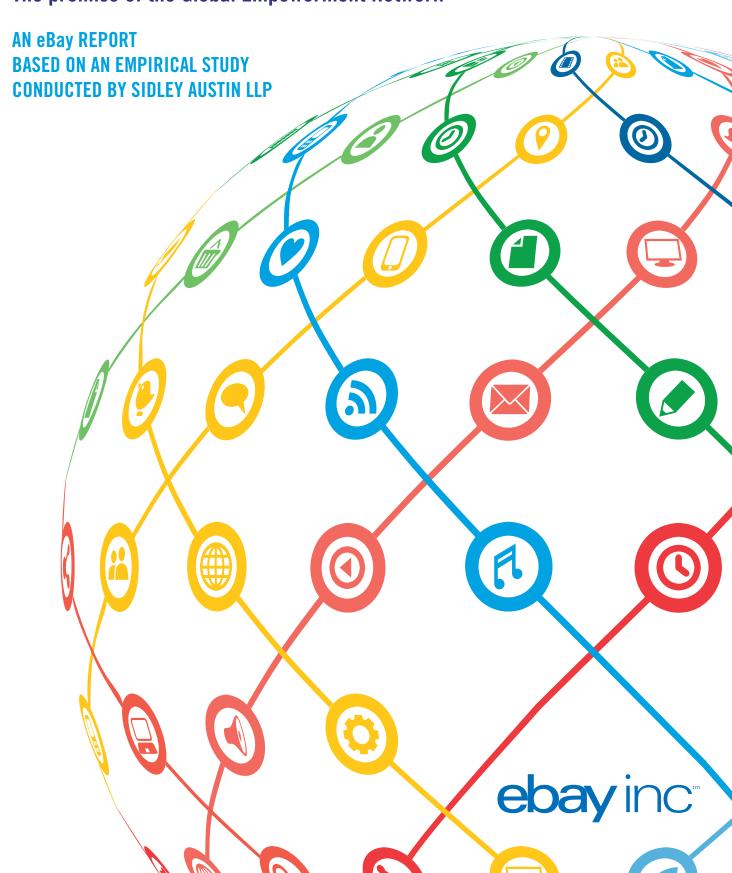
COMMERCE 3.0FOR DEVELOPMENT

The promise of the Global Empowerment Network



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EXECUTIVE SUMMARY

Trade and globalization have no doubt resulted in increased jobs and wealth around the world, but up until now it has only been the few largest players who have been able to take full advantage of globalization. If a small business wished to participate in the global economy, it was largely relegated to providing an intermediate product to a large multi-national supply process. This model for trade is the result of the immense resources that have traditionally been required to develop an international consumer base and deliver a product or service efficiently across borders.

A parallel model for trade is emerging.

Technology, particularly drawing on the Internet, is now enabling businesses of all sizes to trade directly with consumers around the world. This new model for trade is exciting because it means that a technology-enabled small business can maintain a local presence and contribute to its local economy while increasing its revenue by reaching out to a global customer base.

The model can be referred to as the

Global Empowerment Network.

This report demonstrates the great transformative power of the Global Empowerment Network.
eBay Inc. has released four reports over the past two years describing how technology-enabled small businesses in the developed world have benefited from trade. This report confirms that

the Global Empowerment Network works for everyone: developed, emerging, and developing countries.

First, we can show that the technology-enabled global marketplace truly is flat. Barriers to trading across distance are 83% lower for trade over such a marketplace compared to traditional markets. The effect is even more pronounced looking solely at trade by developing countries over such a marketplace (94%).

Second, by analysing eight developing and emerging markets, we can show that the benefits of technology are also being realized by enterprises of all sizes in those markets. Technology-enabled businesses in developing and emerging economies see increased export

rates, endless number of markets within reach, and higher survival rates in precisely the same way as technology-enabled businesses in the developed world.

The findings of the report are impressive; some of the highlights include:

- 1) **Over 95%** of the small businesses analysed in the study engage in exporting.
- Across the eight markets analysed, the average number of international markets that exporters reach is around 30 to 40.
- 3) **60-80% of new businesses analysed** "survive" their first year. The respective figure for traditional exporters is only around 30-50%.

The report concludes with a detailed policy analysis of the eight countries providing a lens into the creative policies that governments have adopted to foster the growth of technology-enabled small businesses. The analysis also puts forward policy recommendations for these governments to consider. Policy is an underlying factor in creating an effective Global Empowerment Network.

The policy areas identified as key for creating the right conditions that would allow small businesses to benefit from the Global Empowerment Network are:

- Investment in Open, Interconnected
 Broadband and Smartphone Technology
- Optimized and Harmonized Shipping and Postal Regimes
- Robust Intermediary Liability Protections
- Increased and Harmonized De Minimis Thresholds
- International Exhaustion of Copyright and Trademark
- Promoting Electronic Payment Methods
- Improved Customs Processes Through Increased Technology Adoption
- Recognition of Technology-Enabled Small Businesses and the Global Empowerment Network in Free Trade Agreements

We hope this report will begin a new conversation on global trade. Technology is revolutionizing the type of actors and the method by which these actors engage in and benefit from trade. We hope that policymakers will take note of these developments and will implement policies to further the exciting trends highlighted in this report.

INTRODUCTION

In a series of reports released in Europe, the United States, Australia and Asia-Pacific, eBay has shown that the powerful combination of the Internet and technology is enabling small businesses like never before to reach beyond a local customer base and build global operations.

Commerce 3.0 is the term we have used to capture this development of online and offline worlds coming together and the merging of local and global markets. The idea that technology-enabled small businesses can maintain a local presence while providing goods and services on a global scale is a novel and exciting story.

Technology has created tools for businesses of all sizes to engage in trade. The Internet creates a truly global network. When the Internet is combined with technology solutions and services, businesses and consumers are empowered, and are able to connect and establish trust across national and cultural borders. This model can be referred to as the **Global Empowerment Network**, and it runs along side another internationalization model known-as Global Value Chains.

Our previous reports looked at how the Internet and technology services — exemplified by the eBay Marketplace — shaped trade flows and export behavior of firms in developed markets. With this report, we have extended our research to study the impact of technology-enabled trade on firms in developing and emerging markets.

A team of economists at Sidley Austin LLP has conducted economic research based on a global dataset of cross-border eBay Marketplace transactions. They have compared this with "traditional" trade flows between countries. They have thereafter zoomed in on sellers in eight developing and emerging markets from around the world: Chile, Peru, Ukraine, South Africa, Jordan, India, Indonesia and Thailand.

As in our previous reports, the eBay Marketplace provides the illustration of a new model for trade that is taking shape. Importantly, we believe our findings to be applicable generally to the nexus of trade and technology.

This report is divided into three parts. First, we utilize economic analysis to describe what happens when technology meets trade in developing and emerging markets. We find that geographical distance in fact has a minimal trade-reducing effect on trade flows powered by technology. Second, we take a look at what this finding means for sellers in eight developing and emerging markets. We discover that it translates into internationallyminded entrepreneurs as well as export markets less dominated by a few large firms. Third, we set out to identify the key policy actions in developing and emerging markets that promote, and detract, from the ability of technology-enabled businesses to effectively reach world markets. Indeed, legal rules and administrative procedures have a key role to play in ensuring that the Global Empowerment Network continues to thrive.

TECHNOLOGY MEETS TRADE

As connectivity improves, the power of the Global Empowerment Network to allow small, local businesses to reach a global customer base will only increase.

- Internet access has grown by over 300% in developing and emerging markets between 2004 and 2012. For the same period, total sales on eBay have grown by almost 800% in developing countries.
- Distance matters 83% less for trade on Internet enabled global marketplaces compared to traditional markets.
- The significance of technology is even more pronounced for developing markets where distance matters 94% less for Internet enabled trade compared to traditional trade.

POWER OF THE GLOBAL EMPOWERMENT NETWORK

Trade and globalization have no doubt resulted in increased jobs and wealth around the world, but up until now it has only been the few largest players who have been able to take full advantage of globalization. If a small business wished to participate in the global economy it was largely relegated to providing an intermediate product to a large multi-national supply process (the Global Value Chains model). This model for trade is the result of the immense resources that have traditionally been required to develop an international consumer base and deliver a product or service efficiently across borders.

A parallel model for trade is emerging.

Technology, particularly drawing on the Internet, is now enabling businesses of all sizes to trade directly with consumers around the world. This new model for trade is exciting because it means that a technology enabled small business can maintain a local presence and contribute to its local economy while increasing its revenue

by reaching out to a global customer base. This model can be referred to as the Global Empowerment Network.

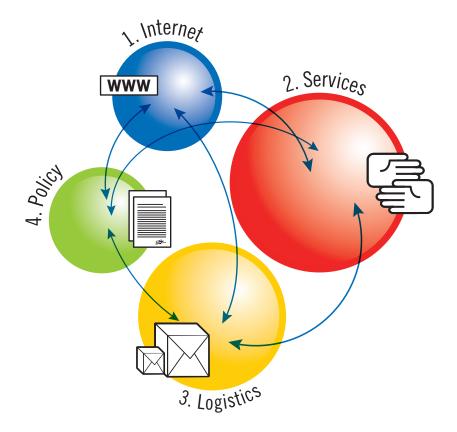
The Global Empowerment Network brings together a set of services and conditions that contribute to an emerging borderless system, which enables economic activity in new shapes and forms.

This system of building blocks is presenting an alternative model for small businesses to join the global economy: they can build a global presence on a set of digital services and solutions that can be tweaked to accommodate their needs and resources. Where these services and solutions are complemented by the right legal and administrative conditions, we are on track to unlock the next wave of globalization that encompasses all countries, businesses of all sizes and shapes, and individuals.

We have identified the following four key building blocks of the Global Empowerment Network:

- 1. Connectivity at low cost and without gatekeepers
- 2.Innovative payment, marketing, translation, and marketplaces services
- 3. Moving products sold by many small traders around the world efficiently
- 4.Legal rules and administrative procedures for a world where small firms and consumers are part of global trade

With this report we explore the power of the Global Empowerment Network. We find that it is already transforming trade by allowing the smallest businesses and individuals to overcome geographic distance and trade confidently with each other. From there, we seek to identify the policies that are both furthering and hindering its use.



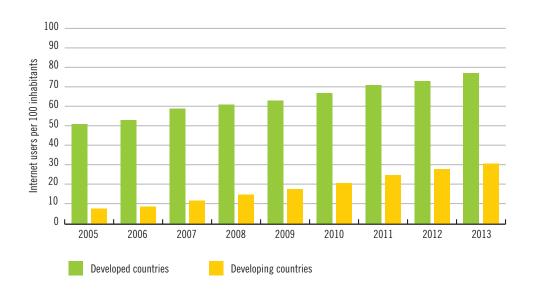
THE PROMISE OF TECHNOLOGY

A fundamental building block of the Global Empowerment Network is connectivity. Little surprise therefore that, initially, digital commerce services, such as online marketplaces, have been used primarily by sellers and buyers located in developed countries with the roll out of reliable broadband, high throughput speeds, and drop in prices.

In 2013, it is estimated that about a third of all people in developing countries are using the Internet, compared to almost 80% in developed countries.² However, in recent years, Internet usage has grown much faster in developing countries, as compared to the developed world.

Internet access has grown by over 300% in developing and emerging markets between 2004 and 2012. Internet enabled trade will gain in importance as the connectivity gap continues to close. For instance, during that same period, total sales on eBay have grown by almost 800% in developing countries.

FIGURE 1: SHARE OF INTERNET USERS



Note: The chart shows internet users per 100 estimates. Source: International Telecommunication Union (http://www.itu.int/en/ITU-D/Statistics/Documents/statistics/2013/ITU_Key_2005-2013_ICT_data.xls).

ENABLING TRADE, DISRUPTING DISTANCE

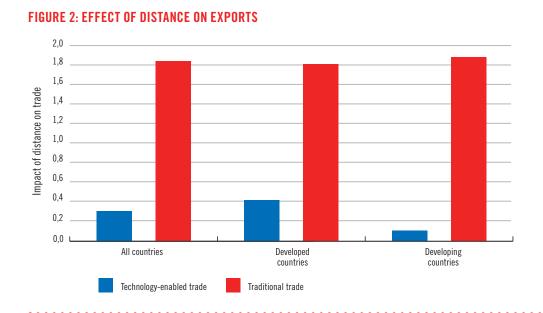
A key variable that is commonly found to have a large — and negative — impact on trade is geographic distance. Countries further apart trade less with each other. One typically finds that a 10% increase in distance reduces trade by 15-20%.

