Global Center of Excellence
PROINVEX PANAMA

E-commerce in Latin America

AND THE ROLE OF PANAMA AS AN E-COMMERCE HUB FOR THE REGION

POWERED BY

PROINVEX PANAMA
GABINETE LOGÍSTICO REPÚBLICA DE PANAMÁ
DHL

PREFACE:

WITH THE GOAL OF ENHANCING PANAMA'S LOGISTICS AND DISTRIBUTION ROLE IN THE AMERICAS, PANAMA'S MINISTRY OF COMMERCE AND INDUSTRIES (MICI) LAUNCHED THE GLOBAL CENTER OF EXCELLENCE JOINTLY WITH DHL, ONE OF THE WORLD LEADERS IN THE LOGISTICS SECTOR.

The Global Center of Excellence was designed to help fulfill the central objectives of the National Logistics Strategy of Panama by 2030, to increase international investment in Panama in the areas of logistics and transport.

Expanding at close to 15% per annum worldwide, e-commerce is one of the largest opportunities for growth in the logistics sector. E-commerce remains relatively undeveloped in Latin America and as such, e-commerce supply chain routes are yet to be defined. Now is the opportune time to research the sector and Panama's role as an e-commerce hub. With the opportunities come significant challenges in e-commerce logistics, particularly cross-border deliveries, which is where Panama could become a strategic nexus.

Divided in five chapters, the following white paper report begins by exploring what drives e-commerce growth both worldwide and within Latin American and Caribbean markets and helps illustrate where logistics opportunities will next emerge. The report would not be complete without a keen understanding of the logistical challenges still retraining the growth potential of physical e-commerce in Latin America. It also offers a glimpse of what logistics solutions today's e-commerce players require and where they will naturally look for them. The report goes on to benchmark the strengths of Panama versus other traditional logistics hub cities in the Americas, and how Panama can further enhance its hub competitiveness.

We hope that you draw some valuable insights from this paper and that it inspires you to take a closer look at the opportunities in Latin American e-commerce and specifically in Panama, which strives to be a future cross-border e-commerce hub.

Table of Contents

1

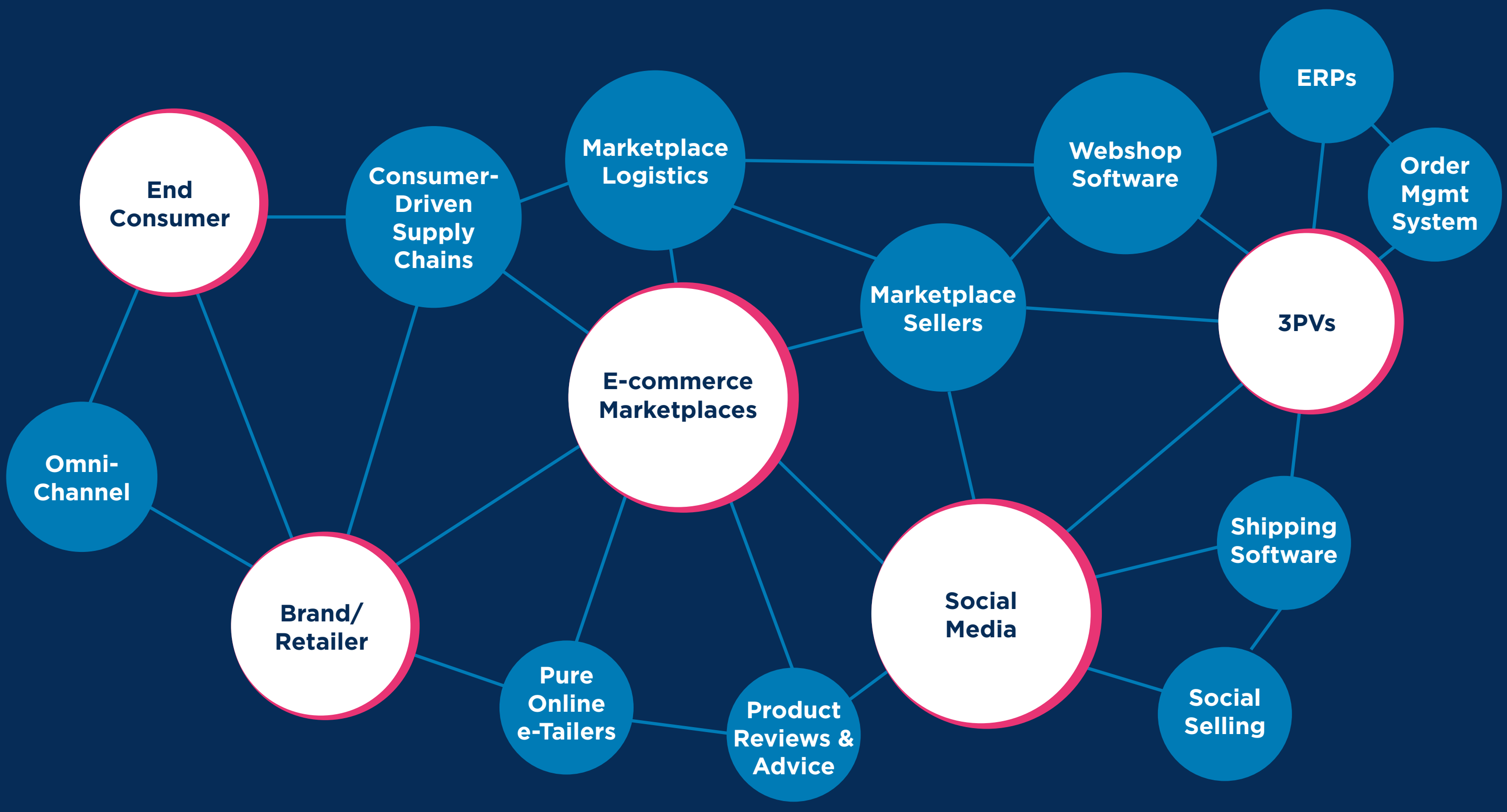
Chapter 1
Understanding e-commerce

Understanding e-commerce

E-commerce may be the most disruptive trend to simultaneously impact trade, retailing and distribution. Today, e-commerce represents less than 10% of global retail sales and yet it has already re-written the rules of how products are marketed, distributed and sold the world over.

