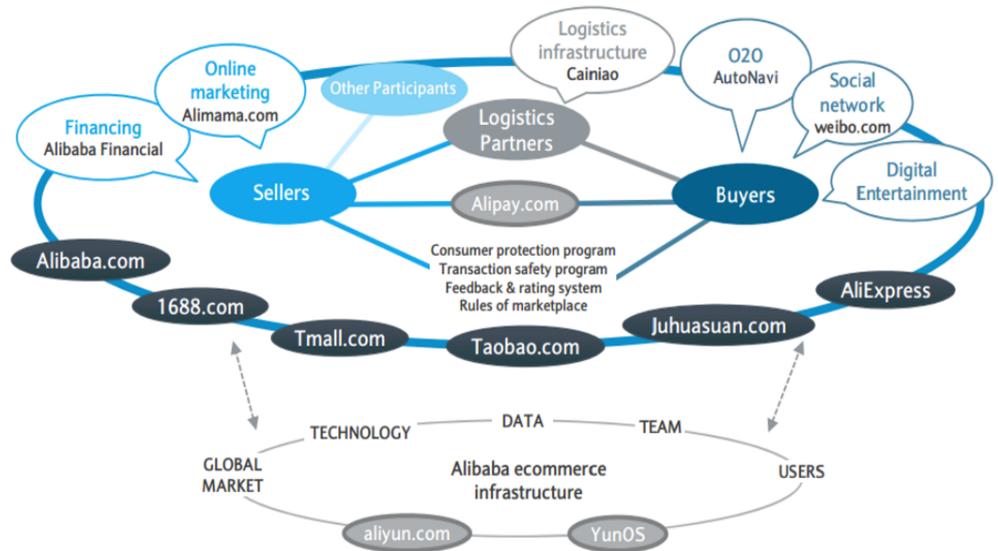
Now, China is experimenting with innovative regulatory solutions to make cross-border e-commerce even easier.

From 2008 to 2012, the government deliberately served as a catalyst for growing cross-border e-commerce and there was a seamless flow of products into China. The government actively explored different models, including free trade zone and pilot cities, to resolve friction points in both customs and tax returns.

In cross-border e-commerce, goods delivered by express services and mail often faced problems in customs clearance and settlement of exchange and tax reimbursement. To solve these problems, the General Administration of Customs selected five pilot cities in 2012 to experiment with improved customs clearance management and extended the project to over 17 pilot cities in 2014. This project adopted new policies designed around the needs of e-commerce and integrated new information technology that enabled departments to work together and share data with enterprises. The Shanghai Free Trade Zone was launched in 2013 as a testing ground to incorporate a number of economic and social reforms. Commodities entering the zone are not subject to duty and customs clearance as would otherwise be the case. This has created a booming wine industry in China, as it grants importers more flexibility in bringing wine into the country. Furthermore, in December 2013, the Shanghai Free Trade Zone officially launched a cross-border e-commerce platform called kuajingtong.com with authorization and support from the Chinese government. The government is proactively looking to further increase its involvement in boosting cross-border e-commerce in China.

### Alibaba, and other Chinese platforms, have vertically integrated throughout the entire e-commerce ecosystem

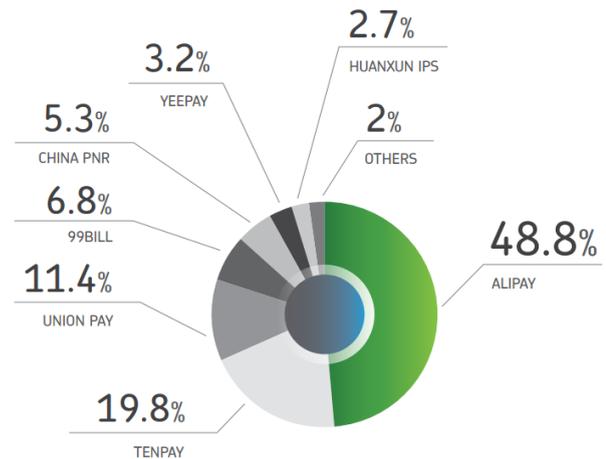
Alibaba ecosystem and participants



Source: Company report, Barclays Research

### There are many alternative payment options

PREFERRED THIRD PARTY PAYMENT COMPANIES IN CHINA



Source: PayVision: Tapping into China.

*“Many platforms were built in China but most failed in the journey of exploration, while a few succeeded due to innovation in technology and a creative business model. Platforms went through significant changes to provide more and more services, it used to be an information and payment platform, but now also manages logistics, customs clearance, foreign exchange and overseas marketing.”*

*—A cross-border e-commerce platform executive from Beijing*

*“From the beginning of 2012 the Chinese government actively promoted cross-border e-commerce by issuing supportive policies, however these take a long time and are very complicated to make and put in action. But overall, the government is very supportive and actively involved.”*

*—A cross-border e-commerce platform executive from Shanghai*

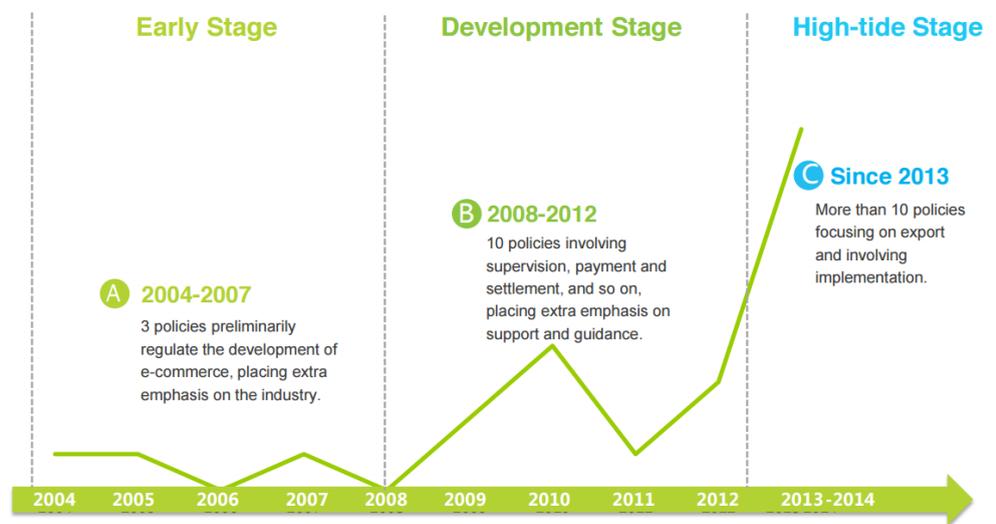
## What is unique to China?

**Large consumer class and strong customer willingness.** There are over 1 billion people in China and strong demand for e-commerce due to the underdeveloped physical retail infrastructure; this won't be easy to replicate for other economies.

**Innovative Chinese entrepreneurs who drive high competitive environment for MSMEs.** Chinese entrepreneurs are good at replicating ideas quickly, applying and adapting business models into a new environment; They are savvy at e-commerce business opportunities and agile in implementation.

## China cross-border e-commerce policies are comprehensive and forward-looking

### More and More Supportive Policies



Source: iResearch: 2014 China Cross-Border e-Commerce Report

## Learning opportunities from China

**Go mobile first.** Economies can skip the landline stage and jump into the mobile stage.

**Sophisticated, vertically integrated platforms.** Economies can leverage mature Chinese platforms and marketplaces like Alibaba, DHgate, LightintheBox to jumpstart cross-border e-commerce. For instance, Peru and Chile leveraged the Alibaba platform directly. These sophisticated e-commerce providers bring in not only the expertise of the platform, but also logistic payment solutions. From there, each economy can learn from these players and bring back best practices to their own economies. Besides leveraging these Chinese platforms, each economy should encourage their own e-commerce industry to integrate resources and build up the ecosystem.

**Focused investments in infrastructure.** Economies need to build telecommunications, roads, and ports to enable e-commerce. China is a good role model for how to quickly develop this infrastructure.

**Innovative policies to encourage cross-border e-commerce.** Not every area of e-commerce needs regulation; in excess, regulation is crippling of innovation. The Chinese government stood by and watched as digital companies developed new ways of doing business. By choosing not to enforce laws meant for traditional businesses, China let MSMEs with new ownership structures and new ways of thinking flourish. Other APEC countries may find themselves better off if they take a similar approach. Rather than heavily regulating cross-border e-commerce and alternative payment methods, they should allow new business models to flourish, and worry about passing the right regulations later.

*“From the beginning of 2012 the Chinese government actively promoted cross-border e-commerce by issuing supportive policies, however it takes a long time and is very complicated to make, not mentioning to put these policies in action. But overall, government is very supportive and active.”*

*- A cross-border e-commerce platform VP from Beijing, China*





FIT IN MIND. FIT IN SPIRIT. CONTINUOUS LEARNING.

Opportunities  
for Impact

## Trade in Services Dominates Cross-Border E-Commerce

Cross-border e-commerce by MSMEs is dominated by e-services, particularly specialized B2B e-services. This rapid growth in cross-border e-services has taken place because it sidesteps two sources of friction for physical goods: customs, and logistics. In addition, startup costs are lower for e-services, and the development of pay-as-you-go tools has facilitated payments for e-services firms. However, despite these advantages, e-services firms must find ways to establish their reputations for high quality, reliability, and trustworthiness. In addition, e-services firms typically have little collateralizable assets, making it hard for them to raise the capital that is still necessary to develop cross-border trade. Governments can help here, by building out consumer and producer protections in the services sector; by promoting the development of platforms specifically designed for e-services firms; by providing education to service-based MSMEs; and by providing funding for startups expanding into cross-border trade. In this way, governments can assist in creating clusters of excellence for e-services firms.

### E-services are the easiest way to engage in cross-border e-commerce for MSMEs...

Cross-border e-services are well situated to continue the rapid growth they have experienced over the last five years. The breakdown of the need for physical interaction between service provider and consumer has driven this growth. Increased connectivity and computer literacy has reduced the barriers to entry across APEC. The arbitrage of labor costs between developed and developing economies for fungible services continues to expand into new and innovative spaces, such as data analytics, medicine, and digital security.

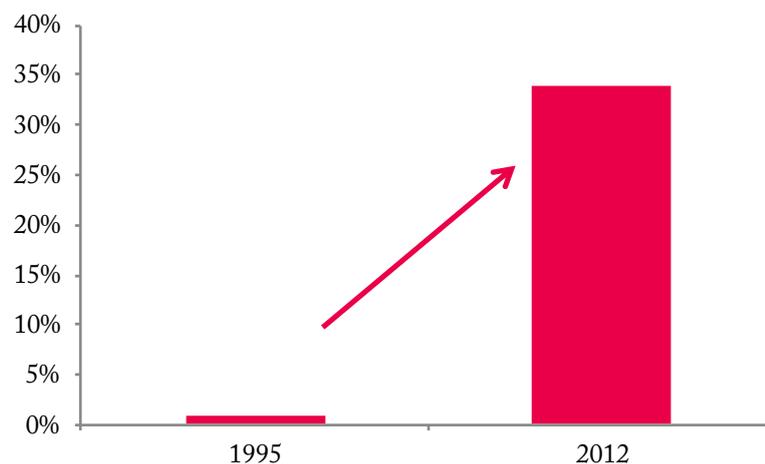
*“Google play and amazon web services have allowed us to scale our business up much faster and with less capital requirements”*  
– Malaysian Entrepreneur

With the advent of cloud computing and decreasing technology costs, digital services allow MSMEs to join the global value chain with very little upfront costs.

**...because of reduced barriers to entry, startup costs, and transactional frictions**

E-services avoid two of the major barriers that traditional e-commerce trade of goods encounter: customs and logistics. MSMEs starting service companies also benefit from decreasing investment costs when entering the market.

Services as a % of U.S. exports



## Customs

Because services are transferred through servers, they sidestep most customs procedures. They are also difficult to tax, and frequently are either not taxed, or avoid payment. This worries some economies because it reduces their tariff collections. Certain economies, such as Vietnam, have tried to tax digital goods, but still allow untaxed exports if the digital good is consumed wholly outside the country.

## Logistics

Trade in services also sidesteps most of the logistical problems faced by cross-border sellers of physical goods. The advent of cloud computing has further reduced logistical challenges.

## Modest and declining investment requirements

Innovations such as online platforms and software services, remote desktops, and cloud computing have significantly decreased the costs of entry into cross-border e-services. In addition, pay-as-you-go and freemium systems allow e-services firms to scale their infrastructure commensurate with their needs, and allows them to outsource non-core competencies.

*“If the service provided is not what the customer wanted, then there is no recourse for them to get their money back”*  
 – Indonesian MSME

*“The current finance infrastructure will not support my service business model because you need collateral, so we had to leverage our personal assets to get funding”*  
 – Peruvian MSME CEO

*“We need a B2B service platform to expand our market outside of the country”*  
 – Thai service provider

## B2B overwhelmingly dominates cross-border e-services

B2B demand for services is almost 10 times larger than demand for B2C services, according to the UNCTAD Information Economy Report 2015. This trade has moved beyond outsourcing back office functions, call centers, and accounting into other e-services such as app development, digital marketing, and training.

## But...challenges to e-services still exist

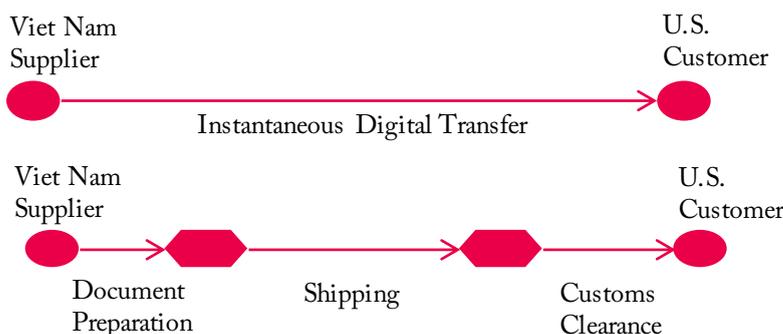
Distance still matters. It can be a challenge for a client to communicate their ideas, project requirements, and timelines across language, cultural and physical distances.

Services are experiential by nature, which creates problems when the two sides of the transaction do not know one another. Trust must be built, and protections for both buyers and providers must be in place. The potential for lack of recourse for poor performance, or for non-payment for services rendered, will breed distrust.

As services are consumed immediately, it is more difficult to design recourse mechanisms for buyers and suppliers. Bonding, certification, and dispute resolution procedures can play a critical role.

Funding for service-based companies is also a challenge. These firms typically lack collateral; their assets lie in their skills, knowledge, and personnel. In some economies, venture capitalists are familiar with funding this type of enterprise. However, traditional financing institutions struggle to lend or fund this type of company. These gaps in financing must be met through public initiatives such as grants, provision of seed capital, and tax incentives.

*Trade in service has fewer friction points than trade in goods*



Data restrictions also persist as a friction to cross-border trade in e-services. Demands for data localization and restriction on data transfer can significantly inhibit the development of trade in e-services in some areas and economies.

### The real opportunity lies in services

This study has shown us that services provide the biggest opportunity for MSMEs in cross-border e-commerce. As we have already noted, trade in e-services sidesteps many of the frictions that afflict cross-border trade in physical goods. However, very little is known at present about the quantity and reach of the e-services being traded cross-border by MSMEs. Future studies must be conducted in order to deepen understanding of the nature of cross-border trade in e-services by MSMEs and its impact on their growth and survival.

### Next steps for services

Currently, anything that does not require a physical human touch can take advantage of the global supply of skills and talents. Economies can and should become experts in specific services and industries in order to promote their specific capabilities. For example, the Philippines has done a remarkable job at promoting their accounting work around the world.

Economies must limit restrictive data localization and permit free cross-border data flows to encourage e-services trade among MSMEs. For instance, Big Data service providers running millions of lines of code will need to aggregate and analyze across borders. Allowing free data flows will encourage cross-border collaboration as well. A good example of free flow of data is the United States-Korea free trade agreement, which allows free flow of data between American and Korean businesses.

MSMEs should focus on the growth of mobile technology. Many developing nations are leapfrogging over landline technology and moving straight to mobile technology for Internet communication. Many companies, such as iFlix, dubbed “Asia’s Netflix”, are targeting this mobile data market.

Economies must also encourage crowdsourcing and crowdfunding as sources of informal capital for new ventures in this unconventional sector.

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*“Services are a way for even the unknown designer to participate in the digital economy”*  
 – Professor of Economics,  
 Indonesia

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## Moving forward, areas to focus:

- ⊕ **Limit data localization and encourage KORUS-like agreements.** Data localization requirements are a barrier to cross-border e-commerce. They force businesses to build and maintain infrastructure in multiple locations, increasing investment costs and limiting expansion opportunities. While there is some value to be gained from data sovereignty, we recommend that governments focus on KORUS-like agreements to meet those needs.
- ⊕ **Encourage the growth of services platforms and exchanges.** Economies should encourage the growth and development of platforms not only for goods, but also for services. As services make up a larger portion of cross-border e-commerce growth, economies must have a strategy to help service platforms grow.
- ⊕ **Create easy to use collaboration tools.** Collaboration tools encourage the development of services markets. By allowing for quick and easy communication between clients and MSMEs, collaboration tools quickly build services in an economy.
- ⊕ **When creating e-commerce training programs, do not forget about e-services.** Most of the e-commerce training programs solely focus on trade in goods. E-service training is needed to build capacity and expand the reach of MSMEs to the rest of the world.
- ⊕ **Do not overregulate crowd-funding and crowd-sourcing of ideas.** Crowd-based platforms such as Kickstarter and freelancer.com allow MSMEs to reach a larger customer base and also access skills and resources not readily available in home markets. Over-regulation will limit the effectiveness of these platforms and deprive MSMEs from an important equalizer in cross-border e-commerce.
- ⊕ **Ensure high speed data connection to the rest of the world.** For services to grow, high-speed, reliable and efficient data infrastructure must be in place. MSMEs cannot effectively participate in the digital economy if they are handcuffed by the cost, availability and reliability of their network connections.

# Freelancer.com: Facilitating E-Commerce in Services Around the World

Freelancer.com is the world's largest freelancing, outsourcing, and crowdsourcing marketplace, where potential employers post jobs that freelancers can then bid on to complete. Every post, or job, is a service that can be digitally delivered to clients located around the world and can be paid for with 17 different currencies. The average project is completed for just \$200.

Founded in 2009, Freelancer.com is headquartered in Sydney, Australia. Even though the company is based in Australia, however, the majority of transactions are international. Millions of individuals, small businesses, and multinational corporations use the platform to outsource work to talented freelancers in other economies. Common projects include website development, market research, manual data entry, search engine optimization, and graphic design.

Many MSMEs hire talent on Freelancer.com, or one of their rivals such as Upworks.com, because of the low costs, high quality of work, and quick turnaround time of projects. Companies in developed economies, such as the United States, can hire English speakers from the Philippines or Thailand at much cheaper rates than they would at home. The site also allows MSMEs to hire freelancers for much needed but one time jobs, such as logo design. On the other hand, MSMEs or individuals selling their services on Freelancer.com can often make more money than by working a normal job, as they are able to reach potential clients around the globe. Outsourcing e-service platforms--such as Freelancer.com--help MSMEs improve the efficiency of their operations, reduce local advertising spending, lower their fixed costs, and better compete with multinational corporations.

Some economies have earned reputations as having highly developed professionals in specific areas. For example, the Philippines is often the first choice for business processing and virtual assistants, while Thailand has highly regarded accountants. Individuals with strong English and customer service skills can often charge more for their services.

Individuals and MSMEs with strong IT skills will turn to freelancing sites when the money they can earn there is greater than what the local market will bear. The opportunities from freelancing websites will motivate more people to earn technical degrees and over time will lead to a more developed local e-commerce ecosystem.



We spoke with Janice, a U.S. based entrepreneur who has used services like Freelancer to hire talent around the world to assist in website development. She told us:

*"I use Upwork as an inexpensive skilled labor pool that I can quickly engage for both small and large projects. With Upwork, I hire specialists for different tasks of a software development job. I can't find people who have the right skill set to do an entire project. Upwork allows employers to see how candidates have been evaluated for jobs already completed. I found this an appealing aspect of Upwork until I realized that the ratings are poor indicators, as most employers give high marks, no matter the quality of the work. Not only are employers uncomfortable hurting workers' reputations with poor scores, but workers can see the rating record of an employer. Workers want to work for those who uniformly give top ratings. Initially I hired workers from multitudes of countries, and now, only a few. I have noticed significant cultural differences in approach to work, particularly with adherence to deadlines, ability to ask for clarification, and honesty of skill level."*

# Raising Awareness: MSMEs and Governments Have Huge Blind Spots When it Comes to E-Commerce

Across many of the economies in APEC there is an overwhelming sense that many MSMEs and government agencies lack awareness about the disruptive impact of technology and e-commerce. While some businesses and governments are at the cutting edge of this change, most are not. Both parties lack a basic level of understanding of the opportunities and threats that e-commerce, and particularly cross-border e-commerce, bring to industry and trade. More public and private dialogues are needed to bridge this gap.

## The challenge begins with awareness!

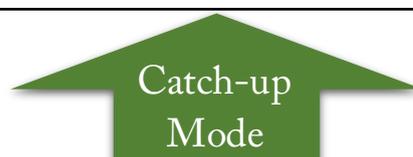
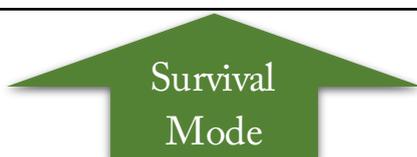
Neither businesses nor governments seem to know the best strategy to increase awareness amongst MSMEs. During our interviews, it was commonplace to have a MSME owner tell us “we need to have more

training and support to help us learn how to do cross-border e-commerce.” During the same week, a government official would tell us that “we already have those programs available.”

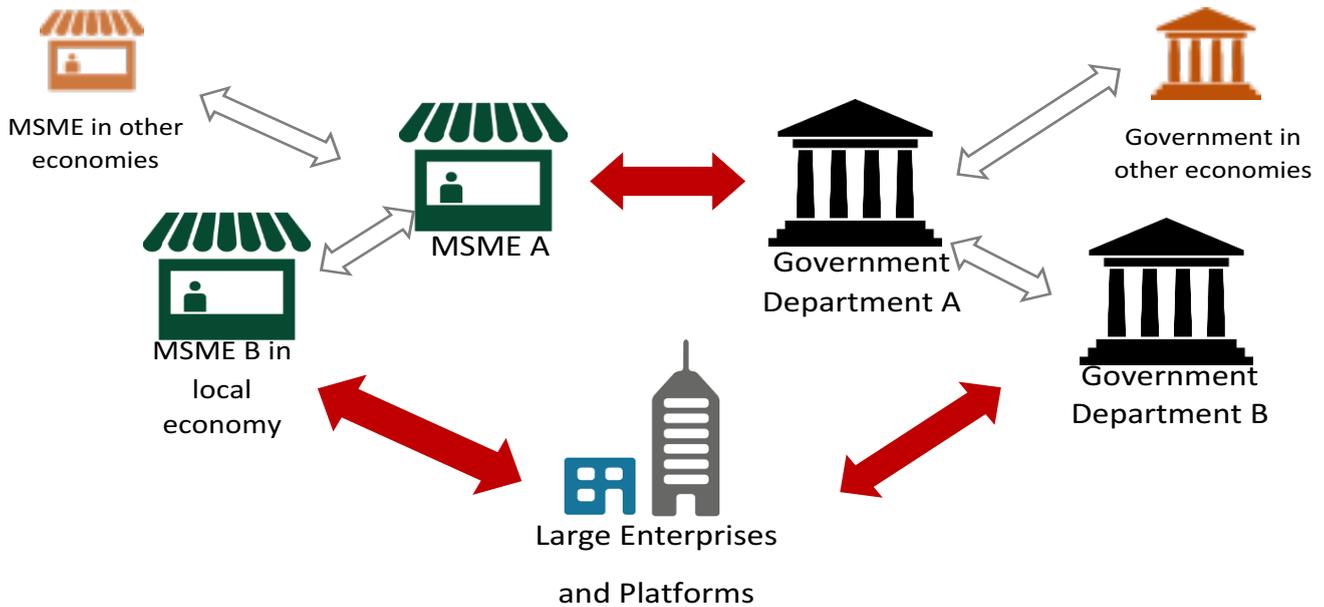
Governments and businesses must work proactively to bridge these gaps in awareness.

*“They offer many export-focused seminars, but they’re not offering anything specific to e-commerce.”*  
- U.S. MSME

MSME awareness gaps:	Government awareness gaps:
<ul style="list-style-type: none"> <li>- Value and potential of e-commerce</li> <li>- Opportunities in cross-border trade and integration into the global market</li> <li>- The speed of change and the threat of being left out</li> <li>- What other MSMEs are doing: best practice and new business models</li> <li>- What government &amp; 3rd parties are doing: training programs and available resources</li> </ul>	<ul style="list-style-type: none"> <li>- The full impact of e-commerce on the economy</li> <li>- What MSMEs are doing</li> <li>- What MSMEs think of government policies &amp; regulations</li> <li>- What other governments are doing</li> <li>- APEC best practices</li> <li>- How changes in e-commerce will lead to evolving regulatory needs from e-commerce</li> <li>- How to design strategic initiatives moving forward</li> </ul>



*Information channels that improve awareness on cross-border e-commerce.*



**A glance at the disconnect, which leads to the “Lack of Awareness”**

The diagram above shows the key information flows that economies should focus on to help raise awareness of cross-border e-commerce for MSMEs. Key disconnects are highlighted in red.

**Channel 1** represents the direct channel between the government and MSMEs. This disconnect was evident from multiple MSME interviews. Government programs to improve awareness are not reaching the target MSME audience.

**Channel 2** represents knowledge sharing and training from large, successful enterprises and platforms and up-and-coming MSMEs.

**Channel 3** represents the dialogue between large enterprise and government.

To bridge the gaps, economies must work on:

- **Public and private dialogues.** Establish communication links to close the knowledge gap on both sides.
- **Single Ministry with a digital economy plan.** Establish one location where MSMEs can access comprehensive, up-to-date resources on e-commerce, so that they always know where to look.
- **Learning from foreign companies.** Governments and MSMEs should look at companies abroad to see what solutions are working well in other economies.

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*“There is training that is really helpful, but I never hear about it from the government. I heard about it from a friend. I could have missed it.”*  
 - MSME in Peru

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*“I don’t know if there’s a SME association, not to mention how to approach them for help... what do they offer?”*  
 - MSME in Shanghai

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*“In most successful disruption cases, the industry doesn’t even see what has hit them.”*  
 - Founder of a Peer-2-Peer Money Transfer Firm

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## MSMEs should look at innovative companies across APEC for inspiration, such as:

### uitox

#### Uitox (Chinese Taipei)

Helps businesses establish localized websites for cross-border e-commerce and to sell and ship their products cross-border by leveraging their network of warehouses and relationships to overcome gaps in the value chain.



#### WeGoLUCK (Chinese Taipei)

Assists small businesses that are looking to sell their goods in the United States in understanding the costs to deliver products to American customers. WeGoLuck helps decide the final selling price to offer customers and compares prices to determine whether the pricing will be competitive with domestic products.



#### Lightinthebox (China)

Established in 2007, Lightinthebox is the biggest foreign trade B2C website in China today. At first, Lightinthebox focused on selling customized wedding dresses, but has now expanded to offer 60,000 types of products in 14 categories, including apparel, electronic products, toys, accessories, and household items.



#### Taobao University (China)

Alibaba Group's core education and training product. After 12 years in development, it has become a network of shop owners, shop managers, e-commerce elites, and professionals (universities, entrepreneurs). It offers a series of practical courses through online training, on-site lectures, and training certification, which have reached millions of successful e-commerce small business owners.



#### Orange Now (United States)

A b2b U.S. company that sells American food products to grocery stores in Asia to reach U.S. diaspora customers. Orange Now markets directly to small businesses in Asia to advertise the demand for their products and then provide an end-to-end solution for their clients.



#### United Courier Service (United States)

UCS specializes in international e-commerce solutions via a front-end user-facing platform and back-end merchant-facing system integration, enabling online retailers to extend their market reach to a global scale.



#### Made in Candy (Singapore)

A candy manufacturer that started in Singapore, before expanding to Thailand, Viet Nam, and China. The company is run on mobile from taking orders to reviewing candy designs.



#### HijUp (Indonesia)

A new Muslim fashion e-commerce website that has received seed funding from a prominent, global investor and has more than 400 primarily female designers. The company creates inspirational videos to educate the market and to fuel its overseas expansion plans.



#### Gandengtangan.org (Indonesia)

A crowd-lending non-profit company that focuses on raising money for NGOs and non-profit businesses abroad.



**MyTeksi/GrabTaxi**  
(Malaysia)

A mobile-first app that is Uber's primary competitor in South East Asia. As Malaysia's first start-up Unicorn, MyTeksi/GrabTaxi has expanded to 20 cities in 6 countries, providing taxi, private car and motorcycle transportation services to millions of users across the region. The company is primarily an O2O service; while users summon a car with their phone, they pay the driver in cash.

**SPIKE**

**Spike**  
(Japan)

A Japanese payment solution created by Metaps that processes up to \$10,000 in transactions a month without charging fees and counts more than 40,000 corporate users. The website is already translated to English and the CEO has indicated that the company has international ambitions.