Trade over Internet enabled marketplaces, such as the eBay Marketplace, is much less affected by distance. Our research shows that a 10% increase in distance reduces eBay trade by only around 3%, whereas it reduces traditional exports by 18% — i.e. by almost six times as much.

Significantly, the impact of technology is even more pronounced in the case of trade from developing countries. We find that a 10% increase in distance results in no more than a 1% decrease in technology enabled trade from developing countries.

Put differently:

- Distance matters 83% less for trade on Internet enabled global marketplaces compared to traditional markets
- For developing countries, the figure is 94%.

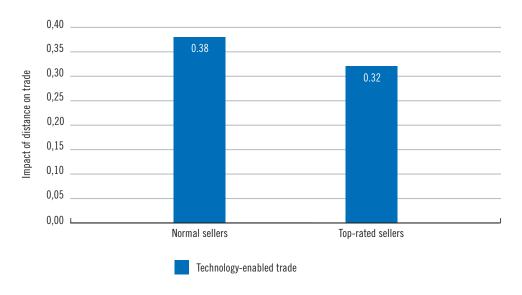


Note: The chart illustrates the trade-reducing effect of geographic distance. For example, a 1% increase in distance reduces eBay trade by 3.1%, and traditional trade by 18.4% (among all countries). The results are based on a regression analysis of global trade flows and are all statistically significant (see Appendix for details).

The power of the Internet and technology enabled services to facilitate communication and information exchange explains this trend. There are various and constantly evolving tools and services to inform choices and decisions.

To take an example, eBay has a system that rates sellers based on customer feedback. A seller who consistently delivers great customer experience may be rewarded the quality badge "eBay Top Rated Seller" (eTRS). The badge eTRS is of course only one of several criteria that may inform the consumer's decision, but it is nevertheless a technology tool allowing buyers to overcome distance. This can be seen in how the negative effect of distance is lower for sellers with the eTRS badge as demonstrated in Figure 3.

FIGURE 3: EXAMPLE OF TECHNOLOGY TOOL'S IMPACT ON DISTANCE EFFECT



Note: The chart illustrates the trade-reducing effect of geographic distance for normal and top-rated eBay sellers (see Appendix for details).

WHEN TECHNOLOGY IS PUT TO USE

What happens when businesses in developing and emerging markets make use of Internet enabled global marketplaces?

- Almost all businesses analysed engage in exporting.
- They reach far more foreign markets than traditional exporters.
- Newcomers are able to quickly gain sizeable market shares.
- Newcomers have a higher probability of remaining in the market after their first year than they do in the traditional context.

We can conclude that the Global Empowerment Network carries great potential for small businesses in developing and emerging markets that want to capitalize on a worldwide customer hase.

A LOOK AT EIGHT DEVELOPING & EMERGING MARKETS

The previous section showed that the Internet enabled global marketplaces — illustrated by the eBay Marketplace — bridge distance for trade.

To describe the importance and huge potential of this finding for entrepreneurs and business in developing and emerging markets, the Sidley Team undertook a more detailed analysis of eBay trade by "commercial sellers" based in eight different countries³: Chile, Peru, Ukraine, South Africa, Jordan, India, Indonesia and Thailand.

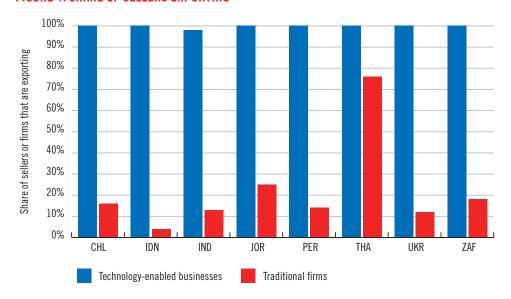
We choose countries from several continents and representing both small and large developing and emerging countries.

The overall sales on eBay by commercial sellers in these eight countries have grown by 170% in only five years. Similarly, the number of commercial sellers from those countries trading on eBay is growing fast. It has doubled between 2008 and 2012.

Figure 4 illustrates the exceptional finding that almost all these technology-powered sellers are exporters. This stands in stark contrast to the situation for traditional firms. The World Bank provides survey data for a wide range of countries, showing the share of businesses that are exporting. This shows that only relatively small shares of firms are involved in export activities, even if one includes indirect exporting through intermediaries.

As shown in Figure 4, roughly 10-20% of traditional firms across the eight countries report that they are exporters. Thailand is an outlier, with 3 out of 4 firms reporting to export — but that is still lower than what we observe among eBay sellers.⁴





Note: eBay data is based on commercial sellers (annual sales \geq USD 10'000) in 2012. World Bank data is from the "Enterprise Surveys" and includes firms that report to export indirectly (e.g., through intermediaries (see www.enterprisesurveys.org/Methodology)).

These findings suggest that the Global Empowerment Network has the ability to enable any entrepreneur to reach foreign markets — and reach practically any market worldwide.

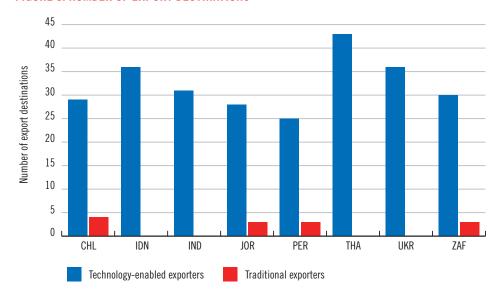
The Sidley Team found that commercial eBay sellers in the selected eight countries reach more than 200 different destinations, ranging from 93 markets reached by sellers in Jordan to 198 for those based in Thailand.⁵

Across the eight markets analysed, the average number of different markets that individual

exporters reach is around 30 to 40. This is a very different picture from what one can observe for traditional exporters. The Sidley Team analyzed such exporters based on a new database provided by the World Bank⁶ that covers exporters in 45 countries, including four of the eight countries covered by this report (Chile, Peru, Jordan and South Africa).

Figure 5 below contrasts our findings of eBay exporters with traditional exporters in these markets, who reach on average only 3-4 different markets.⁷

FIGURE 5: NUMBER OF EXPORT DESTINATIONS



Note: Based on commercial sellers (annual exports ≥ USD 10'000) in 2012. Source for "traditional exporters": World Bank EDD database (such data is not available for Indonesia, India, Thailand and the Ukraine).

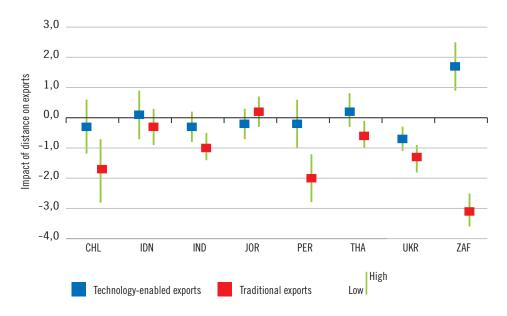
We have already shown that trade over the eBay network is in general much less constrained by distance, which helps to explain why firms on eBay become successful exporters to a degree unmatched by traditional firms.

Indeed, looking specifically at the impact of distance on trade flows from the eight selected countries, geographic distance has no statistically significant effect on eBay trade — not even when controlling for variables such as the size

of destination countries. The commercial sellers making use of the eBay network from the countries analyzed export almost independently of distance to the destination market.

In contrast, for traditional exports — based on a subset of such exports in products similar to the ones traded on eBay —distance to the destination market has a significant trade-reducing effect on eBay sales.

FIGURE 6: EFFECT OF DISTANCE ON EXPORTS

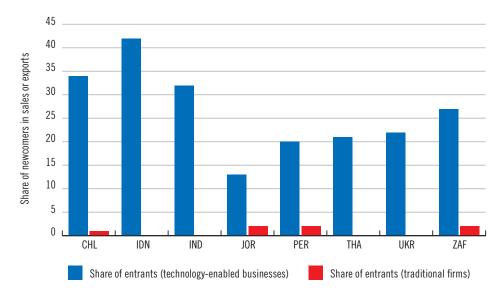


Note: The chart shows the results of a so-called "gravity regression", in which the effect of geographical distance on trade flows is empirically tested. The chart shows the estimates (green for eBay exports and red for "traditional" exports) and a 95% confidence interval illustrated by the vertical lines. This shows how precisely the distance effect is estimated. If the confidence interval encompasses zero, then this means that the estimate is not statistically different from zero, i.e., there is no statistically significant effect of distance on exports. This is for example the case for the first estimate on the left (for eBay exports from Chile), whereas the second estimate ("traditional" exports from Chile) is negative and statistically different from zero (see Appendix for details).

As noted, traditionally, only large corporations engage in exporting. Data from the World Bank shows that conventional exports are totally dominated by established firms, with newcomers accounting for a mere 1-2% of exports. Moreover, World Bank data shows that the largest 5% of firms typically account for 80-90% of all exports of a country.

However, the proliferation of the Global Empowerment Network is changing this. We find that newcomers make up for a much larger share of sales on eBay. "Newcomers" — defined as sellers that did not make any sales in the previous year — account for substantial shares of sales. Across the eight countries, their share is on average around 26%, and in some countries even more (e.g., 42% in Indonesia).

FIGURE 7: SHARE OF NEWCOMERS

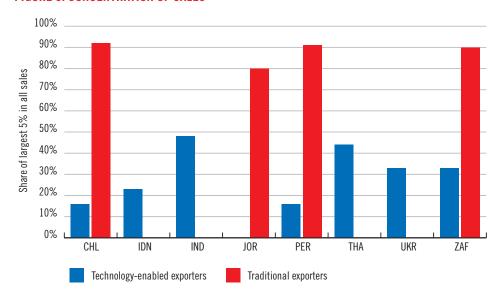


Note: Newcomers (or "entrants") are defined as commercial sellers that were active in one year, but did not make enough sales in the previous year to qualify for being a commercial seller. The results are based on an average across 2009-2012. Source for "traditional exporters": World Bank EDD database, latest available year (2009 or 2010). Such data is not available for Indonesia, India, Thailand and the Ukraine.

We also find that the largest sellers on eBay do not dominate sales as they do in traditional markets — they only account for roughly one third of total sales. For example, 91% of Peru's total traditional exports are conducted by the largest 5% of all

exporters, and on eBay the equivalent figure is only 16%. Figure 8 shows these figures for all eight eBay markets⁹ and compares it with World Bank figures for the four markets for which we have such data.

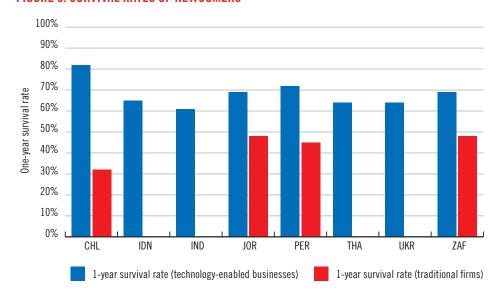
FIGURE 8: CONCENTRATION OF SALES



Note: The chart shows the share of sales conducted by the largest 5% of sellers. Only commercial eBay sellers with annual sales of at least USD 10'000 are considered. The results are based on 2012 data. Source for "traditional exporters": World Bank EDD database, latest available year (2009 or 2010). Such data is not available for Indonesia, India, Thailand and the Ukraine.

Newcomers (i.e., eBay sellers that did not sell in the previous year) in developing countries also have a much higher chance to remain in the market — we find that 60-80% of new sellers "survive" their first year. The respective figure for traditional exporters — available again for four of the eight markets — is significantly lower. Only around 30-50% of such exporters remain active in their second year. This is shown in Figure 9.

FIGURE 9: SURVIVAL RATES OF NEWCOMERS



Note: The survival rate definition is taken from the World Bank to allow for comparability with the traditional data. It is defined as the share of newcomers that remain active in the second year (as compared to those entering the market in one year and dropping out in the next year). Only commercial eBay sellers with annual sales of at least USD 10'000 are considered (although we still consider them as "survivors" if their sales drop below that threshold in the second year). The results are based on an average across 2009-2011. Source for "traditional exporters": World Bank EDD database, latest available year (2009 or 2010). Such data is not available for Indonesia, India, Thailand and the Ukraine.