Before e-commerce, consumers by and large purchased only what was available within their physical proximity. Thanks to rapidly evolving logistics solutions, customers today can purchase anything from anywhere. The consumer is the focus of the e-commerce revolution and his or her user-experience (UX), which begins with getting online and ends with receiving (or returning) the product, is the new battle ground for consumer loyalty.

THE E-COMMERCE ECOSYSTEM



B2C E-COMMERCE IS DIVIDED INTO THREE SEGMENTS

1. The first segment to gain traction globally was **travel e-commerce**, i.e. the booking of flights, hotels, and car rentals online. In most markets travel represents 1/3 or more of total e-commerce but its growth is slowing as the category matures.

2. Physical e-commerce includes all physical products that require fulfillment and delivery to complete the sale. These are the most relevant to the discussion in this white paper.

3. The newest and fastest growing e-commerce segment is the **electronic sale of digital goods and services** like Netflix (goods) and Uber (services).

1.1 THE CONSUMER IS KING

The e-commerce empowerment of the consumer obliges brands and retailers to move away from models that are shop-centric or geo-focused to ones that are customer-centric and often borderless. With digitalization, brands can more easily communicate and even sell directly to end consumers. Penetration of e-commerce varies across product types with top categories bought online globally being books and music (53%), electronics (47%), and apparel (40% women, 34% men).[1]

Beyond time spent on the e-commerce website, including the checkout process, the next most critical components of the user-experience in e-commerce are the delivery and, when necessary, return of the product purchased. According to the MetaPack 2018 State of E-commerce Delivery study, 61% of shoppers say that a positive delivery experience incentivizes them to shop with an e-tailer again and 58% of online shoppers chose one online provider over another because they provided more delivery options, highlighting the importance of delivery experience in the overall online purchasing process.

Returns is also an important element for the user experience of the online shopper with 56% of shoppers claiming that an e-commerce site's returns policy had deterred them from shopping with the said site and over one-third (35%) of consumers saying they check an e-commerce site's returns policy before making a purchase.

These statistics showcase how critical it is for an online store to offer a great delivery and return experience to ensure repeat purchases from their customers.

Consumers demand cross-border shopping options

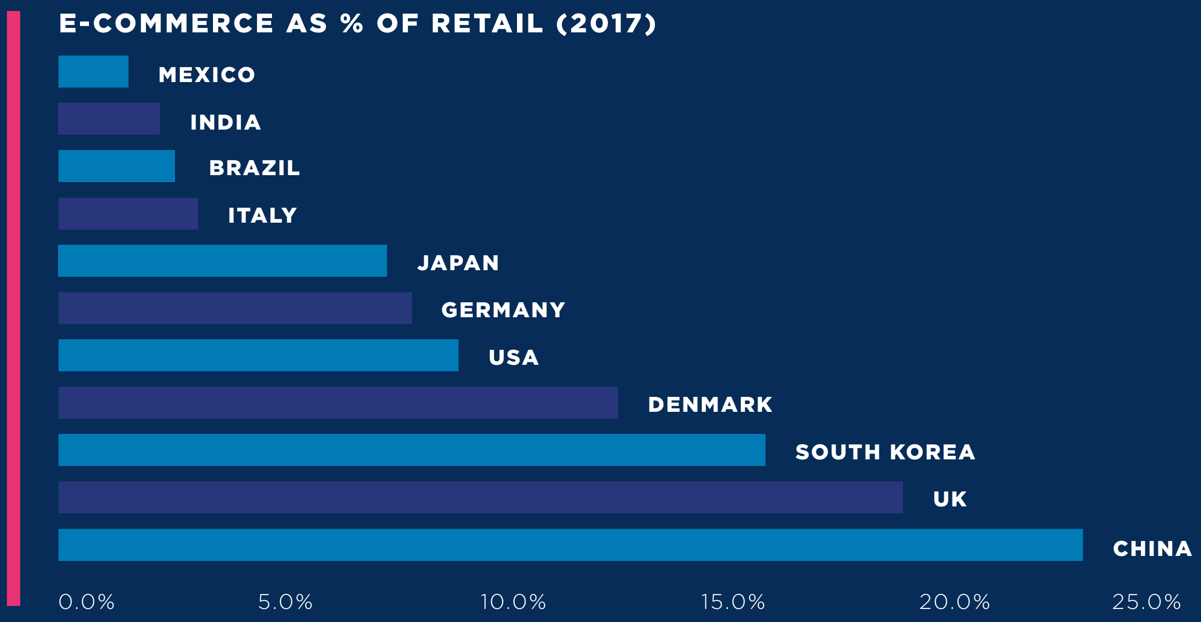
China is today the largest e-commerce market in the world. Together with the US, the two behemoth economies are responsible for over 70% of total e-commerce demand.[2] In both countries there is a growing demand for cross-border e-commerce but about 85% of fulfillment is executed domestically. Approximately 15% of total B2C ecommerce in these combined markets is cross-border.[3]

The rest of the world (close to 200 countries) makes up about 30% of the world's retail e-commerce purchases.[4] For customers in these markets, close to 35% of B2C e-commerce is executed cross-border.[5] On a global basis, roughly every fifth online transaction is international and is expected to grow by 25% per annum over the next five years[6], almost double the pace of total e-commerce growth, forecast at closer to 14%[7]. The motivations of shoppers to purchase abroad include[8]:

- Product availability
- More attractive offering (including price)
- Trust

Sharpening a competitive advantage related to availability and trust is both a motivation and a strategic opportunity for the majority of cross-border retailers and manufacturers. When it comes to cross-border e-commerce, fashion and electronics are today's leading categories. In the future, analysts anticipate above-average growth from beauty and cosmetics, pet care, food and beverage, and sporting goods.[9]

1. Source: KPMG: The truth about online consumers; defined by percentage of shoppers that purchased product in last 12 months. **2.** Source: eMarketer/Economist, published in the World Economic Forum bulletin on September 17th, 2018. **3.** Source: Accenture – Cross border e-commerce, 2019. **4.** Source: eMarketer/Economist, published in the World Economic Forum Bulletin on September 17th, 2018. **5.** Source: Accenture – Cross border e-commerce, 2019. **6.** Source: DHL Report: The 21st Century Spice Trade. **7.** Source: Accenture – Cross border e-commerce, 2019. **8.** Source: DHL Report: The 21st Century Spice Trade. **9.** Source: DHL Report: The 21st Century Spice Trade.