**Factelier**  
(Japan)

This fashion cross-border e-commerce website is creating high-quality made-in-Japan apparel products by partnering directly with Japanese manufacturers. By eliminating the middlemen in fashion distribution and working directly with manufacturers, Factelier has been able to provide high-quality products at a lower price than other luxury apparel brands.



**Retiros Multicaja**  
(Chile)

Enables businesses and startups to export their products and services by processing international payments from the 123 million users of PayPal located in more than 190 countries.



**MCM Worldwide**  
(Republic of Korea)

A luxury leather good manufacturer based in Seoul that currently conducts cross-border e-commerce in the United States and Europe. The company is currently in the process of expanding e-commerce operations globally by 2017. MCM has a devoted team focused on cross-border e-commerce that fully understand the ecosystem and the unique and significant challenges that e-commerce presents.



**Kakao**  
(Republic of Korea)

An Internet company founded in 2014 that offers a range of mobile products, including an e-wallet, music, chatting, and taxis. International brands, like Burberry, have recently launched storefronts on the mobile app.



**Lazada**  
(Singapore)

Lazada Group has the intention of establishing the Amazon.com of Southeast Asia to take advantage of the nascent online consumer market and Amazon's weak presence in South East Asia.

**temando™**

**Temando**  
(Australia)

The company provides facilitated shipping options for MSMEs that displays the available shipping options to the customer, calculates the most efficient routing, and helps optimize the appropriate delivery cost.



**Carousell**  
(Australia)

The mobile app peer-to-peer marketplace lets sellers easily upload items with a tap of the phone. The company counts Sequoia Capital and Rakuten Ventures as investors, and is the process of expanding to Indonesia, Malaysia, and Chinese Taipei.

# Single's Day in China: Building Awareness of E-Commerce Through Bargain Shopping

*“This year for Singles Day, our keyword is globalization. Starting from this year, future Singles Days will definitely not just be for consumers in a particular region, Singles Day will be for the whole world.”*

**-Wang Yulei,  
Tmall CEO**

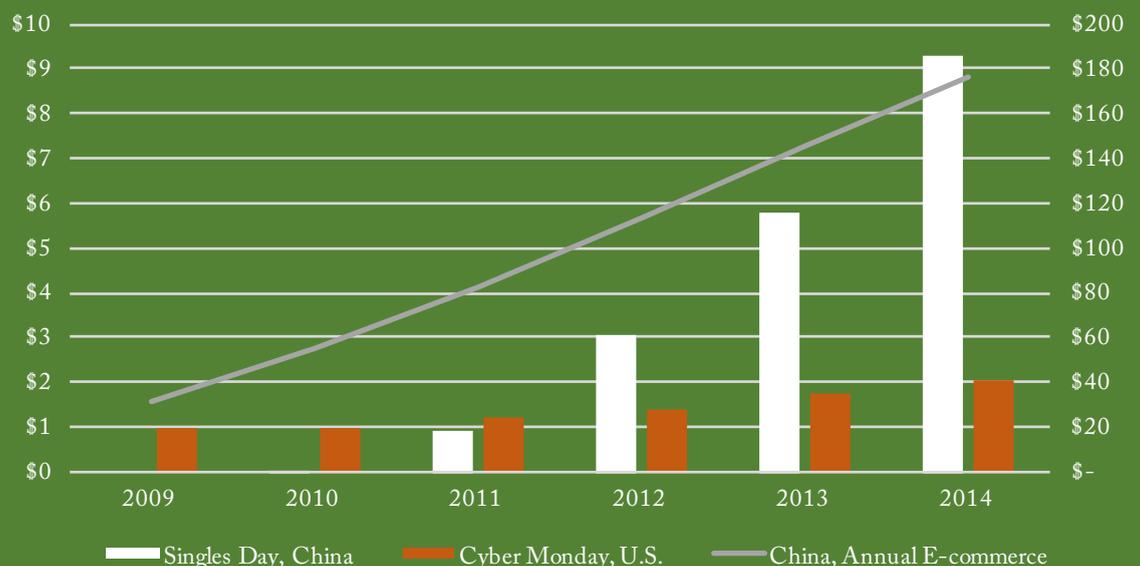
Singles Day, the 11 November e-commerce day, is the largest shopping day in the world. Originally created in 1992 by a group of university students, the day was co-opted by Alibaba in 2009 as a day to promote massive e-commerce sales, much like Cyber Monday in the United States. E-commerce sales on Singles Day have grown dramatically ever since. In 2013 and 2014, for example, sales on Alibaba's Tmall and Taobao websites stood at \$5.8 billion in 2013 and \$9.3 billion in 2014.

Alibaba is also attempting to market Singles Day abroad by promoting sales on Tmall Global, an Alibaba-owned platform that sells marked down imports from international brands that are not established in China. Shoppers in economies including Malaysia and Singapore received discounted cross-border shipping rates on 2014 single's day and had the option to pick their packages up at lockers or convenience stores.

Moreover, China Smart Logistics, a consortium of shipping companies in which Alibaba owns a 48% stake, has partnered with leading logistics companies—including Singapore Post, DHL, TNT, and FedEx—to deliver goods to customers in virtually every corner of the world. That's good news for customers, as well as MSMEs selling on Alibaba's many platforms.

Alibaba actively promotes Singles Day as an e-commerce holiday, driving consumers to purchase goods online from retailers around the world. Other economies should take note, and consider a similar approach as a way to grow awareness of e-commerce. Gimmicks aside, the experience shows that a national online shopping day can quickly accelerate e-commerce for an economy.

Singles Day, Cyber Monday, and Total Chinese E-Commerce Sales (\$ billions)



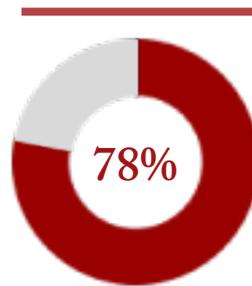
Source: “What is China’s Singles’ Day,” BBC

## *MSMEs Lack the Knowledge and Capabilities to Exploit the Benefits of Cross-Border E-Commerce*

Most MSMEs lack the skills and resources to handle the complexities, costs, and risks of engaging in cross-border e-commerce. As a result, these MSMEs remain entrenched in the old ways of doing business. To address this gap, governments and business should work together to educate businesses on the potential and benefits of cross-border e-commerce. It is equally critical to train MSMEs to build their online presence and prepare them to compete in global commerce. It is imperative that businesses and governments work together to establish cross-border e-commerce communities and co-working spaces, develop enhanced e-commerce curriculum at schools and universities, and mentor the next generation of e-commerce entrepreneurs.

### **Governments are actively trying to develop the digital economy but their link to MSME's is broken...**

Based upon our interviews, many government officials believe they are providing the necessary resources to small businesses, but MSMEs are either uninterested or not taking advantage of opportunities. Meanwhile, MSMEs complain that training opportunities either do not exist or focus on the wrong skills. Better cooperation is needed to ensure that training is focused on the right areas and designed to close critical knowledge gaps.



*MSMEs see lack of training as an issue*

*“Cross-border trade focused educational seminars and webinars are available, but poorly attended.”*

*- Government official*

*Governments need to consolidate MSME-related information to a single website with a combined list of contacts and resources to help small businesses engage in cross-border e-commerce.*

*- MSME*

Governments should create a single website that includes clear and comprehensive information tailored specifically to meet the needs of domestic MSMEs. Additionally, governments should provide information on export initiatives that provide assistance to MSMEs looking to fulfill orders in target economies. Information should cover how to develop logistics, warehousing, marketing, distribution, and manufacturing partnerships. Finally, governments should revise communication strategies in order to increase awareness amongst MSMEs. Together, a streamlined single website and targeted marketing approach could have a positive impact on MSMEs.

### Identify where you can make an impact

Due to limited resources, governments should identify companies, sectors, and industries within their economy that will benefit most from cross-border e-commerce training and education.

### Community co-working offices

Bring businesses together so that they can share best practices and industry knowledge with their peers. Co-working spaces allow multiple MSMEs to work in the same space, allowing small companies to benefit from shared resources, improved motivation, and have network effects. While many co-working spaces such as We Work are for-profit endeavors, other alternatives involve governments and large multinational corporations. We encourage governments and corporations to work together to establish co-working spaces in cases where insufficient solutions do not already exist. For a minimal investment, these co-working spaces can exponentially grow successful startups and boost economic growth.

### University involvement

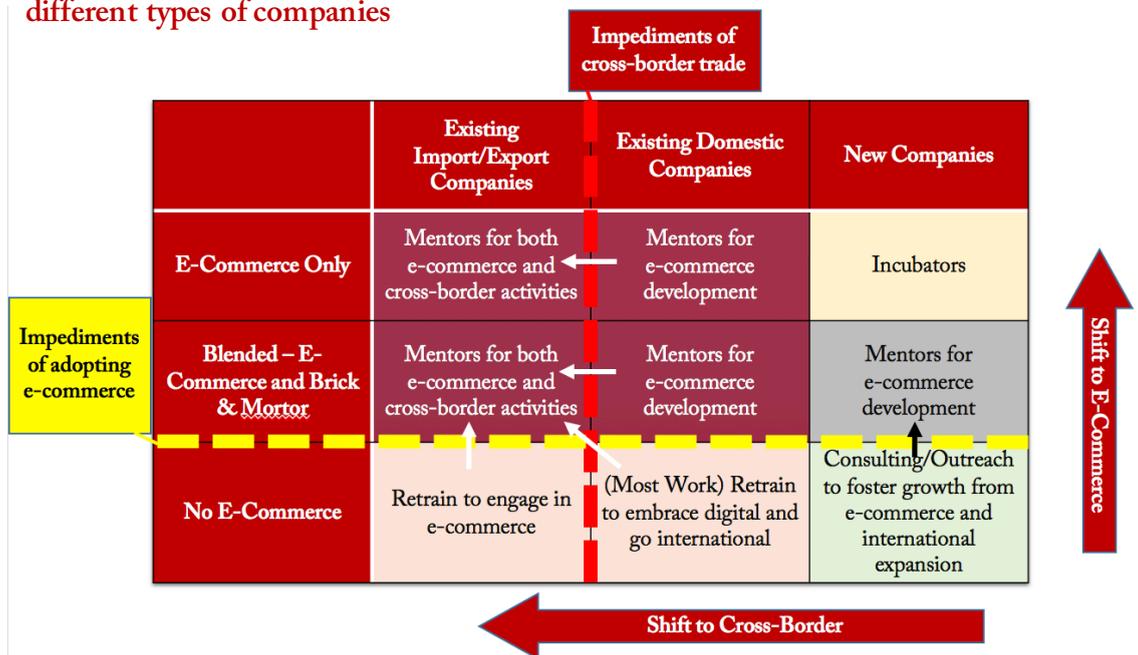
Incorporate cross-border e-commerce into curriculums so that young students can become entrepreneurial and opportunistic in the e-commerce space. Engage with Universities to train experts and build a talent pool that will start profitable cross-border e-commerce businesses. E-commerce should be included in university curriculum to empower and educate citizens on the business potential—and impact of—cross-border e-commerce. Moreover, Governments should provide auxiliary adult education and training to transitioning professionals. Finally, educators in economies that lack a robust history in e-commerce should recruit outside talent to help train, develop, and inspire students about cross-border e-commerce.

*“In China students go to universities and local e-commerce companies to participate in case competitions specifically around e-commerce business. They even offer e-commerce as a major at some universities and it is growing in demand.”*  
 - Chinese cross-border e-commerce entrepreneur

*“We bring in speakers, mentors, successful people, to help inspire, help and collaborate with our companies.”*  
 - Co-working space owner

*“After series A funding, I still work in a co-working space because its flexible with my employees, I only pay for what I use, and I receive benefits from the government.”*  
 - Malaysian entrepreneur

### Training needs to be individualized to meet the needs of different types of companies



## Governments can aid in training and educating MSMEs...

Domestic companies need training and guidance on how to overcome the barriers of expanding internationally. Some governments are stepping up to provide this training, while others lag behind.

KOTRA, the Korean Trade-Investment Promotion Agency, provides shared working spaces that are jointly funded by the government and membership fees that are designed to facilitate MSME cross-border trade.

### *Cross-Border E-Commerce Training Program (CBET)*

To increase the level of awareness, education, and capacity, ABAC, lead by ABAC China, has created the CBET training program currently operating in Brunei and China, with the goal of expanding to all APEC economies. CBET is providing tailored training to increase the capacity of MSMEs to expand their market outside their own borders by holding multi-day seminars at little to no cost for the MSMEs.

CBET has brought MSMEs from across the globe to provide hands on experiences in order to build capacity. The training programs are not limited to the individual economies where they are being held. They train the MSMEs on growth factors of e-commerce, future projections, and how to begin selling online. They also provide the basics of the value chain of e-commerce, from logistics to supply chain financing.

They train the MSMEs on best practices around APEC primarily through entrepreneurs who have succeeded in the past. DHgate has been an invaluable partner to ABAC in the CBET program and capacity building of MSMEs trying to participate in cross-border e-commerce.

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*“Lack of mentorship is an issue because there are not many entrepreneurs that have made it”*  
*-Head of Incubator in Philippines*

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*A successful cross-border e-commerce business owner in Chinese-Taipei remarked that “I have so much knowledge and experience to share but nobody reaches out to me to help.”*

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*“There are no mentors and many young entrepreneurs do not realize that they need mentors. The people who do contact me seeking a mentor are completely clueless. There are no entrepreneurs who have made it yet.”*  
*-Head of incubator in Philippines*

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## ...but the private sector also has an important role in helping MSMEs build cross-border e-commerce capacity and ability

Platform providers should provide comprehensive training—in person and online—to the MSMEs on their marketplaces. By providing high-quality training, platforms can grow their user base and expand the entire e-commerce ecosystem. Similarly, logistics firms can benefit from educating MSMEs by offering e-commerce training focused on the shipping, packing, and customs process.

Industry Associations and Business Councils should work to facilitate training programs and enable dialogues between businesses. Private sector-led training programs should seek to bolster MSME e-commerce skills, rather than locking MSMEs into using certain platforms and providers.

Successful entrepreneurs should mentor individuals starting new businesses. In turn, new entrepreneurs should actively seek out mentors with experience in their niche fields. However, developing economies often lack a mentorship culture. This gap is worrisome because mentorships are crucial for realizing network effects, particularly in fast-moving industries. Mentors can help businesses that are new to e-commerce successfully strategize and execute a plan for leveraging the digital economy and global marketplace.

## Retrain the “Old Dogs”

After leaving interviews with multiple MSMEs that strictly do business online across borders, the owner of an established brick & mortar retailer accompanying us remarked, “Oh, Young Dreamers.” Too often, the older generation of MSMEs is skeptical of new global business models that embrace cross-border e-commerce. This illustrates the general lack of awareness that established and older companies have of e-commerce’s potential. Some education efforts should target existing businesses that need an extra push to move online.

MSME needs will vary across APEC economies. While some types of training are universally required—such as on regulation compliance, logistics, and platforms—others are highly dependent on the existing e-commerce culture and state of development. Governments should poll MSMEs and business leaders to identify high need areas.

## *Moving forward, areas to focus:*

- ⊕ **Develop education seminars in conjunction with governments, platforms, and industry associations.** Bridging the education gap requires coordination amongst all stakeholders. Economy governments can provide resources and communication channels. Platforms can provide content and subject matter expertise. Industry associations can provide attendance and key challenges to be addressed.
- ⊕ **Encourage universities to train experts and build a talent pool prepared to develop businesses and train their peers in e-commerce.** One large barrier to MSME growth is access to talent. Even in the most advanced economies, at the largest companies, the competition for talent is intense. Governments must support universities in ensuring the talent supply grows to meet latent and future demand.
- ⊕ **Provide co-working space, mentoring opportunities, and incubator facilities to facilitate the sharing of ideas and resources.** Co-working spaces and incubators have been found to accelerate the growth and development of startup MSMEs. By providing facilities and encouraging private investment in the entrepreneurial ecosystem, governments will best prepare their MSMEs for the future.

# Start Up Chile: Guiding MSMEs to Market



*“Chilecon Valley -- For startups in our country, what we really need is a superhero, or a domestic unicorn, which will set a symbol for other talents or entrepreneurs to learn and follow”*

The accelerator’s objective is to transform Chile into the innovation hub of Latin America by attracting the world’s best and brightest entrepreneurs to bootstrap their startups in Chile. This organization provides education, funding, entrepreneur friendly regulations, international communication, and mentoring programs.

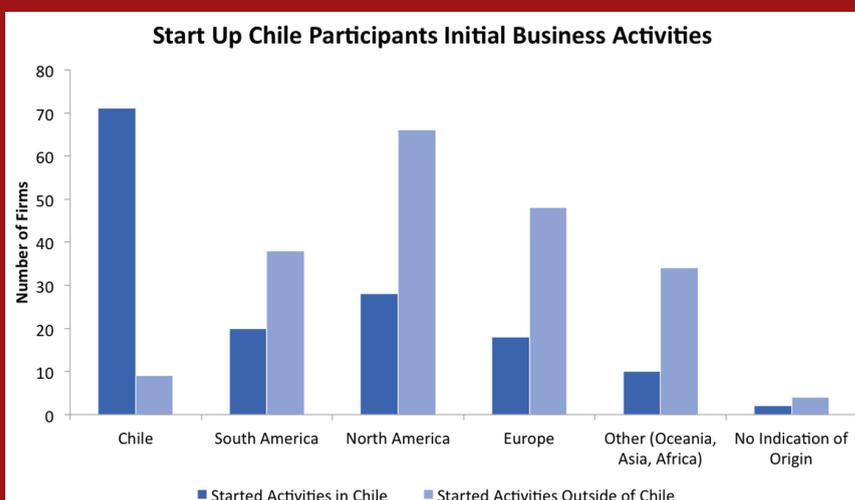
Start-Up Chile also provides startups with mentors that have experience developing and expanding businesses. These mentors help young entrepreneurs avoid common pitfalls and develop feasible business models that enable MSMEs to survive, grow, and expand abroad. Startups that participate in the program must also mentor local entrepreneurs and host workshops to give back to the Chilean MSME community.

Start-Up Chile is a seed accelerator created by the Chilean Government that provides \$40,000 in equity free investment, office space, mentoring, and a one year temporary visa for selected startups. The program is managed by the Chilean Economic Development Agency (CORFO), via InnovaChile, with the mission of encouraging entrepreneurship and innovation to grow Chile’s tech scene. Start-Up Chile receives funding from the Ministry of Economy, Development and Tourism, Ministry of Foreign Affairs, and Ministry of the Interior.

The incubator is unique in that it is open to people from any country, so long as they move business operations to Chile. As a result, it attracts talented entrepreneurs from Europe and the United States, in business areas such as engineering where Chile is traditionally weak. Moreover, the organization is an intermediary for matching international and domestic investors with high potential startups. MSMEs that join the the program are better prepared and more able to raise additional funding than traditional firms.

Start Up Chile has strong support from the government. Originally, it was relatively hard to obtain a working visa in Chile. Now, if someone is applying for a working visa through the Start Up Chile program, the Chilean government will ask a specialist to accelerate and simplify the application process. Start Up Chile has authority from the government to execute some cross-organization coordination, which increases the efficiency of business operations.

Finally, Start Up Chile promotes itself internationally, which helps member-MSMEs attract funding from international investors and identify international opportunities. The program still suffers from Chile’s lack of local venture capital, as roughly 85 percent of follow-on funding comes from abroad. As a result, some successful start-ups depart for the United States or larger markets after the end of the formal program. Still, with 1,200 graduates from 72 countries, it is hard to deny that the program is a success and a role model for how governments can actively work to foster entrepreneurship in an economy.



Source: Start Up Chile: An Analysis, Oscar Barillas

## *Public and Private Dialogues Are Crucial for Increasing Engagement*

The rapidly evolving nature of the digital economy is a significant challenge for governments. Across APEC, governments are trying to create digital economy road maps to develop and promote e-government, e-health, e-commerce, e-education, and e-IDs. In many cases, however, they are still struggling to reach MSMEs.

**Governments and institutions are actively creating ways to help MSMEs become fully engaged in cross-border e-commerce.**

In Korea, for example, the Korea Trade-Investment Promotion Agency (KOTRA) supports overseas business trips, participation in exhibitions, supplies foreign market research, and provides important training programs to grow export opportunities for Korean companies.

**APEC is also taking a leading role**

In September 2015, for example, the APEC Small and Medium Enterprises Ministerial Meeting announced the creation of the “APEC MSME Marketplace”. The interactive portal will facilitate business matching and networking between MSMEs across APEC.

APEC has also educated MSMEs on cross-border e-commerce. In 2014, ABAC China organized—with the help of sponsors Mastercard, Songshan Lake, and DHgate.com—a cross-border e-commerce training workshop aimed at capacity building for MSMEs. The conference was attended by over 50 attendees from 10 APEC economies.

**In spite of these positive efforts and key training programs, many MSMEs are still unaware of many government initiatives and dialogues**

Across our interviews we found a clear communication gap between governments and the private sector. On the one hand, governments are actively preparing digital economy road maps, allocating resources to train and assist MSMEs, and seeking the input of business in policymaking.

On the other hand, e-commerce businesses frequently told our team that governments are simply not doing enough to seek their guidance or advice. This signals a clear communication challenge that is difficult to overcome. Many MSME entrepreneurs lack the bandwidth to devote time to government dialogues and conferences. However, the pace and nature of change in e-commerce requires governments and leading e-commerce players to collaborate to create an agenda for the future.

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*“Government is not helping because they don’t understand what we really need”*  
— MSMEs

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## Success Story: E-Commerce LATAM

E-Commerce LATAM is a multinational organization hosted by the chambers of commerce of several countries that aims to bring together the leaders of e-commerce in Latin America's emerging market sector. Their main objective is to collect opinions from e-commerce players including MSMEs and giant retailers.

In the expert meeting on Internet business and new technologies, participants meet to exchange experiences and discuss new trends in multiple plenary and simultaneous sessions in the form of panels, business cases and guests.

In parallel with the conference workshops there is a trade fair exhibition, where services and solutions covering all aspects of e-commerce, e-business, online banking, mobile solutions and online businesses are organized. This organization will travel to the capitals of each member country to collect data and to address specific e-commerce issues in their countries and provide sustainable recommendations.

## Issues:

- Governments are actively seeking public-private dialogs on creating the future digital economy. Although governments are trying to keep up with e-commerce entrepreneurs, governments are not efficient in implementing e-commerce regulations, especially for MSMEs.
- Dialogues that do occur are influenced by the larger voice and bigger budgets of self-interested players, such as banks and large incumbents.
- MSMEs are not engaged, and their voice is not heard. MSMEs are not providing feedback to government because of their lack of resources.
- Most dialogues take place in capital cities and ignore the voices of those living outside technology hubs.

## *Moving forward, areas to focus:*

- ⊕ **Governments can actively engage with enterprises**, especially MSMEs, by hosting forums, round tables, and conferences. Government representation at industry-led conferences will also increase engagement.
- ⊕ **Nation-wide e-dialogues and online webinars** expand the participating audience, while also developing online skills and comfort with e-services.
- ⊕ **Governments can gain an inclusive perspective on proposed regulations** by providing simple online tools to capture private sector feedback from both large enterprises and MSMEs. New Zealand, for example, provides a readily accessible website for businesses to read and provide feedback on proposed regulations.

## *Solving the Multi-Ministerial Problem: Coordinated Execution Across Ministries is Needed to Help MSMEs Succeed*

### *Cross-border e-commerce development currently falls under the scope of multiple ministries ...*

Government ministries and departments have too many conflicting agendas to make e-commerce a key priority. Promoting the growth of MSMEs through cross-border e-commerce cannot be left to separate bodies acting independently. The risk of confusion, uncertainty, and conflicting regulations is too high with multiple government bodies working in isolation without a guiding framework. For MSMEs, this means navigating countless government websites and bureau offices just to get an approval or regulatory clarification.

### *Economies should develop comprehensive digital roadmaps...*

A digital economy roadmap, designed by government and business leaders, is a key enhancer for cross-border e-commerce growth. Economies should take practices from regional blueprints created by regional experts, such as the ASEAN ICT Masterplan 2015 and the APEC e-commerce steering group recommendations. However, each economy's digital strategy must be customized to enhance value creation.

*We had to meet with three to  
four different government  
agencies or departments in order  
to get a comprehensive view of  
e-commerce in each economy..*

The trouble is that too many economies have not properly detailed a formal e-commerce roadmap. The most recent World Economic Forum Global IT Report ranked economies according to the following question: "To what extent does the government have a clear implementation plan for utilizing ICTs to improve your country's overall competitiveness?" APEC economies are displayed to the right.

### World Economic Forum IT Strategy Rankings

Economy	Rank	Score
Singapore	2	5.9
Malaysia	6	5.5
New Zealand	7	5.3
Chinese-Taipei	13	5.0
Republic of Korea	15	5.0
Japan	20	4.9
China	25	4.7
Hong Kong, China	27	4.6
Indonesia	34	4.5
United States	39	4.4
Australia	40	4.4
Canada	46	4.3
Chile	49	4.2
Vietnam	55	4.1
Philippines	69	3.9
Russia	74	3.8
Mexico	84	3.7
Thailand	96	3.5
Peru	110	3.3
Brunei	N/A	N/A
Papua New Guinea	N/A	N/A

WEF Rankings from Global 2015 IT Report  
 - Rank: out of 143 surveyed economies  
 - Score: 1= no plan, 7 = clear vision. Mean = 3.9

*...And appoint a single authority within the government responsible for developing and enacting the digital economy roadmap*

Without a single agency or department with clear authority for pushing an economy's digital strategy, economies cannot hope to match the pace of change of e-commerce development.

The upside is that some economies already see the importance of developing a single authority to bolster e-commerce. Thailand recently established the Digital Economy Policy Committee, and restructured its ICT Ministry to become the Ministry of Digital Economy and Society. This will allow the government to take more direct control of the economy's long-term digital strategy. Moving forward, however, it is critical governments still approach regulations with a "less is more" mentality. By focusing initially on negative lists, governments can adapt quickly to changing technology and market needs.

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*"When I created my e-commerce business I had to register with four agencies. Many people do not even register their business due to the bureaucracy. There are attempts to create a one-stop shop for registering an e-commerce businesses, which would be a huge boon for the industry."*

*-Filipino MSME*

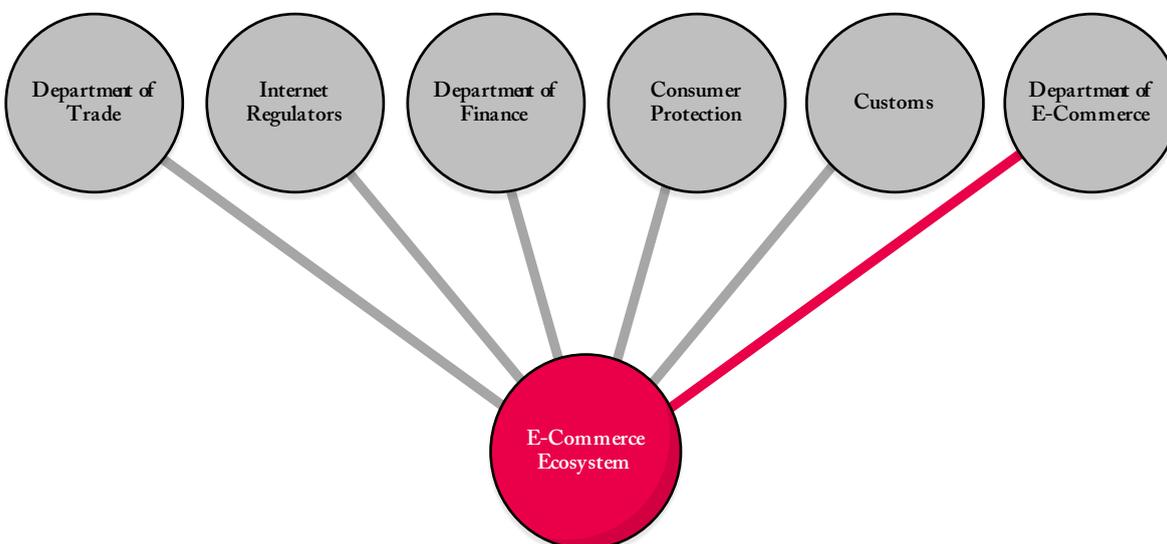
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*"The government keeps moving ownership of e-commerce from department to department. Trying to get things done means being told to go from building to building, ministry to ministry. From registration to taxes to financing, we've had to approach too many different parties."*

*-Entrepreneur in Brunei*

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There are too many ministries trying to regulate e-commerce



## *Incumbents and Vested Interests – Holding Back the Tide of Technologies and Trade?*

Policymakers around the world should anticipate the natural selection of groups being negatively impacted by the rise of cross-border e-commerce. New technologies, such as e-commerce, have the ability to reshape economies and transform traditional global trade patterns. Naturally, drastic changes that alter the status quo will create economic winners and losers. The challenge is how economies balance the interests of both traditional and emerging players as they relate to the growth of cross-border e-commerce.