These findings demonstrate how the Global Empowerment Network helps eBay sellers in a number of developing and emerging markets to reach consumers all around the globe. The benefits of new technologies reach entrepreneurs in all markets, and both large and small ones.

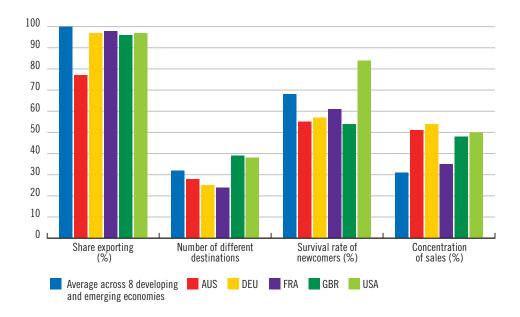
Previous research undertaken by eBay had focused on eBay sellers in developed countries. In fact, our new findings show that eBay sellers in developing and emerging markets are indeed fairly similar, or, in some respect, even better linked to international markets.

Figure 10 below compares some of the key indicators with previous results for eBay sellers in

five other markets — Australia, Germany, France, Great Britain and the United States. One can see that the share of commercial eBay sellers that are exporting is even slightly higher in developing and emerging markets, but sellers in developed markets are also in most cases exporters. ¹⁰ In terms of the number of foreign countries that sellers reach on average, results are fairly similar across all countries. The same applies to survival rates or the concentration of sales among sellers.

Overall, these findings demonstrate that the benefits of new technologies are spread globally, and in very similar ways across markets in different regions and at different levels of economic development.

FIGURE 10: COMPARISON OF KEY RESULTS WITH FIVE DEVELOPED COUNTRIES



Note: Findings for the five developed countries are based on the same definitions used for the other eight markets. Figures for US refer to 2010, and for Germany (DEU), France (FRA), Great Britain (GBR) and Australia (AUS) refer to 2011. Survival rates are averages across all available years.

COUNTRY ANALYSIS AND COMPLEMENTARY POLICY ACTION

The Global Empowerment Network is having a strong economic effect on developing and emerging markets around the world. This section conducts an individual economic and policy analysis of the eight countries highlighted in the section above. The conclusion is that the Global Empowerment Network impacts developing and emerging markets just as it impacts developed markets.

Appropriate legal rules and administrative procedures form part of the building blocks of an effective Global Empowerment Network.

Governments' policy action should ensure that critical conditions are adapted to the resources and needs of the smallest firm everywhere.

To that end, we identify the following policy actions as key:

- Investment in Open, Interconnected Broadband and Smartphone Technology
- Optimized and Harmonized Shipping and Postal Regimes
- Robust Intermediary Liability Protections
- Increased and Harmonized De Minimis Thresholds
- International Exhaustion of Copyright and Trademark
- Promoting Electronic Payment Methods
- Improved Customs Processes Through Increased Technology Adoption
- Recognition of Technology-Enabled Small Businesses and the Global Empowerment Network in Free Trade Agreements

This section will discuss the economic effect of the Global Empowerment Network on the eight developing and emerging markets analyzed. It will also describe two positive policies that each government has adopted to build the foundation for the Global Empowerment Network. Finally, it will make a single policy recommendation for each country to consider.

The Global Empowerment Network may be underpinned by technology but its effectiveness also depends on the right legal rules and administrative procedures. Therefore, in order to further the policy element, we look to complement our economic findings with policy proposals.

Based on publicly available information on the eight selected countries, we have conducted an assessment of the economic and policy situation relevant to exporting by technology-powered small businesses. Based on this assessment and our experience from other markets, we highlight two positive policy developments for each country. We also make one recommendation per country for policy action that would enhance technology-enabled trade.

In no way do we pretend that entrepreneurs and businesses in developing and emerging markets have access to ideal digital services. Still, technology has moved the needle quite far and we need to ensure the trade regime catches up. Our message is that only the combination of policy and technology will create a global trading environment that works for everyone.

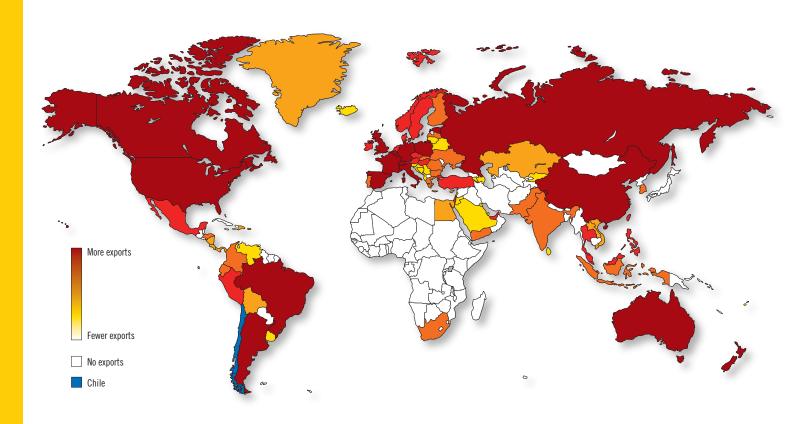
CHILE

According to the Santiago Chamber of Commerce (CCS), more than 2 million Chileans shop online, and spend over USD 400 million a year. This growth is accompanied by an increase in the percentage of Internet users and the country's Internet connectivity index.¹¹ According to the Economist Intelligence Unit, the environment for e-commerce in Chile is more advanced than in other Latin American nations due to greater use of credit cards, personal computers, and the Internet.

Our research shows that all commercial Chilean sellers using eBay export and they reach on average 28 different markets. In total, Chilean sellers export to 98 different markets.

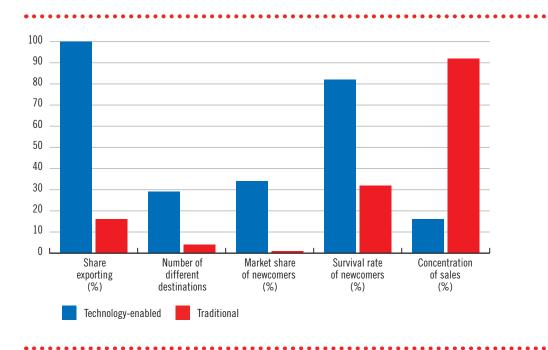
This situation of easy exporting by technologypowered sellers is clearly reflected in a sense of exceptionally low entry / start-up barriers. Chilean businesses utilizing the eBay Marketplace charge ahead and succeed: all newcomers combined grab about 30% of total sales in their first year and

ALL DESTINATIONS REACHED BY COMMERCIAL SELLERS BASED IN CHILE IN 2012



around 80% survive that critical first year. Finally, the concentration of sales by the top 5% of Chilean sellers on eBay is notable at only 16% - whereas

92% of Chile's traditional exports are conducted by its 5% largest exporters. The key results for Chile are summarized in the chart below:



We identify two policy actions that may have contributed to this positive trend:

Recognizing Small and Medium Enterprises (SMEs) in Technology-Enabled Trade

Recognizing that SMEs engage in international trade and face unique barriers is an important first step to removing the barriers that these businesses face. The Free Trade Agreement (FTA) between the US and Chile contains an important chapter on E-Commerce where Article 15.5 recognizes the global nature of technology-enabled commerce and the importance of removing barriers for SMEs

to enjoy the benefits of e-commerce. ¹² This type of provision should be used in other FTAs and should also be developed by, e.g., adding specific measurable requirements on the governments to remove barriers to technology-enabled SME trade.

Network Neutrality

Small business entities are the most likely to be discriminated against or blocked because they do not have any leverage against Internet Service Providers (ISPs). Larger entities may be able to afford to pay for faster service provision, or utilize their large user bases to exercise leverage against an ISP. Small entities do not have such means.

Maintaining an open playing field on the Internet, where every actor on the edge of the network has an equal opportunity to access a consumer, brings clear benefits to small and medium sized Internet businesses.

Chile was the first country in the world to codify the doctrine of net neutrality. An amendment of 2010 to the Telecommunications Act prohibits ISPs from arbitrarily blocking, interfering, discriminating, hindering, or restricting the right of any Internet user to engage in lawful use of the network.¹³ This law ensures that the Internet will remain equally open to businesses, and consumers, of all sizes.

To further enhance the opportunities for small businesses to use the Global Empowerment Network to trade globally, we make the following recommendation:

Raise the *De Minimis* Threshold

The de minimis threshold is the monetary level below which an importer of physical goods is exempted from customs duty and paperwork requirements. The Chilean de minimis threshold is currently set at only USD 30.¹⁴ This low de minimis threshold slows down cross border technology-enabled trade for Chilean consumers, but also more importantly, limits the ability of Chilean technology-powered traders to offer returns services to their global customers.

Returns are an essential part of the retail experience. In the current environment, providing cross border returns is difficult for technology enabled businesses because if a good is valued at a level above the de minimis threshold, then upon its return it may be subject to customs duty and paperwork requirements, and the responsibility for those would fall on the seller. Rather than offering returns, many times a seller from a country with a low de minimis threshold will refuse to offer returns or will simply ship a new product rather than dealing with the hassle of receiving a return.

Chilean sellers that want to offer returns should not be subject to additional burdens. Several members of the Asia Pacific Economic Cooperative (APEC) signed a pathfinder initiative in November of 2011 that recognized the importance of providing higher de minimis levels. Members that signed the pathfinder initiative agreed to raise their de minimis threshold to USD 100 by the end of 2012. Chile is, unfortunately, not one of the participating economies in this initiative. Chile should reconsider raising its de minimis level.

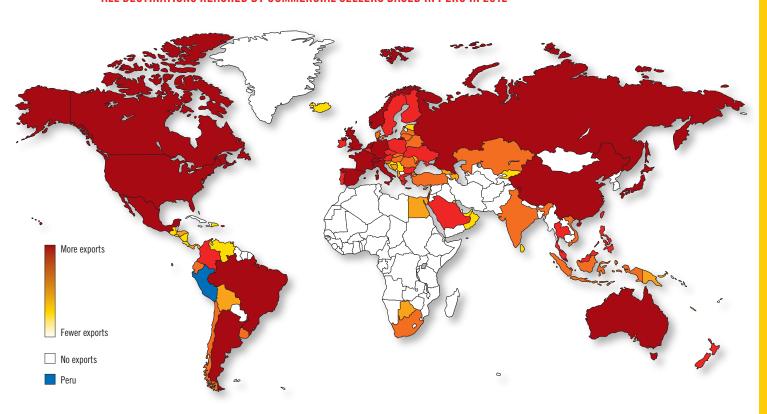
PERU

Peru is one of the countries where technology-enabled trade is particularly helpful in overcoming geographic distance. Distance has a significant negative effect on traditional trade flows — a 10% increase in distance reduces Peru's exports by 20%. In contrast, exports over digital services networks such as the eBay Marketplace are about 10 times less affected by distance — and that effect is not even statistically significant. ¹⁶

Our research shows that all commercial Peruvian sellers use eBay to export and they reach on average 25 different foreign markets — in contrast to traditional exporters, who reach 3 on average. In total, Peruvian eBay sellers export to 100 different foreign markets.

Peruvian businesses utilizing the eBay Marketplace are seeing strong success: Combined, newcomers account for about 20% of total sales in a given year, compared to a share of only 2% that new "traditional" exporters have. Around 72% of eBay sellers survive that critical first year. The concentration of sales by the top 5% of Peru's sellers on eBay is only 16%, compared to 91% among traditional exporters, showing that online sales are much less concentrated among a few large sellers or firms.

ALL DESTINATIONS REACHED BY COMMERCIAL SELLERS BASED IN PERU IN 2012



The chart below illustrates these key results for Peru.