Source: eMarketer

1.2 HOW BRANDS AND RETAILERS ARE ADAPTING TO CONSUMER-CENTRIC E-COMMERCE

Pure online e-tailers

Digitalization of commerce can help level the playing field for small suppliers. Pure e-tailers (online-only presence) with innovative business models that are customer-centric have proven capable of very fast growth and have demonstrated an ability to sell globally. A great example of this is the Dollar Shave Club. (see Case Study for more details).[10]

The rise of omni-channel

Brick-and-mortar retailers are quickly transforming into omni-channel providers. Traditional retailers, including manufacturer-owned retailers like Nike shoes, want to appeal to younger customers who prefer online shopping. But more broadly, these retailers see online commerce as a way to deepen their relationship with customers. (see Nike Case Study for more details). This is especially relevant in the age of category-killer megaretailers like Walmart and Amazon, whose unlimited brand choice and emphasis on pricing can quickly dilute a consumer brand's equity.

Brick-and-mortar and online channels can by symbiotic if they are well coordinated. For traditional retailers, their network of stores can serve as localized inventory that accelerates fulfillment and delivery to a customer. A Walmart store can be found within 20 miles of 96% of American consumers.[11] For customers who are rarely at home, the option to pick up their online purchase at the nearest store can be very convenient.

So compelling is the omni-channel concept that some pure e-tailers have invested in brick and mortar storefronts, a tactic considered taboo just a few years ago. Case in point is Bonobos, who started as a pure online retailer and eventually established a brick-and-mortar presence; however, this was more of a showroom than a store, a place where consumers could experience the fabrics and try the pants and could order them in-store for home delivery.

If brands manage the customers' omni-channel journey well, they can be well-rewarded. A Harvard Business Review study shows the more sales channels offered to consumers, the more likely they are to purchase. For example, customers who used multiple channels spent 9% more in the store, on average, when compared to those who used just one channel. Furthermore, when shoppers research the retailer's own website before visiting the store, in-store spending is 13% higher than those who did not consult the retailer's website before shopping.[12]

10. Source: Entrepreneur magazine, March 28, 2017. **11.** Source: Brick and Mortar Retail is Not Dying: The Future of Brands in an OmniChannel World, July 17th, 2017.
12. Source: Harvard Business Review, https://hbr.org/2017/01/a-study-of-46000-shoppers-shows-that-omnichannel-retailing-works.

CASE STUDY

DOLLAR SHAVE CLUB: REVOLUTIONALIZING MEN GROOMING THROUGH ONLINE SUBSCRIPTION BASED SALES MODEL

Dollar Shave Club launched in 2011, with a simple premise to make buying razors more convenient. Against all odds, the start-up managed to disrupt one of the most mature and consolidated product categories, the razor market, which Gillette dominated with 72% of the US market. The Dollar Shave Club presumed it could start by undercutting the big competitors on razors, make purchasing a razor more convenient and then build out something that felt less like a shaving supply company and more like a full-scale men's club — a subscription-based grooming brand. The idea worked. By 2015, four years after the company was conceived, web sales for men's shaving gear had more than doubled industry-wide, to $263 million — and the following year, Dollar Shave Club was the number-one online razor company, with 51% of the market. By Q3, 2016, the Dollar Shave Club was sold to Unilever for a reported $1bn USD[10] and offers a much wider men's grooming product variety than razors only.

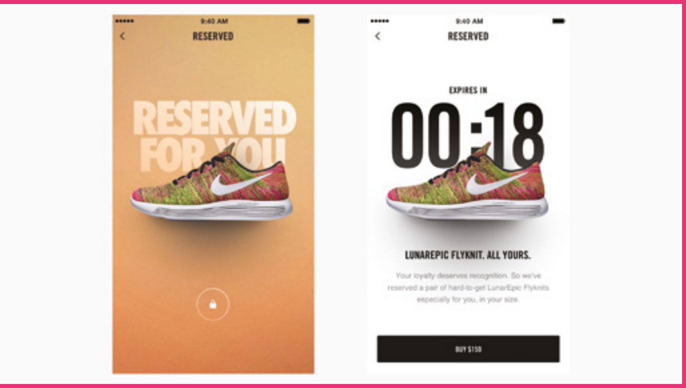
CASE STUDY

NIKE: THE JOURNEY TO DIRECT TO CONSUMER SALES

In March 2009, Nike appointed their first President of Direct to Consumer for the company. The aim was to grow Nike-owned retail stores worldwide, affiliate retail stores, and digital commerce. And in the years between 2009 and 2018, the share of direct to consumer has more than doubled, with impressive CAGR of 17% p.a. vs. only 4% for the traditional Nike sales channels.

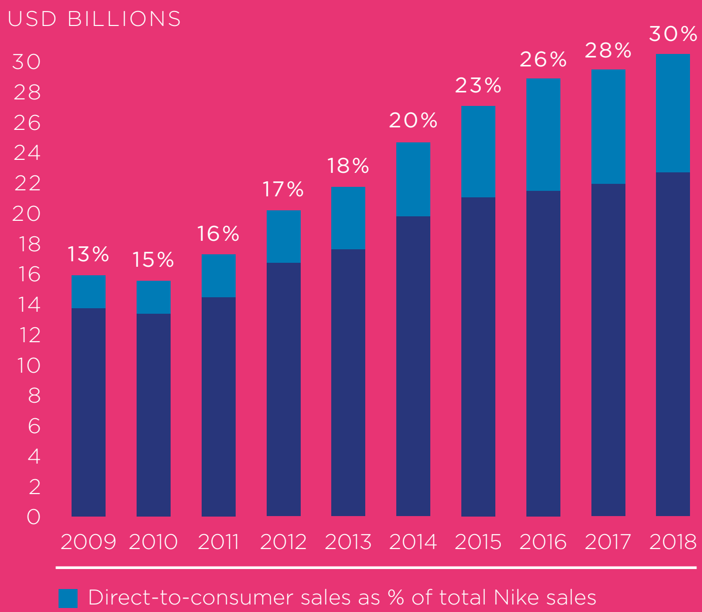
Nike's first direct-to-consumer efforts were based on a partnership with Apple whereby it enabled users to connect their shoes with an iPod to track running indicators. Branded as Nike+, the effort evolved into a community for runners and Nike was keen to build on this.

In 2016, Nike expanded NikePlus to become a personalized app for all sorts of users and not only for runners. It aims to provide customized offers, with products 'reserved' for the customers and with expert advise from top athletes. This effort has been paying off – customers on NikePlus are worth three times the value of an anonymous buyer.