### **Incumbents try to influence government policies to maintain the status quo**

We observed a number of small businesses, corporations, and even government bureaus across the APEC region that stand to lose out if they fail to adapt to the emerging cross-border e-commerce landscape.

**Logistics.** For centuries, logistics has been critical to cross-border trade. However, the rise of digital products and home delivery services is altering business models for many logistics players. For global logistics companies such as Fedex, UPS, and DHL, this means higher delivery costs for home deliveries and individual parcels.

**Government.** The rise in streaming content and cross-border services is resulting in lost revenues for local, state, and federal governments. Naturally, many governments have been slow to react.

At the same time, some governments have taken steps to apply sales taxes to Internet transactions. New online purchasing dynamics raise questions about how governments should treat digital and cross-border services.

Other government bureaus risk losing power and even jobs. For example, the rise in cross-border e-commerce has shifted goods away from traditional ports towards airports. As a result, customs checkpoints must be shifted away from ports and to airport cargo terminals.

**Telecom.** Companies with inherent monopolies and large fixed costs feel threatened by new high-speed services and emerging players. In some economies, telecoms push governments to block approval of new innovative business models that challenge their revenues. In other economies, telecoms have invested heavily in new technologies that expand the size of the ecosystem.

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*Some companies—or industries—are so heavily regulated they are unable to adapt to changing technological trends or consumer behaviors.*

*– U.S. MSME*

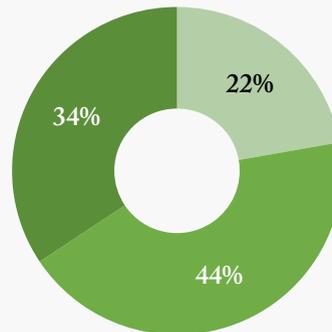
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**Banking.** Industry traditionally charged fees for transferring money between accounts. However, development of new online platforms, such as TransferWise, allows users to bypass traditional banking institutions in order to transfer money across borders electronically. Banks have the ability to limit digital transactions by not enabling e-signatures, crowd funding, or even peer-2-peer financing. Banks may even seek to block new competitors such as Apple Pay and Google Checkout.

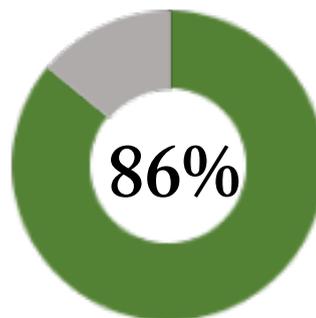
For example, traditional banks in developing economies face the need to adapt to the rise of credit cards and online payment systems. However, a banker in South America described to us the regulatory challenges that prevent much of the banking industry in that economy from implementing policies to adapt to these trends.

**Platforms.** Growing market positions allow early adopters and global e-commerce platforms, such as Amazon and Alibaba, to utilize economies of scale to reduce shipping and transaction costs for MSMEs. However, market dominance allows platforms to increase switching costs for MSMEs. One MSME owner in the Asia-Pacific warned, “major platforms try to control the market and shipping companies... people should understand that platforms are not a solution for everything...”

**Q: How do you view banks and existing financial industries as participants in the cross-border e-commerce ecosystem?**



- A supportive solution provider for MSMEs
- A major blocker to MSME cross-border e-commerce growth
- Neither / Neutral



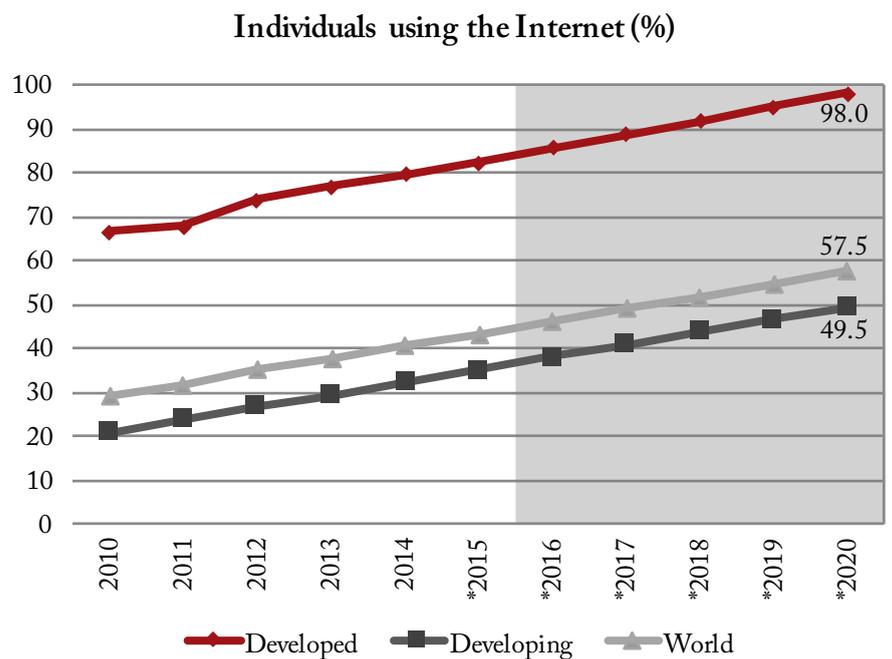
*worry about the potential for cross-border e-commerce marketplaces to become too controlling and to have monopoly power*

## Game-Changers: Looking to the Future

New business models and technologies will dramatically shift e-commerce landscapes across APEC and around the globe. Already, the plummeting costs of smartphones are pulling millions of people into the digital age. In the future, these technologies will create a new wave of mobile technology-connected consumers. Meanwhile, powerful tools such as virtual currencies, crowdfunding, pay-as-you-go investments, and alternative means of delivering Internet access will revolutionize how the Internet and e-commerce are distributed and conducted. APEC must stay on top of and ahead of these trends, and carefully consider the potential impact these changes will have on consumers and existing industries. Many MSMEs will need help keeping up with these developments; those that do not evolve will be replaced by a new wave of global MSMEs and multinationals.

### Affordable smartphones expand Internet access and create new customers

In 2015, Nokia released a \$29 smartphone, making mobile commerce affordable for millions of new consumers around the globe. Further price erosions will bring Internet access to larger segments of the population. Mobile connectivity is special because it allows consumers to bypass traditional impediments to access such as reliable access to electricity, cable connections, or computers. Today, most economies still see less than one third of e-commerce coming from mobile. By 2020, we expect mobile e-commerce to increase to over 50 percent.



Source: World Bank ITU 2015 figures

### Affordable smartphones expand Internet access and create new customers

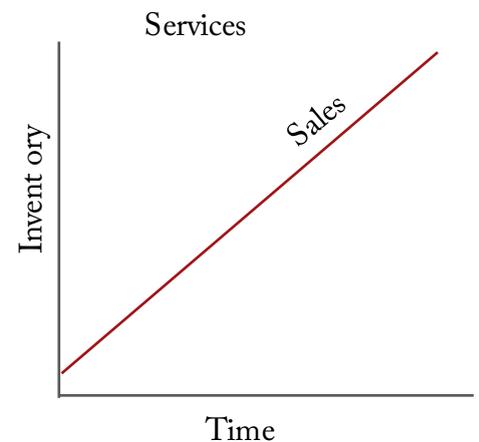
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### Pay-as-you-go(r)ow

Gone are the days when MSMEs are forced to invest in expensive servers or software prior to starting a company. Cloud computing and subscription based pay-as-you-scale models will allow MSMEs to start companies with lower capital requirements.

### Mobile payments create a more inclusive environment

Mobile and virtual money will empower the unbanked to become full participants in the global economy. Mobile platforms will expand banking access to the over 2.5 billion unbanked people in the world. Access to mobile money will give consumers financial security without traditional transaction frictions and remittance fees.



### Internet for everyone

Innovative means of delivering the Internet to consumers will connect the most remote corners of the world. Companies such as SpaceX, Facebook, and Google are already providing new distribution channels—such as satellites, drones, and balloons, respectively—that are decreasing the cost for MSMEs and individuals in remote locations to access the Internet. Expansion of these channels and other new technologies will create a new wave of online consumers.

### Goods versus Services

In goods-based e-commerce, inventory costs outrun sales in order to meet demand. For services based e-commerce, MSMEs are better able to match inventory to sales.

We expect growth in services to outpace growth in other cross-border e-commerce segments. Service businesses have low barriers to entry, avoid logistic friction points, and take advantage of differences in local labor costs. Governments can prepare their citizens for these types of businesses by offering advanced training and fostering a strong operating environment. By 2020, hiring a cross-border MSME for a service job will be a common occurrence for both consumers and businesses.

### Riches in the niches

Greater global connectivity and lower operating costs will allow MSMEs to carve out specialized niches in cross-border e-commerce. MSMEs will plug into the global value chain to sell to foreign consumers or to the ever-globalizing large players. This will be even easier with e-services, where the physical distance between suppliers and consumers becomes less important.

### Presales diminish risk

Crowdfunding sites, such as Kickstarter, allow businesses to gauge demand for products or services before actually making any investments into infrastructure. With just an idea or a prototype, businesses are able to raise funds easier than ever before.

### Data localization increases distance

Data localization laws that force Internet service providers and businesses to host data within national or regional borders are a growing impediment to operating abroad. Stemming from the Edward Snowden scandal and under the veil of national security, these laws are being implemented in a rising number of economies across the globe, including Indonesia, Korea, Russia, and Vietnam. These changes will cause businesses to rethink data flows, software solutions, IT infrastructure, and cloud computing<sup>1</sup>. Implementation of data localization laws will increase compliance costs and make it difficult for companies to operate abroad.

### Customs through sensors

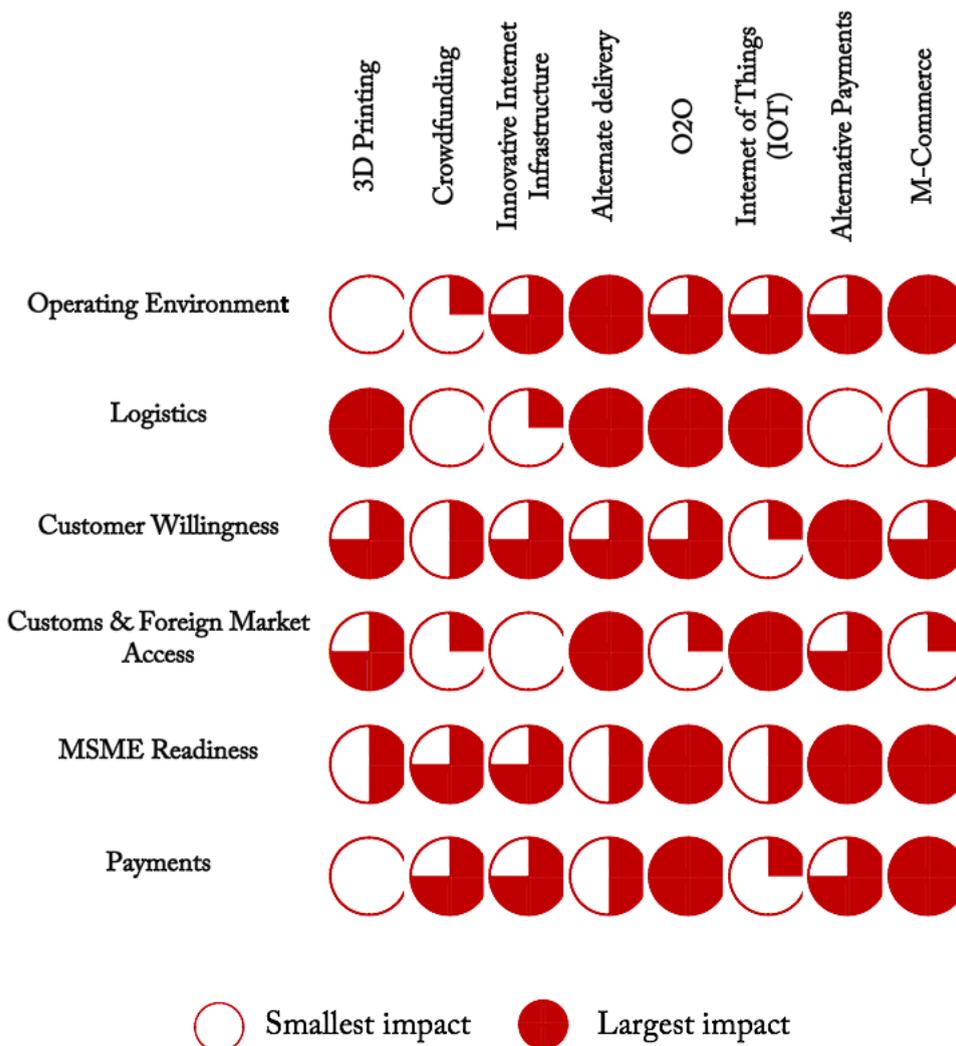
Incorporating low-cost sensors into every part of the supply chain will expedite customs processing in the future. Current “trusted trader programs” require customs authorities to investigate each step of the supply chain before granting a company “trusted trader” status. Digital sensors that actively collect the history of a product during the manufacturing and production processes will allow customs officials to better understand what is entering an economy. At the border, the simple scan of an item will then allow officials to apply the correct duties for each product.

### Single windows cut friction points

A single window system that allows MSMEs to submit information at a single location accelerates customs processing, reduces the need for forms, and eliminates corruption. Since Singapore adopted the single window in 1989, the time for customs processing dropped from two days to under ten minutes. Governments that adopt single window systems will make it easier for MSMEs to ship to new economies.

### Cyber-Mafia

Cyber-crime concerns for both consumers and governments around the globe will rise. Already, powerful criminal networks and government-to-government spying accusations cause consumers to worry about data sharing and online security. International criminals can reach the global network easier than ever before. Highly publicized cases of stolen consumer data decrease trust for e-commerce.



### Autonomous logistics

Autonomous vehicles and drones will change the way goods are delivered. The ability to operate without a human in charge will remove many of the limits on time and distance. This technology will decline in cost over time, bringing significant benefits for isolated populations in places like Papua New Guinea.

### The impact of game-changers

The chart to the left shows the expected future impact from select game-changers on specific elements of the e-commerce framework. Economies and MSMEs will do well to keep abreast of these fast-moving developments and their impacts on business. Regulations must be developed in a technology agnostic method, in order to encourage innovation in the economies.



Action Agenda  
Moving Forward

## *Action Agenda Moving Forward*

**Growing MSMEs globally is worth the effort.** As a research team, we began our task agnostic to the question of whether or not encouraging MSMEs to engage in e-commerce was worth the effort. After conducting over 500 intensive interviews during the span of the last eight months, we are convinced that encouraging, supporting, providing training, getting access to e-commerce marketplaces and platforms, and reducing barriers and impediments to cross-border e-commerce does make a big difference for MSMEs. The sheer complexity of cross-border trade is daunting for even the biggest and best multinational enterprises; but it is an almost insurmountable impenetrable challenge for most MSMEs. Without explicit help much is lost.

Innovative technologies have effectively opened the door to MSMEs to adopt e-commerce platforms and go cross-border. Lower price points for mobile devices and data give millions of new consumers the opportunity to buy online. Together, many traditional barriers to entry have been shattered, creating a new hierarchy of market players, where global platforms are replacing the old titans of trade and commerce.

Because of the sheer number of MSMEs that dominate the economic landscape of most APEC economies, enabling even small improvements for MSMEs has magnified impacts on productivity and economic prosperity. With the opportunities provided by e-commerce, getting MSMEs engaged in trade and exporting can become an important new engine for economic growth across APEC.

**Positive-sum game.** E-commerce, and cross-border e-commerce, is not a zero-sum game. It is not simply the switching of one business model for another. The positive impact of technology, expanded reach, lower transaction costs, and efficiency improvements leads to real economic gains. Consumers are better off with greater variety and more competitive prices. Global value chains are enhanced as they incorporate world-class specialists at all stages. MSMEs can experience greater stability, increased reach, and better competitive dynamics that drive innovation. Whether economies are quick or slow to harness the positive impact depends directly on the political will and vision of policymakers to invest in needed ICT infrastructure and to make regulatory changes that eliminate impediments to growth in e-commerce. Simplification of domestic policies and processes to enable Internet-based businesses are a vital first step. Strong, efficient, and highly competitive domestic e-commerce markets are essential for developing globally competitive MSMEs.

**Creative destruction: the impact will be severe.** It is dangerous and naïve to think and expect that all MSMEs will transition to e-commerce. Most will not. Indeed, we estimate that 80 percent of MSMEs, more in some economies, lack the technical skills and resources to become competitive in the new e-commerce landscape. It is even more dangerous to suppose that most MSMEs because of their small size and niche market approaches will be immune to the creative destructive impact of technology, the Internet, and e-commerce. They are not. Economies must recognize that a fundamental wave of change is transforming all aspects of commerce and society. Governments have a real responsibility to raise awareness, to educate, and to provide support for their MSMEs. While some products and services companies will thrive in this new e-commerce environment, most will not.

**Only as strong as the weakest link.** Sadly, like the failure of the “O” ring in the Challenger disaster, a globally competitive cross-border e-commerce ecosystem is only as strong as its weakest point. MSMEs in some APEC economies are disadvantaged by low levels of connectivity, in other economies they are disadvantaged by poorly developed payment systems. Still in other economies, MSMEs try to compete in outdated and ineffective regulatory regimes. Burdensome customs procedures remain a stall-out problem for MSMEs everywhere, as does the lack of harmonization of consumer protection laws across economies. No APEC economy is without its challenges in accelerating the growth of MSMEs through cross-border e-commerce. If weak points or voids exist anywhere in the e-commerce ecosystem, they effectively bring the entire market to its knees. To be successful, APEC must lead in creating an inclusive framework for cross-border e-commerce. Individual APEC economies must harmonize e-commerce laws and streamline and simplify customs and trade rules for e-commerce. Businesses must engage with policy makers to help foster attention on the most critical chokepoints.

**Imagining a new trade landscape and overcoming vested interests.** How and where economies—and industries—will change, as well as who the winners and losers will be, is not yet fully understood. Nor is it predictable. There are no theories or frameworks for predicting waves of change. But what is clear is that many MSMEs, large enterprises, and even government institutions will be forced out of existence or drastically altered. Already, e-commerce is turning industries upside-down. Uber is putting traditional taxi companies on the defensive. Mobile payments and digital currencies are allowing consumers to bypass traditional banking systems. Global logistics companies are struggling to adapt to the rising onslaught of small packages being sent to private homes and apartments. It is reasonable to argue that e-commerce will be every bit as impactful as the invention of light, and flight.

Those that are willing and capable of imagining what this e-commerce future might be like will be better armed to harness and benefit from its impact. Those economies that actively motivate, educate, and support their MSMEs will likely surpass those economies that do not. It is important that policy makers remain flexible and forward looking. More importantly, they must resist the self-interest of motivated incumbents in both business and in government. Bureaucratic inertia, self-interests of civil servants, and multi-ministerial coordination difficulties are challenges that all APEC economies must navigate. Policy makers must construct new trade and regulatory frameworks that support and enable e-commerce.

**Will history repeat itself?** While individual economies and APEC have taken positive steps to address various MSME concerns, provide education and training programs, and implement legislation aimed at reducing burdens for many businesses, more can—and should—be done. The fact is that many MSMEs we spoke with throughout APEC are frustrated with the lack of urgency and attention given to enabling MSMEs to thrive in this ever-changing e-commerce world. MSMEs feel the impact of these failings every single day. They are burdened with time-consuming customs procedures, countless government websites, and the crushing weight of growing regulations. Going cross-border adds to these complexities.

In 2000 at the APEC Small and Medium Enterprises Ministerial Meeting, the attendees recommended that APEC put a framework in place to coordinate standards, increase consumer confidence, and encourage private sector innovation. In the fifteen years since, progress toward these ambitious, vital APEC objectives has been limited. It is no wonder MSMEs are growing impatient.

**Collective action is needed.** Individual economies can take positive steps to develop regulatory structures and education programs that enable a new generation of e-commerce success stories, but any hope of reaching the true potential of cross-border e-commerce across the APEC region will depend on the collective cohesive actions of all economies. MSMEs need harmonized and interoperable laws and regulations across APEC. Similarly, consumers need widely agreed upon norms and protections in order to confidently buy goods or services across borders. Go it alone approaches add levels of complexity that can overwhelm the typically under-resourced MSME.

## *Recommendations*

MSMEs are impatient. They want action. They want improvements. For them they feel they have been neglected for too long. Progress toward a truly integrated global e-commerce marketplace will take time, requiring lots of collective effort. Whether progress is smooth, awkward, or an utter failure depends critically on the policies put in place now by individual economies, the international community, and businesses.

**Create an APEC-wide MSME e-commerce roadmap.** APEC governments should play an active role establishing an APEC-wide action plan focused on increasing MSME participation in cross-border e-commerce. Specifically, the forward-looking e-commerce framework should address issues related to e-payments, fraud and consumer protections, enhanced logistics value chains for MSMEs, streamlined customs procedures, and greater awareness of the STAR database, which will provide MSMEs with relevant trade information to facilitate e-commerce exports.

- *We urge APEC economies to establish an APEC-wide e-commerce action plan to increase participation by MSMEs in cross-border e-commerce.*

**Make cross-border e-commerce a priority.** The transformative and disruptive impact of e-commerce on economies and societies requires that it become a major priority for APEC, and within individual economies. The rapid adoption of mobile technologies is moving everyone to an m-commerce world with unclear implications. At the APEC level, existing trade regimes and customs agreements were never designed to accommodate flows of goods and services through e-commerce. Within APEC economies multi-ministerial jurisdictional overlap difficulties make progress on the Digital Economy and e-commerce agendas challenging.

- *We urge APEC to make e-commerce and m-commerce a key priority in all trade and investment discussions.*
- *We encourage APEC economies to tackle the multi-ministerial oversight challenge. Make e-commerce and cross-border e-commerce a national priority. Make e-commerce a priority in the education agenda. Simplify domestic policies and processes to enable Internet-based businesses.*
- *We advise economies to develop extensive roadmaps outlining the actions that they will take to promote the e-commerce environment and reduce friction points. The Philippines 2020 Roadmap serves as a strong role model*
- *We recommend individual economies research where competitive clusters and comparative advantages can be readily developed in cross-border e-commerce and especially in e-services.*

**E-service drives real growth potential is for MSMEs.** The true story of cross-border e-commerce growth for MSMEs is dominated by e-services driven by the explosion of specialized B2B e-services because of the elimination of customs and logistics expenses, and the plummeting barriers to entry due to decreasing startup costs and pay-as-you-go tools. Promotion of e-services is the go-to opportunity for MSME growth in cross-border e-commerce.

- *We encourage APEC to increase the emphasis placed on e-commerce in the ongoing trade in services work stream.*
- *We urge APEC economies to create task-forces to examine the competitiveness of their MSMEs cross-border e-commerce in the trade in services agenda.*

**Educate MSMEs about potential opportunities in cross-border e-commerce.** Cross-border e-commerce provides MSMEs with new business opportunities across different markets around the world. However, across APEC economies we found a profound lack of awareness amongst MSMEs about the potential opportunities in domestic e-commerce, and even less about cross-border e-commerce. Additionally, MSMEs were generally unaware of dedicated government and industry resources that were already available to support them.

- *We encourage APEC economies to increase touch points with MSMEs to improve awareness of global opportunities, government sponsored programs and MSME pain points. Additionally, we encourage economies to push for greater adoption of e-commerce tools through promotion of training programs such as CBET.*
- *We encourage individual MSMEs to seek out government programs and support opportunities, such as CBET.*

**Invest in capacity building for MSMEs.** Especially in developing economies, but also in developed economies, MSMEs need training in all aspects of e-commerce. From computer literacy to website design to e-payments and logistics, MSMEs need specialized education programs as they seek to transition their businesses to the e-commerce world. Education and training programs should also be tailored to improve mobile commerce capabilities.

- *We encourage APEC economies to create collaborative communities to foster entrepreneurship and share best practices learnings.*
- *We urge individual economies to more actively engage universities and technical schools in developing education and training programs for students in aspects of e-commerce.*

**Public-private dialogue forums drive mutual understanding and keep the focus on the future.** Across our interviews we found a dysfunctional relationship between government and business. Governments are trying to prepare digital economy road maps and to allocate limited resources to assist businesses to improve competitiveness and economic growth. They are actively seeking business input. E-commerce businesses on the other hand, complain that government is not doing enough and are not seeking guidance or advice. Game-changing MSME entrepreneurs lack the bandwidth to devote time to government dialogues. However, the pace and nature of change in e-commerce requires that governments and leading e-commerce players collaborate to create an agenda for the future.

- *We encourage APEC economies to engage in more public-private dialogue and partnerships on cross-border e-commerce, and find more ways to get MSMEs involved.*

**Simplify customs and trade rules for MSMEs, create programs to expedite cross-border e-commerce, and adopt harmonized online procedures.** Even when they try to comply, MSMEs are quickly overwhelmed by the complexity of customs and trade rules. If MSMEs are to succeed in cross-border e-commerce, government needs to modify customs processes, and create special programs for MSMEs. Harmonizing de minimis requirements will help, but will not be sufficient to promote MSMEs. Pathfinder approaches such as authorized economic operation programs should be adopted but even these will not be enough. Harmonization of customs procedures is crucial to reduce the burden of MSMEs.

- *We urge APEC to expand and accelerate initiatives to simplify and expedite customs requirements for MSMEs engaged in cross-border e-commerce, such as authorized economic operator programs. Moving to completely online processes is critical.*
- *We encourage APEC economies to enhance logistics value chains and streamline customs procedures for low-value goods.*

**Tap the wealth of information and experience on “what works” in APEC economies.** Our research has identified numerous good practices and innovative solutions in action in governments and in industry. We include many illustrative studies and good practices in our report. Avenues need to be developed within APEC to share these experiences with government agencies and with MSMEs.

- *We stress the importance of APEC economies getting ahead of m-commerce. Work with the leading firms to create policy frameworks to support and guide the development of m-commerce and the mobile spectrum for increasing bandwidth demands.*

**Harmonization and coherence of e-commerce laws and mutual recognition of standards across APEC is critical.** A common APEC-wide legal framework is needed for all aspects of e-transactions if cross-border e-commerce is to flourish. There needs to be coherence in consumer protection laws, e-payment regulations, cybercrime, and intermediary liability protection dispute resolution to ensure safe and efficient cross-border e-commerce. Agreement on standards, licensing and certification is also essential.

- *We urge APEC to accelerate efforts to secure agreement on a framework for digital economy planning and agenda setting. Economy by economy approaches must be avoided at all cost. More discussions and efforts on harmonizing region-wide regulations, especially on e-payments, e-signatures, customer protection, VAT, and limited liability protections are needed.*
- *We urge economies to actively address issues in cross-border payment frameworks, fraud, and consumer protection.*
- *We encourage MSMEs to engage in cross-industry and cross-economy dialogues on establishing mutually agreed upon standards and frameworks.*

**Encourage the development and growth of e-commerce intermediaries but use a light regulatory touch.** The role of e-commerce marketplaces and platforms is irreplaceable in enabling MSMEs to engage in cross-border e-commerce. Government needs to encourage and support robust competitive e-commerce marketplaces and platforms. However, the potential monopolistic positions that these intermediaries can achieve requires that governments exercise careful insight. Emphasis should be placed on creating efficient competitive markets to eliminate market power rather than relying solely on regulatory approaches.

- *We recommend economies monitor the market positions and influence of e-commerce marketplaces and platforms with their economies. Encourage and support multiple competitors.*
- *We encourage APEC economies to engage large e-commerce players to provide mentoring and training to MSMEs in their ecosystems.*

**Negotiate robust e-commerce provisions in free-trade agreements.** Governments should include e-commerce provisions in free trade and regional trade agreements. Harmonization of customs procedures, trade rules, legal protections, IP protections, and payment systems all foster and facilitate greater MSME participation in cross-border e-commerce trade.

- *We encourage APEC economies to examine the provisions for e-commerce written in the Trans-Pacific Partnership trade agreement.*

**Encourage funding and support for MSMEs to support innovation.** There is known to be a strong correlation between a strong venture capital or government funding program and the development, growth and success of small businesses. In the absence of private venture funding, governments can help fund startups through grants, loans, and tax relief programs. Governments can also encourage foreign companies and venture capitalists to invest in domestic e-commerce firms. Additionally, create programs that draw unemployed and underemployed university graduates into e-commerce incubators.