Our research points to in particular two policy circumstances that contribute to this positive situation:

Relatively high De Minimis

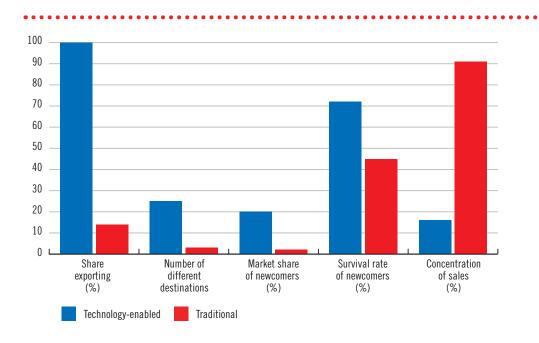
Peru has its de minimis threshold — the level below which customs duties and paperwork are not required on imports — set at USD 200.¹⁷ This enables Peruvian businesses to offer returns on their products and lowers costs and delays for Peruvian consumers. The Peruvian de minimis level is the highest of the countries discussed in this report. But other countries around the world have even higher de minimis levels. Australia has its de minimis level set to USD 1'000. An eBay commissioned report entitled Enabling Australian

Export Opportunities demonstrated that Australian technology-powered exporters have seen strong growth in the past few years.¹⁸ Moreover, legislation has been introduced in the United States to increase the de minimis threshold from USD 200 to USD 800.

Peru has set the benchmark for other countries in this study with its USD 200 de minimis, but Peru can also see additional cost savings by increasing its current de minimis level.

Limitations on Liability for Internet Intermediaries

The Internet relies on intermediaries that provide online services and build functional communication networks for user interaction. The growth of intermediaries is directly correlated to the growth of the digital economy. These intermediaries serve



as platforms for large amounts of users; it is not possible for intermediaries to proactively monitor all of the actions of their users. Limitations on liability enable online platforms to host user generated content without risking unmitigated liability.

An example on point is the provision that formed part of the US-Peru FTA stipulating limitations in national law regarding the scope of remedies available against service providers for infringements of intellectual property rights that they do not control. Appropriately crafted liability limitations are crucial for the development of the Global Empowerment Network.

The technology-enabled free trade that is becoming a reality benefits both consumers and businesses. This reality coming of age sees no borders. As demonstrated, digital services are already empowering individuals and businesses to overcome geographical distance. Legislation must not maintain borders no longer felt by traders or consumers.

In that spirit, we recommend:

Clarify Scope of Exhaustion of Copyright and Trademark as International

Intellectual Property rights grant a manufacturer the right to control the initial marketing of the product bearing a copyright or trademark. However, once the product has been put on the market — for instance sold to a consumer or to a retailer — the copyright/trademark owner can no longer use the copyright/trademark rights to exercise control over that product. The owner has exhausted that right. The exhaustion doctrine promotes alienability

of goods, rewards innovative sourcing methods, provides a backbone for a robust secondary market, and prevents harmful downstream market restrictions.

Some countries apply the international exhaustion doctrine whereby the rights are exhausted irrespective of where the products are put on the market. Other countries exercise more restrictive doctrines where exhaustion only occurs if the product is placed on the market in that country or within a region.

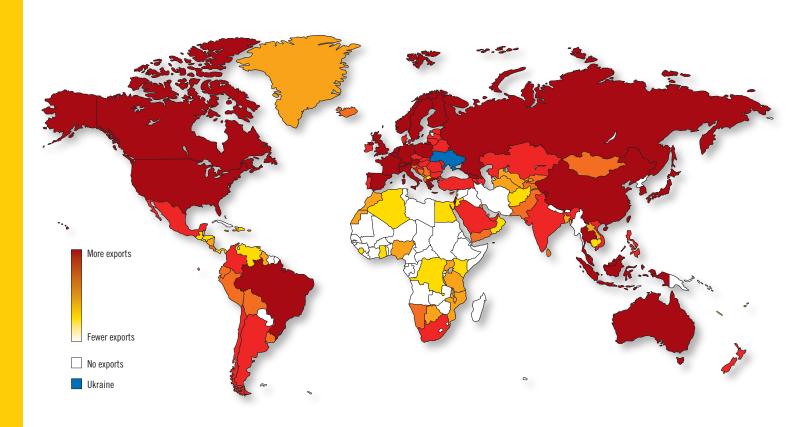
Here, Peru should clarify that its copyright and trademark laws follow the international exhaustion doctrine — once a good is sold anywhere in the world its distribution can no longer be controlled by the rights owner. For instance, it is unclear under Peru's copyright law when the copyright owner's right to control importation is exhausted. 19 This empowers rights owners to restrict sales of legitimate products into Peru. Technology is opening up world markets and creating an open level playing field. Copyright and trademark law should not be used as a tool to prevent the lawful trade of goods in the global digital economy.

UKRAINE

ITU figures demonstrate that Ukraine had an internet penetration of 31% in 2011, up from 5% in 2006.²⁰ The use of mobile Internet is also rising as an estimated 16% of urban Ukrainians have access to the mobile Internet.²¹ Our research shows that all commercial Ukrainian sellers are using eBay to export. Commercial sellers making use of the eBay Marketplace are among those reaching the largest number of foreign markets — on average 37 different markets. Overall, sellers based in the Ukraine are reaching 152 different markets around the globe.

Ukrainian businesses utilizing the eBay Marketplace are growing. Newcomers — sellers not active in the previous year — account for 22% of total eBay sales and around 64% survive that critical first year. Sales on eBay are also not very concentrated — the largest 5% of sellers only account for 33% of all sales. The chart below summarizes these results:²²

ALL DESTINATIONS REACHED BY COMMERCIAL SELLERS BASED IN UKRAINE IN 2012



There are several Ukrainian policy choices that have led to the increase in technology-enabled trade, including:

High Speed Mobile Broadband Investment

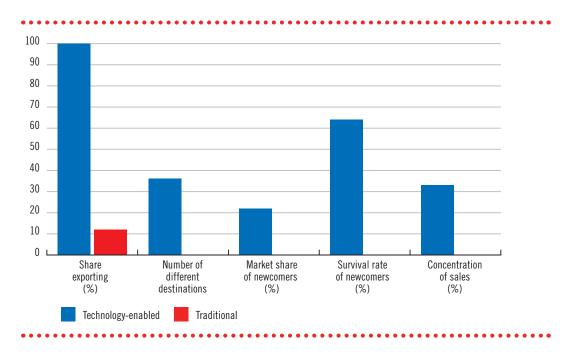
Ukraine's Open World project is designed to develop a 4G broadband network throughout Ukraine. The initiative promotes educational uses of the Internet and describes how a wide variety of services will be enabled by increased broadband adoption.

This program reflects a key understanding of the Internet, namely that value is created at the edge. Moreover, the more users on the network the more valuable the network becomes. The project brief also notes that the state will "create a beneficial regulatory environment." This statement demonstrates that the Ukrainian government recognizes that deployment of broadband is not enough. Regulatory policies across the board must be updated to foster the digital environment.

"Deployment of such a project will revolutionize many of the out-of-date systems of Ukraine and have far reaching social and economic benefits." ²³

Electronic Customs Processing

Ukraine has a long-standing Law on Electronic Documents, which puts electronic documents on a legal level playing field with paper documents. 24 More importantly, however, the new Customs Code of Ukraine, which took effect in June 2012 and is a step towards EU accession, is encouraging the use of electronic declaration forms and is aiming at having 50% of goods declared to customs electronically in 2012. to have 50% of goods declared to customs electronically in 2012. 25 The new Customs Code also enables customs rulings to be delivered electronically. 26 Global trade is now digital. Creating a digital customs process will enable the continued growth of the digital economy.



Ukraine can do even more to foster the growth of the digital economy:

Continue to Modernize Ukrainian Post

The Ukrainian Postal Service is a nationwide distribution system. Ukraine has met the Universal Postal Services (UPU) "A-Level" rating and a UPU report from 2011 found that Ukraine ranked among the top 25 countries in postal e-services development.²⁷ Yet, in the World Economic Forum's Enabling Trade Report 2012, Ukraine was ranked 74 out of 132 in postal service efficiency.²⁸ In 2008, Minister of Transport and Communications of Ukraine Yosyp Vinsky recognized that the Ukrainian postal service needed to improve operations and in 2009 the Ukrainian Cabinet of Ministers endorsed the concept of developing the Ukrainian Postal Service.²⁹

The Ukrainian postal service could continue to improve by partnering and promoting technology services that leverage efficiencies in scale and aggregation to achieve volume discounts.

Ukrpost would also benefit from working with other countries to harmonize shipping platforms between countries. Finally, Ukrpost could work with the private sector to create interoperable systems that both the public and private sectors can utilize. Creating interoperable tracking systems would enable merchants and consumers to track their packages throughout the shipping process, and thus to improve reliability.

SOUTH AFRICA

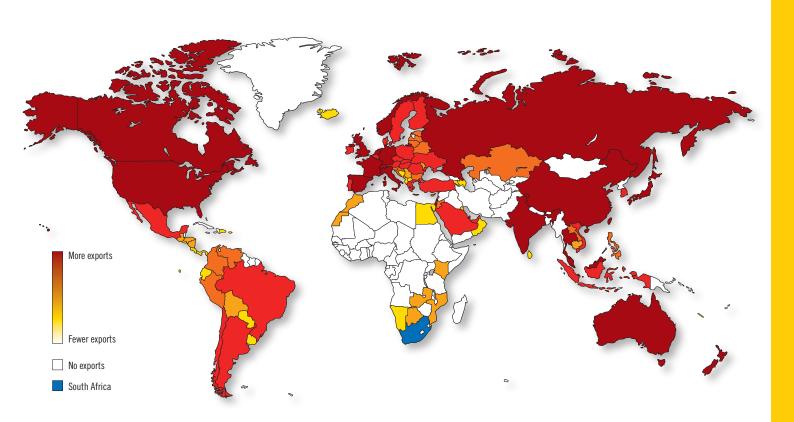
South Africa is a leader in online commerce in Africa. A study of Internet penetration in South Africa conducted by World Wide Worx found that 20% of formal, registered SMEs cannot exist without their websites. 30

South Africa is an example where we find that eBay sellers sell even more to distant than to closer markets, whereas traditional exports decrease with distance. Indeed, we can also see that South African sellers using the eBay Marketplace reach a large number of countries in contrast to traditional firms — an average of about 30 markets on the

eBay marketplace versus less than 5 markets. Our research shows that all commercial South African sellers use eBay to export. Commercial sellers making use of the eBay Marketplace are reaching on average 30 different markets. Overall, sellers based in the South Africa are reaching 118 different markets around the globe.

South African businesses utilizing the eBay Marketplace are thriving. Newcomers account for 27% of sales — whereas the respective figure for traditional firms is only 2%. Around 69% of eBay sellers survive that critical first year — and only

ALL DESTINATIONS REACHED BY COMMERCIAL SELLERS BASED IN SOUTH AFRICA IN 2012



48% of traditional firms. The concentration of sales among the top 5% of South African sellers on eBay is lower than for traditional firms (33% versus 90%). The chart below summarizes these results.

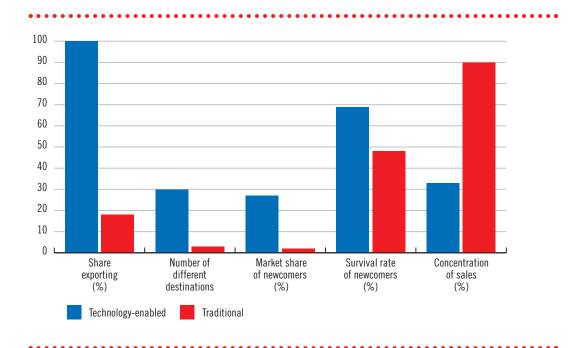
There are some important policies that are facilitating technology-enabled small business trade in South Africa:

Harmonization and Modernization of Customs Processes

The South African Customs Union (SACU) is the world's oldest customs union.³¹ Its members include Botswana, Lesotho, Namibia, South Africa, and Swaziland. It was designed to encourage the free movement of goods between member countries. In 2009, the SACU in conjunction with the World Customs Organization launched a three year initiative designed to create harmonized

customs policies in the region.³² The initiative was also designed to improve risk management and information technology aspects of customs in the region.³³

Small businesses are disproportionality affected by complicated customs procedures. Harmonizing procedures reduces the number of considerations a small business needs to account for when engaging in trade. Modernizing standards, particularly through the introduction of technological solutions, greatly reduces costs for small businesses and reduces barriers to the customs process. Standardization and simplification of customs processes should be a central goal for governments around the world that are interested in seeing an increase in technology-enabled small business trade.