NIKE DIRECT-TO-CONSUMER JOURNEY

DIRECT-TO-CONSUMER SALES AS % OF TOTAL NIKE SALES



Source: Nike Investor Relations

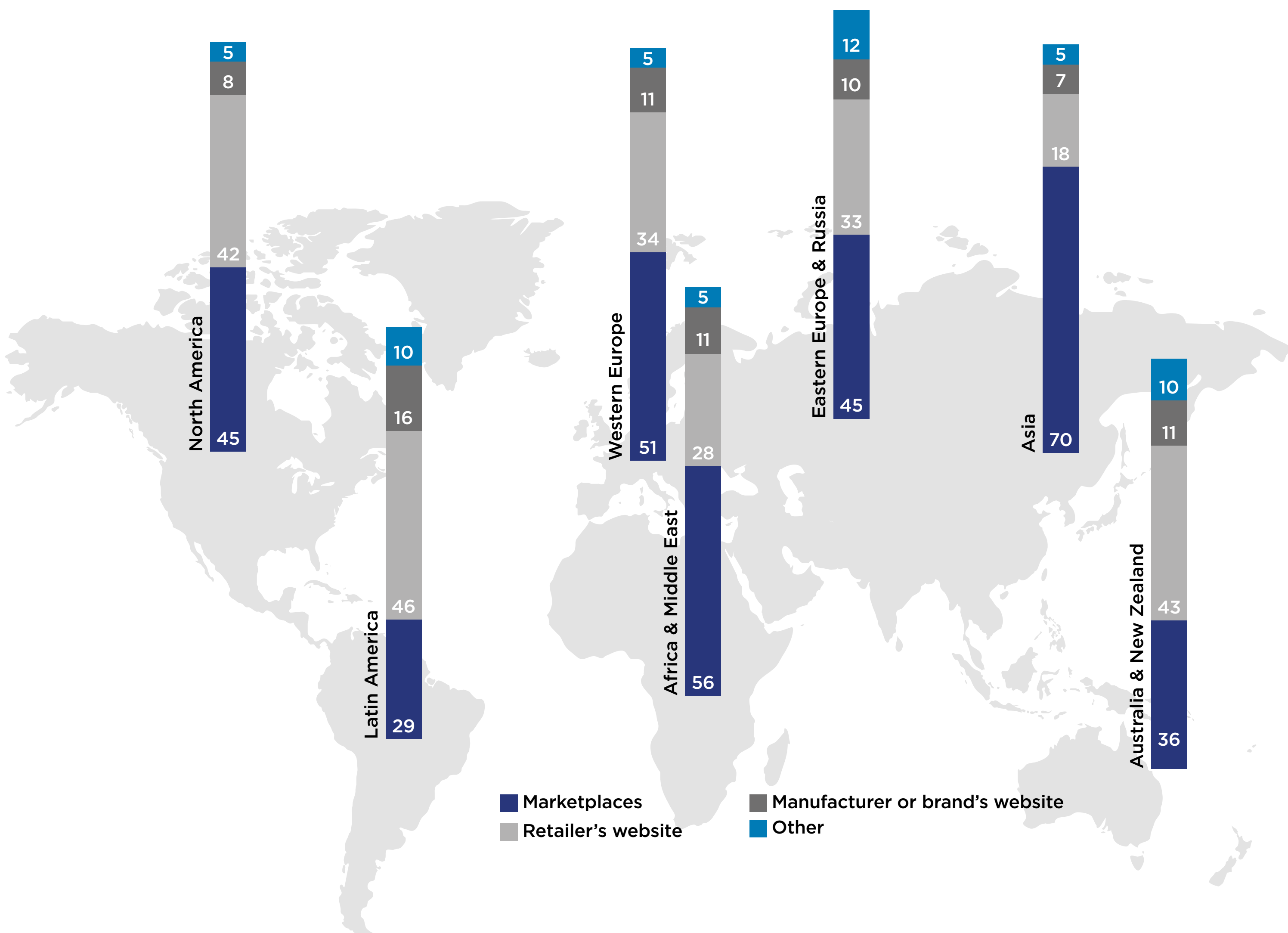
The journey to direct to consumer sales

1.3 THREE GIANTS LEAD THE WAY

The three e-Commerce giants - Amazon, Alibaba and JD.com - presently dominate the global e-commerce market with a combined market share of more than 50%.[13] But far more than re-sellers of popular consumer products, these companies provide vital services to consumers (e.g. Amazon films, TV and music) and even to other players in the e-commerce eco-system (e.g. Alipay).

All three of these e-commerce marketplaces pride themselves on providing excellent customer service, competitive prices and fast delivery, and often they shape the expectations of consumers in the markets where they are present. For instance, Amazon raised the bar on consumer expectations regarding delivery times and product returns.

WHERE MOST PURCHASES WERE MADE BY TYPE OF WEBSITE (%)[14]



13. Source: DHL estimate based on GMV and Euromonitor market sizing. **14.** Source: KPMG, Global Consumer Report 2017.
15. Source: https://www.wsj.com/articles/instagram-encroaches-on-amazon-with-new-shopping-feature-11552996800.

1.4 SOCIAL MEDIA AND NEW MARKETING TOOLS

Social media is quickly emerging as the most influential source of consumer purchase behavior. This is especially true if brand recommendations come from friends, family and other trusted sources, which social media platforms excel at facilitating. The connection between social media opinion sharing and a transactional decision is now referred to as Social Commerce.

The powerful influence that social media platforms have in consumer choice is one of the implicit value propositions of companies like Facebook, Instagram, or Twitter. Until recently, social media companies have been reticent to offer e-commerce directly on their sites for fear of losing credibility among their millions of users, but that is where they are likely headed. In 2019, Instagram launched a pilot for 20 customers where end consumers can purchase directly through Instagram.[15]

Q: WHAT ONLINE MEDIA DO YOU REGULARLY USE TO FIND INSPIRATION FOR YOUR PURCHASES?

Social network	37%
Individual retailer sites	34%
Price comparison websites	21%
Multi-brand websites	21%
Visual social networks	20%
Travel review websites	16%
E-mails from brands/retailers	14%
Deal of the day websites	12%
Mobile apps	11%
Blogs	11%
Digital press & magazines	6%

Base: 22,481 (Respondents were asked to select up to three options)

Source: PwC, Global Consumer Insights Survey, 2018

1.5 3PVS AS KEY E-COMMERCE TECHNOLOGY ENABLERS

3PVs or third-party vendors are companies that provide auxiliary products or services that enable retailers, brands and sellers to participate in e-commerce in an easy and cost-effective manner.