- *We encourage APEC economies to foster and support the funding of ecosystem and startup incubators.*
- *We recommend creating programs that draw university graduates into e-commerce incubators, and into new e-commerce startups.*





Individual  
Economy  
Assessments

# Australia

E-commerce Operating Environment	3	Credit card, internet, and smartphone penetration are relatively high in Australia. However, education specific to ICT and digitalization transformation of business is lacking, which limits the talent pool for MSMEs and puts them at a disadvantage when competing with major international players.
MSME Readiness	3	MSMEs are capable of doing cross-border e-commerce since they already have frequent communication with U.S. and U.K. markets. Education in Australia in IT is a potential concern.
Customer Willingness	3	Some buyers are extremely sophisticated at purchasing via cross-border e-commerce and frequently buy goods from the U.S. and U.K. via global e-commerce marketplaces. However, the majority of people are not highly engaged in domestic e-commerce.
Marketplace Platforms	4	Major international marketplaces and platforms already have a presence in Australia, although there are few domestic options. Buying from overseas on those marketplaces is more common than selling to customers outside Australia.
Payments	4	Most of the major international payment systems are accepted in Australia. People are confident in their options for cross-border e-commerce.
Logistics	4	The population is highly centralized in major urban cities where logistics is very well developed. For rural areas, well-established infrastructures and the presence of major international logistics companies contribute to the convenience of logistics.
Customs & Border Administration	4	The paperless custom clearance process in Australia is highly developed and efficient, which is very important for cross-border e-commerce. Yet Australia still need to make efforts to continue to develop and implement a single window system.
Foreign Market Access	4	Australia participates in FTAs and RTAs. The country is open to FDI and tariffs are not a major impediment for businesses that want to enter the market. There are efforts to harmonize cross-border e-commerce laws, standards, and legislation. However, the country needs to continue increasing transparency of regulations, especially for e-commerce.
E-commerce Regulatory Environment	3	Australia effectively enforces regulations and has laws that cover the main issues affecting e-commerce. However, data privacy laws are becoming more restrictive and conservative – limiting cross-border e-commerce. For example, the new mass data retention law raises major concerns.

Low Score



High Score

# Australia

## Most problematic factors for doing cross-border e-commerce...

- Australia relies on a limited number of markets for cross-border e-commerce
- The extensive geography of Australia impedes development of infrastructure for logistics, leading to cost and time inefficiencies
- Lack of education for skills related to e-commerce limits the quality of talent, especially for MSMEs
- Business owners voice that there is a lack of support for cross-border e-commerce
- Rise of restrictive and conservative laws regarding e-commerce, such as the data retention requirements
- Lack of a focus on e-services leads to missing out on cross-border e-commerce opportunities
- Inefficient and inconsistent communication between public and private parties

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	6	2	WEF Networked Readiness Index 2015 (Rank / 143)	16	7
APEC E-payments Readiness Index (Rank / 21)		4	- Laws Relating to ICT	28	10
- Regulation		9	- International Internet Bandwidth	40	4
- Infrastructure		3	- Fixed Broadband Internet Tariff Rates	76	10
- Demand		3	- Cellular Telephone Subscriptions	81	12
- Innovation		6	- Internet Users	18	5
BCG e-friction Index 2015 (Rank / 65)	14	4	- Mobile Subscriptions	4	3
Digital Planet Index 2014 (Rank / 50)	12	6	- ICT Use for B2B Transactions	28	9
Global Connectivity Index 2015 (Rank / 50)	12	5	- Internet Use for B2C Transactions	16	7
UN E-government survey 2014 (Rank / 193)	2	2	- E-Participation Index	7	3
Global Retail e-commerce Index 2013 (Rank / 30)	9	5	WEF Global Enabling Trade Report (Rank / 138)	23	8
Logistics Performance Index 2014 (Rank / 160)	16	6	- Domestic Market Access	18	7
			- Efficiency and Transparency of Border Administration	22	9



# Brunei Darussalam

E-commerce Operating Environment	2	Connecting to the internet remains either slow, or expensive if speed is desired. Improved connectivity reliability is needed. E-commerce culture needs to be built out, as well as a network of entrepreneurs that can help one another. Currently, there is hesitation to help other entrepreneurs for fear of having your idea stolen. Government wants to help MSMEs but they continue to move too slowly to help companies in the fast paced environment of technology startups.
MSME Readiness	2	High levels of education and business intelligence are held back by a lack of motivation and capacity. Quota systems on importing foreign talent limit the ability for companies to hire outside talent despite the need. MSMEs complain about both the availability of funding and the time it takes for government grants to come through, which is sometimes over a year. These funding issues prevent any first mover advantage and decrease competitiveness.
Customer Willingness	4	Customers in Brunei are willing and able to purchase online due to high credit card penetration, high per-capita GDP, and the demand for goods from other economies. There is a culture to purchase online, but due to the lack of offerings from domestic players, this need is primarily filled by global suppliers.
Marketplace Platforms	1	Brunei does not have a local eBay or Amazon platform due to the small market size. E-commerce is primarily conducted over social media platforms, such as Instagram and Facebook. Local options such as Padian and SocialDeal have yet to expand large enough to hold a critical mass of consumers.
Payments	2	While there is a high credit card penetration rate in Brunei, there is an absence of payment systems. Only two companies in the country can accept payments online, although there appears to be a payment option under development from the BIDB bank that should be marketed to companies. Though this payment system exists, it still requires both parties to have BIDB bank accounts, blocking cross-border transactions through this system
Logistics	2	Logistics are an inherent problem due to the isolation of Brunei. Goods must be shipped via Singapore, adding an additional expense that make imports more expensive and fungible exports uncompetitive on the market. Local delivery consists of expensive 3rd party carriers or forced pickup at the post office, adding time and resulting in a headache for consumers.
Customs & Border Administration	2	Customs and border access are about average compared to the rest of Southeast Asia with consumers and MSMEs complaining about long import wait times. There is a need to switch to a true e-filing of customs paperwork. Consumers importing must go to the post office to not only pick up their goods, but also to pay import tariffs (when necessary). It is difficult to know the cost of tariffs in advance.
Foreign Market Access	3	Brunei engages in numerous FTAs and RTAs that allow for goods and services to enter and leave the country, although there are few MSMEs that participate due to the small market size.
E-commerce Regulatory Environment	3	Brunei's low tax rate and low regulation of e-commerce provides relative freedom for citizens to conduct business, but the business registration process involves too much redundant paperwork and needs to be moved toward electronic registration. E-commerce regulation needs to be governed by one ministry to encourage consistency and unity across the digital economy.

Low Score 1 2 3 4 5 High Score

# Brunei Darussalam

## Most problematic factors for doing cross-border e-commerce...

- Brunei’s MSMEs do not have an online payment platform to facilitate the purchase of goods and services.
- Lack of availability of funding makes MSMEs uncompetitive on the global marketplace.
- Bruneian culture does not celebrate innovation and risk taking.
- Bruneians do not leverage their high level of education and English language skills enough to offer e-services to the world.
- Small market size significantly reduces potential demand.
- Internet infrastructure continues to be a problem with expensive and slow digital connectivity.
- Isolation and distance from neighboring economies causes expensive logistics and shipping costs.
- The community of entrepreneurs tend to operate in a silo instead of sharing best practices.

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	NA	NA	WEF Networked Readiness Index 2015 (Rank / 143)	NA	NA
APEC E-payments Readiness Index (Rank / 21)		11	- Laws Relating to ICT	NA	NA
- Regulation		11	- International Internet Bandwidth	NA	NA
- Infrastructure		11	- Fixed Broadband Internet Tariff Rates	NA	NA
- Demand		7	- Cellular Telephone Subscriptions	NA	NA
- Innovation		17	- Internet Users	NA	NA
BCG e-friction Index 2015 (Rank / 65)	NA	NA	- Mobile Subscriptions	NA	NA
Digital Planet Index 2014 (Rank / 50)	NA	NA	- ICT Use for B2B Transactions	NA	NA
Global Connectivity Index 2015 (Rank / 50)	NA	NA	- Internet Use for B2C Transactions	NA	NA
UN E-government survey 2014 (Rank / 193)	86	13	- E-Participation Index	NA	NA
Global Retail e-commerce Index 2013 (Rank / 30)	NA	NA	WEF Global Enabling Trade Report (Rank / 138)	NA	NA
Logistics Performance Index 2014 (Rank / 160)	NA	NA	- Domestic Market Access	NA	NA
			- Efficiency and Transparency of Border Administration	NA	NA



# Canada

E-commerce Operating Environment	3	E-commerce culture and habits are well established in the North American market, including Canada. However, Canadian businesses continue to face lower rates of e-commerce adoption and ICT investment per worker. Over the last 20 years, Canadian business underinvested in digital technology adoption, affecting productivity and growth.
MSME Readiness	4	MSMEs in Canada are strong in business intelligence, technical skills, and capabilities. However, expensive and inefficient logistics decreases the motivation of MSMEs to engage in e-commerce business opportunities. Also, Canadian businesses do not understand the benefits of using digital technologies to optimize their business models.
Customer Willingness	4	Canadian consumers have enthusiastically adopted domestic and cross-border e-commerce. The cold weather in Canada has helped motivate more consumers to come online. Canadian shoppers are increasingly comfortable with cross-border buying.
Marketplace Platforms	3	There are multiple, well established online marketplaces such as Amazon and eBay. However, the few domestic options have struggled in capturing market share and are still relatively unknown. A large percentage of online shoppers in Canada use websites based outside Canada due to better pricing and a shortage of local options.
Payments	5	Online and electronic payment is a non-issue in Canada. There are high-quality and secure online payment methods, increasing trust in e-payments. Cross-border solutions are widely adopted and accepted; MSMEs are widely satisfied with their options.
Logistics	3	Logistics is a constant challenge for Canadian MSMEs, both for domestic and cross-border e-commerce. The availability and quality of regional transport providers are unsatisfactory due to geographic challenges. Cross-border e-commerce remains limited due to logistic constraints. Even domestically, high shipping costs & unintended fees (i.e. brokerage fees) increase consumer costs.
Customs & Border Administration	3	MSMEs complain about the low de minimis threshold in Canada. Improvements are needed to increase the efficiency and speed of customs process. In general, Canadian customs is relatively transparent and consistent.
Foreign Market Access	4	Cross-border e-commerce players are able to access the Canadian market because of the established e-commerce regulatory environment, large number of trade agreements, and a mature operating environment in Canada. Updated regulations and rules need to be made accessible via digital channels.
E-commerce Regulatory Environment	4	Overall, the domestic and cross-border e-commerce regulatory environment is well established in Canada. Changes are needed to improve tax policy and decrease regulatory complexities.

Low Score 1 2 3 4 5 High Score

# Canada

## Most problematic factors for doing cross-border e-commerce...

- Lack of digital adoption by MSMEs. Even though Canadians are avid users, only 46% of Canadian MSMEs have a web site.
- Canadian businesses do not understand the benefits of using digital technologies to optimize their business models.
- Customs and border administration barriers, such as the \$20 CAD de minimis threshold, impede cross-border e-commerce in Canada.
- Costly and inefficient logistics due to geographic constraints – both domestically and cross-border.

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	4	1	WEF Networked Readiness Index 2015 (Rank / 143)	11	4
APEC E-payments Readiness Index (Rank / 21)		5	- Laws Relating to ICT	10	3
- Regulation		5	- International Internet Bandwidth	23	3
- Infrastructure		4	- Fixed Broadband Internet Tariff Rates	85	12
- Demand		1	- Cellular Telephone Subscriptions	114	19
- Innovation		9	- Internet Users	13	2
BCG e-friction Index 2015 (Rank / 65)	10	3	- Mobile Subscriptions	45	11
Digital Planet Index 2014 (Rank / 50)	8	4	- ICT Use for B2B Transactions	34	10
Global Connectivity Index 2015 (Rank / 50)	16	7	- Internet Use for B2C Transactions	17	8
UN E-government survey 2014 (Rank / 193)	11	7	- E-Participation Index	14	7
Global Retail e-commerce Index 2013 (Rank / 30)	10	6	WEF Global Enabling Trade Report (Rank / 138)	14	6
Logistics Performance Index 2014 (Rank / 160)	12	4	- Domestic Market Access	16	6
			- Efficiency and Transparency of Border Administration	20	7



# Chile

E-commerce Operating Environment	3	Chile has high credit card penetration, but it can only be leveraged for domestic commerce. Urban smartphone and internet penetration is high, but the overall quality of bandwidth is still not very good. However, rural smartphone and internet penetration is really low. Furthermore, English is still the major language for cross-border e-commerce and Chile has poor English literacy. Also, getting funding for MSMEs is tough since they must pay higher interest rates than giant corporations.
MSME Readiness	2	Very few Chilean MSMEs ever think of doing cross-border e-commerce. They need help improving technology and digitalization in order to take advantage of cross-border opportunities. The Chilean retail and e-commerce market is dominated by several giant retailers. Furthermore, problems in payments and shipping increases the operating costs for MSMEs in Chile. These barriers decrease the competitiveness of Chilean MSMEs.
Customer Willingness	2	Chilean customers have credit cards that can be used domestically, but are not accepted cross-border. Shipping takes too long; therefore, buyers prefer to purchase in brick & mortar stores. People do not trust online payments or online credit card transactions. Return policies and consumer protection regulations are still not well-established for e-commerce.
Marketplace Platforms	2	There are very few well-recognized, high-quality websites or marketplaces in Chile. The giant retailers control the talent and funds required to build high-quality online shopping sites. However, the situation is improving because the Chilean government has implemented initiatives to boost the ecosystem of marketplaces and platform providers in efforts to help MSMEs.
Payments	1	The credit card and online payment ecosystem in Chile is monopolized by the credit card administrator Transbank, who is not prepared to deal with international market demands. Payment regulation seriously blocks competitors from entering the market, and the Chilean government has not made steps to open the market. Chile could quickly move up its ranking, if it just removed the restrictions on foreign purchases.
Logistics	2	Most shipping facilitators are domestic players with low quality service and unsophisticated tracking systems. Basic infrastructure allowing access to rural areas is not well-developed and is further exasperated because Chile is a highly centralized, long and narrow country. There are a few international shipping companies, but the available options are either too expensive or take too long.
Customs & Border Administration	3	The customs and borders processes of Chile are well established and efficient. However, the export focused nature of the government has led the customs and borders process to be biased in this same manner. There is a paperless system but the customs process could still benefit from optimization for cross-border e-commerce.
Foreign Market Access	4	Chile is engaged in participating FTAs and RTAs and continues to remove tariff barriers. For traditional trade, Chile has globally harmonized cross-border trade legislations. Chile is also open to FDI. However, Chilean laws and legislation still need to be updated to address cross-border e-commerce.
E-commerce Regulatory Environment	2	Most of the e-commerce laws in Chile are modified from traditional trade laws. Laws regarding e-commerce exist, but these laws are out-of-date. Lack of education and understanding of ICT, IP, and data privacy makes it difficult for Chile to build a sophisticated regulatory environment.

Low Score



High Score

# Chile

## Most problematic factors for doing cross-border e-commerce...

- Chile does not have an e-commerce culture. The Chilean online market is only \$749 million in sales, with just 2% of that from cross-border.
- The monopolized payment system in Chile blocks innovation in developments of e-commerce, especially for cross-border e-commerce.
- The natural geography impedes Chile from developing a strong logistics infrastructures.
- Economy is optimized for export, not import.
- Digital regulations and laws are out-of-date, leaving consumers unprotected.
- Market is closed to international talent and it is difficult to import talent.
- Many industries, like retailing, are dominated by giant corporations.
- Societal turbulence and a shrinking middle class creates an unstable business environment for MSMEs.

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	39	9	WEF Networked Readiness Index 2015 (Rank / 143)	38	11
APEC E-payments Readiness Index (Rank / 21)		12	- Laws Relating to ICT	37	11
- Regulation		10	- International Internet Bandwidth	49	8
- Infrastructure		12	- Fixed Broadband Internet Tariff Rates	106	16
- Demand		12	- Cellular Telephone Subscriptions	40	6
- Innovation		14	- Internet Users	43	11
BCG e-friction Index 2015 (Rank / 65)	41	10	- Mobile Subscriptions	63	12
Digital Planet Index 2014 (Rank / 50)	27	10	- ICT Use for B2B Transactions	36	11
Global Connectivity Index 2015 (Rank / 50)	20	8	- Internet Use for B2C Transactions	38	14
UN E-government survey 2014 (Rank / 193)	33	8	- E-Participation Index	7	4
Global Retail e-commerce Index 2013 (Rank / 30)	20	11	WEF Global Enabling Trade Report (Rank / 138)	8	4
Logistics Performance Index 2014 (Rank / 160)	42	13	- Domestic Market Access	9	4
			- Efficiency and Transparency of Border Administration	26	10



# China

E-commerce Operating Environment	2	Internet connectivity, Internet and smart phone penetration, and the sophistication of the domestic e-commerce environment are developing very fast in China. The e-commerce culture is strong and established with numerous players in the market. The government has helped foster a strong environment to further develop cross-border e-commerce.
MSME Readiness	3	China's shift to a consumption-driven economy has created an opportunity for local MSMEs to serve this growing domestic consumer base. Many MSMEs in China have seized the opportunity in cross-border e-commerce. They are agile in deploying new technology, as well as able to understand and capitalize on international business opportunities. However, the majority of MSMEs are still not onboard yet.
Customer Willingness	4	The Chinese e-commerce industry is rapidly expanding and China is one of the world's largest online retail markets. Chinese customers have passed the tipping point for acceptance to engage in cross-border e-commerce. Their high willingness to engage in cross-border e-commerce is due to the lack of physical stores, dedicated infrastructure, and a need for high quality and authentic products. Trusted payments and the ease of transactions also helps increase customers' willingness in China.
Marketplace Platforms	5	China has many high-quality cross-border e-commerce marketplaces and platforms. The availability of cross-border e-commerce companies covers many different business models, such a B2B and services.
Payments	4	Online payment methods, especially payment players like Alipay and Wechat payment, provide easy and low-cost means of electronic payment. The credit card penetration rate is still low, but growing quickly.
Logistics	4	Domestic e-commerce has helped boost affordable and fast logistics delivery in China. Chinese online shoppers buying goods from overseas have benefited from bonded logistics properties that allow global e-commerce operators to store goods within the country, while avoiding customs duties. However, cross-border e-commerce logistics are still inconsistent due to the regulatory challenges in overseas markets.
Customs & Border Administration	2	China suffers from high complexity of customs requirements and procedures, a lack of customs transparency, a low de minimis threshold, and relatively low efficiency and speed of customs clearance. Reliability and predictability is a major issue with Chinese customs and border administration. However, the government recently launched a series of pilot cities to explore best practices and improve customs procedures.
Foreign Market Access	2	China's market is notorious for being extremely difficult to enter due to both tariffs and non-tariff barriers. For instance, China's third party platform protection and local registration requirements make it difficult for foreign players enter into China. Additionally, the regulations for entry are both complex and constantly changing, which is overwhelmingly frustrating for MSMEs trying to enter the market.
E-commerce Regulatory Environment	3	Since 2013, the Chinese government has introduced more than ten export focused policies and is actively exploring new policy models to solve issues in areas such as customs as tax return with solutions such as free trade zones and pilot cities. However, the tax policy is still complicated and needs improvement. The legal environment is improving, but is not yet fully established

Low Score



High Score

# China

## Most problematic factors for doing cross-border e-commerce...

- The strong competition in the Chinese e-commerce market requires strong branding and product differentiation. There is severe homogeneity of products and the lack of an established brand for cross-border e-commerce.
- Complicated policies and opaque regulations make customs clearance and product return and exchange settlement difficult.
- Shortage of cross-border e-commerce talent due to limited language capability and a shortage of technical capabilities.
- China is an export oriented and very protectionist, making it very difficult for MSMEs from other economies to enter via cross-border e-commerce.
- Cross-border e-commerce logistics remains time-consuming and difficult; going overseas requires working with multiple logistic providers.

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	65	13	WEF Networked Readiness Index 2015 (Rank / 143)	62	13
APEC E-payments Readiness Index (Rank / 21)		13	- Laws Relating to ICT	49	13
- Regulation		12	- International Internet Bandwidth	123	19
- Infrastructure		14	- Fixed Broadband Internet Tariff Rates	74	9
- Demand		16	- Cellular Telephone Subscriptions	108	17
- Innovation		10	- Internet Users	75	13
BCG e-friction Index 2015 (Rank / 65)	53	15	- Mobile Subscriptions	80	14
Digital Planet Index 2014 (Rank / 50)	29	11	- ICT Use for B2B Transactions	61	16
Global Connectivity Index 2015 (Rank / 50)	23	9	- Internet Use for B2C Transactions	34	12
UN E-government survey 2014 (Rank / 193)	70	11	- E-Participation Index	33	11
Global Retail e-commerce Index 2013 (Rank / 30)	1	1	WEF Global Enabling Trade Report (Rank / 138)	54	13
Logistics Performance Index 2014 (Rank / 160)	28	11	- Domestic Market Access	98	16
			- Efficiency and Transparency of Border Administration	48	12



# Chinese Taipei

E-commerce Operating Environment	3	Chinese Taipei's relatively small population and isolation puts the economy at a disadvantage. Nevertheless, connectivity and e-commerce culture is well established within Chinese Taipei. Despite the fact that the government has some trade promotion programming – MSMEs are not aware of it and asked for more support. There is a need for more training specifically addressing cross-border e-commerce.
MSME Readiness	3	MSMEs in Chinese Taipei have relatively high levels of business intelligence. They are well prepared to accept financing and funding. However, many lack the willingness and motivation to go cross-border, and those that do focus primarily on China. There are a lack of entrepreneurs with the capacity and willingness to adopt global, cross-border business models. They also struggle with attracting the necessary talent for their business.
Customer Willingness	4	Consumers in Chinese Taipei, especially those of younger generations, are accustomed to shopping online and are constantly using their mobile devices; thus, e-commerce is socially and culturally accepted. There are trusted payment systems in the economy and the consumers have confidence in online sellers.
Marketplace Platforms	4	There are three large e-commerce aggregators in Chinese Taipei that are very popular for consumer goods. The area needing improvement is their international reach, as the majority of their customers are local. However, many of the MSMEs had online websites that were functional and suitable for servicing their businesses, but need improved marketing capabilities.
Payments	4	MSMEs are satisfied with the current payment methods and processes in Chinese Taipei and are not worried about fraud. Chinese Taipei is in the process of opening up to 3rd party payment processors. Some MSMEs complained about high transaction fees, but were pleased with the security and reliability of current systems.
Logistics	3	Logistics companies in Chinese Taipei have strong domestic infrastructure systems, but lack international capabilities. Most of the Chinese Taipei MSMEs complained about the cost of logistics. Furthermore, there are regulations that prevent shipping directly to China, which discourages engagement in cross-border e-commerce.
Customs & Border Administration	3	Chinese Taipei has very clear regulations for exporting and importing. Customs has minimal corruption and businesses were confident in the economy's efficient and transparent customs system.
Foreign Market Access	2	Chinese Taipei is not actively engaged in many FTAs or RTAs, and MSMEs complained that as a result they are at a competitive disadvantage. On the other hand, the economy is extremely open and MSMEs do not consider tariffs or non-tariff barriers as major problems.
E-commerce Regulatory Environment	3	Chinese Taipei has a strong local regulatory environment that is conducive to conducting business. However, the regulations lack specific language for e-commerce.

Low Score



High Score

# Chinese Taipei

## Most problematic factors for doing cross-border e-commerce...

- Expensive and costly cross-border e-commerce logistics solutions
- Lack of MSME leadership interested in facing cross-border e-commerce challenges with innovation and perseverance
- Lack of access to global markets
- Lack of a skilled and affordable talent pool that is proficient in e-commerce
- Need for more flexible government that is active and agile in creating regulation that facilitates cross-border e-commerce
- A weak “Made in Chinese Taipei” brand that makes it difficult to sell products overseas

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	NA	NA	WEF Networked Readiness Index 2015 (Rank / 143)	18	9
APEC E-payments Readiness Index (Rank / 21)		9	- Laws Relating to ICT	24	9
- Regulation		8	- International Internet Bandwidth	42	5
- Infrastructure		9	- Fixed Broadband Internet Tariff Rates	8	2
- Demand		8	- Cellular Telephone Subscriptions	47	8
- Innovation		5	- Internet Users	24	7
BCG e-friction Index 2015 (Rank / 65)	NA	NA	- Mobile Subscriptions	35	9
Digital Planet Index 2014 (Rank / 50)	NA	NA	- ICT Use for B2B Transactions	20	7
Global Connectivity Index 2015 (Rank / 50)	NA	NA	- Internet Use for B2C Transactions	14	5
UN E-government survey 2014 (Rank / 193)	NA	NA	- E-Participation Index	NA	NA
Global Retail e-commerce Index 2013 (Rank / 30)	NA	NA	WEF Global Enabling Trade Report (Rank / 138)	24	9
Logistics Performance Index 2014 (Rank / 160)	19	7	- Domestic Market Access	40	13
			- Efficiency and Transparency of Border Administration	18	5



# Hong Kong, China

E-commerce Operating Environment	3	The biggest issue is the lack of interest in e-commerce from the customer side, holding back the e-commerce operating environment. Hong Kong has strengths in mobile penetration, internet penetration, and connectivity. Limited office space and warehousing increases costs and is another big issue that e-commerce businesses faces.
MSME Readiness	4	As a service based economy, many MSMEs provide services via online platforms both domestically and cross-border. The MSMEs are open to new technologies and have the resources to handle complexities of international trade. But funding has been a major issue for firms that fall outside of technology and bio-tech, making it difficult for MSMEs to survive in this environment.
Customer Willingness	3	Due to the small geography and easy physical connectivity, most products are available within an arm's reach and customers are able to get the products immediately without delay. This detrimentally impacts the growth of e-commerce. With this cultural influence, people do not trust online sellers and there is no demand to buy online.
Marketplace Platforms	4	Hong Kong's small population does not shop much online and there are no major domestically developed platforms. But other global players have a presence that serve the market. Also, the service businesses have their own e-commerce websites or leverage other global platforms.
Payments	4	There are a variety of payment options and well established systems available in Hong Kong. The economy is free of restrictive regulations, which helps foster innovative payment methods. Credit card penetration is relatively good, facilitating e-payments. Trust issues remain due to consumer perceptions of fraud. Also, low currency transaction fees boost cross-border e-commerce.
Logistics	5	Hong Kong has very strong logistics providers and the small geography makes it very easy to reach every corner of the economy. Also, since Hong Kong has long served as a port for China, logistics systems are well developed. The lack of common address formats increases the delivery time for logistics companies.
Customs & Border Administration	5	As the most free economy in the world, Hong Kong has virtually no customs and border administration issues. Customs clearance time is very low, making Hong Kong a role model in this area. There are very low levels of corruption.
Foreign Market Access	4	Hong Kong is an extremely open and accessible market that is fully harmonized with e-commerce demands. Hong Kong is the 4th largest receiver of Foreign Direct Investments. No non-tariff barrier exists. Hong Kong actively engages in a number of FTAs, making it a preferred trading partner for many countries. However, there is a need for e-commerce specific regulations.
E-commerce Regulatory Environment	5	Regulations in Hong Kong are highly conducive for conducting business. Chapters on E-Commerce have been included in Hong Kong's regulatory framework and the government has been highly supportive of technology advancements. There are no firewalls that restrict web content. However, e-signatures are not yet frequently used.

Low Score



High Score

# Hong Kong, China

## Most problematic factors for doing cross-border e-commerce...

- Lack of capital funding for e-commerce MSMEs
- Cultural non-acceptance of e-commerce due to the presence of an accessible and robust retail market
- High real estate cost for offices and warehouses
- Weak IT talent to cater to needs of e-commerce growth
- MSMEs lack awareness on advantages of trading goods via e-commerce
- Lack of standard address formats delay delivery of goods
- MSMEs lack skills in digital marketing
- Lack of trust in e-payment systems

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	18	7	WEF Networked Readiness Index 2015 (Rank / 143)	14	6
APEC E-payments Readiness Index (Rank / 21)		6	- Laws Relating to ICT	14	7
- Regulation		2	- International Internet Bandwidth	2	1
- Infrastructure		8	- Fixed Broadband Internet Tariff Rates	60	7
- Demand		9	- Cellular Telephone Subscriptions	1	1
- Innovation		3	- Internet Users	30	8
BCG e-friction Index 2015 (Rank / 65)	5	1	- Mobile Subscriptions	10	6
Digital Planet Index 2014 (Rank / 50)	3	2	- ICT Use for B2B Transactions	19	6
Global Connectivity Index 2015 (Rank / 50)	NA	NA	- Internet Use for B2C Transactions	27	10
UN E-government survey 2014 (Rank / 193)	NA	NA	- E-Participation Index	NA	NA
Global Retail e-commerce Index 2013 (Rank / 30)	14	9	WEF Global Enabling Trade Report (Rank / 138)	2	2
Logistics Performance Index 2014 (Rank / 160)	15	5	- Domestic Market Access	1	1
			- Efficiency and Transparency of Border Administration	11	4



# Indonesia

E-commerce Operating Environment	2	Internet is common in the bigger cities like Jakarta and Bandung, but is very sparse in rural cities. Because the majority of MSME's reside in smaller, rural cities, most do not have access to the web. There is some growth of e-commerce in the bigger cities, but it is still lacking overall in comparison to other APEC economies. Government support of Internet infrastructure and MSME development does not exist.
MSME Readiness	2	Funding and technical skills are significant barriers for MSME's going online, especially for cross-border e-commerce. Since most businesses are not focused on expansion, they lack the desire and acumen to exploit cross-border opportunities. Finally, apprehension to engage in cross-border e-commerce is high, partly because there is little confidence in the infrastructure and payments systems.
Customer Willingness	1	The lack of trust in payment systems is a major factor that inhibits customer willingness to engage in e-commerce domestically and globally. Furthermore, the time and cost required to deal with logistics and customs inhibit consumers from engaging in cross-border e-commerce. Additionally, social and cultural barriers exist because shopping is a pastime for many consumers and significantly reduces the overall desire to buy online.
Marketplace Platforms	2	Marketplaces like Amazon and eBay do not currently operate in Indonesia. Thus, individual MSMEs must develop their online presence themselves, greatly increasing capital and capability requirements. Social media is the most common form of cross-border e-commerce, but is still not mainstream. Telecom companies are starting to build marketplaces but have yet to gain traction across borders.
Payments	2	Security and reliability of payments within Indonesia is a major concern for most businesses and consumers. There is no cross-functionality between systems; therefore, cards are not universally accepted. This results in high costs because MSMEs must have multiple systems for different payment forms, which limits MSME's ability to limit all customers. There are also security and fraud liability concerns for businesses and consumers.
Logistics	1	Indonesia is comprised of more than 15,000 islands, presenting massive logistical issues. The main issue is cost, since land transit is virtually out of the question. With only 53% of the population living in cities, it is challenging to get products to customers. Furthermore, due to regulatory restrictions, certain areas of the country are only serviced by the state postal service. Lack of tracking and speed present issues with timely delivery.
Customs & Border Administration	1	There are many different government agencies who claim jurisdiction over certain goods and complicate the customs processes, which delays delivery and increases costs. Corruption is a major barrier, especially for MSME's. The lack of clarity and standardization increases time and costs, resulting in apprehension to engage in cross-border trade. There are no initiatives underway to overcome the challenges of e-commerce.
Foreign Market Access	1	There are more legislative restrictions around food safety, livestock, and GMO's than for all other ASEAN member states except Malaysia. For example, one big non-tariff barrier is the requirement for specialized Indonesian language labels, rather than allowing for re-stickering over labels, a commonly accepted practice worldwide. Tariffs are standard, but they differ greatly from other economies. Also, there are unclear import procedures and requirements.
E-commerce Regulatory Environment	2	Current regulation is unclear, or simply does not exist. Regulations are needed to directly address e-commerce, payments, customs, and logistics. This lack of clarity makes it very difficult, costly, and time-intensive for MSME's to ensure compliance and avoid sizeable penalties. Furthermore, consumer and IP protection has not been a major focus, greatly decreasing the desire to engage in both domestic and cross-border e-commerce.