Harmonization and Cooperation on Postal

The South Africa-European Union Agreement on Trade, Development and Cooperation Article 56 contains unique language on postal cooperation:

"Cooperation in this area shall include:

- (a) exchange of information and dialogue on postal matters in relation to, inter alia, regional and international activities, regulatory aspects and policy decisions
- (b) technical assistance on regulation, operational standards and human resource development;
- (c) promotion and implementation of joint projects, including research, on technological development in this sector"

This provision is notable for two reasons: 1) postal services are included in the discussion of an FTA; and 2) policy, regulation, and technological development are all identified as keys to cooperation. Harmonization and simplification of policy and regulation, as well as increased technological investment and development of postal services are extremely beneficial for technology enabled small businesses that utilize the postal service to move their goods around the world. Finally, moving some of these aspirations from a bilateral discussion to a multi-lateral would be greatly beneficial as multi-lateral harmonization would further reduce divergent burdensome standards.

South Africa is seeing strong growth of its technology enabled small business, but there is more that can be done to create a healthy environment for technology enabled businesses:

Investing in Broadband Access Proliferation

South Africa has the laudable goal of universal broadband access by 2020.³⁴ However, in 2013, a report by the Broadband Commission, an international body set up by the International Telecommunications Union (ITU) and UNESCO, ranked South Africa at 111 out of 183 countries on fixed broadband penetration (2.2 connections per 100 inhabitants). On a positive note, the report noted that South Africa ranked number 62 out of 170 countries on mobile broadband penetration (26 connections per 100 inhabitants).³⁵

South Africa does have a national broadband plan, which was drafted in 2010. But there have been delays at the national level and lack of coordination of implementation at the local level, which have impeded the rapid distribution of broadband access. ³⁶ The Department of Communications is working to create a new broadband policy by November 2013 and should work to reduce delays and improve implementation. Ensuring that citizens from every economic level and in every part of the country can access a high speed connection is an essential step in creating a robust digital economy.

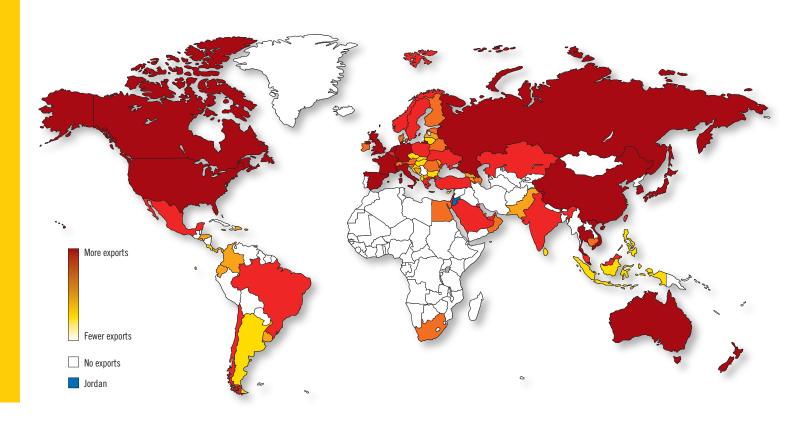
JORDAN

Jordan is seeing growth in usage of Internet services and the untapped potential for small businesses is huge. In 2011, there was a 92% increase — from USD 192 million to USD 370 million — in Jordanian Internet users' spending on products and services online, including paying their bills.³⁷ According to IMRG International, online commerce in the region is expected to reach an estimated USD 15 billion by 2015.

Jordanian sellers making use of the eBay Marketplace are no different from those of any other country — they export and reach customers in a large number of markets, as illustrated in the map below.

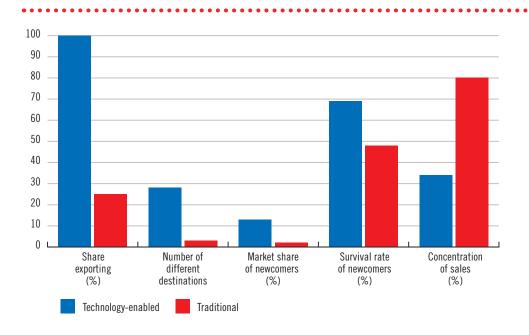
Our research shows that all commercial Jordanian sellers use eBay to export. Commercial sellers making use of the eBay Marketplace are reaching on average 28 different markets — whereas traditional Jordanian exporters only reach 3 different markets on average. Overall, sellers based in Jordan are reaching 93 different markets around the globe.

ALL DESTINATIONS REACHED BY COMMERCIAL SELLERS BASED IN JORDAN IN 2012



Jordanian businesses utilizing the eBay Marketplace are thriving. Newcomers have a share of around 13% in overall sales, more than traditional firms in Jordan (2%). New eBay sellers also have a higher chance to survive —

69% compared to 48% for traditional firms. The concentration of sales by the top 5% of Jordanian sellers on eBay is only 34%, compared to 80% for traditional exporters. These findings are summarized in the chart below.



We have identified the following two policy factors that we believe support the trend towards increased uptake by both businesses and consumers of technology-enabled trade:

Comprehensive National E-Commerce Strategy

In 2007, Jordan's Ministry of Information and Communications Technology drafted a thoughtful document — the National E-Commerce Strategy — describing how to develop the digital economy in Jordan. The document recognizes the gamut of policy areas that affect technology-enabled

commerce including payments policy, consumer production, information communications technology, customs, and tax policy.³⁸ The document notes shortcomings in Jordan's current regulatory regime, the opportunities that are available to improve the situation, and sets out a vision and a strategy to promote a stronger digital economy. The vision of the document is simple:

"Jordan to become a 'leading' e-commerce centre in the region through the exploitation of its information technology capacity and the creativity of its people." ³⁹ The National E-Commerce Strategy sets out specific actions to be taken to achieve this vision. For example, the document notes that there is a problem in Jordan with SMEs taking on e-commerce and so it proposes an action plan to increase SME capacity by running pilot e-commerce projects and demonstrations for SMEs. The model of creating a national e-commerce strategy should be replicated as it allows a government to look at the digital economy from a high-level and lay out an entire range of policy concerns and possible solutions.

Competition in Electronic Payments

The 2001 FTA between the US and Jordan was the world's first trade agreement to include a chapter on e-commerce. 40 Adjacent to the FTA is a Joint Statement on Electronic Commerce with a number of important principles and recommendations. In particular, the Joint Statement makes a strong declaration on electronic payment systems, which has unfortunately not been replicated in more recent trade documents:

"Developments in this area should recognize the importance of private sector leadership, and should promote both a competitive market for, and user confidence in electronic payment systems." 41

Jordan also recognized the central role of globallyacccepted electronic payments in its National E-commerce strategy and laid out a specific action plan to increase consumer usage of electronic payment methods. Electronic payments are essential to creating a vibrant digital economy and Jordan should be applauded for its commitment to developing electronic payments for Jordanian businesses and consumers.

However, businesses in the Middle East region have not fully taken of to setting up online operations. Only 15% of businesses in the region have an online presence.⁴² Our research suggests there are some barriers to adding a digital element to retail operations: in comparison with the other countries assessed by this report, Jordan is not seeing newcomers taking a large market share.

We make the following recommendation to enhance an environment conducive to technology take-up:

Reconsider the High Taxation on Mobile Phones

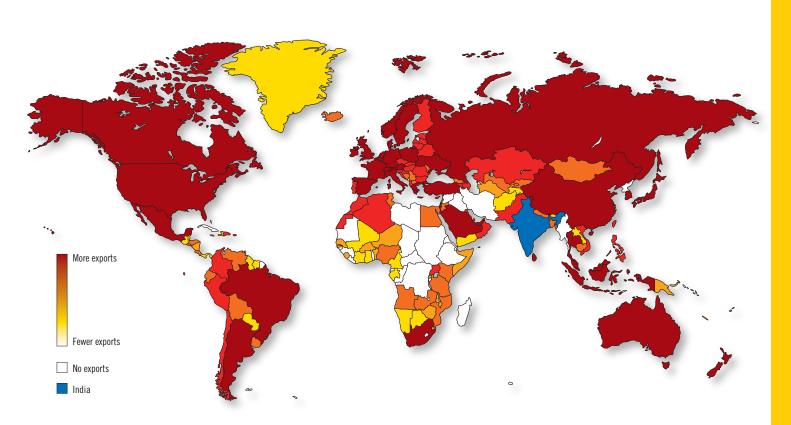
The modern consumer connects to the digital economy through his/her smartphone. A Cabinet decision published in the Jordan Official Gazette in July 2013 raised the special tax on mobile phones to 16% from 8%. The decision also raised the tax on mobile subscriptions -pre- and post-paid - to 24% from 12%.⁴³ This tax not only affects consumers but it also affects businesses of all types that are using mobile devices to optimize processes and develop new mobile services. The Jordanian Consumer Protection Society (CPS) has stated that it plans to file a lawsuit against the government because of the decision to raise taxes on mobile phones and subscription. The government should reconsider its high tax on a technology that is enabling business innovation and consumer empowerment in unprecedented ways.

INDIA

India's consumer-facing market for technology-enabled commerce grew at a whopping compound annual growth rate of 49.1% from 2007 to 2011 to reach a market size of USD 9.9 billion.⁴⁴ India has the potential to double its economic contribution from the Internet in the next three years, from 1.6% of GDP at present to 2.8% - 3.3% by 2015.⁴⁵ Google India reported that consumer interest in online shopping grew 128% year over year in 2012.⁴⁶

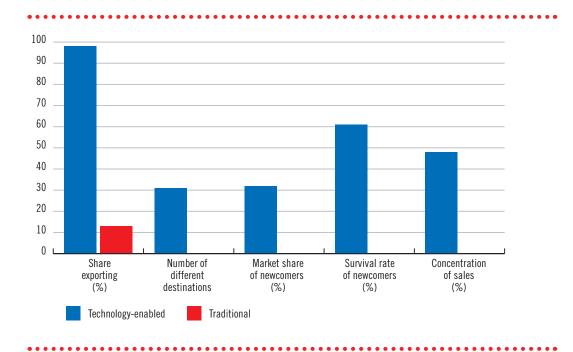
Our research demonstrates that practically all (98%) commercial Indian sellers using eBay to export, and they reach on average 31 different markets. Overall, sellers based in India are reaching 194 different markets around the globe, as illustrated by the map below..

ALL DESTINATIONS REACHED BY COMMERCIAL SELLERS BASED IN INDIA IN 2012



Indian businesses utilizing the eBay Marketplace are thriving. New sellers account for around 32% of sales, and they have a 61% chance to remain active in their second year. The largest 5% of commercial sellers account for 48% of total sales,

which is less than what can be found for traditional firms in many other countries (no comparable data is available for traditional firms in India). The chart below summarizes these results.⁴⁷



We believe the following two policy actions are playing an important role in building the Global Empowerment Network in India:

National Optical Fibre Network (NOFN)

The Government of India approved on 25-10-2011 the setting up of National Optical Fiber Network (NOFN) to provide connectivity to all the 2,50,000 Gram Panchayats(GPs) in the country at cost of ~2B USD. The network is being rolled out rapidly and is expected reach full coverage in 2 years. This would ensure broadband connectivity with adequate bandwidth. This is to be achieved

utilizing the existing optical fiber and extending it to the Gram Panchayats. NOFN has the potential to transform many aspects of millions of lives including video, data, internet, telephone services in areas such as education, business, entertainment, environment, health households and e-governance services.

In the last 5-10 years, India has significantly liberalized and opened up it telecom sector with broadband wireless, 2.3 GHz spectrum and 3G auctions to private sector companies for broadband & wireless services. In 2013, the government allowed Foreign Direct Investment in the telecom

sector to 100%. The positive policy actions over last several years have resulted in a fast growing mobile telephony and data market with $\sim\!870M$ subscribers and one of the lowest tariffs in the world. The mobile Internet users in the country are expected to grow from 4.1 million users in 2009 to 164.8 million in 2015 at a CAGR of 85 percent." ⁴⁸

Encouraging a "Less-Cash" Economy

The Reserve Bank of India's (RBI) Payments System Vision document 2012 states:

"The overall regulatory policy stance is towards promoting a less cash/less paper society, the "green" initiative, and hence the increased emphasis on the use of electronic payment products and services that can be accessed anywhere and anytime by all at affordable prices. Embracing new technology and innovation to unveil a bouquet of simple low cost, easy to use modern payment products and services would be the corner stone of this endeavour." 49

This is an extremely positive statement as electronic payments methods empower consumers and improve security for the system. Cash and check, however, currently remain major methods of payment in India. RBI's document recognizes the shortcomings of the current model and calls for a need to substitute cash-on-delivery with non-cash payment modes such as mobile wallets, cards etc.⁵⁰

With the rise of online commerce, it is important that electronic payment methods advance to meet the needs of the consumer. A regulatory policy that encourages a shift towards electronic payment methods will no doubt help the online commerce experience in India continue to thrive.