Webshop software helps retailers move online from scratch or professionalize their online offering with advanced features that include the integration of shipping options during the checkout process and an interface to an Order Management System for order transmission to a Fulfillment Center. Some examples are Magento, Shopify and WooCommerce.

Shipping software offers integration services by bundling shipping options and service levels of various providers, offering a single interface to help e-tailers and merchants to reduce single integrations complexity and better manage shipping costs. Examples of companies in the space are MetaPack and ProShip.

ERPs or Enterprise Resource Planning software is typically deployed by larger companies, and with their add on e-commerce capabilities ERPs can help optimize business processes by enabling integration and automation. They also can offer customer facing platform including shipping options. An example is Salesforce Commerce Cloud.

1.6 KEY OPPORTUNITIES AND CHALLENGES IN E-COMMERCE LOGISTICS

Opportunities:

A fast growing new channel like e-commerce that still strives to overcome barriers offers many opportunities:

- Cross-border e-commerce fulfillment to small economies where domestic e-commerce remains underdeveloped and consumers shop heavily from international sites.
- Break-bulk distribution services for new vendors drawn to new markets by e-commerce marketplaces.
- Innovative delivery concepts improving convenience and speed of delivery especially in major urban centers.
- Fulfillment capabilities combining management of inventory for various sales channels (online, own stores, retail partners).
- Reverse logistics and repair centers to support manufacturers selling online domestically and across borders.
- Development of COD (cash on delivery) and other cash-based payment methods that help extend the accessibility of e-commerce to a larger population without access to payment cards.

Challenges:

Some of the most pressing challenges include:

- Customs remains a key challenge for cross border e-commerce: delays in releasing cross-border purchases are common and customs regulations remain designed for moving bulk freight and are too onerous when auditing e-commerce shipments. In addition, customs unions are not set up for handling product returns and with them, the return of import duties and VAT collected upon market entry.
- Last-mile fulfillment remains costly and in many emerging markets can be unreliable due to security issues and poor infrastructure. For example, the world's most congested cities tend to be in Asia, Latin America and the former Soviet Union. Also, address systems in many markets are often illogical, repetitive or nonexistent – e.g. Central America.
- Combining logistics operations and inventory for different sales channels is often a challenge for customers just transitioning into e-commerce.
- Managing high levels of returns is a challenge especially from the perspective of inventory optimization, product obsolescence and product resale.
- Inefficient and unreliable official postal operators in most emerging markets denies consumers a cost-effective fulfillment channel.

2

Chapter 2

The promise of e-commerce growth in Latin America

2.1 THE PROMISE OF E-COMMERCE GROWTH IN LATIN AMERICA

In 2018, total B2C e-commerce in Latin America eclipsed $100 billion dollars and will grow at 22% CAGR (compounded annual growth rate) through 2021.[16] This is an even faster rate of growth than over the previous five years. There are several drivers of accelerated growth, but the biggest impulse comes from the rapid expansion of e-commerce marketplaces like MercadoLibre, Amazon, Alibaba, Linio and others (see Case Studies). By creating local language sites and developing local customer service, the compelling price advantages offered by these and other sites are now aggressively marketed to Latin Americans. Their response is overwhelming. MercadoLibre and Amazon are now the top two e-commerce sites in Mexico. In Brazil, the leaders include MercadoLibre, Amazon and AliExpress, owned by Alibaba, the world's largest e-commerce company by number of customers (close to 500 million).

Over the next few years, it will be these global and regional e-commerce marketplaces that will continue to dominate e-commerce in Latin America, until such time as traditional retailers catch up with their own online efforts and e-retailers climb the learning curve of Latin American e-commerce fulfillment. Global marketplaces source a disproportionate volume of the products they sell from Asian manufacturers and some like AliExpress even fulfill orders at origin.

Global e-commerce players are betting on the region in part because Latin Americans have demonstrated a strong propensity for digital commerce. From 2016-2018, Latin America was the fastest-growing region in the world for Uber, Netflix, Airbnb and Coursera. Latin American consumers take to these and other disruptive digital commerce sites with great enthusiasm because traditional options (conventional taxis, broadcast television, hotels and universities) lack the variety, customer service, and a level of value for money that customers demand.

TOP FIVE E-COMMERCE SITES IN LATIN AMERICA'S LARGEST MARKETS

RANK	Brazil	Mexico	Colombia	Argentina	Chile	Peru
1	MercadoLibre	MercadoLibre	MercadoLibre	MercadoLibre	Yapo	Falabella
2	Americanas	Amazon	OLX	OLX	MercadoLibre	Ripley
3	OLX	Walmart	Falabella	Fravega	Sodimac	Sodimac
4	Casasbahia	Liverpool	Linio	Alamaula	Ripley	Linio
5	Magazineluiza	Coppel	Sodimac	Garbarino	Paris	Plaza Vea

Source: MercadoLibre investor report

16. Source: Americas Market Intelligence.

CASE STUDY

MERCADOLIBRE: PAVING THE WAY FOR E-COMMERCE GROWTH IN LATIN AMERICA

Founded in 1999, MercadoLibre is the leader in e-commerce in Latin America and takes the 7th place globally. It has a broad presence, covering 18 Latin American markets. In 2018, goods worth $12.5B USD were sold through MercadoLibre. It has 200,000 Mercado Shops offering 182.1 million live listings.

Key to the success of MercadoLibre is that it offers various e-commerce ecosystem enablers that make transacting online easy. MercadoLibre developed a very effective payment technology company called MercadoPago, which helps extend the reach of e-commerce beyond credit card holders. In addition, it has a credit subsidiary – MercadoCredito and a logistics arm – MercadoEnvios.

Source: MercadoLibre Investor Relations

CASE STUDY

LINIO: A DIFFERENT APPROACH TO ENABLING E-COMMERCE

Linio (founded in 2012) is a Latin American founded e-commerce marketplace active in 5 Latin American markets. Linio boasts 50 million visitors per month and has 10, 00 Linio stores, a modest amount compared to the one from MercadoLibre.

However, Linio has a different approach to enabling e-commerce sales. With offices and bilingual account managers in both China and US, Linio is attracting international sellers from those markets to sell on the Latin American marketplace.

In 2018, Linio was acquired by Falabella, a large Chilean retailer with operations across Latin America for a reported $138M USD.