Low Score



High Score

# Indonesia

## Most problematic factors for doing cross-border e-commerce...

- Undeveloped internet infrastructure and low penetration rates.
- Complex and disparate customs requirements for e-commerce companies.
- Costly logistics due to the highly rural population distributed across many islands.
- Lacking government support for e-commerce MSMEs.
- Lack of consumer and fraud protection.
- Inconsistency in accepted payment methods.
- Complex and confusing e-commerce regulations.
- Void of e-commerce culture and awareness.
- Limited business mindset and acumen.

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	88	16	WEF Networked Readiness Index 2015 (Rank / 143)	79	17
APEC E-payments Readiness Index (Rank / 21)		16	- Laws Relating to ICT	45	12
- Regulation		14	- International Internet Bandwidth	100	18
- Infrastructure		19	- Fixed Broadband Internet Tariff Rates	110	19
- Demand		21	- Cellular Telephone Subscriptions	49	9
- Innovation		12	- Internet Users	112	19
BCG e-friction Index 2015 (Rank / 65)	59	16	- Mobile Subscriptions	78	13
Digital Planet Index 2014 (Rank / 50)	46	16	- ICT Use for B2B Transactions	51	13
Global Connectivity Index 2015 (Rank / 50)	41	16	- Internet Use for B2C Transactions	28	11
UN E-government survey 2014 (Rank / 193)	106	17	- E-Participation Index	100	17
Global Retail e-commerce Index 2013 (Rank / 30)	NA	NA	WEF Global Enabling Trade Report (Rank / 138)	58	15
Logistics Performance Index 2014 (Rank / 160)	53	16	- Domestic Market Access	26	9
			- Efficiency and Transparency of Border Administration	69	16



# Japan

E-commerce Operating Environment	4	Internet connectivity and e-commerce culture are well developed. There are plenty of training programs offered by government and private sectors for domestic and cross-border e-commerce. However, there is a gap between MSMEs' needs and governmental support. Governments need to listen to the MSMEs more on issues pertaining to e-commerce.
MSME Readiness	3	MSMEs in Japan have sufficient technical skills and capabilities, and are doing very well with domestic e-commerce. However, business intelligence for overseas digital marketing and language skills are relatively low, negatively impacting cross-border e-commerce. There is lack of awareness about opportunities and benefits of cross-border e-commerce. Furthermore, Japanese MSMEs are risk averse.
Customer Willingness	2	Domestic online shopping is very common in Japan. On the other hand, since customers can buy everything inside of Japan, they do not feel the need to purchase from overseas. Additionally, they do not trust cross-border e-commerce transactions and fear counterfeits and fraud. They also lack language skills and desire a higher level of customer service.
Marketplace Platforms	4	The availability of domestic marketplaces is very high, but are relatively expensive for MSMEs. There are some cross-border marketplaces and platforms, but they require further development. Sophisticated language translation services, overseas marketing, and international trading assistance is still needed.
Payments	3	One of the biggest barriers for cross-border e-commerce in Japan is the low credit card penetration which exists because the Japanese are afraid of credit card fraud. Instead, they prefer bank transfer, cash-on-delivery, and convenience store payment. Japanese MSMEs also do not trust online cross-border payments.
Logistics	4	Logistics in Japan is well developed, even in rural areas. Domestically, logistic companies deliver within a few days and use sophisticated tracking systems. However, when MSMEs export their products overseas, logistics in other countries such as China and Indonesia are problematic, with unclear transit times and costs. There is some global logistic integration, but it is not yet sufficient.
Customs & Border Administration	3	Documentation and customs requirements are quite complex for importing into Japan. Simplification and single window administration are needed to improve cross-border transactions. However, transparency of custom and border administration of Japan is high.
Foreign Market Access	3	Japan has intense regulations for importing products from overseas. Transparency of regulations and laws is high in Japan. However, the presence of tariffs is a huge impediment for MSMEs doing international trade. Furthermore, there are not enough harmonized laws, standards, and legislation.
E-commerce Regulatory Environment	4	Tax policy, customer protection, IP protection, and data privacy laws are well developed in Japan. E-signatures are not yet adopted and laws still need to be updated for e-commerce, especially for cross-border.

Low Score



High Score

# Japan

## Most problematic factors for doing cross-border e-commerce...

- Significant language barrier for MSMEs.
- Lack of awareness of cross-border e-commerce for MSMEs.
- Customer willingness to purchase from overseas by e-commerce is low due to the large variety of goods already available in Japan.
- Lack of credit card penetration.
- Lack of understanding of international regulations and laws.
- Inconsistent IP protection and enforcement in cross-border markets.
- Digital marketing and cross-border customer acquisition difficulties for MSMEs.

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	12	4	WEF Networked Readiness Index 2015 (Rank / 143)	10	3
APEC E-payments Readiness Index (Rank / 21)		8	- Laws Relating to ICT	18	8
- Regulation		7	- International Internet Bandwidth	63	11
- Infrastructure		6	- Fixed Broadband Internet Tariff Rates	23	4
- Demand		10	- Cellular Telephone Subscriptions	60	10
- Innovation		2	- Internet Users	12	1
BCG e-friction Index 2015 (Rank / 65)	21	7	- Mobile Subscriptions	3	2
Digital Planet Index 2014 (Rank / 50)	17	8	- ICT Use for B2B Transactions	4	1
Global Connectivity Index 2015 (Rank / 50)	9	4	- Internet Use for B2C Transactions	3	2
UN E-government survey 2014 (Rank / 193)	6	4	- E-Participation Index	4	2
Global Retail e-commerce Index 2013 (Rank / 30)	2	2	WEF Global Enabling Trade Report (Rank / 138)	13	5
Logistics Performance Index 2014 (Rank / 160)	10	3	- Domestic Market Access	28	11
			- Efficiency and Transparency of Border Administration	5	2



# Republic of Korea

E-commerce Operating Environment	4	Government investments in trade promotion and training programs, particularly through the KOTRA office, benefit MSMEs seeking to export to foreign markets. Internet penetration and speeds here lead the globe, which has created a digital culture second to none. The support of technology and e-commerce are major factors for recent economic growth and development.
MSME Readiness	4	MSMEs have the desire, resources, and capabilities to engage in cross-border e-commerce. There is a high motivation and willingness to adopt e-commerce. MSMEs are at the forefront with regard to technical skills, but still have some challenges with marketing and language ability.
Customer Willingness	5	There is advanced e-commerce culture with high internet penetration and social and cultural acceptance for online purchases, including mobile platforms. There is high trust and confidence in online retailers and consumer protections. Consumers frequently seek and purchase foreign products.
Marketplace Platforms	4	E-commerce platforms and marketplaces are very popular in Korea. It is currently dominated by local firms, but major international players such as Amazon and Alibaba are seeking to expand presence in Korean market in 2015.
Payments	4	Credit card penetration is high and consumers are very confident in online payment systems. There is government support to build trust and online protection; however, payment regulations for goods of higher values are outdated.
Logistics	4	The domestic postal service can effectively reach both urban and rural populations, enabling e-commerce growth throughout the economy. However, domestic regulations and subsidized postal prices hinder the growth and development of foreign carriers.
Customs & Border Administration	3	Clear and predictable regulatory environment for exporters and importers. The economy does not suffer from corruption and businesses expressed confidence in their ability to interact with customs authorities. There are still complexities with regard to specific challenges that e-commerce presents, but overall the processes are very clear.
Foreign Market Access	3	Korea currently has eight free-trade agreements in effect—including with ASEAN, the European Union, and the United States—and eleven in the process of negotiation. These trade agreements encompass the majority of the country's trade volume making it fairly easy to gain access for both importing and exporting. Government is working to include e-commerce language in agreements.
E-commerce Regulatory Environment	3	Regulatory environment is generally clear and predictable for many industries. However, some logistics companies complain about investment restrictions and complexities. Consumer and IP protections are relatively strong.

Low Score 1 2 3 4 5 High Score

# Republic of Korea

## Most problematic factors for doing cross-border e-commerce...

- Inefficiencies related to domestic postal service; domestic regulations restrict foreign investment in logistics.
- Lack of legal and regulatory certainty in foreign markets.
- Language barriers challenge many MSMEs seeking to go cross-border.
- Growing costs of digital marketing. Competition when moving cross-border increase costs of digital marketplaces
- Logistics companies face burdensome customs regulations, regulatory uncertainty, and expensive processes.
- Consumers complain about payment challenges for higher valued goods.

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	8	3	WEF Networked Readiness Index 2015 (Rank / 143)	12	5
APEC E-payments Readiness Index (Rank / 21)		7	- Laws Relating to ICT	12	5
- Regulation		13	- International Internet Bandwidth	68	13
- Infrastructure		1	- Fixed Broadband Internet Tariff Rates	78	11
- Demand		5	- Cellular Telephone Subscriptions	73	11
- Innovation		7	- Internet Users	15	3
BCG e-friction Index 2015 (Rank / 65)	25	8	- Mobile Subscriptions	7	4
Digital Planet Index 2014 (Rank / 50)	9	5	- ICT Use for B2B Transactions	18	5
Global Connectivity Index 2015 (Rank / 50)	8	3	- Internet Use for B2C Transactions	6	3
UN E-government survey 2014 (Rank / 193)	1	1	- E-Participation Index	1	1
Global Retail e-commerce Index 2013 (Rank / 30)	5	4	WEF Global Enabling Trade Report (Rank / 138)	30	11
Logistics Performance Index 2014 (Rank / 160)	21	8	- Domestic Market Access	104	17
			- Efficiency and Transparency of Border Administration	19	6



# Malaysia

E-commerce Operating Environment	3	In general, the cross-border operating environment is relatively strong in Malaysia, with high internet penetration, competitive e-commerce players, and robust government support for education and funding. Hiring talent encounters few restrictions, but attracting talent is difficult.
MSME Readiness	4	Many Malaysian MSMEs are ready and able to engage in cross-border e-commerce. They have the requisite technical skills, capability, and motivation to buy and sell cross-border services and goods. There is a strong government and private financing environment for MSMEs.
Customer Willingness	3	Some customers in Malaysia have shown a willingness to engage in cross-border e-commerce. However, cross-border consumer protections, logistics, and consumer confidence must be increased in order to encourage additional customer spending online.
Marketplace Platforms	3	While some of the global players have entered the Malaysian market, there is room for improvement, particularly in engaging MSMEs in cross-border e-commerce services. Training and support for sellers also needs more investment, particularly for the traditional MSME segment.
Payments	3	Credit and debit card penetration is relatively high in Malaysia. MSMEs have begun to accept more cross-border payments, and the overall payment landscape is quite competitive. Government has also provided rebates for the initial cost involved in setting up online and cross-border payments.
Logistics	3	The cost and capability of logistics providers in Malaysia are highly ranked. However, there are last mile issues in parts of the country that must be addressed- specifically in the eastern states- in order to further encourage cross-border e-commerce growth. Foreign investment is encouraged, although conditions and restrictions are in place for the logistics sector.
Customs & Border Administration	3	Malaysia has set de minimis of 500 MYR, or \$116 USD. Customs transparency, administrative corruption, and predictability for cross-border shipments all underperform APEC and global standards, and must be improved to accelerate cross-border e-commerce growth.
Foreign Market Access	3	Malaysia has a large number of FTAs that allow foreign businesses market access. In general, MSMEs face only minor market access hurdles in accessing the Malaysian market. Most major industries have been liberalized in the past two decades, although there are still some conditions and restrictions in place for local bumiputera ownership in specific industries.
E-commerce Regulatory Environment	4	The regulatory environment for cross-border e-commerce in Malaysia is generally strong. ICT laws are in place and e-government is in the process of developing. Enforcement of existing regulations should be improved, in particular for intellectual property rights and consumer protection.

Low Score



High Score

# Malaysia

## Most problematic factors for doing cross-border e-commerce...

- Market access challenges in other markets. Many domestic MSMEs find it difficult to access buyers across APEC.
- Lack of trust from many local businesses in regards to B2B marketplaces.
- It is difficult to access talent and high-quality technical talent tends to move overseas.
- Local touchpoints for MSMEs are difficult to manage cross-border for issues such as language, last-mile, customer service, and returns.
- Regional tariffs, import and export duties, and customs administration create friction points.
- Potential upcoming data localization and privacy laws for specific industries such as payments will have adverse affects on growth.
- Access to initial funding is well-developed, but beyond the seed stage many MSMEs look outside the country.
- Traditional Malaysian MSME culture is too complacent and too unwilling to change.
- The de minimis level lags behind some APEC economies.

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	45	10	WEF Networked Readiness Index 2015 (Rank / 143)	32	10
APEC E-payments Readiness Index (Rank / 21)		10	- Laws Relating to ICT	8	2
- Regulation		3	- International Internet Bandwidth	69	14
- Infrastructure		13	- Fixed Broadband Internet Tariff Rates	97	14
- Demand		11	- Cellular Telephone Subscriptions	32	4
- Innovation		11	- Internet Users	41	10
BCG e-friction Index 2015 (Rank / 65)	28	9	- Mobile Subscriptions	94	17
Digital Planet Index 2014 (Rank / 50)	23	9	- ICT Use for B2B Transactions	21	8
Global Connectivity Index 2015 (Rank / 50)	28	11	- Internet Use for B2C Transactions	15	6
UN E-government survey 2014 (Rank / 193)	52	9	- E-Participation Index	59	15
Global Retail e-commerce Index 2013 (Rank / 30)	30	12	WEF Global Enabling Trade Report (Rank / 138)	25	10
Logistics Performance Index 2014 (Rank / 160)	25	10	- Domestic Market Access	75	14
			- Efficiency and Transparency of Border Administration	33	11



# Mexico

<p><b>E-commerce Operating Environment</b></p>	<p>2</p>	<p>The e-commerce operating ecosystem in Mexico remains in its infancy. Infrastructure voids, affordability issues, relatively low penetration rates of mobile and smartphones, and a lack of development of key supporting transaction facilitators have restricted the growth of e-commerce. While the government has an aggressive agenda for e-commerce development in Mexico, progress has been slow. The government offers no formal support for MSMSs engaged in cross-border e-commerce.</p>
<p><b>MSME Readiness</b></p>	<p>2</p>	<p>The majority of Mexican MSMEs are informal and do not use technology of any sort. There is a small emerging group of e-commerce firms, but their focus is primarily domestic e-commerce. There is a general scarcity of skilled talent. Most university programs teach outdated IT content. On the job training is the primary form of education. Mexican government recognizes the need and has committed funds to capacity building among MSMEs. There is very little awareness of cross-border e-commerce activities. Access to funding is a major challenge.</p>
<p><b>Customer Willingness</b></p>	<p>1</p>	<p>Levels of e-commerce in Mexico remain very low. Lack of trust and confidence in online transactions are very high. Concerns of credit card fraud and security remain significant. Participation in e-commerce is limited to B2B and higher socio-economic groups. Reluctance to complete transactions online is high, leading to a preference for physical transactions instead. There are greater levels of trust in buying online internationally, particularly with the U.S. E-commerce executives in Mexico believe the establishment of Amazon in Mexico will be a tipping point for acceptance of e-commerce.</p>
<p><b>Marketplace Platforms</b></p>	<p>4</p>	<p>MSMEs have access to multiple high quality marketplaces and platforms for e-commerce in Mexico. The presence of domestic marketplaces like Linio and Mercado Libre, more specialized platforms like Kichink and Comparaguru, and global marketplaces like Amazon and Ebay creates a strong set of platforms for MSMEs. Limited access to financing for the e-commerce firms remain a limiting factor for growth. Importantly, none of the major domestic marketplaces or platforms are yet profitable.</p>
<p><b>Payments</b></p>	<p>1</p>	<p>Availability of efficient payment methods for e-commerce is Mexico's most significant challenge. Low credit card penetration and banks' refusal to accept e-signatures on credit card vouchers is a major impediment to both domestic and cross-border e-commerce. The refusal to accept debit cards for e-commerce transactions is a further impediment. Fear of payment fraud is also a major concern. There is no sense of urgency in the banking sector to support e-commerce. Fear of payment fraud is also a major concern. On the positive side, alternative payment platforms are emerging. Mexico has developed extensive alternative non-bank payment systems, some using convenience stores, that support e-commerce.</p>
<p><b>Logistics</b></p>	<p>3</p>	<p>Mexico's logistics systems are the most advanced in Latin America. However, they are not developed in ways that are supportive of e-commerce. Mexico's postal service lags and is particularly problematic in rural areas. While major global logistics firms, as well as competitive domestic firms are active in Mexico current low volumes make e-commerce an unprofitable line of business. Potential local logistics partners lack IT and tracking systems needed to integrate with global cross-border firms. The lack of technological sophistication of most MSMEs make integrating into logistics systems problematic. There are problems with physical safety and crime in certain areas of Mexico. However, the emergence of "first and last mile" logistics specialists is helping MSMEs.</p>
<p><b>Customs &amp; Border Administration</b></p>	<p>2</p>	<p>Customs remains one of the most critical impediments for B2B and B2C e-commerce firms moving physical goods across the border. Inconsistency in duties levied, lack of transparency in procedures, bribery, and delays remain real challenges for MSMEs doing cross-border business in Mexico. The majority of B2C cross-border e-commerce in Mexico is with the United States. Most MSMEs exploit the personal consumption provision for shipping directly from supplier to customer. Custom duties and other compliance costs prevent most Mexican MSMEs from engaging in cross-border e-commerce.</p>
<p><b>Foreign Market Access</b></p>	<p>2</p>	<p>Mexico remains a relatively open market for foreign players. MSMEs benefit from Mexico's participation in NAFTA, while both the Pacific Alliance and the planned TPP have strong provisions to promote e-commerce. However, the complexity of trade rules, FDI restrictions, and tariffs make accessing the benefits of FTA provision effectively inaccessible to the majority of MSMEs. Very few Mexican MSMEs are active in cross-border e-commerce.</p>
<p><b>E-commerce Regulatory Environment</b></p>	<p>2</p>	<p>Mexico has adopted all APEC initiatives in the digital economy. However, Mexico has a lack of comprehensive laws in e-commerce and cybercrime. This is complicated by weak and non-existent enforcement of existing e-commerce laws. Consumer protection and dispute resolution mechanisms remain major challenges. Multi-ministerial overlap challenges along with lack of alignment between federal and state governments on e-commerce are real impediments to the future of e-commerce in Mexico. On a positive note, Mexico has avoided data localization requirements and censorship restrictions.</p>



# Mexico

## Most problematic factors for doing cross-border e-commerce...

- Mexican banks have not engaged with e-commerce players
- Lack of integration of global logistics firms with domestic carriers to ensure tracking and security
- Complex import tariffs and tax regulations for e-commerce importers
- Lack of financing for MSMEs in e-commerce
- Lack of access to skilled talent
- Fraud in payments and delivery
- Regulatory framework –an absence of laws and enforcement for cybercrimes and e-commerce frauds
- Multi-ministerial conflict and no clear policy coordination amongst branches

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	60	12	WEF Networked Readiness Index 2015 (Rank / 143)	69	15
APEC E-payments Readiness Index (Rank / 21)		18	- Laws Relating to ICT	62	14
- Regulation		19	- International Internet Bandwidth	79	15
- Infrastructure		18	- Fixed Broadband Internet Tariff Rates	25	5
- Demand		15	- Cellular Telephone Subscriptions	111	18
- Innovation		18	- Internet Users	79	15
BCG e-friction Index 2015 (Rank / 65)	51	14	- Mobile Subscriptions	92	16
Digital Planet Index 2014 (Rank / 50)	37	13	- ICT Use for B2B Transactions	74	18
Global Connectivity Index 2015 (Rank / 50)	32	13	- Internet Use for B2C Transactions	82	19
UN E-government survey 2014 (Rank / 193)	63	10	- E-Participation Index	45	12
Global Retail e-commerce Index 2013 (Rank / 30)	NA	NA	WEF Global Enabling Trade Report (Rank / 138)	61	16
Logistics Performance Index 2014 (Rank / 160)	50	15	- Domestic Market Access	33	12
			- Efficiency and Transparency of Border Administration	62	15



# New Zealand

E-commerce Operating Environment	4	Internet connectivity is high and the government is currently in the process of rolling out fiber broadband. Companies can be registered online and in a short amount of time. Government is making investments in trade promotion and MSME training programs, but the MSMEs interviewed lacked awareness of various government programs and initiatives.
MSME Readiness	3	Many MSMEs are online and poses high levels of education and general interest in e-commerce. However, MSMEs overall lack desire to go cross-border. MSMEs complain about lack of access to financing and keeping talented workers from leaving to the U.S. and Europe.
Customer Willingness	4	Advanced e-commerce culture with high internet penetration. New Zealand's size and geographic location increases customers' comfort and desire to purchase goods across borders. Consumers are willing and capable of using mobile platforms to make online purchases. Roughly two-thirds of online consumers have purchased from overseas website, according to Nielsen NZ.
Marketplace Platforms	5	Major e-commerce platforms exist and there are a number of successful local players in the space. Both domestic and major international players, such as Amazon and Alibaba, currently operate in New Zealand.
Payments	4	Most major international payment systems are accepted in New Zealand. There is high credit card penetration and consumer confidence in online payment systems. Banks have shown a desire to quickly adopt technologies.
Logistics	4	Logistics costs are an inherent challenge for MSMEs and consumers due to New Zealand's geographic location. However, the domestic postal service is able to reach urban and rural populations, enabling e-commerce growth throughout the economy. The domestic post office is actively creating ways to decrease costs for consumers. International carriers are present.
Customs & Border Administration	4	Clear and predictable regulatory environment for exporters and importers. Economy does not suffer from corruption and businesses expressed confidence in their ability to interact with customs authorities. Government is taking positive steps to address taxation challenges.
Foreign Market Access	4	New Zealand currently has nine free-trade agreements in effect—including with ASEAN, Australia and Singapore—and ten in the process of negotiation. The government is an original member of the recently negotiated Trans-Pacific Partnership agreement.
E-commerce Regulatory Environment	4	There are strong tax policies, customer protections, IP protections, and data privacy laws. E-signature and electronic banking is advanced. However, the government is still finalizing policies related to GST on online purchases of services and intangibles.

Low Score



High Score

# New Zealand

## Most problematic factors for doing cross-border e-commerce...

- MSMEs lack motivation to go cross-border, although general willingness to go online is high.
- Financing for MSMEs in e-commerce remains a major challenge.
- Collection of GST on low-value imported goods and inconsistency of tax policy related to online purchase of goods and services.
- Challenges keeping and nurturing domestic talent.
- Economy dependent upon e-commerce customers in English speaking economies
- MSMEs face high shipping costs due to long distances.
- Lack of e-commerce provisions in Free Trade Agreements.

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	13	5	WEF Networked Readiness Index 2015 (Rank / 143)	17	8
APEC E-payments Readiness Index (Rank / 21)		3	- Laws Relating to ICT	11	4
- Regulation		4	- International Internet Bandwidth	56	9
- Infrastructure		5	- Fixed Broadband Internet Tariff Rates	105	15
- Demand		4	- Cellular Telephone Subscriptions	84	13
- Innovation		8	- Internet Users	19	6
BCG e-friction Index 2015 (Rank / 65)	17	6	- Mobile Subscriptions	15	7
Digital Planet Index 2014 (Rank / 50)	15	7	- ICT Use for B2B Transactions	16	3
Global Connectivity Index 2015 (Rank / 50)	15	6	- Internet Use for B2C Transactions	9	4
UN E-government survey 2014 (Rank / 193)	9	6	- E-Participation Index	19	8
Global Retail e-commerce Index 2013 (Rank / 30)	18	10	WEF Global Enabling Trade Report (Rank / 138)	4	3
Logistics Performance Index 2014 (Rank / 160)	23	9	- Domestic Market Access	5	3
			- Efficiency and Transparency of Border Administration	6	3



# Papua New Guinea

E-commerce Operating Environment	1	Internet is the most expensive in the world; as a result, entrepreneurs lack the internet access needed to launch their business. There is no government support for MSMEs interested in e-commerce and a lack of relevant training options.
MSME Readiness	1	Most MSMEs lack the technical, international trade, and business intelligence skills to engage in e-commerce. There is a lack of experienced leadership or examples of companies that have already made it in e-commerce. Funding is difficult to access.
Customer Willingness	1	Most people have never engaged in e-commerce or have a clear understanding of how buying online could benefit them. There is not a yet a culture or social acceptance of e-commerce. There is a lack of trust and minimal enforcement of consumer protections laws.
Marketplace Platforms	1	There are no marketplaces yet in PNG, although a small number of people purchase goods on foreign marketplaces, such as Amazon Australia.
Payments	2	While credit card penetration is very low, mobile payments are widespread. Even rural farmers in PNG have access to mobile banking services provided by companies, such as Bank South Pacific. Mobile payments are primarily used to pay informal sector workers, but also has the potential to support a more robust e-commerce ecosystem.
Logistics	1	There are logistics options, although in many cases they make e-commerce prohibitively expensive due to challenges from the geographical terrain and the low population density. There is lack of routing and tracking technology.
Customs & Border Administration	2	The customs process is slow and overly bureaucratic. Goods that are imported into PNG with a value of under \$90 are exempt from duties and goods with a value of under \$360 have a less formal reporting requirement. These exemptions may help enable consumers in PNG to purchase goods from foreign MSMEs.
Foreign Market Access	3	PNG has trade agreements with the Pacific Island countries, Australia, and New Zealand. More trade agreements would make it easier for MSMEs to access foreign markets. There is foreign investment in PNG, although it is mostly in traditional sectors, such as oil and mining.
E-commerce Regulatory Environment	1	There is no regulatory framework for e-commerce, or even for internet activity. PNG needs to enact laws to address cyber protection, consumer protection, cybercrime, and data privacy.