The RBI has also enhanced the limit for exports processed by an online payment gateway from \$3000 to \$10,000 per transaction. This will no doubt help Indian small business exporters to sell their locally manufactured goods around the world.

We would make the following recommendation to further the ability of small businesses to take advantage of an emerging Global Empowerment Network to reach and service customers worldwide:

Facilitated Procedures for Technology Enabled Trade

In 2012, the Ministry of Commerce recognized the importance of technology-enabled exports for small businesses. ⁵¹ The Ministry of Commerce encouraged small businesses in India to begin to take advantage of technology services, and worked with thought leaders like the Federation of Indian Export Organizations to create seminars, incentives, and best practices to help ease the transition for small businesses. Implementation of these aspirations has proven to be difficult.

Now that a high-level commitment to technology enabled small businesses has been made, the government should enact procedural reforms to simplify export processes for small businesses. Currently, export clearance, notifications, VAT, services taxes, and valuation are all issues faced by technology enabled traders in India. Addressing these challenges through simplified procedures would be of tremendous benefit to the growing sector of technology enabled businesses.

INDONESIA

Smartphones are seeing a significant uptick in ownership in Indonesia, according to a study from Australian market research company Roy Morgan Research. The firm found that between March 2012 and 2013, smartphone ownership doubled from 12% of the population to 24%. Smartphones are key to enabling businesses and consumers to access the Global Empowerment Network.

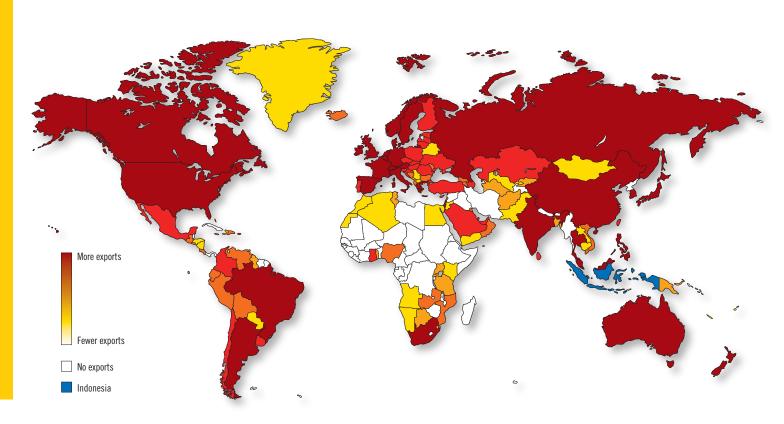
Our research finds that Indonesian "commercial sellers" using the eBay Marketplace are among those reaching the largest number of foreign markets. All of them export through eBay, and on average, such sellers reach 36 different foreign

countries. Overall, Indonesian eBay sellers reach 162 of around 200 possible markets around the world (as shown in the map below).

What is more, newcomers are effective in gaining market shares — they typically account for 42% of all sales. Only 23% of sales are conducted by the largest 5% of all commercial sellers, which is a fairly low degree of concentration. 65% of new sellers survive their first year. The chart below summarizes these results.⁵²

We have identified the following policy actions as supporting the positive developments and opportunities that we see in India:

ALL DESTINATIONS REACHED BY COMMERCIAL SELLERS BASED IN INDONESIA IN 2012

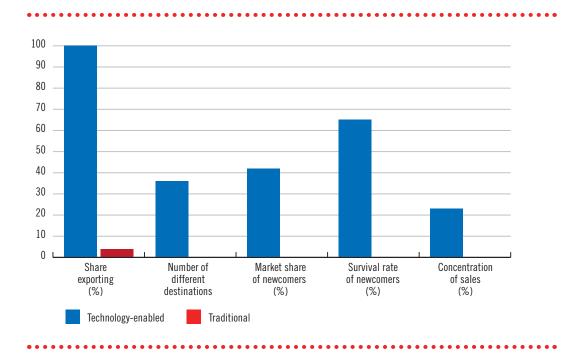


Branchless Banking Pilot Programs

Indonesia has a large rural population; the Internet is an incredible tool for connecting this population to essential financial services. The Indonesian government has recognized this and is investing in branchless banking and mobile wallets through its National Financial Inclusion Strategy.⁵³ The plan includes improving financial education and facilitating the ability of intermediaries to enter the process of giving consumers access to a variety of financial tools.

The key to the success of these investments will be to maintain an open and level playing field for competition in the mobile wallet environment.

Allowing innovative new players to offer Indonesian consumers a mobile wallet solution will be imperative to ensuring that Indonesian customers are able to enjoy the benefits of a "cash-light" economy.



Reviewing Customs with the Aim of Trade Facilitation

In January of 2012 Indonesia signed the ASEAN-Australia-New Zealand Free Trade Agreement (FTA). Chapter 4 Article 4 of the FTA states:

"The customs administration of each Party shall review its customs procedures with a view to their simplification to facilitate trade." ⁵⁵

Frost & Sullivan predicts that the Indonesian logistics industry will grow 14.5% year-over-year in 2013. Frost and Sullivan credit the Government's initiatives and development of the logistics industry for much of this growth. For Yet, Indonesian customs processing is largely still done in paper form, and a move towards paperless trading could further enhance the productivity gains aimed at by the above provision.

We would make the following recommendation to strengthen the connectivity building block of the Global Empowerment Network in Indonesia:

Avoid Localization Proposals

The strength of the Internet is that it is an open distributed network enabling information to travel to its destination through the most efficient path. Introducing any additional barriers beyond basic protocols makes the network less efficient. Requiring that all businesses operating in Indonesia acquire a ".id" global top-level domain is an unnecessary burden on the Internet. It limits the potential of the Internet by bifurcating a website operators' attention, perhaps unnecessarily, to a unique ".id" site. It should be up to the website operator to determine if s/he wishes to setup a ".id" site that is independent from its other sites.

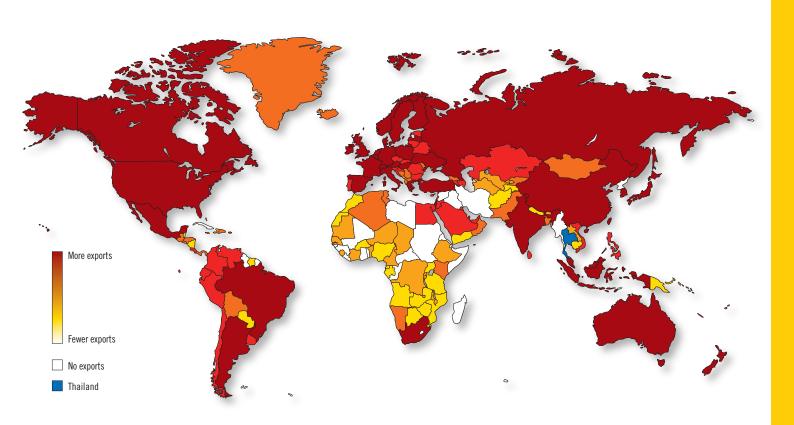
There is an understandable desire for government to have law enforcement authority over websites operating in country.⁵⁷ But, good faith corporate citizens will comply with law enforcement requests regardless of whether the corporate citizen has a domestic domain name. Domestic Indonesian businesses that are export-oriented will be harmed by this requirement since they will be forced to operate a ".id" alongside another international-facing global top-level domains even though their products are aimed primarily at international consumers.⁵⁸

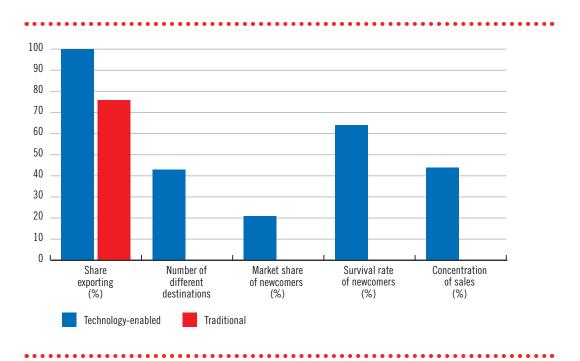
THAILAND

Our analysis of commercial eBay sellers based in Thailand shows that such sellers reach on average 43 different foreign countries, and all Thai sellers combined reach practically all countries in the world - 198 out of just over 200 possible destinations - the highest numbers among the eight countries that we analyzed in depth. This can be seen in the following map.

All commercial Thai sellers using the eBay Marketplace are engaged in exporting. The share of sales made by "newcomers" is only 21% with many successful sellers having established a stable position in the market. 64% of newcomers survive their first year.

ALL DESTINATIONS REACHED BY COMMERCIAL SELLERS BASED IN THAILAND IN 2012





The chart above summarizes the key results.⁵⁹

When comparing how Thai exports through eBay are affected by geographic distance, we found that there is no statistically significant effect of distance. This is in contrast to traditional exports from Thailand, for which we found that a 10% increase in distance to a country on average reduces trade by 6%.

We have identified the following policy actions as promoting the ability of technology-powered businesses to build global operations as well as the very fundamental uptake of technology:

Electronic Submission of Trade Administration Documents

Small technology-enabled traders can benefit tremendously from being able to access customs forms and other trade administration documents online. These businesses are accustomed to conducting business online, and having to obtain paper copies of customs forms and turn them in to a physical location can be a large burden. An example at point is the Thailand-Australia Free Trade Agreement (TAFTA, 2005) which contains a provision on Paperless Trading in its Article 1107. It stipulates as the general rule that the parties shall accept the electronic format of trade administration documents as the legal equivalent of paper documents.⁶⁰

An agreement to work together in international forums to enhance the acceptance of electronic trade documents is important as harmonizing rules across the international landscape is key for the global digital economy. The World Trade Organization Trade Facilitation Agreement would be an ideal venue for nations to cooperate to push for more electronic acceptance.

Moreover, electronic acceptance is merely the first stage in optimizing customs for the 21st century. Online submission, interoperable systems, and application programming interfaces (APIs) that enable importers and exporters to plug data elements into a customs agency's back-end system should be aspirations that customs agencies around the world should aspire to.

Working to Increase Internet Access

Thailand's efforts to bridge the gap between those who benefit from technology and those that do not began in earnest in 2003. The "Budget PC project" brought millions of computers to Thai citizens. ⁶¹ The Ministry of Information and Communication Technology been working hard to provide accessible Internet to the disadvantaged and disabled. ⁶²

In a survey of rural Thai, 60% of respondents reported using the Internet daily for e-mail.

Notably, only 24% of those surveyed reported they used the Internet daily for online shopping and only 12% reported using the Internet daily for mobile banking. These figures indicate that while much has been done to increase access to the Internet there is still more that can be done to tie rural Thai into the global digital economy.

One example what Thailand could do to improve access to the Global Empowerment Network is the regulatory environment, as we will explain next.

Intermediary Liability for Offenses of Third Party Users

Thailand's Computer-Related Offences Commission Act has been the subject of controversy as a result of provisions, which arguably could hold intermediaries liable for content placed on their platforms by third parties. ⁶⁴ Section 15 of the Act holds service providers liable if they "intentionally support or consents" to an offense of the Act. ⁶⁵

There is a need to target the enforcement of Internet crimes in a smart and tailored manner. Intermediaries should not be held responsible so long as they take the content down after receiving valid notice from the relevant authorities and cooperate within a reasonable framework. The principles behind Section 15 of the Computer-Related Offenses Commission Act should not be adopted in other provisions.

Consumer protection and security are legitimate goals for regulation, but regulation must be aimed at the actor that has violated the law rather than the platform that the actor has used. It is neither technically possible nor economically feasible for intermediaries to monitor all of their users' actions. Thailand should consider creating a safe harbor provision for intermediaries that exempts them from liability for the actions of their users.