Source: Linio website, Reuters

Disrupting poor service

In 2015, Uber began in Mexico with 20 drivers. By Q1, 2019, there were 500,000 Uber drivers in Mexico servicing about 15% of adult Mexicans as customers. The same market penetration in the US required nine years, twice as long as Mexico.[17] Uber has been successful all over Latin America because traditional taxis are unsafe, unpredictably priced, and often unreliable.

In 2018, Netflix was available in 190 countries worldwide. Of the top 10 binge watchers of Netflix, defined as number of hours watched per customer, five of the top 10 were in Latin America with Mexico leading the world.[18] These disruptive models work so well in Latin America because they provide a welcome change from overpriced, poorly executed services where legacy providers often lack competition.

Localized payment methods

As recently as 2010, digital commerce sites in Latin America could only be utilized by credit card holding customers, limiting access to less than 20% of household's.[19] A few years back, innovative FinTech's like PayU and D-local emerged, offering digital merchants low risk payment options like debit cards, cash (boletos) and ACH (bank transfers). Latin American banks, recognizing the opportunity that e-commerce represents, have begun facilitating the acceptance of debit cards on their e-commerce merchant clients' websites. Business models like Netflix or Uber could not thrive without offering a wide variety of payment methods.

17. Source: Forbes magazine. **18.** Source: Statista, 2018. **19.** Source: Americas Market Intelligence.

Prevalence of smart phones

Latin Americans have upgraded from feature phones to smart phones much faster than analysts predicted just a few years ago. The influx of low cost smart phones has enabled them to be accessible to all levels of society. According to the GSMA 2018 report, smart phone penetration reached 64% of the total Latin American population by July 2018, representing 75% of all cell phone connections in the region.

Consumer research conducted by Americas Market Intelligence illustrates that it is, above all other factors, the desire to use popular consumer apps like Netflix that compels Latin Americans to buy a smart phone and even apply for a credit card. From January 2017 to 2018-2019, Latin American data consumption climbed by 45%.[20]

Limited physical retail infrastructure

Physical e-commerce still faces logistical hurdles to reach its potential, but that potential is massive. Traditional retail has achieved very little penetration in Latin America (less than 1 sq. ft/person versus 21.5 in the USA and 2 – 5 sq. ft/person in most of Western Europe).[21] For that reason, analysts believe that middle income emerging markets like Latin America will see e-commerce climb to represent 20-25% of total retail, as China has done, surpassing the penetration of e-commerce in the US. For Latin Americans living outside the 10 largest cities in the region, sourcing any kind of unusual product, be it a set of golf clubs or a particular brand of clothing, presents two choices: they can travel great distances to a large urban market or buy online.

TOTAL MONTHLY MOBILE DATA TRAFFIC, JANUARY 2019

Country	Monthly volume (billions of Gigabytes)	Annual change
Latin America	2.09	45%
North America	3.57	32%
Asia Pacific	19.43	29%
Middle East & Africa	2.56	57%
Western, Central & Eastern Europe	4.87	45%

Source: Ericsson Mobility Calculator

RETAIL SPACE IN SQ. FEET PER PERSON, 2017

Country	Square feet
USA	21.5
Norway	9.9
Sweden	4.7
Finland	4.5
Netherlands	3.9
Spain	2.6
Italy	2.5
Germany	2.0
Russia	1.3
Turkey	1.2
Mexico	1.0
Peru	0.9
Philippines	0.8
Colombia	0.7
Brazil	0.7
Argentina	0.5
China	0.4
India	0.05

Source: Credit Suisse, 2017

20. Source: Credit Suisse.

2.2 CROSS-BORDER E-COMMERCE IN LATIN AMERICA

According to a 2018 Nielsen global survey, 54.6% of Latin American e-commerce shoppers make purchases from overseas websites.

Today only Brazil has sufficient domestic vendors to supply the majority of the variety and volume of e-commerce demand. Although Mexico boasts Latin America's largest manufacturing sector, over half of its production value is exported, principally to the US. Often, when a Mexican customer purchases a laptop computer or television online, the product is assembled in Mexico but shipped to a central warehouse in the US before delivery back into Mexico. Every other market in Latin America relies on imports to supply most of its physical e-commerce sales.

Forward inventory location

With a handful of global and regional e-commerce marketplaces and mega-retailers driving this early growth phase of e-commerce, cross-border shipments outpace the growth of domestic physical e-commerce until such a time that marketplaces like Amazon and the hundreds of vendors that follow them begin to place inventory inside targeted domestic markets. The major marketplaces service dozens of Latin American and Caribbean markets today — but in only a handful of the largest countries do they or their vendors maintain inventory.

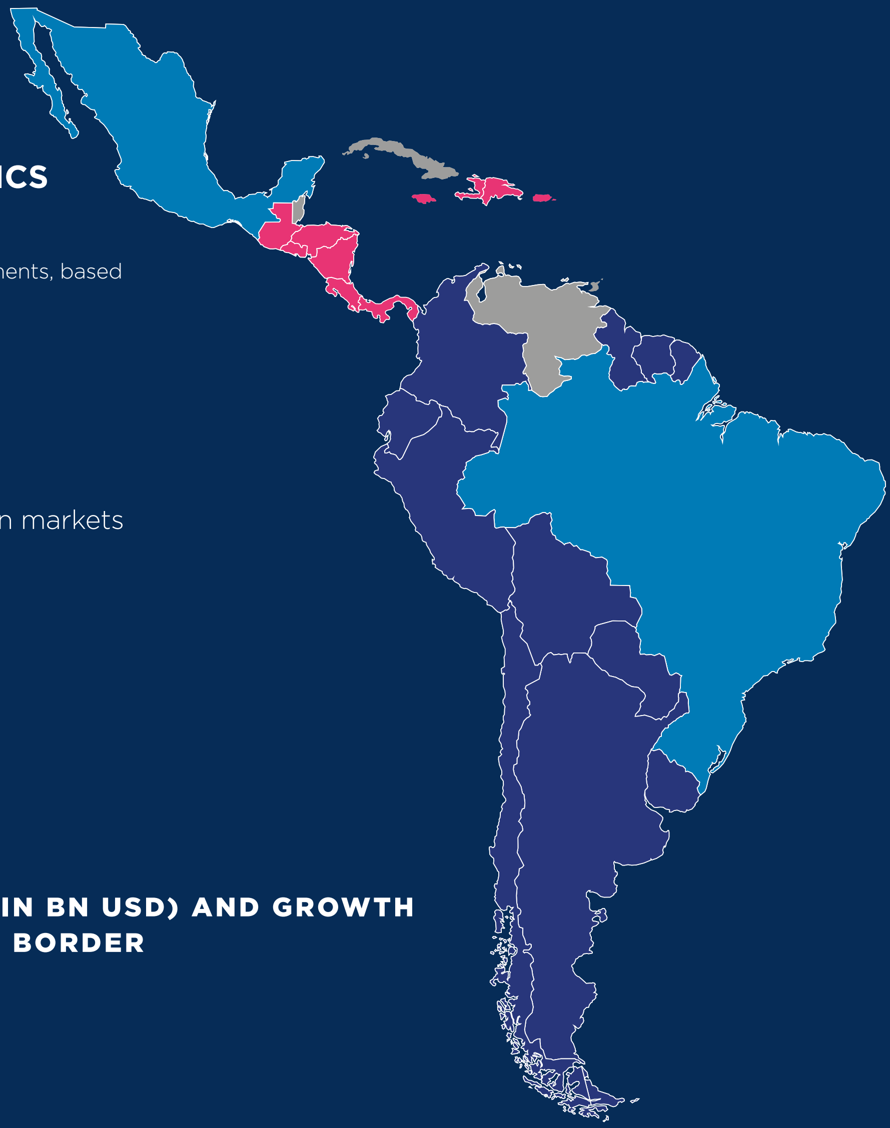
Purchase savings help drive cross-border demand