Low Score 1 2 3 4 5 High Score

# Papua New Guinea

## Most problematic factors for doing cross-border e-commerce...

- Internet is the most expensive in the world
- Internet is unreliable; as a result big businesses must pay for multiple connections
- Much of the interior of PNG is not yet connected to the internet infrastructure
- No cyber protections for those wanting to buy online
- There are a lack of mentors and success stories for entrepreneurs wanting to enter e-commerce
- Financing is difficult to find for young companies without collateral
- The lack of a developed e-commerce value chain increases the barriers to entry.
- Shipping is extremely expensive, especially for the interior of the country

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	NA	NA	WEF Networked Readiness Index 2015 (Rank / 143)	NA	NA
APEC E-payments Readiness Index (Rank / 21)		19	- Laws Relating to ICT	NA	NA
- Regulation		21	- International Internet Bandwidth	NA	NA
- Infrastructure		16	- Fixed Broadband Internet Tariff Rates	NA	NA
- Demand		17	- Cellular Telephone Subscriptions	NA	NA
- Innovation		20	- Internet Users	NA	NA
BCG e-friction Index 2015 (Rank / 65)	NA	NA	- Mobile Subscriptions	NA	NA
Digital Planet Index 2014 (Rank / 50)	NA	NA	- ICT Use for B2B Transactions	NA	NA
Global Connectivity Index 2015 (Rank / 50)	NA	NA	- Internet Use for B2C Transactions	NA	NA
UN E-government survey 2014 (Rank / 193)	188	18	- E-Participation Index	NA	NA
Global Retail e-commerce Index 2013 (Rank / 30)	NA	NA	WEF Global Enabling Trade Report (Rank / 138)	NA	NA
Logistics Performance Index 2014 (Rank / 160)	126	20	- Domestic Market Access	NA	NA
			- Efficiency and Transparency of Border Administration	NA	NA

Top Ranking  
Percentile

0-20%

20-40%

40-60%

60-80%

80-100%

Bottom Ranking  
Percentile

# Peru

E-commerce Operating Environment	2	In general, the cross-border e-commerce operating environment is underdeveloped in Peru. The country has a long way to go to establish good connectivity and requires improvements in Internet and mobile penetration. Peru also needs to build out the digital economy to gradually change peoples' mindset and develop new e-commerce players.
MSME Readiness	2	There are Peruvian MSMEs who are willing to grow their businesses internationally via e-commerce; however, the majority are still not aware of the opportunity. They also lack the mindset to adopt new business models, along with the technical capacity to set up e-commerce businesses and capability for digital marketing.
Customer Willingness	1	The domestic market in Peru is very traditional. Most of the transactions are still made in cash and the majority do not have credit cards or trust online shopping. Given the low development level of logistics and internet infrastructure, the "online shopping" culture has yet to develop.
Marketplace Platforms	2	There are very few quality e-commerce websites and even fewer are well utilized in Peru. However, the recent Alibaba partnership program, "the Peruvian SMEs to the World," has accelerated e-commerce adoption among Peruvian MSMEs and built strong momentum for online B2B export.
Payments	2	Credit card and even bank account penetration is very low in Peru, leaving cash to be the dominant payment method. However, for cross-border e-commerce MSMEs are set up to accept VISA and Paypal, but MasterCard and Amex do not yet work well in Peru. Mobile wallet innovation is a leapfrog opportunity for Peruvians to pay digitally without having a bank account.
Logistics	2	The underdevelopment of the infrastructure in Peru has made it very difficult and expensive to ship goods around the country. For cross-border trade, there are very limited export ports, and 90% of the goods go out via the port in Lima. For MSMEs, the Peruvian government has set up the "ExportaFacil" program to provide a one-stop shop solution.
Customs & Border Administration	3	Peru is very active in promoting exports and therefore has set up relatively clear and simple rules for customs. However, it is still challenging for MSMEs to fill out documentation correctly and to independently navigate through the entire process. Customs procedure are even more challenging.
Foreign Market Access	4	Peru has been opening up and is actively signing various multilateral or bilateral FTAs to allow businesses to have better access to the global market. Additionally, it has also seen increasing FDI.
E-commerce Regulatory Environment	2	Peru has been making efforts in establishing the "rule of laws" to improve the whole regulatory environment. However, it lacks regulations specific to e-commerce.

Low Score



High Score

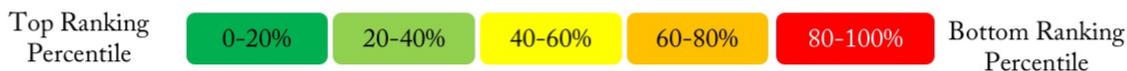
# Peru

## Most problematic factors for doing cross-border e-commerce...

- Mindset, mindset, mindset. There is a lack of awareness and motivation for businesses and individuals to go digital.
- Under developed infrastructure in both logistics and internet connectivity.
- Informality: a large number of MSMEs are not registered and therefore lack the ability to access additional resources.
- Absence of a “single window” or one-stop support for MSMEs to conduct cross-border e-commerce.
- MSMEs lack necessary techniques to conduct e-commerce, especially for digital marketing.

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	85	15	WEF Networked Readiness Index 2015 (Rank / 143)	90	19
APEC E-payments Readiness Index (Rank / 21)		17	- Laws Relating to ICT	93	18
- Regulation		17	- International Internet Bandwidth	86	16
- Infrastructure		18	- Fixed Broadband Internet Tariff Rates	87	13
- Demand		18	- Cellular Telephone Subscriptions	97	15
- Innovation		16	- Internet Users	84	16
BCG e-friction Index 2015 (Rank / 65)	60	17	- Mobile Subscriptions	116	18
Digital Planet Index 2014 (Rank / 50)	NA	NA	- ICT Use for B2B Transactions	78	19
Global Connectivity Index 2015 (Rank / 50)	34	14	- Internet Use for B2C Transactions	79	18
UN E-government survey 2014 (Rank / 193)	72	12	- E-Participation Index	24	9
Global Retail e-commerce Index 2013 (Rank / 30)	NA	NA	WEF Global Enabling Trade Report (Rank / 138)	51	12
Logistics Performance Index 2014 (Rank / 160)	71	18	- Domestic Market Access	13	5
			- Efficiency and Transparency of Border Administration	51	13



# Russia

E-commerce Operating Environment	2	Internet connectivity is developing and e-commerce culture for domestic transactions is improving. However, for cross-border transactions, there is still a big gap among MSMEs' needs, customer willingness to engage, government support, and availability of tools for companies to engage internationally.
MSME Readiness	2	MSMEs in Russia are still developing the skills needed to tackle the issues regarding domestic e-commerce. However, business intelligence for overseas marketing is relatively low to start cross border e-commerce. There is lack of awareness about opportunities and benefits of cross-border e-commerce. The business mindset is still now fully open to engage in cross-border e-commerce
Customer Willingness	2	Even though domestic e-commerce is growing, there is still little trust in cross-border e-commerce transactions. Fear regarding the efficiency of delivery and the possibility of fraud discourages cross-border e-commerce and makes customer only willing to engage in domestic transactions.
Marketplace Platforms	2	The big companies tend to operate by their own means to fulfill transactions. Platforms tend to be available for the domestic market. For MSMEs, it is still challenging to connect with platforms for cross-border transactions and the cost of this is still high.
Payments	3	Credit card penetration is growing for the domestic market. However, there are issues regarding methods of payment and fraud negatively affecting the propensity of customers and companies to engage in cross-border transactions.
Logistics	3	Logistics are slowly developing for foreign markets. However, for the domestic market, logistics is improving and boosting the development of e-commerce and the participation of MSMEs in domestic e-commerce.
Customs & Border Administration	1	MSMEs find it extremely difficult to understand and comply with Russian customs procedures. This lack of knowledge prevents many companies from even trying to develop an international strategy for their businesses because customs is such a big hurdle. Some simplified procedures are being developed on exports and import to China, but these need to be increased access for other markets. Corruption is also a major issue affecting customs in Russia.
Foreign Market Access	1	Russia has limited trade agreements, mostly focused on partnering with China. Furthermore, recent restrictions, such as those on import quotas, prevent the development of the businesses in this sector. As a result, MSMEs tend to focus more on the domestic market and the Russian market is difficult to access.
E-commerce Regulatory Environment	2	E-commerce laws are behind what is actually needed for businesses to have confidence in operating globally. The launch of the new National Payment System and modifications to the Law on Personal Data Protection should address the needs of the MSMEs.

Low Score



High Score

# Russia

## Most problematic factors for doing cross-border e-commerce...

- Restrictive government regulations for trade with other countries
- Lack of funding for MSMEs
- Extensive customs procedures
- Lack of credit card penetration
- Low trust and willingness to engage in cross-border transactions

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	50	11	WEF Networked Readiness Index 2015 (Rank / 143)	41	12
APEC E-payments Readiness Index (Rank / 21)		14	- Laws Relating to ICT	80	16
- Regulation		20	- International Internet Bandwidth	60	10
- Infrastructure		10	- Fixed Broadband Internet Tariff Rates	10	3
- Demand		13	- Cellular Telephone Subscriptions	22	3
- Innovation		13	- Internet Users	49	12
BCG e-friction Index 2015 (Rank / 65)	43	11	- Mobile Subscriptions	31	8
Digital Planet Index 2014 (Rank / 50)	40	14	- ICT Use for B2B Transactions	66	17
Global Connectivity Index 2015 (Rank / 50)	25	10	- Internet Use for B2C Transactions	36	13
UN E-government survey 2014 (Rank / 193)	NA	NA	- E-Participation Index	30	10
Global Retail e-commerce Index 2013 (Rank / 30)	13	8	WEF Global Enabling Trade Report (Rank / 138)	105	19
Logistics Performance Index 2014 (Rank / 160)	90	19	- Domestic Market Access	127	19
			- Efficiency and Transparency of Border Administration	103	19



# Singapore

E-commerce Operating Environment	4	The cross border e-commerce operating environment for Singaporean MSMEs is strong in terms of culture and local players. The macro environment also pushes Singaporean MSMEs to engage in cross-border trade to capture growth. Government support can be improved through more targeted programs, specifically for the lagging traditional MSMEs.
MSME Readiness	4	Singaporean MSMEs have the motivation, skills, and capability to engage in cross-border e-Commerce. There is available financing for those companies who choose to move online. Singaporean MSMEs have also established relationships across the region, as the small size of the domestic market encourages MSMEs to look internationally for growth.
Customer Willingness	4	Customers in Singapore are ready and able to engage in cross-border e-Commerce. However, cross-border consumer protections must be improved. Singapore also has a high availability of very convenient shopping malls and a culture of physical shopping at malls, which reduces some of the advantages of e-commerce.
Marketplace Platforms	4	All major platforms are available in Singapore for MSMEs; however, cost to sellers for cross-border e-commerce trade in goods and services should be improved. Furthermore, Singapore MSMEs are looking for additional market reach through the available platform providers.
Payments	5	Singapore's payment system is reliable and the overall credit card penetration is very high. As a target market, Singapore is attractive for the ease and simplicity of establishing payment acceptance. For MSMEs from Singapore who move out, there are global providers available to support them, albeit at relatively higher costs.
Logistics	5	Singapore has strong, cost-effective logistics for cross-border e-commerce. The port is a global standard of efficiency, and the small geography and well-developed infrastructure make same-day and next-day delivery a much simpler proposition than in other economies.
Customs & Border Administration	5	De minimis is at 400 SGD, or \$316 USD. Clarity and consistency of the customs and border process is also very strong for MSMEs in Singapore. Singapore's single window has long been a model for developing economies, and will be a good starting point for an ASEAN single window.
Foreign Market Access	5	Singapore is engaged in a high number of FTA agreements. The Singapore government also recognizes the value of lowering barriers to trade, and actively pursues an agenda of open trade borders. Singapore is amongst the easiest economies in the world to navigate for market entry. Singapore is also tax-friendly to foreign companies who wish to do business in the economy.
E-commerce Regulatory Environment	5	Singapore has taken the lead across APEC in adopting many forward-looking regulations that address e-commerce. In particular, Singapore has adopted e-commerce friendly domestic consumer protection, anti-fraud, foreign investment, and intellectual property rules.

Low Score



High Score

# Singapore

## Most problematic factors for doing cross-border e-commerce...

- Regulations are limiting the import of talent. Current plans are to reduce foreign work permits by up to 30%, which will lead to a talent crunch and potentially higher costs for business. This may force companies to look elsewhere for more economical and readily available human capital.
- Despite many regional trade relationships, MSMEs still find challenges in breaking down the at-the-border frictions of inconsistent customs and NTBs in target economies.
- Lack of accreditation bodies that can certify products and companies for more than one economy at the same time. (i.e. FDA approval can act as a stamp of approval for foreign economies, as well as the local economy)
- Limited support for MSMEs at regional trade missions and embassies. Some difficulties exist in overcoming cross-border challenges, and additional support from trade missions and larger corporations could help them succeed.

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	26	8	WEF Networked Readiness Index 2015 (Rank / 143)	1	1
APEC E-payments Readiness Index (Rank / 21)		2	- Laws Relating to ICT	3	1
- Regulation		1	- International Internet Bandwidth	4	2
- Infrastructure		7	- Fixed Broadband Internet Tariff Rates	53	6
- Demand		6	- Cellular Telephone Subscriptions	19	2
- Innovation		4	- Internet Users	33	9
BCG e-friction Index 2015 (Rank / 65)	15	5	- Mobile Subscriptions	1	1
Digital Planet Index 2014 (Rank / 50)	1	1	- ICT Use for B2B Transactions	13	2
Global Connectivity Index 2015 (Rank / 50)	3	2	- Internet Use for B2C Transactions	26	9
UN E-government survey 2014 (Rank / 193)	3	3	- E-Participation Index	10	6
Global Retail e-commerce Index 2013 (Rank / 30)	11	7	WEF Global Enabling Trade Report (Rank / 138)	1	1
Logistics Performance Index 2014 (Rank / 160)	5	1	- Domestic Market Access	3	2
			- Efficiency and Transparency of Border Administration	1	1



# Thailand

E-commerce Operating Environment	2	Thailand has a strong operating environment with high rates of internet connectivity, a strong trend towards e-commerce culture, and a slow but stable increase in MSME's interest in e-commerce. On the other hand, there is a lack of government support for financing and training of MSMEs.
MSME Readiness	2	There are a large number of manufacturing MSMEs in Thailand, but these MSMEs are highly skeptical about e-Commerce. Gaps in MSME readiness include lack of motivation and technical knowledge. They also do not see e-commerce as a channel to sell goods as most of them are B2B and think that there is a lack of flexible B2B platforms. However, many MSMEs in B2C have successfully adapted e-commerce as an additional channel to sell their goods.
Customer Willingness	3	Thailand has one of the largest tech-savvy, growing populations in the world. In terms of social media usage, Thailand ranks in the top five and e-commerce is strongly established for shopping. This huge demand is supported by platforms like Lazada and Weloveshopping.com. However, the rate of growth of e-commerce usage among older age groups and the rural population remains low.
Marketplace Platforms	4	There are a number of e-commerce platforms, including Lazada, Weloveshopping, Tarad, and iTruemart. These platforms are easy to use for MSMEs. Some of them also provide training and support to help MSMEs get started in e-commerce. But there is a serious lack of platforms for services and B2B transactions. Though some platforms trade across borders, cross-border e-commerce platforms still need improvement.
Payments	3	Even though the e-commerce culture is strong in Thailand, payments are a major issue when going cross-border since most transactions are paid through cash-on-delivery, which is impractical for international shipments. Low credit card penetrations have caused Thailand to lag behind in terms of e-payments.
Logistics	3	Though Thailand has many of the major international players operating in their boundaries, these services are limited mostly to the cities. First and last mile delivery is a major issue for remote locations, and international shipping has to be carried out through two different agencies. Thai Post has not kept with technological advancements.
Customs & Border Administration	2	Thailand has some serious issues with customs. First, the National Single Window policy has added more burden to MSMEs due to lack of proper implementation. Second, the de minimis is too low, making almost every seller pay duties. Third, there is a infusion of corruption in the customs, making transactions overly complicated for MSMEs. There are no dedicated customs clearance channels for e-commerce.
Foreign Market Access	2	Thailand lacks regulations tailor made for e-commerce and there is a lack of harmonization of regulations with other economies. Non-tariff barriers still apply over a broad range of products. Foreign Direct Investment is limited to a select number of industries. Thailand participates in Free Trade Agreements, but they lack e-commerce specific provisions.
E-commerce Regulatory Environment	2	Thailand's regulatory policies lack chapters supporting e-commerce. There is very little international law support for businesses going cross-border. Regulatory policies are complicated, making it difficult for MSMEs to comply. Third party liability regulations need to be more precise, while intellectual property protection regulations are too weak.

Low Score



High Score

# Thailand

## Most problematic factors for doing cross-border e-commerce...

- Language constraints restrict cross-border e-commerce acceptance.
- Lack of platforms for services and B2B transactions.
- Complicated customs procedures and very low de minimis value.
- Lack of efficiency in logistics systems.
- Lack of support on international law for cross-border transactions.
- MSMEs lack knowledge of the potential of e-commerce and how it can help their business.
- Lack of global standards for perishable goods sold across borders.

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	70	14	WEF Networked Readiness Index 2015 (Rank / 143)	67	14
APEC E-payments Readiness Index (Rank / 21)		15	- Laws Relating to ICT	98	19
- Regulation		16	- International Internet Bandwidth	64	12
- Infrastructure		15	- Fixed Broadband Internet Tariff Rates	109	18
- Demand		14	- Cellular Telephone Subscriptions	35	5
- Innovation		15	- Internet Users	96	18
BCG e-friction Index 2015 (Rank / 65)	48	13	- Mobile Subscriptions	42	10
Digital Planet Index 2014 (Rank / 50)	35	12	- ICT Use for B2B Transactions	59	15
Global Connectivity Index 2015 (Rank / 50)	31	12	- Internet Use for B2C Transactions	49	15
UN E-government survey 2014 (Rank / 193)	102	16	- E-Participation Index	54	14
Global Retail e-commerce Index 2013 (Rank / 30)	NA	NA	WEF Global Enabling Trade Report (Rank / 138)	57	14
Logistics Performance Index 2014 (Rank / 160)	35	12	- Domestic Market Access	113	18
			- Efficiency and Transparency of Border Administration	56	14



# The Philippines

E-commerce Operating Environment	2	Landline internet connections are among the most expensive in the region, which may limit the number of people online and raise business costs for MSMEs. The government provides limited support for MSMEs that want to engage in cross-border e-commerce.
MSME Readiness	2	MSMEs can find talented employees in technical fields, but have trouble finding more senior employees with experience in e-commerce, international trading, or business intelligence. There is lack of venture capital funding available compared to other economies in southeast Asia.
Customer Willingness	1	Customers prefer to touch goods before they purchase them and there is a well-established mall culture. There is not yet a cultural acceptance of e-commerce. Many customers are worried about fraud when purchasing online, in part due to a lack of consumer protections.
Marketplace Platforms	3	There are several established marketplaces. Much of e-commerce of online-to-offline and occurs over social media websites, like Facebook. The most popular marketplaces are foreign operators, such as Lazada and eBay. Some of the marketplaces have large fees.
Payments	1	Credit card penetration is less than 10% and alternative payments, such as mobile are not yet well established. It is difficult to transfer money between bank accounts, even for people who use the same bank. COD is well established, but is primarily available for larger firms.
Logistics	2	There are logistics options at reasonable costs in metro regions, such as Manila. However, package tracking is unreliable and shipping outside the country and to the southern islands is expensive. There are restrictions on foreign firms entering the logistics market.
Customs & Border Administration	1	Tariffs are unpredictable, customs is over regulated, there is perceived corruption, and printed forms need to be submitted. It is difficult for new MSMEs to navigate through the custom process. The de minimis is also less than \$1 making customs complex for even low values shipments.
Foreign Market Access	1	Tariffs are unpredictable, customs is over regulated, there is perceived corruption, and printed forms need to be submitted. It is difficult for new MSMEs to navigate through the custom process. The de minimis is also less than \$1 making customs complex for even low values shipments.
E-commerce Regulatory Environment	3	In the past there were limited protections for MSMEs and consumers engaged in e-commerce. However, the creation of a dedicated e-commerce Office within the Department of Trade, as well as the "2020 E-commerce Roadmap" should help reshape the regulatory environment. If the proposed laws regarding data privacy, e-payments, e-signatures, information security, and consumer protection are enacted, the Philippines could improve its rating to a "5" within several years.

Low Score



High Score

# The Philippines

## Most problematic factors for doing cross-border e-commerce...

- Low credit card penetration and low usage of mobile wallets
- High cost and unreliability of internet inhibits MSME and customer growth
- Cultural preference for shopping at malls
- Banks make it difficult to transfer money between accounts
- Regulations on retail ownership curb foreign investment
- Complex and bureaucratic customs procedures discourages MSMEs from shipping cross-border
- Lack of a de minimis makes it difficult for the average customer to order products from abroad.
- High corporate tax rates compared to the rest of the region makes it difficult to compete abroad
- Brick-and-mortar companies are slow to enter e-commerce
- Lack of VC investment due to stringent regulations discouraging foreign investors

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	NA	NA	WEF Networked Readiness Index 2015 (Rank / 143)	76	16
APEC E-payments Readiness Index (Rank / 21)		21	- Laws Relating to ICT	78	15
- Regulation		15	- International Internet Bandwidth	47	7
- Infrastructure		21	- Fixed Broadband Internet Tariff Rates	108	17
- Demand		20	- Cellular Telephone Subscriptions	86	14
- Innovation		21	- Internet Users	91	17
BCG e-friction Index 2015 (Rank / 65)	47	12	- Mobile Subscriptions	132	19
Digital Planet Index 2014 (Rank / 50)	47	17	- ICT Use for B2B Transactions	52	14
Global Connectivity Index 2015 (Rank / 50)	40	15	- Internet Use for B2C Transactions	58	17
UN E-government survey 2014 (Rank / 193)	95	14	- E-Participation Index	51	13
Global Retail e-commerce Index 2013 (Rank / 30)	NA	NA	WEF Global Enabling Trade Report (Rank / 138)	64	17
Logistics Performance Index 2014 (Rank / 160)	57	17	- Domestic Market Access	19	8
			- Efficiency and Transparency of Border Administration	71	17



# The United States

<p>E-commerce Operating Environment</p>	<p>4</p>	<p>E-commerce culture and habits are very well established within the US market. Furthermore, there are multiple macro-economic factors that make the US an attractive market such as relatively high purchasing power and a large domestic population. Connectivity and the development of e-commerce players is well established in the market. However, MSMEs would like to see more support options.</p>
<p>MSME Readiness</p>	<p>4</p>	<p>E-commerce is well developed in the U.S. Many companies collaborate to boost their skills and manage their operations – thereby expanding their capability and capacity. MSMEs are willing and motivated to engage in online transactions locally and globally; they are constantly in learning and growth mode. However, not all MSMEs are comfortable or equipped to deal with the complexities of international markets and many chose to stay domestic instead.</p>
<p>Customer Willingness</p>	<p>5</p>	<p>E-commerce has become a way of life in the U.S. and is ingrained into the culture of many consumers. Customers are constantly engaging with checking prices and purchasing online with both mobile devices and computers. Additionally, many consumers trust online sellers and will buy cross-border for a cost savings or to purchase unique items. Platforms and marketplaces respond to MSME demands and work to build consumer readiness.</p>
<p>Marketplace Platforms</p>	<p>5</p>	<p>Making a website is relatively easy in the U.S. There are numerous popular ‘build your own’ platforms that have simplified website building for MSMEs. Additionally, there are multiple well established online marketplaces, such as Amazon and eBay where sellers are able to upload product portfolios and effortlessly begin selling. There is also a significant network effect from connecting buyers and sellers to one location. Lastly, the marketplaces are continuing to vertically integrate and help solve many of MSMEs’ capability gaps.</p>
<p>Payments</p>	<p>5</p>	<p>Online and electronic payments is a non-issue within the U.S. as there are a variety of solutions and technologies available for relatively low cost. Furthermore, there are newly emerging technologies that are making payments even simpler. Cross-border payment solutions are also in place. Additionally, payment fraud is effectively handled by the payment facilitators, such as banks, and has a minimal impact on MSMEs.</p>
<p>Logistics</p>	<p>4</p>	<p>UPS and FedEx are two of the leading global logistics companies that originated in the United States. The USPS also has an e-packet agreement with China Post and Hong Kong Post to increase access to American consumers. The U.S. has highly developed infrastructure, tracking, and connectivity for logistics services. Addresses and delivery are standardized and last mile delivery is a non-issue. However, cross-border logistics is often prohibitively expensive for MSMEs.</p>
<p>Customs &amp; Border Administration</p>	<p>3</p>	<p>U.S. Customs is relatively transparent and consistent, but can be restrictive at times- especially for cross-border e-commerce shipments. The absence of corruption increases clarity and reduces complexity. Furthermore, there is a de minimis in place that is high enough to encourage small shipments. MSMEs from the other APEC economies complained that customs enforcement was inconsistent and should be updated with e-commerce specific regulations.</p>
<p>Foreign Market Access</p>	<p>3</p>	<p>The U.S. is involved in many trade agreements and some involve trade language that is specific to e-commerce. An effort to update and improve e-commerce specific language and rules is needed to improve the ability of cross-border e-commerce players to engage in U.S. markets. The US is a signatory of the pending TPP agreement, which has e-commerce specific language. However, the US tariff system is very complex and overwhelming for MSMEs.</p>
<p>E-commerce Regulatory Environment</p>	<p>4</p>	<p>The U.S. has free trade agreements with 20 economies, some of which include trade language that is specific to e-commerce. Non-tariff barriers for trade and restrictive laws and standards were not identified as major barriers. Updated e-commerce specific language and rules would make it easier for cross-border MSMEs to engage in U.S. markets. The U.S. is a signatory of the proposed and pending TPP agreement which has e-commerce specific language.</p>



# The United States

## Most problematic factors for doing cross-border e-commerce...

- E-commerce specific education and training
- Virtual introduction to cross-border buyers rather than just face to face
- Complicated and cumbersome public funding application processes
- Multiple ministries working on the digital economy leading to an uncoordinated approach to policy building
- Lack of e-commerce specific regulations
- Limited foreign market understanding amongst MSMEs

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	15	6	WEF Networked Readiness Index 2015 (Rank / 143)	7	2
APEC E-payments Readiness Index (Rank / 21)		1	- Laws Relating to ICT	13	6
- Regulation		6	- International Internet Bandwidth	43	6
- Infrastructure		2	- Fixed Broadband Internet Tariff Rates	71	8
- Demand		2	- Cellular Telephone Subscriptions	102	16
- Innovation		1	- Internet Users	16	4
BCG e-friction Index 2015 (Rank / 65)	6	2	- Mobile Subscriptions	9	5
Digital Planet Index 2014 (Rank / 50)	6	3	- ICT Use for B2B Transactions	17	4
Global Connectivity Index 2015 (Rank / 50)	1	1	- Internet Use for B2C Transactions	2	1
UN E-government survey 2014 (Rank / 193)	7	5	- E-Participation Index	9	5
Global Retail e-commerce Index 2013 (Rank / 30)	3	3	WEF Global Enabling Trade Report (Rank / 138)	15	7
Logistics Performance Index 2014 (Rank / 160)	9	2	- Domestic Market Access	27	10
			- Efficiency and Transparency of Border Administration	21	8



# Viet Nam

E-commerce Operating Environment	2	Connectivity remains an issue with low internet speeds and unreliable cables connecting Viet Nam to the outside world. Strong economic growth over the next 30 years should help improve the business environment as the rising middle class becomes e-shoppers. Nascent e-commerce culture hurts the operating environment and there is much to be done to increase the public perception of e-commerce.
MSME Readiness	2	MSMEs possess basic technical skills. Financing availability continues to be an issue, especially with venture capital firms having a tough time raising their next funds. Motivation of entrepreneurs to move into e-commerce is abundant, which is shown through the extensive use of Instagram to sell online. Basic business intelligence and capabilities to run companies need to be built out through training and building entrepreneur networks.
Customer Willingness	1	Customers continue to be wary of e-commerce, especially cross-border e-commerce. Low credit card penetration rates and a perceived over evaluation of fraud risk contributes to their lack of willingness. Consumer protection continues to be an issue and customers are not willing to put their credit card numbers online.
Marketplace Platforms	4	Major e-commerce platforms exist and there are a number of local players moving into the space. Much of the beginnings of e-commerce in Viet Nam started with daily deal sites, but are moving into traditional e-commerce as Amazon, eBay, and Lazada have developed a major ground presence.
Payments	1	Payment options are limited due to low credit card penetration. Many of the online purchases made are conducted via COD in coordination with the logistics companies. Many small players are trying to capture online payments, but no one has come up as a dominant player to compete with Paypal. Companies are also using cell phone cards as alternate forms of payment acceptance, though the fees in these transactions are extraordinarily high.
Logistics	2	Outside of Hanoi and Ho Chi Minh City, there are logistics challenges that are trying to be met by an unorganized network of small players. Larger companies have resorted to delivering goods themselves instead of relying on local carriers. Much of the purchasing remains to be COD, which causes increased logistical challenges for MSMEs, especially because customers can refuse to accept the product at the point of delivery.
Customs & Border Administration	1	Customs remains an issue with inconsistent wait times for imports and high corruption at the border. The move toward e-customs has helped large import and export companies, but MSMEs have seen marginal benefits due to the continued complexity.
Foreign Market Access	2	Viet Nam has signed a number of FTAs and RTAs and put this as at the forefront of their trade policy. They have struggled with allowing foreigners to bring their intellectual and monetary capital into the country. It is difficult for international MSMEs to start selling products or services and the non-tariff barriers of corruption and relationship building are a standing problem.
E-commerce Regulatory Environment	2	The Vietnam E-Commerce and Information Technology Agency (VECITA) has consolidated regulatory control of e-commerce into one agency, which is a positive step. The trustmark that e-commerce companies can acquire does not appear to be trusted by consumers. IP protection and consumer protection need to be built out to ensure both companies and consumers feel comfortable transacting online.

Low Score



High Score

# Viet Nam

## Most problematic factors for doing cross-border e-commerce...

- Many MSMEs are leveraging Instagram and Facebook as storefronts, rather than more complete platforms.
- Low credit card penetration and consumer protection makes payments difficult.
- Nascent acceptance of online purchasing limits businesses potential market size.
- Technical talent, while available, is hard to keep and attract for Vietnamese companies trying to compete with foreign player with large bank accounts.
- Government misses the mark with their attempts to regulate e-commerce.