CONCLUSION

Perhaps the single most important finding from this extended research is that the very same trends and benefits we saw in developed markets are present and, in fact, amplified in developing markets. We see that geographic distance has little negative impact on online trade flows arising from developing markets. We also see that commercial sellers on eBay in the eight selected developing and emerging markets are almost all multi-country exporters reaching on average 30 to 40 different foreign markets.

Our research confirms that the Global Value Chains model (i.e., whereby small businesses enter the global market by becoming a part of the production process of a much larger firm) is not the only way for small businesses to reach and service consumers in international markets. The combination of the Internet and digital services make it possible for businesses anywhere to reach consumers everywhere. This means that sustainable global operations can spring out of small local establishments: the bringing together of services and conditions that can be adapted to meet the needs of small businesses everywhere in the world is making way for an alternative, complementary, path to globalization. We are witnessing the proliferation of what can be called the "Global Empowerment Network".

The Global Empowerment Network is underpinned by technology, but its effectiveness also depends on the right legal rules and administrative procedures. This report identifies the following policy areas as key for creating the right conditions that enable small businesses to tap into global customer bases:

- Investment in Open, Interconnected
 Broadband and Smartphone Technology
- Optimized and Harmonized Shipping and Postal Regimes
- Robust Intermediary Liability Protections
- Increased and Harmonized De Minimis
 Thresholds
- International Exhaustion of Copyright and Trademark
- Promoting Electronic Payment Methods
- Improved Customs Processes Through Increased Technology Adoption
- Recognition of Technology-Enabled SMEs and the Global Empowerment Network in Free Trade Agreements

We are excited about the continued growth of the Global Empowerment Network and believe it will be an integral part of global trade in the future.

APPENDIX 1 — DATA SOURCES

The analytical results shown in this paper are based on two different eBay datasets: a global dataset of eBay trade flows, and a more detailed dataset for the eight countries covered in detail.

- The global dataset contains all global eBay transactions disaggregated by location (country) of buyer and seller. It also allows disaggregating the data further into sales based on different rating levels of the seller.⁶⁶
- The in-depth analysis of eight different countries (Chile, Peru, Ukraine, South Africa, Jordan, India, Indonesia and Thailand) was made based on a dataset that contains information on sales conducted by all sellers based in these countries, including the location of the buyer (by country) and for several years (2008-2012). For the most part, the analysis was done by considering only those eBay sellers with annual sales of at least USD 10'000 ("commercial sellers").

To allow for comparisons with the "traditional" world, i.e., traditional companies, we have used a number of other datasets:

- For direct comparison with traditional exporters, we have used a new database developed by the World Bank that contains information on all exporters based in a number of countries.⁶⁷
 Out of the eight countries covered by our in-depth analysis, four are covered and thus allow for direct comparison (Chile, Jordan, Peru and South Africa). This database contains, for example, information on the average number of countries to which exporters sell, or the level of concentration of exports among exporters.
- We have also used results from the World Bank Enterprise Surveys, which are representative surveys conducted among a selection of firms in each country.⁶⁸ The key variable we have used is information on the share of firms that are exporting. This survey covers all of the eight countries in focus.
- For the gravity analysis, we have used data on "traditional" exports from each country, which is taken from the Comtrade database.⁶⁹

APPENDIX 2 — ANALYSIS OF DISTANCE EFFECT

OVERVIEW

We have used a regression analysis to compare the impact that geographic distance has on exports conducted through eBay, and how this compares with the effect it has on traditional exports. The method that we used is the so-called *gravity regression*. The finding that distance matters much less for eBay trade than for traditional ("offline") trade has been made previously in a paper by Lendle et al. (2012)⁷¹, who showed — based on eBay trade flows between 62 countries — that distance matters about 65% less for eBay than for traditional trade. These findings are now confirmed with a more comprehensive dataset that included all countries.

METHOD

The gravity regression is a regression analysis in which the impact of geographic distance between two countries (measured as the great-circle distance between their economic centers) on trade flows is assessed. Similarly, one can assess the impact of other country-pair variables, such as whether countries have signed a free-trade agreement with each other. In technical terms, one uses a dataset of bilateral trade flows between countries and regresses these trade flows against distance and other indicators. With countries labelled as i and j, a simple gravity regression looks as follows:

In this example, the effect of trade is assumed to be driven by distance, whether countries have signed an FTA and whether they share a common border (the latter two are dummy variables taking the values 0 or 1).⁷²

The results illustrated in Figures 2 and 3 are based on a gravity regression using a dataset of eBay trade flows between all countries, and using an average across the years 2010-12. For the individual results of the eight countries covered by the in-depth analysis (as shown in Figure 6), a simpler form of the gravity regression was used, in which only exports from one exporting country to all its partner countries are considered. This means that one cannot control for idiosyncratic properties of individual countries and such results should therefore be interpreted more carefully.

In both cases, eBay exports are compared with "traditional" exports taken from the Comtrade database. Only a subset of these trade flows was used, namely only trade flows in products similar to the ones typically traded on eBay.⁷³

DETAILED RESULTS

The following table shows results for regressions, on which the results shown in Figures 2 and 3 are based. 74 Note that the results shown in Figures 2 and 3 are the trade-reducing effects of distance, obtained by multiplying regression results by -1.

 $\overline{\text{Trade}_{ii}} = \beta_1^* \text{distance} + \beta_2^* \text{FTA} + \beta_3^* \text{border} + ... + \sum_{ii}$

APPENDIX TABLE 1

	Figur	e 2 (left)	Figure 2 (Figure 3	
VARIABLES	eBay	traditional (offline)	eBay	traditional (offline)	eBay
Distance	-0.312***	-1.835***	-0.419***	-1.813***	-0.376***
	(0.0151)	(0.0335)	(0.0177)	(0.0388)	(0.0132)
Distance * developing c.			0.307***	-0.0639	
			(0.0241)	(0.0550)	
No common legal system	0.0177	-0.348***	0.0127	-0.348***	0.00266
	(0.0225)	(0.0455)	(0.0224)	(0.0454)	(0.0201)
No colonial link	-0.209*	-0.770***	-0.195*	-0.772***	-0.136
	(0.112)	(0.155)	(0.112)	(0.155)	(0.120)
No cmmon language	-0.539***	-1.464***	-0.541***	-1.464***	-0.476***
	(0.0308)	(0.0628)	(0.0307)	(0.0628)	(0.0267)
No common border	-0.304***	-0.915***	-0.381***	-0.900***	-0.253***
	(0.0773)	(0.2020)	(0.0747)	(0.203)	(0.0773)
No FTA	-0.832***	-0.708***	-0.832***	-0.708***	-0.678***
	(0.0357)	(0.0688)	(0.0355)	(0.0688)	(0.0302)
No common currency	-1.000***	(0.1180)	-0.949***	-0.129	-1.330***
	(0.0617)	(0.143)	(0.0611)	(0.143)	(0.0567)
Top-rated seller					-0.367***
					(0.0808)
Distance * top-rated seller					0.0553***
					(0.00914)
Observations	40,018	38,148	40,018	38,148	84,478
R-squared	0.817	0.759	0.818	0.759	0.777

Robust standard errors in parentheses

- Columns 1 and 2 show the distance effects for eBay and traditional trade. One can see that the distance coefficient on eBay is only -0.312, which means that a 10% increase in distance reduces trade by about 3%. For traditional trade, the coefficient is much larger (ion absolute terms). A 10% increase in distance reduces trade by 18%.
- Columns 3 and 4 show results of a modified gravity regression, in which a dummy variable was used for developing country exporters. The distance coefficient thus shows the distance effect for developed countries (-0.419), whereas the distance coefficient for developing countries can be calculated by adding 0.307, which gives
- an overall distance coefficient for developing countries of -0.419 + 0.307 = -0.112. Offline, the distance effect for developed countries (-1.813) is even less strong (though only slightly) than for developing countries (-1.813 -0.0639 = -1.877).
- Column 5 shows results of another modified gravity regression. Here, eBay trade is split into exports by normal sellers (which gives the baseline result of a distance effect of -0.376) and exports by top-rated sellers.
 For the latter, the distance coefficient can be calculated by adding the relevant results (-0.376 + 0.0553 = -0.321). The distance effect is thus less strong for top-rated sellers.

^{***} p<0.01, ** p<0.05, * p<0.1

The table below shows detailed results of gravity regressions done individually for each of the eight countries covered by the in-depth analysis, as summarized above in Figure 6.

APPENDIX TABLE 2

	Chile		Indonesia		India		Jordan	
VARIABLES	eBay exports	traditional (offline) exports	eBay exports	traditional (offline) exports	eBay exports	traditional (offline) exports	eBay exports	traditional (offline) exports
GDP	0.867***	1.076***	1.193***	1.064***	1.121***	1.104***	1.140***	0.943***
	(0.0828)	(0.103)	(0.0671)	(0.0460)	(0.0591)	(0.0501)	(0.0845)	(0.0863)
Distance	-0.299	-1.735***	0.0898	-0.281	-0.287	-0.952***	-0.187	0.204
	(0.471)	(0.529)	(0.396)	(0.300)	(0.245)	(0.212)	(0.235)	(0.261)
No common legal system	0.214	0.472	1.201***	-0.266	-1.035*	-0.842**	0.624*	0.140
	(0.399)	(0.424)	(0.373)	(0.240)	(0.524)	(0.337)	(0.326)	(0.356)
No colonial link	-2.024***	1.578***	-1.879***	-1.284***	-1.082***	-0.101	-0.405	-1.407***
	(0.548)	(0.508)	(0.290)	(0.179)	(0.383)	(0.343)	(0.289)	(0.422)
No cmmon language	0.716	-3.290***			-0.0718	-0.162	0.510	-2.642***
	(0.620)	(0.570)			(0.587)	(0.352)	(0.533)	(0.617)
No common border	-1.403	0.402	-0.524	-1.800***	1.694***	1.374	0.505	-3.301***
	(0.930)	(0.671)	(0.905)	(0.561)	(0.633)	(1.043)	(1.014)	(1.134)
No FTA	-1.656***	-0.567	-0.400	-0.721	-0.438	0.756*	-0.843**	-1.131**
	(0.345)	(0.376)	(0.681)	(0.493)	(0.345)	(0.435)	(0.352)	(0.488)
No common currency					-1.377*	-4.222***		
					(0.758)	(1.199)		
Constant	-9.169**	1.412	-20.76***	-3.846	-13.75***	0.995	-21.10***	-6.448**
	(4.263)	(4.572)	(3.346)	(2.630)	(2.500)	(2.192)	(2.913)	(3.138)
Observations	120	140	162	178	169	178	111	139
R-squared	0.658	0.690	0.665	0.758	0.704	0.811	0.700	0.636

Robust standard errors in parentheses

^{***} p<0.01, ** p<0.05, * p<0.1

	Peru		Thailand		Ukraine		South Africa	
VARIABLES	eBay exports	traditional (offline) exports	eBay exports	traditional (offline) exports	eBay exports	traditional (offline) exports	eBay exports	traditional (offline) exports
GDP	1.075***	1.274***	1.270***	1.202***	1.193***	1.064***	1.076***	0.976***
	(0.0819)	(0.0852)	(0.0735)	(0.0475)	(0.0755)	(0.0650)	(0.0661)	(0.0796)
Distance	-0.215	-1.999***	0.239	-0.558**	-0.685***	-1.320***	1.713***	-3.063***
	(0.411)	(0.391)	(0.297)	(0.225)	(0.193)	(0.218)	(0.422)	(0.286)
No common legal system	0.819*	0.103	-1.013***	-0.769***	-0.599	-1.139**	-0.516	-0.623
	(0.489)	(0.381)	(0.364)	(0.240)	(0.482)	(0.524)	(0.547)	(0.420)
No colonial link	-1.697**	0.894*			1.408*	1.417**	-0.116	-3.548**
	(0.718)	(0.470)			(0.749)	(0.617)	(0.305)	(1.374)
No cmmon language	0.0273	-2.001***					-0.321	-0.920**
	(0.816)	(0.530)					(0.563)	(0.436)
No common border	0.211	0.421	-0.476	-1.549*	0.0855	-0.746	-2.631**	0.289
	(0.731)	(0.553)	(0.685)	(0.830)	(0.524)	(0.581)	(1.022)	(0.696)
No FTA	-0.254	-0.686	-0.741	-0.552	-1.055	-2.323***	-1.754***	-0.501*
	(0.626)	(0.595)	(0.577)	(0.362)	(0.765)	(0.493)	(0.275)	(0.298)
No common currency							-0.118	5.363**
							(0.644)	(2.409)
Constant	-17.05***	-0.452	-22.25***	-5.672***	-15.95***	0.0998	-31.05***	16.74***
	(3.490)	(2.947)	(2.692)	(2.061)	(2.842)	(2.710)	(3.078)	(3.320)
Observations	121	127	177	179	152	160	135	173
R-squared	0.623	0.737	0.661	0.799	0.667	0.744	0.739	0.679

Robust standard errors in parentheses

For example, one can see that the distance coefficient for eBay exports from Chile (first column) is only -0.299 and not significantly different from zero, whereas distance has a significant and large negative impact on traditional exports, with a distance coefficient of -1.735 (second column). Note that importer GDP is added as a variable to these regressions because it is not possible to control for importer fixed effects. Also note that some of the other explanatory variables

cannot be used for some countries. For example, most of the eight countries do not share a common currency with any other country, and thus it is not possible to assess the impact of a common currency on exports.