Latin Americans are well aware of the fact that their most sought-after consumer products are considerably cheaper in the US or closer to their manufactured origin in East Asia versus buying at home. The price difference is so dramatic that a new generation of business services have emerged to connect Latin customers to global sources. In Central America and Caribbean markets, where non-tariff import barriers are relatively low, tens of thousands of consumers order online for delivery to their Miami based PO box address, where the product is received, repackaged and consolidated in a deferred air delivery to their home country. Three to eight business days after their online purchase is made, the product is delivered to their home or office with a fulfillment cost of less than $50 USD.[20] In Brazil, through AliExpress (Alibaba) consumers can now purchase consumer electronics and accessories directly from Chinese suppliers, bypassing anywhere from 2-4 middlemen, thus saving them 20-50% versus purchasing these products from Brazilian brick-and-mortar retailers. Delivery can take 3-4 weeks to reach them but for a large purchase, the corresponding savings may be worth the wait.

21. Source: Americas Market Intelligence research.

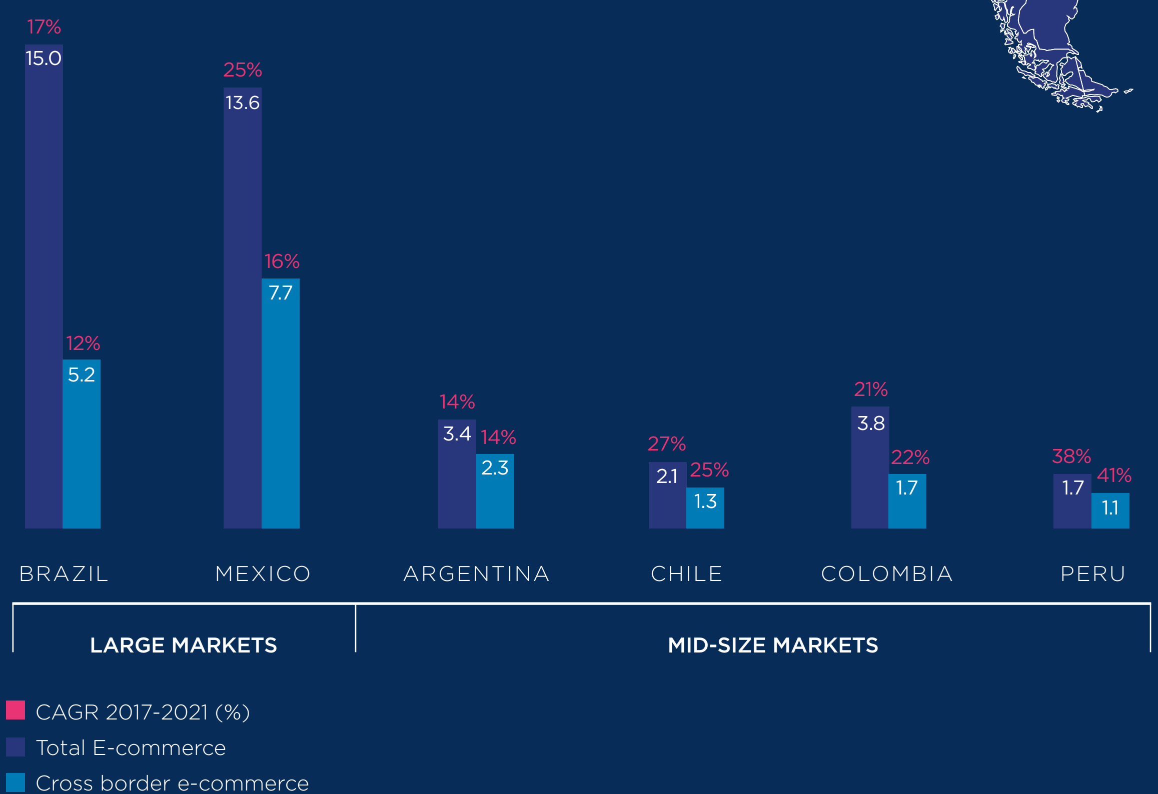
2.3 E-COMMERCE MARKET SEGMENTS AND THEIR LOGISTICS NEEDS

Latin America provides three distinct market segments, based mostly on the size and accessibility of the country.



- Large markets
- Mid-size markets
- Small Central American & Caribbean markets

E-COMMERCE MARKET SIZE (IN BN USD) AND GROWTH (IN %), OVERALL AND CROSS BORDER



Source: Americas Market Intelligence

Large markets (Brazil and Mexico)

These are the first markets of entry for most large e-commerce marketplaces and the vendors they bring with them. In Mexico, Amazon has made strong inroads and today, the vast majority of Mexican Amazon sales are fulfilled from inventories inside Mexico, brought in by traditional freight transportation from countries of origin or from Amazon inventory depots in the US. In Brazil, MercadoLibre similarly conducts almost all of their fulfillment inside Brazil.

The volumes in both Brazil and Mexico and the considerable customs entry barriers both countries represent to individual e-commerce shipments obliges most e-commerce companies to fulfill orders inside those countries.