### E-Commerce Indices

	World Ranking	APEC Ranking		World Ranking	APEC Ranking
UNCTAD B2C e-Commerce Readiness Index 2014 (Rank / 130)	90	17	WEF Networked Readiness Index 2015 (Rank / 143)	85	18
APEC E-payments Readiness Index (Rank / 21)		20	- Laws Relating to ICT	89	17
- Regulation		18	- International Internet Bandwidth	90	17
- Infrastructure		20	- Fixed Broadband Internet Tariff Rates	1	1
- Demand		19	- Cellular Telephone Subscriptions	42	7
- Innovation		19	- Internet Users	77	14
BCG e-friction Index 2015 (Rank / 65)	61	18	- Mobile Subscriptions	83	15
Digital Planet Index 2014 (Rank / 50)	45	15	- ICT Use for B2B Transactions	49	12
Global Connectivity Index 2015 (Rank / 50)	45	17	- Internet Use for B2C Transactions	54	16
UN E-government survey 2014 (Rank / 193)	99	15	- E-Participation Index	64	16
Global Retail e-commerce Index 2013 (Rank / 30)	NA	NA	WEF Global Enabling Trade Report (Rank / 138)	72	18
Logistics Performance Index 2014 (Rank / 160)	48	14	- Domestic Market Access	76	15
			- Efficiency and Transparency of Border Administration	86	18



## Standardized Scale Used to Assess Economies

	Operating Environment	MSME Readiness	Customer Willingness
1	Economy has little to no e-commerce activity in the market and lacks the basics such as Internet connectivity to do so.	No readiness among MSMEs to do business online. MSMEs lack everything starting from motivation and talent to business intelligence. No financing available through banks or VCs. There is no interest to capture international markets.	No willingness among customers to understand the benefits of e-commerce. Internet is still a myth. No reliable payment and logistics systems available. People don't simply trust until they interact with the sellers in person.
2	Basics of e-commerce established and available, however development still needed and minimal e-commerce activity occurring. Limited support, training, and financing for MSME cross-border e-commerce firms.	MSMEs are interested in going cross-border but lack the necessary expertise and capabilities to understand cross-border e-commerce. No financing available through banks or VCs. E-commerce is still not considered as a viable option.	Culture and social acceptance of e-commerce is a detrimental factor for growth of e-commerce. Very little trust in sellers and transaction facilitators. Internet economy trends have started to grow in this economy. The e-commerce industry is gaining competitiveness but at a very slow pace. Customers don't feel necessity to buy from overseas.
3	E-commerce activity in the market, but with limited cross-border activity. Still little support provided for MSME to do cross-border e-commerce.	MSMEs have the motivation for e-commerce but might lack the required talent or funding to adapt to the e-commerce platform. Cross-border trade through e-commerce platforms is considered as an option but very few have taken actions. Limited availability of funds and training.	Customers are willing to buy online but still have trust issues in payments and logistics. There is a shift in the cultural perspective where e-commerce is growing in use. People trust online sellers. Still barriers in terms of consumer protection, after-sale service and returns still exist.
4	Economy has well established e-commerce and is actively engaged in cross-border e-commerce with limited development needed to enhance activity. There is an established support system for MSME to participate in the cross-border e-commerce environment, however still limited to some sectors/regions of the economy	True motivation and willingness for cross-border e-commerce exists and MSMEs have already taken actions to adapt to the e-commerce trend. Though not to the full extent, talent and funding is available. Firms have the necessary business knowledge to handle complexities of international trade. Most of them operate trade through traditional channels across-borders and just need to move their business online.	Customers have trust in payment and logistics systems. Many customs purchase online. People trust big platforms but are still a bit reluctant about individual webpages. Consumers have moderate protection regulations in place. Returns and after sale service is fully functional.
5	Robust and flourishing domestic and cross-border e-commerce. Economy is a market leader in the realm that is working to set global standards and norms. MSMEs receive full support to participate in cross-border e-commerce.	E-Commerce is considered the primary trading channel and MSMEs have invested for cross-border opportunities. MSMEs have the business knowledge to navigate through the on-boarding process and navigating the barriers that may arise. Skilled workforce available. There is a lot of opportunity for funding and MSMEs are ready to receive this funding. Though most of them have not become an expert in cross-border e-commerce they have all resources ready for that.	Domestic and cross-border online shopping is the norm and a majority of customers mostly buy online. People trust payment and logistics systems in other countries and the level of trust between domestic and cross-border trade sellers is the same. Consumer protection acts are in place and there are no issues in terms of returns or after sale service.

	Marketplaces & Platforms	Payments	Logistics
1	Little to no capable cross-border or domestic e-commerce platforms available in the economy. Limited demand for platforms and marketplaces.	No or limited online payment systems available, impeding cross-border e-commerce transactions from even occurring as customers are not able to engage in online commerce.	There are very few logistic providers operating in the economy. The costs for logistic are too high and delivery speed is too slow because of lack of proper infrastructure, resources and lack of competition.
2	Limited e-commerce platforms and marketplaces available that are likely only domestic facing. No quality training or support to MSME to start using platforms and marketplaces.	The online systems are still primitive and still the economy is hugely cash based economy. Few systems in place but not yet fully functional or secure. Payments solutions are also cost prohibitive, limiting the growth and development of cross-border e-commerce.	Some e-commerce logistics solutions are available, however lacking in capabilities and service, and cost is relatively high. Not enough cross-border e-commerce logistics.
3	Some e-commerce platforms and marketplaces available that provide narrow coverage of customer and MSME needs, domestically and/or cross-border. Limited access to quality training or support by platforms and marketplaces. The platforms and marketplaces are relatively unregulated by the government.	Online payment systems present and functional. Credit card penetration is at an effective level such that the economy is transitioning towards e-payments as a viable solution for cross-border e-commerce. However, fraud and regulations may still be limiting growth and use of e-payments systems.	Good e-commerce logistics solutions available in the market, however not much capacity for cross-border, and the cost is not always affordable.
4	Various domestic and cross-border e-commerce platforms and marketplaces are available and have many capabilities but could still use some improvement for customer and MSME service. MSMEs easily access to training or support by platforms and marketplaces. The platforms and marketplaces are relatively regulated by the economy.	Quality, reliable and secure e-payment systems present. Customers leverage e-payments systems for e-commerce transactions. Restrictions may be faced when trying to create a fully integrated foreign system with cross-border solutions since foreign payment options may not be fully available and/or accepted	Strong e-commerce logistics solutions available with cross-border solutions available, however some improvement is still needed.
5	Multiple domestic and cross-border e-commerce marketplaces available in the economy that are fully capable of covering all required and or desired aspects of interaction across the value chain with customers and MSMEs. Platforms and marketplaces provide quality training or support to MSMEs in order to improve cross-border e-commerce.	Fully integrated reliable, affordable, and trusted cross-border e-payment systems are available, often with multiple transaction facilitators available for selection. Protection against fraud offered and regulations supporting such in place and enforced.	Extensive cross-border e-commerce logistics solutions available that service all customer and MSME needs and wants with affordable cost.

	Customs & Border Administration	Foreign Market Access	Regulatory Environment
1	Customs procedures are lacking and/or complex. They tend to be unreliable, require extensive documentation that is time consuming and prohibitive for entry and rampant with corruption.	Economy not engaged in FTAs/RTAs and has restrictive FDI regulations and laws. Also does not engage to harmonize its standards with global standards.	The economy does not have specific laws/regulations regarding cross-border e-commerce and also does not have a clear agency responsible for enforcement/development of cross-border e-commerce issues. Laws regarding IP protection, data privacy and tax do not exist or rarely exist.
2	Customs procedures are available but have long clearance times and delays which are big barrier for cross-border e-commerce. Documentation is extensive and burdensome and corrupt systems a strong possibility. Online systems are not available.	The economy allows FDI in specific areas, but the FDI regulations are not widespread throughout the whole economy. Discusses the issues of FTAs/RTAs, but efforts take to long to come into practice. Limited harmonization with global standards. Non tariff barriers exist.	Laws/regulations regarding cross-border e-commerce exist, but these laws/regulations are not easily enforceable nor there is a clear regulatory body. Issues regarding IP protection, data privacy and tax are not clear and create doubt among the players.
3	Customs procedures are available and relatively uncorrupt, however still often times burdensome and time consuming - resulting in additional transaction costs for cross-border e-commerce MSMEs.	Allows FDI and has established FTAs/RTAs with other economies. FDI laws are clear, although the total amount allowed for investment from foreign companies in local companies is restricted. Some harmonization with global standards are occurring. There are non tariff barriers present in many sectors of the economy.	Laws/regulations regarding cross-border e-commerce exist. However, it still takes time for the regulatory bodies to make decisions and enforce the law/regulations. The companies still take some time to actually understand what it is written in the law/ regulations because of the lack of clarity and cultural differences.
4	Customs procedures are free of corruption, smooth, and clear for cross-border e-commerce transactions, not imposing delays and allowing for cross-border e-commerce growth. Online and return solutions may or may not be available.	Allows FDI and has established FTAs/RTAs with other economies. Foreign players are allowed to invest in the local economy and even make acquisitions. The economy is engaged in harmonization with global e-commerce. Economy has already tackled some non tariff barriers in some sectors, but not entirely throughout the economy.	There is a regulatory body for enforcement and the laws/ regulations regarding cross-border e-commerce cover the main issues that affect cross-border e-commerce. The players know who they should look for to make decisions regarding law/regulation, but the final decisions regarding consultation still takes some time to be completed.
5	A customs environment that is extremely conducive to cross-border e-commerce is in effect. Simple, harmonized and efficient customs procedures are in place. Online solutions are available and de minimis values are in place and at an effective rate. Customers are often able to return cross-border e-commerce goods with minor issue.	Extremely open and accessible market that is fully integrated and harmonized with global e-commerce transactions. FDI investments allowed and there are FTAs/RTAs established. Non tariff barriers eliminated in most of the sectors.	The current regulatory system provides confidence for companies to do business. All the issues regarding cross-border e-commerce are covered by the laws/regulations and the enforcement of the laws/regulations is performed by the proper agency.

# Leading E-Commerce Indices Used to Supplement Our Economy Assessments

Report	Description
UNCTAD B2C eC Readiness Index 2014	The UNCTAD B2C E-commerce Index covers data for 130 economies on four indicators: Internet use, secure servers, credit card penetration and postal delivery services. The UNCTAD B2C E-commerce Index value is strongly positively correlated to the variation in the share of individuals shopping online
APEC E-payment Readiness Index 2015	<p>The APEC E-payment Index, comprising four pillars and 39 indicators, was constructed to gauge the readiness and capacity of each of the 21 APEC economies to engage in e-payment (including both e-payment and m-payment services), and to further develop their overall e-payment ecosystem.</p> <p>Within this index, we have also provided the specific economy score on the sub-indexes of regulation, infrastructure, demand, and innovation.</p>
BCG e-Friction Index 2015	The BCG e-Friction Index 2015 identified 55 indicators of “e-friction” that inhibit online activity by consumers, businesses, and governments in order to rank 65 economies that are home to more than 80 percent of the world’s population. These rankings are useful for showing economies how they can move up the e-friction ladder.
Digital Evolution Index (DEI) 2013	The Digital Evolution Index (DEI) gauges the transformation of economies in the advanced and developing world from traditional brick-and-mortar to digitally-enabled. The DEI measures the digital trajectories of 50 economies to provide actionable, data-informed insights for businesses, investors and policymakers. DEI analyzes the key underlying drivers and barriers that govern a country’s evolution into a digital economy: demand, supply, institutional environment, and innovation.
Global Connectivity Index 2015 (Huawei)	In the GCI 2015, thirty-eight variables divided across four cornerstones of connectivity (supply, demand, experience, and potential) were measured and analyzed for fifty economies (see methodology section for full explanation). The findings of this analysis not only validate expected correlations between economic growth and technology investment and adoption, but also reveal some surprising insight around the impact of the five transformation enablers: cloud, Internet of Things, Big Data, broadband, and data centers.



Report	Description	
UN E-Government Survey 2014	<p>The United Nations E-Government Survey is produced every two years by the Department of Economic and Social Affairs. It is the only report in the world that assesses the e-government development status of the 193 United Nations Member States. It serves as a tool for decision-makers to identify their areas of strength and challenges in e-government and to guide e-government policies and strategies. The survey is intended for government officials, academics, intergovernmental institutions, civil society organizations, the private sector, and citizens at large.</p>	
AT Kearney Global Retail e-Commerce Index 2013	<p>AT Kearney ranked the top 30 economies in both developing and developed markets. The rankings are based on nine variables, including select macroeconomic factors as well as those that measure consumer adoption of technology, shopping behaviors, infrastructure, and retail specific activities. The index balances current online retail market indicators with those that reveal the potential for future growth. The study is designed to help retailers devise successfully global online retail strategies and identify market investment opportunities, while understanding the tradeoffs and barriers to success.</p>	
2014 Logistic Performance Index (World Bank Group)	<p>The logistics performance (LPI) is the weighted average of the country scores on the six key dimensions:</p> <ol style="list-style-type: none"> <li>1) Efficiency of the clearance process (i.e., speed, simplicity, and predictability of formalities) by border control agencies, including customs;</li> <li>2) Quality of trade and transport related infrastructure (e.g., ports, railroads, roads, information technology);</li> <li>3) Ease of arranging competitively priced shipments;</li> <li>4) Competence and quality of logistics services (e.g., transport operators, customs brokers);</li> <li>5) Ability to track and trace consignments;</li> <li>6) Timeliness of shipments in reaching their destination.</li> </ol>	 <b>WORLD BANK GROUP</b>
WEF Networked Readiness Index 2015	<p>Features the latest iteration of the Networked Readiness Index, which assesses the factors, policies, and institutions that enable an economy to fully leverage information and communication technologies (ICTs) for increased competitiveness and well-being.</p> <p>Within this index, we have also provided the specific economy score on the sub-indexes of laws related to ICT, international Internet bandwidth, fixed broadband Internet tariff rates, cellular telephone subscriptions, Internet users, mobile subscriptions, ICT use for B2B transactions, internet use for B2C transactions, and the e-participation index.</p>	
WEF Global Enabling Trade Report 2014	<p>Assesses the extent to which economies have in place institutions, policies, infrastructures, and services facilitating the free flow of goods over borders. This set of trade-enabling factors are organized in four main categories (or sub-indexes): market access, border administration, infrastructure and operating environment.</p> <p>Within this index, we have also provided the specific economy score on the sub-indexes of domestic market access and efficiency and transparency of border administration.</p>	



# Appendix



## Appendix A: Participating Companies

1Pay	Baobao Shu	eCargo Enterprise Limited
A&F Negocios e inversiones SRL	BCG	Ecological
ACASIA	bebe2go.com	e-Commerce Office of the
Acer	BEDB	Philippines
aCommerce	BIDB	Ecomsur S.A.
Adigital	BKF	Econ and Culture office of Taipei
Adplus	BNC.K.K	Economic University of Indonesia
Adsocial	Bontech	Editorial Educollage
Agroindustrias Organicas 2050 SAC	Brunei Halal	eHunting Asociados
Airbnb	CAMARA PYME	Elvira Pinado
Alcatel-Lucent	Caroline	EM Life&Style
Alibaba	Catalyst Accelerate	Emma Alejandra Nuñez Dodero
Alibaba Research Institute	c-connect	En formación
Aliexpress	CenturyLink	Endeavor Indonesia
Alpha Melon	CHEIL	EuroVat
Amazon	China International Electronic	Exercise & Nutrition Works
AmCham	Commerce Center	Exportación & Turismo Dolly'S
AmCham Hong Kong	Chinese non-store retailer assoc	SAC
AmeriCraft Imports	Citic Pacific Property Agents	EZ Table
AMIPCI	COASIN	Factelier
ANZ	Coins.ph	Facultad de Economía y Negocios
APSYS	CollinsSharper	Universidad de Chile
Aquaz	COMEXPeru/PROMPeru	Falabella
Arcis Communications	Comparaguru.com	FarEastFlora.com
Ardent Capital	Cradle Fund	Federation of Korean Industries
ArtAtlasPeru	Cuidad Yoga	Flexiroam
Artcas Peru -Artesanias y Afines	CUSEF	Floship
Artesanias Yanacocha	Datatec	Foundation Chile
Asia Group	Deal Grocer	Freelancer.com
Asian Trade Center	Dediprogram	Frio Industrias Medina Frimed sac
ASKUL	Deesawat Industries	FTI
Asociacion Ceramic Makkas	Delloitte	Full Suite
A-Solutions	Deseret SUD	Gai Bahn Mi
Asos	DesignbyPet.com	Galleon
Assoluto E.I.R.L	DHL	Gandengtangen.org
Austin Pacific	DHL Indonesia	GB CORP
AVA	DigiRep	Gift and Decorative Industry Club
Avocado Global	DMS LOGISTICS	Glassegg
Axand	DoDoPal Holdings	GMS
b5m.com	Dr.Makoto Yokozawa	GO-Jek
BAG	Dragonpay	Golden Gate Ventures
Bank of Chile	DSP	Google
Bank of Communication Shanghai	Easy Cencosud	Google Korea
	eBay	

\* Some participating companies explicitly requested to remain anonymous and have not been listed here

Groupon	Kickstart	National Development Bank YES
Grupo Toral SAC	KiWi	Program
GS1	KMST	Netmarketing Courses
Hailuomall.com	KPMG	New Zealand International Business
Hajah Industry	Kueski	Forum
Hayduk	Law Society Of Hong Kong	Newbuy.com
Hollowpay	Lazada	Nidy
Hong Kong Science and Tech Park	Lead Inc	NIKTA
sfht.com	Light in the Box	Nippon Express
VIECI	Lingo	Niu Jia Bang
Hunter Powell Investment Partners	Linio	Northstar Pacific
Huwai	localbrands.co.id	Novatti
IBM	Love Bonito	Noxhassen Group S.A.C.
Icona	Loyal Cabinets	Office of Electronics Transactions
Ideal	Lyoness	Promotion
Ideaspace	Macbee	Office of Chief Informations Office
IGNEA	Macromac	OgilvyOne
INADEM	Malbi	Oh-ami
Indorama Polymer	Mariace Bebes	Opportunitias
IndoSat	Maureen	OrangeNow
industria grafica vidalon sac	Maxis	OSB Investments
infomarks	MCM International	Pacific Issue
Inspire Synergy	MDEC	Padian
Institute for ICT Industries	Mercari	Paradom Innosys Co. Ltd
Instituto Peruano de Normalización	metaps	Paris
EIRL	METIS GAIA	Patricia Jara, joyas de autor
Inversiones Huarcaya E.I.R.L	Metrol	PayEasy
ISD	Michell	PEMANDU
Island Rose	Microsoft	PeruMaqui
i-style	Milkadeal	Peruvian Digital Platform
itruemart	MINCETUR	Peruvian Minerals & Jewelry
DigitalFilipino	Ministerio de Economia	Peterburg
Japan Finance Corporation	Ministry of Econ	Petsy.mx
JECCICA	Ministry of Economy, Trade and	PNG Independent & Competition
JETRO	Industry	Commission
Jong IE Nara	Ministry of Finance Japan	Pops Media
KARA	Ministry of Internal Affairs and	ProChile
Kartuku	Communications	Proctor & Gamble
KAWACHI-YA	Mitocondria	Production & Export Ramirez SAC
Kbiz	Mobivi	Professor Yuichi Morito
KFIT	Momo	PROMEXICO
Khipu	MUJI	PROMPeru
Khon Kaen Ceramic Co. Ltd.	Multicaja	Qoo10
Kichink	Muzik Creative	Quodisys
	MYTEKSI/ Grab Taxi	

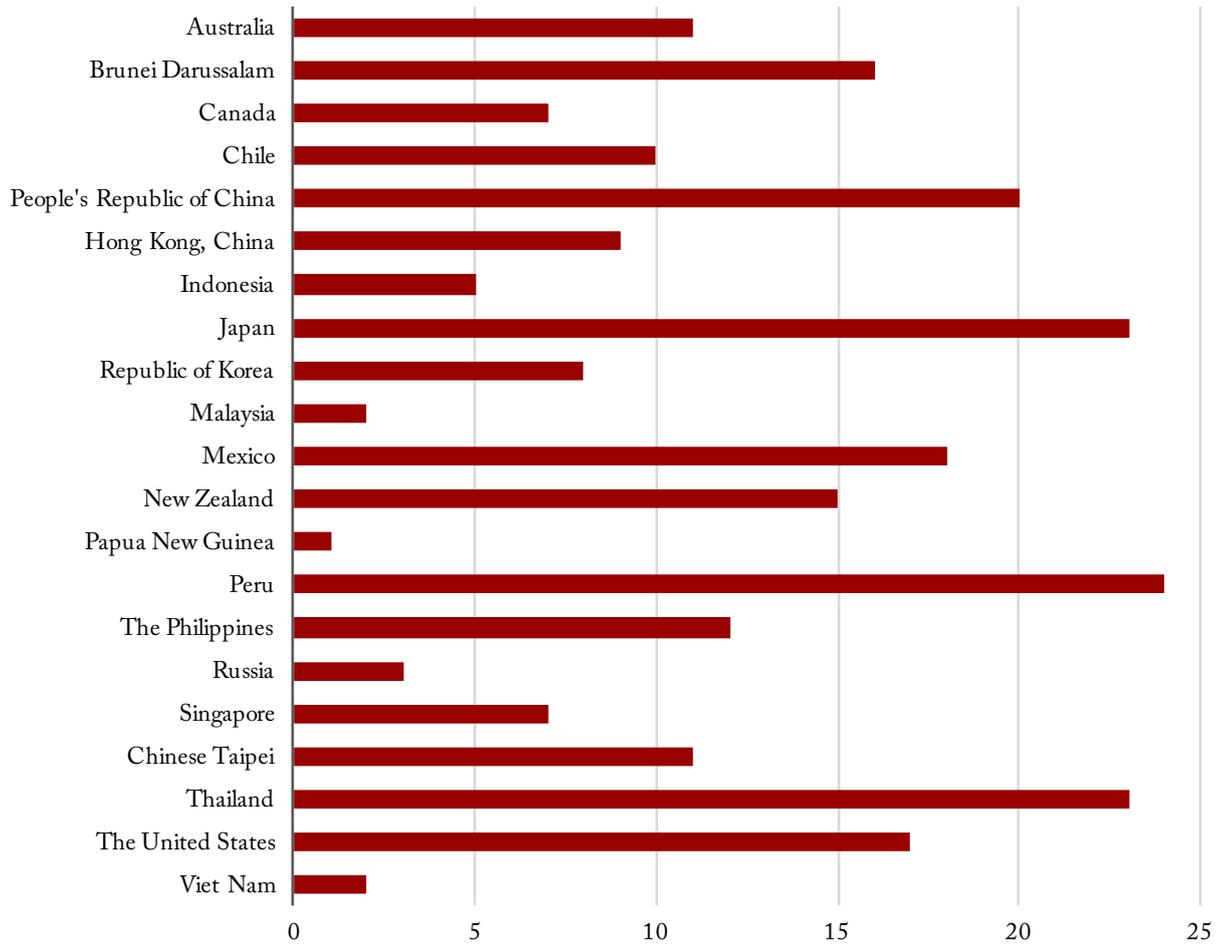
\* Some participating companies explicitly requested to remain anonymous and have not been listed here

RAB	Support and Consultation Centre	Xend
Rakuten	for SMEs (SUCCESS)	Xibao
RANSA	Taembe	Yahoo
Rennie Resources, LTD	TAITRA	Yamato Holdings Co., LTD.
Retail New Zealand	"Taiwan Pelican Express"	Zalora
Retail Prophet	Takeya	
River Crane	Tarad.com	
RocketSpace	Tazze	
Rubicon	Tealium	
Runcu Hotel	Tech in Asia	
Sabrina	Telikom	
Samsung Electronics	Telkom Malaysia	
Santiago Chamger of Commerce.	Temando	
Scotiabank - eBanking	TEMOSAC	
Scotiabank - IT Security	Tenso	
Scotiabank - Micro financing	Thai Herbal Industry Association	
ServiPag	Thai Timer Association	
Shakr	The Digital Delusion	
Shray Skincare	The Merchat Lab	
Siam Commercial Bank	The Pool	
Siemer & Associates, LLC	True Money	
Singapore Business Federation	Tualpaca.com	
SingPost SP eCommerce	UCS	
Siti	Uitox	
Siti Khadijah	Unil	
Sky Tech	United Arrows	
Sli system	UPS	
Small Business Corporation	US Department of Commerce	
SME Agency	US-ASEAN Business Council	
SME Corp	University of Southern California HK	
SnT (Ship n Track)	Association	
Social Deal	Vanity Cosmeceutical	
SOFT	Ve Interactive	
Solidiance Consulting	VECITA	
Sony Japan	Verux Boutique	
SPD Bank	Viewider	
Speakeasys	VIP.com	
Srithai Auto Seats Industry Co. Ltd	VISA	
Start Up Chile	Visionaire Concept Store	
StartupMamak, Founder Institute	VNG	
Status Textil E.I.R.L.	Wegoluck	
Stitch Appeal	Weloveshopping	
StuffGenie/Storeganise	WHITE PLUS	
Stylebis	WINIT/In4net	
	World Wide Access	

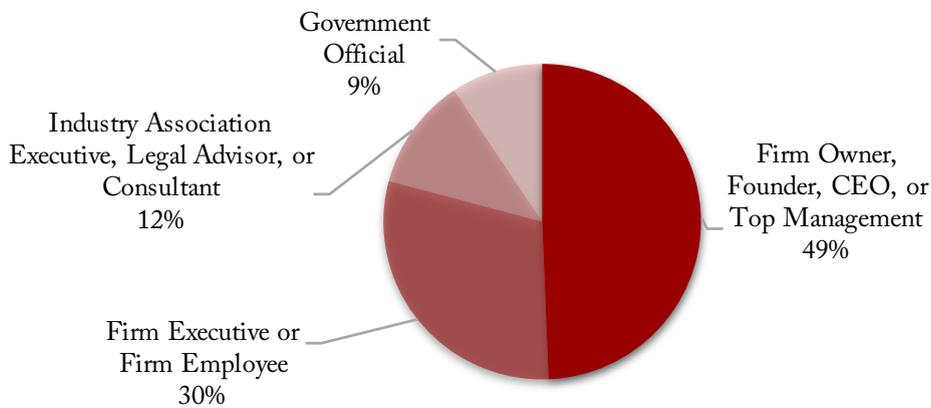
\* Some participating companies explicitly requested to remain anonymous and have not been listed here

# Appendix B: Questionnaire Results

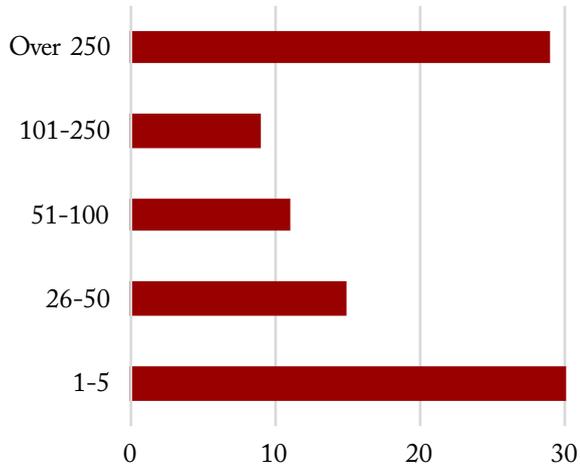
Q. Please select ONE APEC economy perspective you will use to answer the rest of this survey.



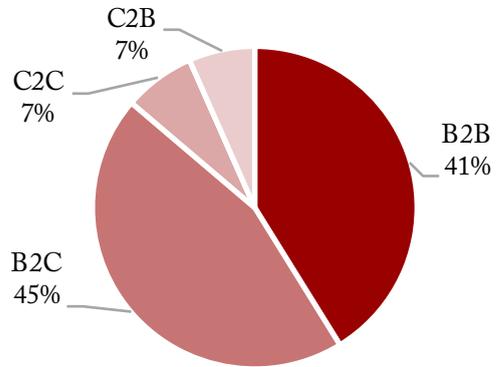
Q. To understand your perspective on these issues, please check one statement that characterizes your position?