Results of these regressions should be interpreted more carefully because they are based on much fewer observations.

^{***} p<0.01, ** p<0.05, * p<0.1

REFERENCES

- 1 These are trade flows reported by countries. To be precise, we only take a subset of these "traditional" trade flows that consists of products similar to the ones typically traded on eBay. This makes eBay and "traditional" data more comparable, but results are fairly similar when one uses all "traditional" trade flows. A similar analysis, but for a more restricted set of countries, has been made previously see Lendle et al. (2012), available at http://www.voxeu.org/sites/default/files/file/DP9094(1).pdf (see http://www.voxeu.org/article/put-your-money-where-your-mouse-how-e-commerce-can-foster-development for a non-technical summary).
- Estimate from ITU (International Telecommunication Union), see http://www. itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2013.pdf.
- 3 See the appendix for details on the data used for this analysis. "Commercial sellers" are defined as sellers having annual sales on eBay of USD 10,000 or more.
- 4 Similar figures can be found for other countries. For example, the share of firms in the US that export has been estimated to be only between 4% and 15%, and similar shares can be found for European markets or Australia (see, for example, Mayer & Ottaviano (2007) available at http://www.bruegel.org/publications/publication-detail/publication/12-the-happy-few-the-internationalisation-of-european-firms/).
- 5 Destinations in the eBay data as in conventional trade data are not only independent countries (of which there are about 195), but also some separate territories that are not "countries" in a strict sense, such as Hong Kong or American Samoa.
- 6 See World Bank (2012). Exporter Dynamics Database available at http://data.worldbank.org/data-catalog/exporter-dynamics-database.
- 7 These four markets are no outliers for traditional exporters. Across the 45 countries covered by the World Bank database, exporters reach around 3 markets on average. Similar findings have been made for sellers based in large developed countries, such as the US or France. Even when we include all eBay exporters in the analysis, including those with annual exports below USD 10,000, we find that they reach on average multiple times more markets than "traditional exporters".
- 8 This is not only true for the four countries where we can make a direct comparison between eBay and traditional data. In most other countries for which the World Bank provides such data, the share of newcomers is below 5%.
- 9 We have calculated the eBay figures based on sales, rather than exports. However, results are practically the same when using eBay exports instead.
- 10 Australia is an outlier in this respect, with "only" 78% of its sellers exporting.
- 11 http://www.emarketservices.com/start/News/International/news/E-Commerce-improves-in-Chile-despite-difficulties-in-locating-supplierinformation.html?xz=0&cc=1&sd=1&ci=4466
- 12 http://www.ustr.gov/sites/default/files/uploads/agreements/fta/chile/asset_upload_file415_4009.pdf
- 13 http://www.leychile.cl/Navegar?idLey=20453
- 14 Petersen Institute, Logistics Reform for Low-Value Shipments http://www. piie.com/publications/pb/pb11-07.pdf
- 15 http://www.apec.org/Meeting-Papers/Ministerial-Statements/ Annual/2011/2011_amm/annex-a.aspx
- 16 See appendix for details on the distance effect.

- 17 http://www.global-express.org/assets/files/Trade/Country%20info%20 on%20de%20minimis_04082013.pdf
- 18 http://www.ebaymainstreet.com/news-events/ebay-inc-releases-newresearch-enabling-australian-export-opportunities
- 19 http://www.wipo.int/edocs/mdocs/copyright/en/sccr_15/sccr_15_7.doc
- 20 http://www.freedomhouse.org/report/freedom-net/2012/ukraine
- 21 Id.
- 22 Note that comparable data for traditional firms is not available, except for the share of firms that is exporting.
- 23 www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=0C DOQFjAC&url=http%3A%2F%2Finvestukraine.com%2Fwp-content%2Fuploa ds%2F2011%2F11%2F0pen-World-Project-Brief1.pdf&ei=69A8UvnrEaWDiQ Kh4oHwCw&usg=AFQjCNFrNo-TvzOflRXEqbdUMzMW7Fe0jA&sig2=Qw-UvrJx XAtxGQiPH99DTA&bvm=bv.52434380,d.cGE
- 24 http://www.internationallawoffice.com/newsletters/detail.aspx?g=bb02e1e3-792d-4d2a-83f7-24864a44754f
- 25 http://www.pwc.com/ua/en/publications/2013/acc_customs_code.jhtml
- 26 Id
- 27 http://www.kmu.gov.ua/control/en/publish/article?art_id=171492548&cat_id=244315200; http://actualites.upu.int/uploads/media/4_2011_en_01.pdf
- 28 http://reports.weforum.org/global-enabling-trade-report-2012/
- 29 www.kmu.gov.ua/control/en/publish/article?art_id=171492548&cat_id=244315200; http://postandparcel.info/23565/news/ukraine-to-reform-postal-service-ahead-of-2013/
- 30 http://www.voanews.com/content/south-africa-lags-behind-with-internetaccess/1147046.html
- 31 http://www.sacu.int/index.php
- 32 http://www.wcoomd.org/en/media/newsroom/2011/april/~/media/7B104796B F494FF9AR972AR4A370057 0 ashx
- 33 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=0J:L:1999:311:0003:0 297:FN-PDF
- 34 http://www.zdnet.com/can-south-africas-grand-broadband-plansucceed-700007165/
- 35 http://mybroadband.co.za/news/broadband/87425-the-state-of-broadbandin-south-africa-2.html
- 36 http://www.doc.gov.za/index.php?option=com_content&view=article&id= 231:south-africas-broadband-policy-too-many-delays-now-for-progresstogether&catid=41:press-realease&Itemid=66
- 37 http://tegaranet.com/Portals/0/PropertyAgent/1083/Files/3627/Arab%20 Advisors%20Press%20-%2024%20April%202012%20-%209thCS%20 Jordan%20Internet%20users%20and%20e-commerce%20survey%202012. ndf
- 38 http://www.moict.gov.jo/Portals/0/Final1.pdf
- 39 Id.

- 40 http://tcc.export.gov/Trade_Agreements/All_Trade_Agreements/ exp 005607.asp
- 41 www.sice.oas.org/Trade/us-jrd/St.Eomm.pdf
- 42 http://www.wamda.com/2012/11/paypal-announces-deal-with-aramex-tosupport-shop-
- 43 http://www.telegeography.com/products/commsupdate/articles/2013/07/12/cellcos-boycott-spectrum-auction-as-lawmakers-double-mobile-taxes/
- 44 http://www.ey.com/Publication/vwLUAssets/Rebirth_of_e-Commerce_in_ India/\$FILE/EY_RE-BIRTH_OF_ECOMMERCE.pdf
- 45 http://www.mckinsey.com/locations/india/mckinseyonindia/pdf/Executive_ Summary_Online_and_upcoming_The_Internet_impact_on_India.pdf
- 46 http://www.zdnet.com/in/online-shopping-catching-fancy-of-indianconsumers-7000010470/
- 47 Note that comparable data for traditional firms is not available, except for the share of firms that is exporting.
- 48 http://articles.timesofindia.indiatimes.com/2013-09-25/ internet/42392337_1_active-internet-users-social-media-brand-building
- 49 http://rbidocs.rbi.org.in/rdocs/PublicationReport/PDFs/VDBP270612.pdf
- 50 Id
- 51 http://articles.economictimes.indiatimes.com/2012-04-06/ news/31300142_1_fieo-indian-export-organisations-paypal
- 52 Note that comparable data for traditional firms is not available, except for the share of firms that is exporting.
- 53 http://freepdfz.com/pdf/the-national-strategy-for-financial-inclusion-inindonesia-46167351.html
- 54 http://www.voanews.com/content/in-indonesia-a-smartphone-for-everybudget/1628734.html
- 55 http://www.asean.fta.govt.nz/chapter-4-customs-procedures/
- 56 http://www.prnewswire.com/news-releases/frost--sullivan-predictsindonesia-logistics-industry-to-grow-145-year-on-year-in-2013-202514481. html
- 57 http://en.dailysocial.net/post/government-to-push-regulation-that-forcesindonesian-e-commerce-companies-to-use-local-domains
- 58 http://sg.finance.yahoo.com/news/indonesian-government-hurtinghelping-e-171230982.html
- 59 Note that comparable data for traditional firms is not available, except for the share of firms that is exporting.

- 60 http://www.dfat.gov.au/fta/tafta/tafta chapter 11.html
- 61 www.academia.edu/1599583/2013_Bridging_the_Digital_Divide_in_ Rural_Thailand_Ellis_
- 62 http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=6 &ved=0CFcQFjAF&url=http%3A%2F%2Fwvw.itu.int%2FITU-D%2Fasp% 2FCMS%2FEvents%2F2009%2FPwDs%2Fdacs%2FSession-8-Proadpran. ppt&ei=tSs2UtWvNMWv4A0E-IH4CQ&usg=AFQjCNFRVEYfzJCPy3CAyUDhCzikGgKAA&sig2=kBzbFQ5ia-UHgFRs7U4ucQ&bvm=bv.52164340,d.
- 63 www.academia.edu/1599583/2013_Bridging_the_Digital_Divide_in_ Rural_Thailand_Ellis_
- 64 https://www.cdt.org/files/pdfs/Comments-Thailand-CCA-Draft.pdf
- 65 http://advocacy.globalvoicesonline.org/wp-content/downloads/Act_on_ Computer Crime 2550%282007%29.pdf
- 66 The data contains even more information, such as the eBay product category, the eBay site used and other indicators. Not all of those have been used for this study.
- 67 World Bank Exporter Dynamics Database, available at http://econ. worldbank.org/exporter-dynamics-database.
- 68 World Bank Enterprise Surveys, available at http://www.enterprisesurveys. org/.
- 69 Available at http://comtrade.un.org/ . See appendix on the gravity regression for further details.
- 70 This explains the name "gravity equation" it resembles the gravity equation used in physics. The force of gravity between two planets, for example, is increasing with their masses, and decreasing with distance.
- 71 Available at http://www.voxeu.org/sites/default/files/file/DP9094(1).pdf. See http://www.voxeu.org/article/put-your-money-where-your-mouse-how-ecommerce-can-foster-development for a non-technical summary.
- 72 One could also control for the size of both partner countries (usually measured by GDP). However, one normally uses importer and exporter dummies, which controls for any country-specific properties. What remains are thus only variables that are country-pair specific. For trade and distance, the logarithm of their values is used.
- 73 This is the same method as used in Lendle et al. (2012). The authors showed that results are fairly similar when using all traditional ("offline") trade flows.
- 74 Note that the results shown in Figures 2 and 3 are the trade-reducing effects of distance, obtained by multiplying regression results by -1.



eBay Inc.

www.ebay.com www.ebaymainstreet.com

Washington DC Office

1250 Eye Street NW — Suite 1200 Washington, DC 20005

EU Liaison Office BVBA

Avenue des Arts 44, 3rd Floor 1040 Brussels Belgium

eBay Singapore Services Private Limited

Suntec Tower 5, 5 Temasek Boulevard #09-01 Singapore 038985