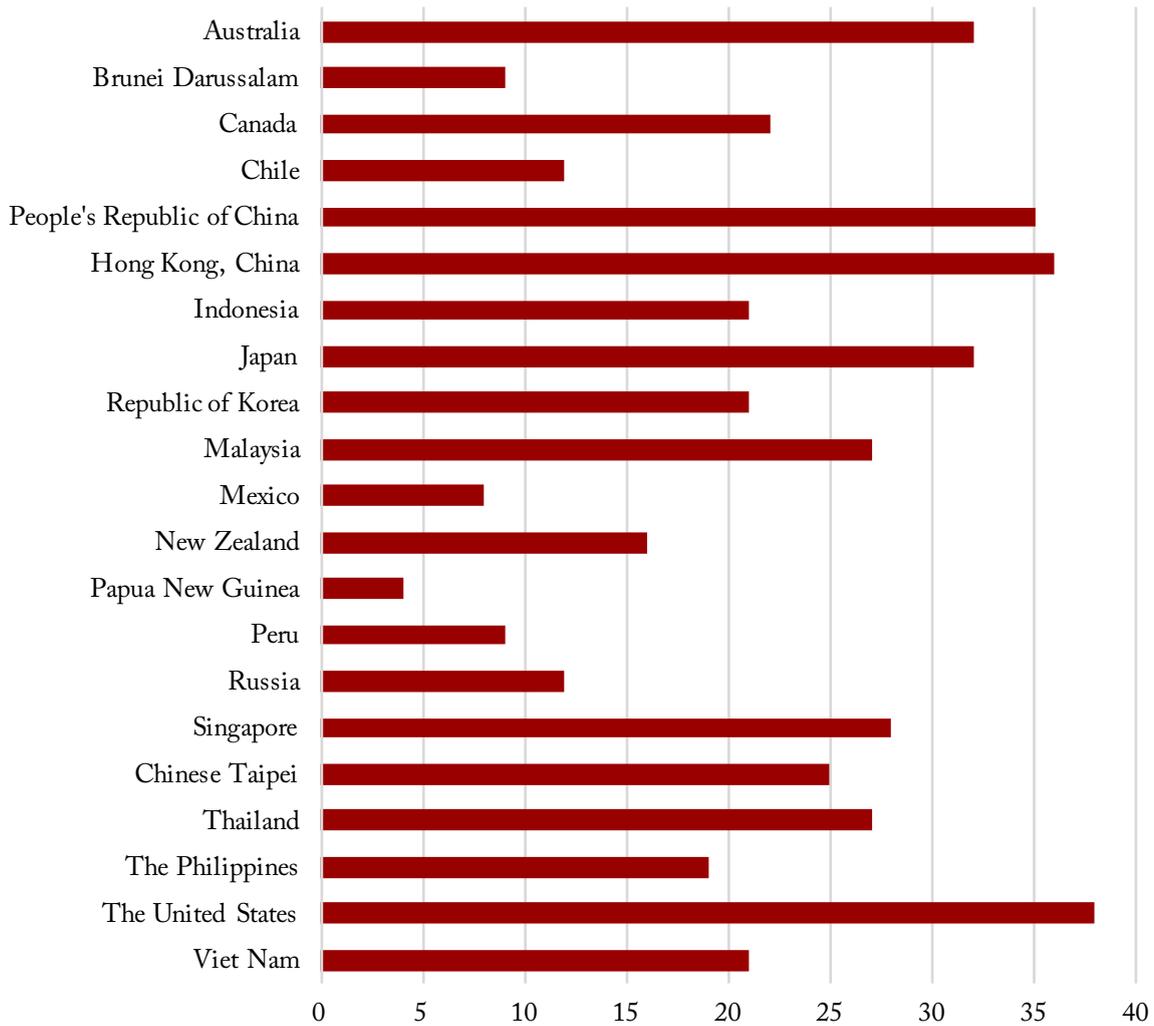
Q. How many employees does your company have?



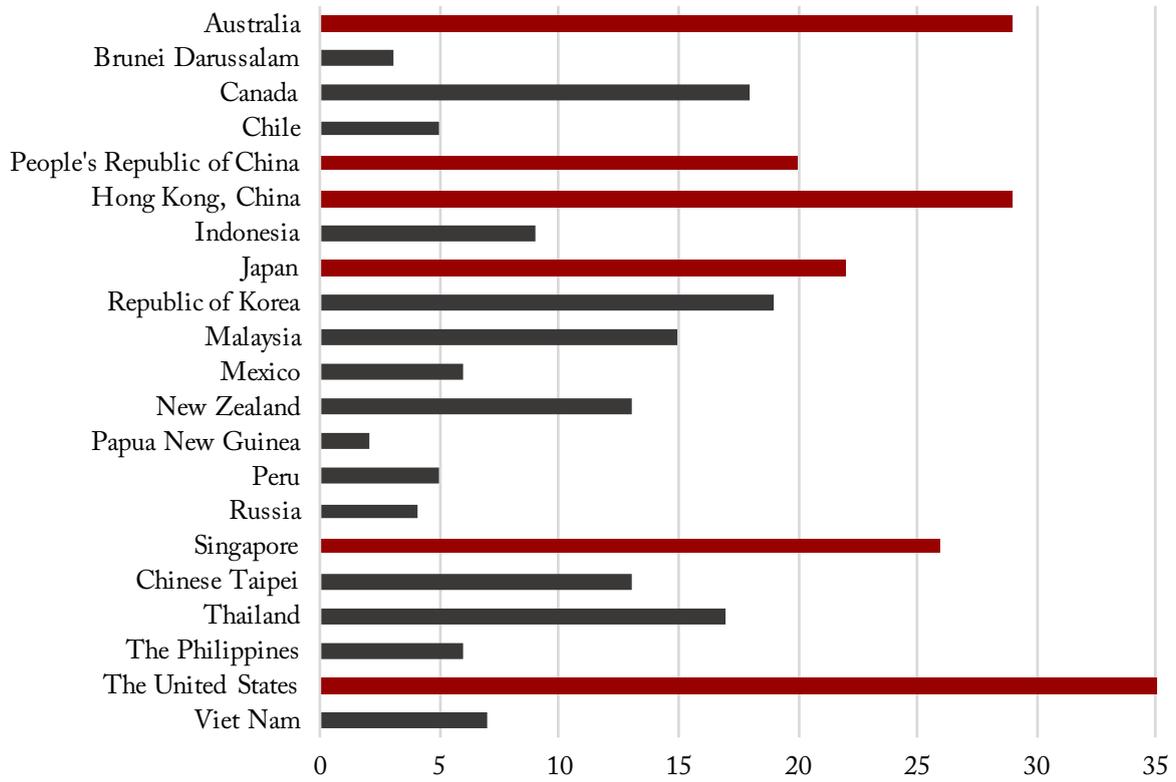
Q. What type of business does your organization participate in?



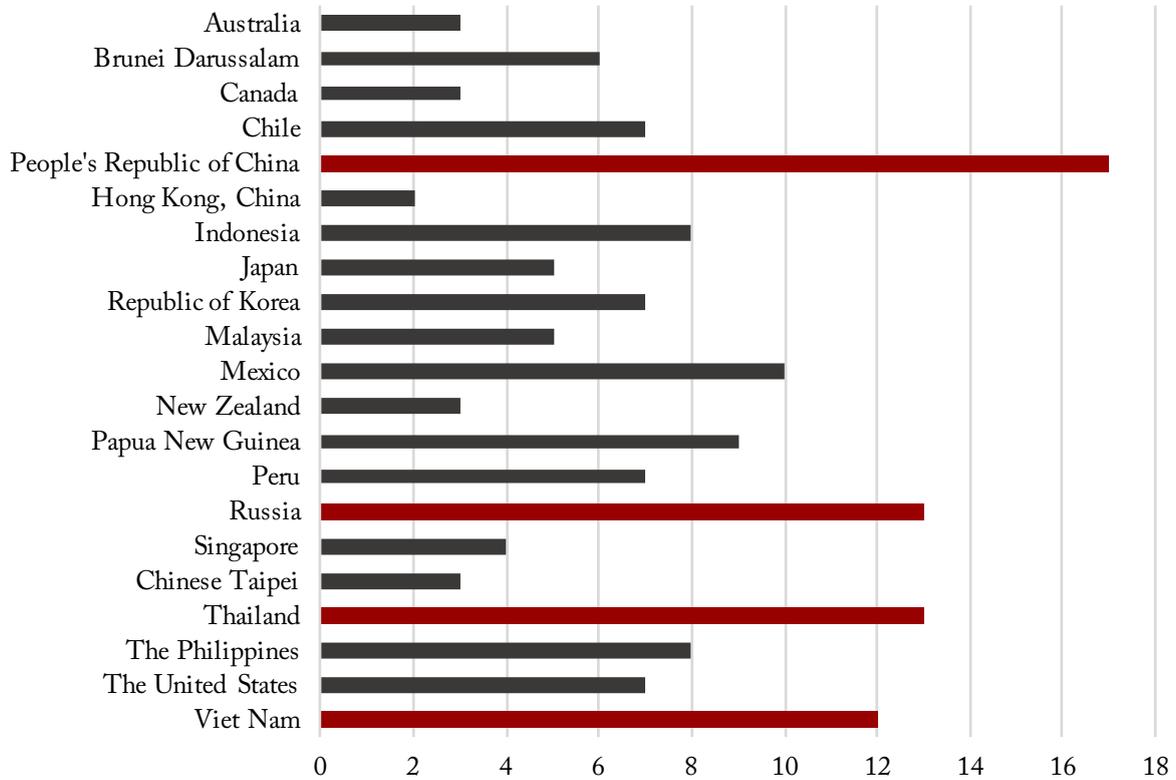
Q. Which APEC economies do you engage with in cross-border e-commerce?



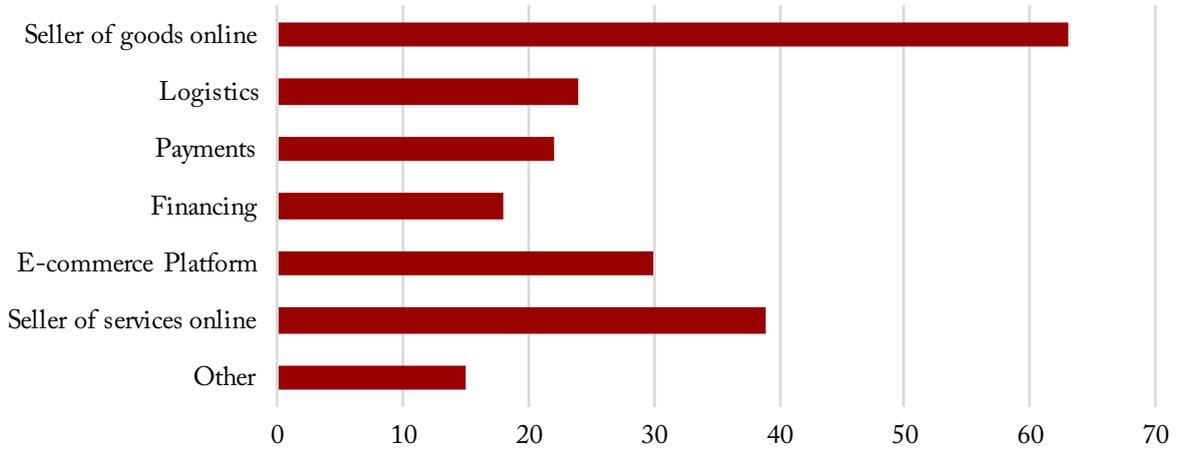
Q. Which APEC economies are **easy** to engage with in cross-border e-commerce?



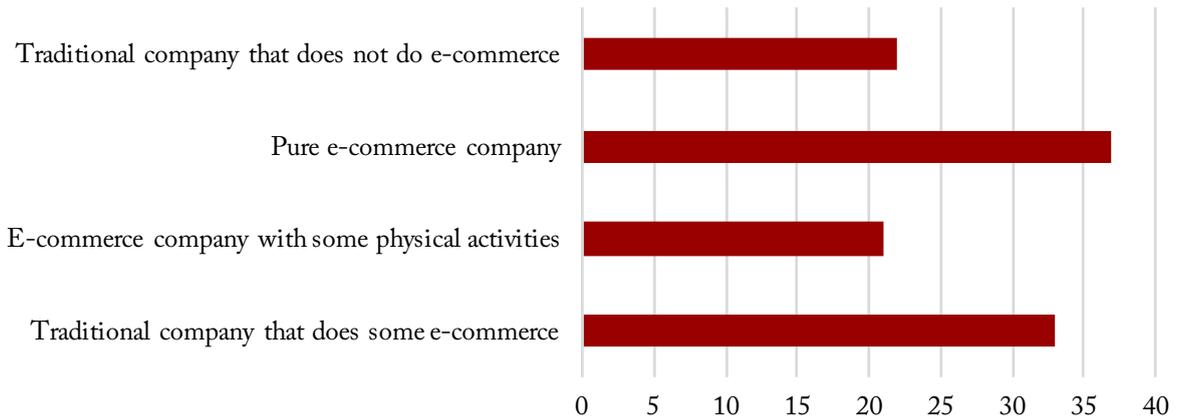
Q. Which APEC economies are **difficult** to engage with in cross-border e-commerce?



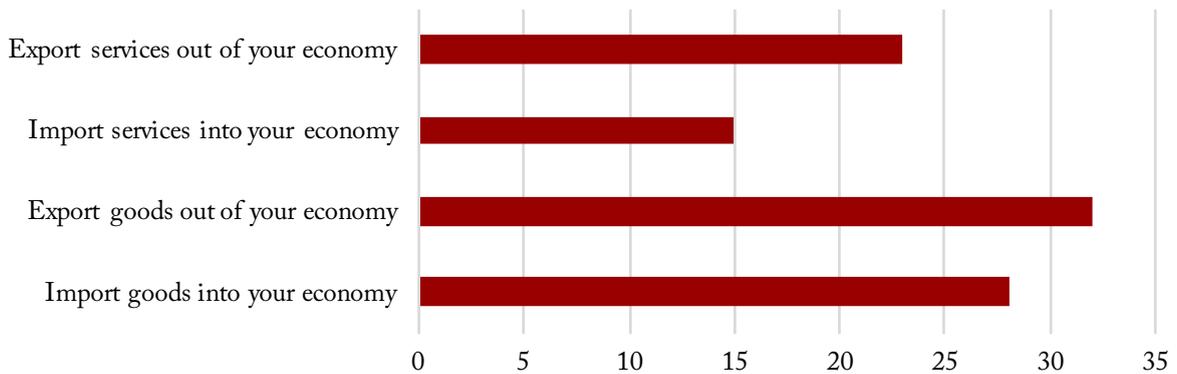
Q. In what part of the e-commerce value chain does your company participate?



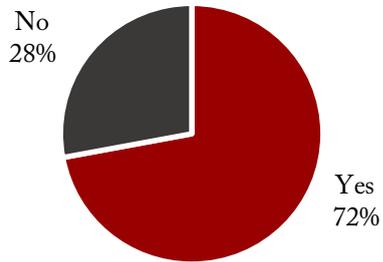
Q. How would you describe your business?



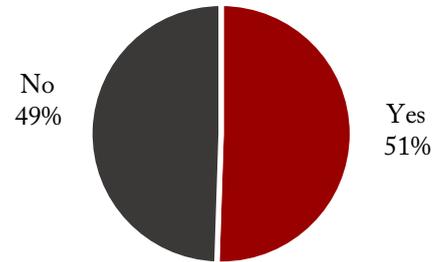
Q. What type of cross-border e-commerce does your company do?



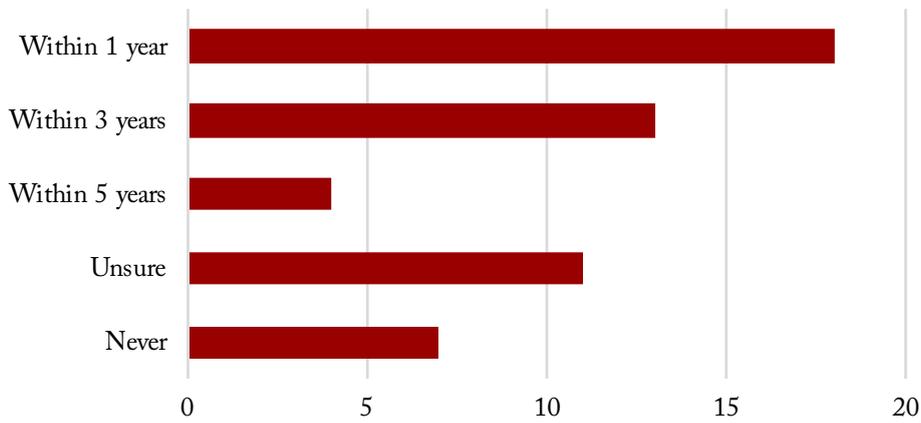
Q. Does your company participate in e-commerce?



Q. Does your company participate cross-border in e-commerce?



Q. For firms not participating in cross-border e-commerce, when do you plan to participate?



## Appendix C: Business Leaders and Government Officials Across APEC Were Interviewed Using a Rigorous Protocol

<p>Pre-Interview Preparation</p>	<p>Before the interview we researched the e-commerce ecosystem in each economy and identified businesses, government organizations, and industry groups that could aid in our project. We set up interviews by using the ABAC office in each economy, as well as by “cold” contacting individuals and using our personal networks. Before each interview, we researched the person and company we were talking to in order to better guide the discussion.</p>
<p>Interview</p>	<p>We met with each interviewee for about an hour, or in some cases conducted the interview over the phone. During the interview we followed a rigorous protocol that is explained in the next section. Some of our questions were more general and asked of everybody, while others varied based off the interviewee’s background and industry. In some situations, translators and ABAC personnel assisted in the interview.</p>
<p>Post-Interview Follow Up</p>	<p>After the interview we sent each individual that we talked to a thank you note expressing our gratitude for their time. We also sent them a questionnaire to verify responses, get more quantitative data, and test additional hypotheses.</p>
<p>Information Synthesis</p>	<p>Our team discussed in length the sentiment that we heard in the interviews, in order to standardize how we analyzed the result. After conducting each interview we ranked a list of barriers related to cross-border e-commerce on a scale of 1 to 5 based off what the interviewee said. These ratings served as the starting point for the E-Commerce Assessment that we presented in the report.</p>

## Procedures Were Standardized for Each Interview

### Research Project Description

The University of Southern California is conducting an APEC-wide research study on opportunities and challenges for MSMEs engaged in cross-border e-commerce within the APEC region for the APEC Business Advisory Council (ABAC). Most studies take a broad perspective, but this year we are looking at the specific issues that are most important to businesses in cross-border e-commerce. This study specifically seeks to capture the voice of the business community on the topic. Currently, the other members of our research team are conducting interviews in other APEC economies. We are interviewing key business executives, trade associations, key thought leaders, and government officials. Our objective in these interviews is to identify and quantify the key impediments to cross-border e-commerce for MSMEs, and to determine what policies would help overcome these impediments. Our findings will be presented to ABAC at the APEC Leaders meeting in Manila in November.

### Confidentiality

Your responses will be fully confidential. While our report will present the conclusions of our research, we will not disclose any specific company or attribute data or quotes to any executive or firm. With your permission we will only list your company's name in an appendix listing participating companies. Is it OK to list the name of your company or would you prefer to remain completely anonymous?

### Background Questions

- Ask for business card. Clarify their decision-making role in their firm.
- What is your firm's role in the e-commerce value chain?
- What is your business type? (B2B, B2C, or C2C)
- How large is your firm in terms of number of employees and annual revenue?
- Does your firm engage in cross-border e-commerce?

## **There are several limitations to a field study built on interview data.**

### **Limited Research Scope**

The explicit objective was to capture the APEC business voice on barriers and impediments to cross-border e-Commerce for MSMEs. This means adopting what is referred to throughout this report as the “business perspective.” The business perspective includes all factors that impact a firm’s strategic and profit-seeking decisions. No effort was made to limit discussion with business executives to factors that can be influenced by policy initiatives in the short or medium term. The report explicitly acknowledges that many of the factors included in the analyses are beyond the influence of governments. However, we include them because business executives reported that they do deter and discourage them from doing cross-border e-Commerce business in certain economies. Deficiencies in infrastructure, geographic location, institutional voids, and lack of critical resources were often reported as reasons for not starting cross-border e-Commerce in a particular economy. We believe it is important that policy makers have this information.

This study is intentionally a field research project based on interviews with APEC businesses, and it is limited to conditions affecting cross-border e-Commerce environments in 2015. It is not longitudinal. If it proves valuable it will be because it complements and expands upon more secondary data based studies. It is not intended to substitute for the rigor of econometric studies.

There are both advantages and disadvantages to a field study designed specifically to capture the personal experiences and opinions of APEC business leaders. The obvious advantage is that the primary data collected is interview data that captures the real problems and challenges encountered by firms. The major disadvantage is that the data is qualitative, making it extremely difficult to compare across firms which leads to challenges in drawing out rigorous generalizations.

### **Substantive Limitations**

The validity and generalizability of any and all findings and conclusions of this report is constrained by the quality and knowledge of the set of business executives and thought leaders available for interviews. The ABAC Secretariats made honest attempts to have researchers interview a representative sample of business executives and “multipliers.” However, the findings of the report are directly limited to the quality and comprehensiveness of the information received from the interviews. Limited numbers of interviews were obtained in Russia, Canada, and New Zealand. For these economies, substantial use of secondary information was used to complement the data received during the interviews.

### **Research Design and Methodological Limitations**

Thirteen different interviewers were used during this research. In most cases, one interviewer conducted all the interviews within an economy. This created a problem of cross-interview rater reliability. Efforts were made during the interview analyses phase to use standardized protocols and rating schemes to ensure comparability across interviewer.

There is no way of knowing whether we have captured a fair sample of executive opinions in an economy. We gained confidence when executives repeated the same set of barriers and impediments. But this remains a major limitation of this study.

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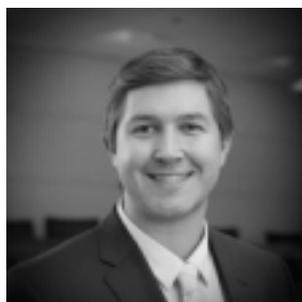
## Appendix E: The Team....



**Steffen, Kimberly** |Team Co-Lead |USA

*Economies: Chinese Taipei & USA*

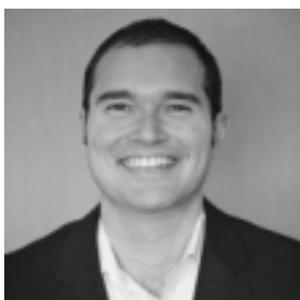
Kimberly received her BA from the University of San Francisco in International Studies with a focus on Asia and Politics. Post-graduation, Kimberly moved to Shanghai, China where she studied Mandarin for one year at Shanghai Normal University. Upon her return to California, she began working in export logistics with a food and beverage exporter in LA. Kimberly will pursue a career in medical device marketing after receiving her MBA from the University of Southern California.



**Stout, Adam** |Team Co-Lead |USA

*Economies: Viet Nam & Brunei Darussalam*

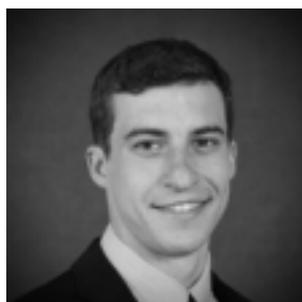
Adam holds a bachelor degree in Economics from Princeton University. Prior to coming to the University of Southern California and joining the ABAC team he has worked in international manufacturing, financial services and co-founded a data transfer startup. He will continue a career in the entrepreneurial technology world and spent his summer working at SpaceX in Los Angeles.



**Andrade, Marcelo** |Brazil

*Economies: Japan & Russian Federation*

Marcelo holds a bachelor degree in Economics from the Federal University of Pernambuco. Prior to the University of Southern California, he worked at Ernst & Young in Brazil for over 7 years, in the Transaction Advisory Services Department. During Summer 2015, Marcelo interned at the private equity department at Laird Norton Company. After completing his MBA, Marcelo looks to continue pursuing a career in Finance.



**Beckham, Jason** |USA

*Economies: Korea & Indonesia*

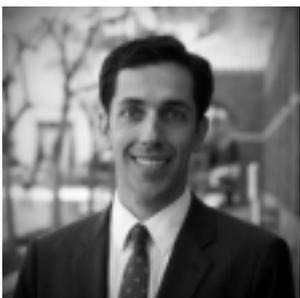
Jason graduated with dual Bachelor's degrees in Business Management and Spanish from San Diego State University. Prior to the University of Southern California, he worked in Sales and Operations in the Consumer Goods industry for four years. During summer 2015, he worked as a Sales Operations Strategy Intern to develop Go-to-market strategies for two key apparel product lines. Jason is passionate about global sales, operations, and supply chains and looks to pursue a career in consulting upon completing his MBA.



**Cai, Wen Ling | China**

*Economies: Peru & United States*

Prior to Marshall, Cathy worked at BP for six years in roles ranging from finance, corporate development to strategic planning, and gained great exposure in global business environment. Most recently as MBA intern, Cathy worked in high tech as a financial business partner. Cathy holds a Bachelor's degree of International Accounting and is a member of ACCA. With solid background in analytics, Cathy is leading Marshall's Data Analytics Club, which is dedicated to empowering data-driven business leaders.



**Christy, Patrick | USA**

*Economies: China, New Zealand, & Republic of Korea*

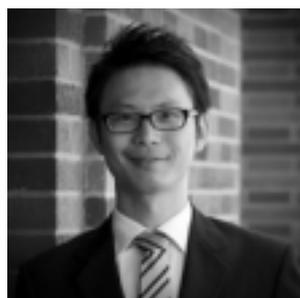
Patrick earned his Bachelor's degree in Political Science from Vanderbilt University. During summer 2015, Patrick interned at Northrop Grumman Aerospace Systems. He previously served as deputy policy director at the Foreign Policy Initiative in Washington, DC. His writings on a range of foreign policy and international trade matters have appeared in The Diplomat, U.S. News & World Report, and other periodicals.



**Hall-Partyka, Philip | USA**

*Economies: Papua New Guinea & Philippines*

Prior to the University of Southern California, Phil worked as a researcher at the RAND Corporation on projects for Department of Defense clients. He is the author of over a dozen published reports that primarily focus on strategic workforce planning. For the last year, Phil has worked as an associate at a private equity fund in Los Angeles. He received his Bachelor's Degree in economics from Wesleyan University.



**Lin, Yung-Yu (Nicolas) | Taiwan**

*Economies: Chile & Australia*

Prior to starting his MBA at the University of Southern California, Nicolas earned a Bachelor of Science degree in Mathematics from National Central University and a Master of Science degree in Computer Science from National Chiao Tung University. Nicolas joins the ABAC team after spending three years as a software developer and a project manager in the Asian e-commerce business at Yahoo!. After finishing the summer internship at Facebook as a business analyst, he is now pursuing to extend his career in technology and e-commerce.



**Mani, Naveenkumar | India**

*Economies: Hong Kong & Thailand*

An Indian by citizenship, Naveen possess a Bachelor of Engineering degree in Automation systems from Anna University, India and was working as an operations consultant with the utilities and energy sector. During summer 2015, Naveen interned at Cisco Systems Inc. in their risk and governance team working on business analytics. He has worked extensively on cross-border supply chain issues and has a strong experience in data analytics. Naveen joins the ABAC team with a focus on strategy consulting as a career post MBA.



**Okumura, Satoko | Japan**

*Economies: Japan & Peru*

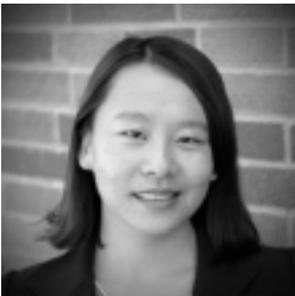
Satoko joins the ABAC Research Team with four years of experience in the Pharmaceutical industry as a clinical research associate. She has a Master's and Bachelor's of Science degree in Pharmaceutical Science from Kyoto University in Japan. She is now pursuing a Master's of Business Administration degree and a career in the global healthcare industry.



**Ting, Tu Yan | Malaysia**

*Economies: Indonesia, Malaysia, & Singapore*

Yan earned his entrepreneurial chops over the last seven years as a co-founder of Kartuku, the premier payment service provider in Indonesia. He is experienced with building and managing teams in research and product development, information security, finance and operations. Yan holds a Bachelor of Science degree in Industrial Engineering from Columbia University. He will continue to pursue his entrepreneurial endeavors after obtaining his graduate degree.



**Yang, Ting | China**

*Economies: China & Canada*

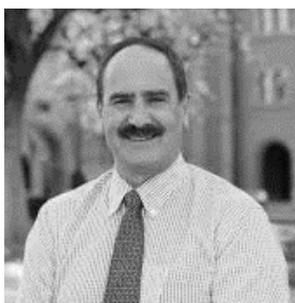
Ting Yang joins the ABAC research team with five years experience in Human Resources. She worked at Intel Dalian and Kimberly-Clark Shanghai before coming to the University of Southern California. Ting earned a Master's degree from Dongbei University of Finance and Economics in Dalian. She also holds a Bachelor of Arts degree in accounting from China University of Mining and Technology in Jiangsu. She will work as HR manager in Cisco Systems in San Jose after receiving her MBA.



**Liebeskind, Julia Porter | Ph.D | England**

*Faculty Advisor*

Dr. Julia Liebeskind has worked during her career for government, for business, and as an academic. Dr. Liebeskind worked as an economic analyst for the English Tourist Board and then worked for a number of years as an independent consultant based in Rome before joining Tate & Lyle PLC. Julia worked at the University of Southern California, teaching competitive strategy and focusing her research on corporate diversification and restructuring, and later, on transactions of intellectual property. She lives in Los Angeles, California and Oxford, England.



**Voigt, Carl W. | Ph.D | New Zealand**

*Economies: Mexico & New Zealand*

Carl Voigt serves as faculty director for the University of Southern California Marshall-ABAC research program. He is a Professor of Clinical Management & Organization. He has worked jointly with ABAC since 2005 to direct teams of MBA researcher on 11 research projects for ABAC. He specializes in teaching business, corporate, and global strategy, and management courses in University of Southern California Marshall's undergraduate and MBA programs. His academic interests are business, corporate and global strategy, and in particular entrepreneurship.