Mid-size South American markets (Colombia, Argentina, Chile, Peru, Venezuela, Uruguay, Ecuador, Bolivia)

These are the strongest cross-border e-commerce markets, enjoying enviable growth levels because e-commerce marketplaces are just starting to make inroads, following the impressive track record of MercadoLibre. However, most international marketplaces maintain only a limited variety of product inventory inside these mid-size markets and their vendors stock even less. Until these markets mature, they will continue to rely on some form of cross-border e-commerce fulfillment to service customers. For that reason, cross-border growth rates will slightly exceed domestic physical e-commerce growth in these markets over the next few years.

Small markets (Central America and the Caribbean)

These rely heavily (60-90%)[22] on cross-border shipments to service e-commerce customers. Customers in these countries look principally to US based e-commerce companies to place their orders, most of which are fulfilled via Miami. Customers in Panama, Jamaica, the Dominican Republic and over two dozen additional small markets utilize US-domiciled PO box fulfillment services. These services enable customers to purchase online and enjoy low-cost seamless delivery to their US PO box address, where the delivery is unpacked, verified and repacked (to comply with the US Patriot act) and labelled for local delivery in the destination country. Daily flights from Miami to these markets ensure speedy and relatively low-cost fulfillment. Orders are consolidated and treated either as freight or as low-cost items shipped by mail, depending upon the rules of each country's customs departments. This innovative approach enables customers to import (usually) tariff-free for a modest fulfillment cost ($20-$50 USD) and enjoy delivery within 4-8 business days of their online order.

The fulfillment machinery of major US websites enjoys unmatched scale and low pricing when moving products from US factories or even imported products via Miami International Airport, the largest international air cargo hub in the Americas. For many single-brand websites, export fulfillment to customers outside of the US and Canada remains a challenge that they are unwilling to take on in the face of breakneck growth in the US, so the Miami PO box solution is one they happily embrace.

In the meantime, Asia's growing e-commerce powerhouses and Latin American marketplaces, which do not have large-scale US fulfillment capabilities, will see the immediate logic of keeping inventory closer to destination. As the majority of goods sold online originate from Asia, having a centralized location closer serving end consumers in several Latin American markets in order to speed delivery times is meaningful.

22. Source: Interviews with major e-commerce providers.

3

Chapter 3

The un-resolved logistics challenges of e-commerce in Latin America

3.1 OVERALL CHALLENGES OF E-COMMERCE IN LATIN AMERICA

In the past, Latin American e-commerce was held back by four factors:

Connectivity

Only a small percentage of customers had access to the internet. However, connectivity is no longer an important obstacle to e-commerce thanks to strong investments in 3G and 4G networks by Latin America's cellular operators and the proliferation of low-cost smart phones that today are used by close to 70%[23] of urban adults.

Payment methods

Only credit cards were accepted, which limited the addressable market to less than 20% of households. This has evolved and in the meantime Latin American entrepreneurs have developed unique payment solutions to diversify payment options. Today customers can pay with cash, bank transfer, debit card and/or credit card. Literally no one is left out of the e-commerce ecosystem.

A lack of trust in online payments

This was due to the high propensity of credit card fraud and identity theft. The trust factor remains an impediment to bringing new customers into Latin American e-commerce. For those who have not yet experimented with online shopping, a lack of trust is by far the most important barrier, according to an UNCTAD survey conducted around the world in 2017 and 2018. In the same survey, among e-commerce clients, Latin Americans are some of the most infrequent users worldwide.

On the bright side, e-commerce purchase frequency in Latin America appears to be growing quickly vis-à-vis other markets because of steady improvements in all facets of infrastructure supporting Latin American e-commerce, ranging from technology and regulations to vendor outreach, payment methods and the anti-fraud measures provided by banks and payment networks.

Logistics

Unreliable customs clearance, last mile, and reverse logistics remain a big obstacle to Latin American e-commerce. Proof positive is the fact that digital goods and services sold online in Latin America, which require no physical fulfillment, are growing 1.5 to 2 times faster than physical e-commerce.[24]

UNCTAD SURVEY OF ONLINE USAGE ACROSS GLOBAL MARKETS 2017 AND 2018
I BUY ONLINE AT LEAST TWO TIMES PER MONTH?

Region	2018	2017
Asia Pacific	44%	42%
BRICS	43%	45%
Europe	37%	37%
North America	31%	31%
Latin America	26%	22%
Middle East & Africa	19%	19%

N = 3,942

Source: UNCTAD

23. Source: Americas Market Intelligence. **24.** Source: Americas Market Intelligence.

3.2 CUSTOMS CLEARANCE

To be fair, customs departments in every country around the world are struggling to keep up with the pace of cross-border e-commerce. But the variance in cross-border friction around the world is dramatic. According to the latest World Bank Doing Business report, the average import shipment entering a Latin American country (excluding outlier Venezuela) requires 109 hours to comply with customs documentation and border compliance, hardly a velocity that is supportive of cross-border e-commerce. Imports headed to Canada and Germany, by comparison, require less than four hours to clear customs.

Three factors differentiate those customs unions that can realistically catch up with the pace of demand versus those who will continue to struggle for time to come:

1. Automation & efficiency

2. Regulation simplicity and enforcement

3. Corruption

In a private study conducted by Americas Market Intelligence in 2016, a Brazilian trading company was hired to ship a small parcel of 500 sheets of paper, valued at less than $5, via different 3PL service providers from São Paulo to ten different cities around the world: Chicago, London, Berlin, Dubai, Cape Town, Shanghai, Tokyo, Bogota, Buenos Aires and Mexico City.

All seven destinations outside of Latin America received their undamaged package in three business days or less. In Bogota, after three different visits to the customs office, Colombian customs claimed to have lost the package. In Buenos Aires, customs officials, during the last days of the then current administration, demanded a $700 USD bribe to liberate the $5 package of paper. In Mexico City, the recipient was asked to register himself as an importer, fill out various documents, which were rejected three times over the course of six weeks, until finally the package was released, heavily damaged. This anecdote speaks to the scourge of customs inefficiency, regulatory complexity and corruption that riddles many Latin America jurisdictions. It also speaks to the important role played by an experienced and well-positioned middleman who can navigate e-commerce market entry into Latin American and Caribbean markets on behalf of less experienced suppliers.

In another study conducted by Americas Market Intelligence in 2018, interviews with e-commerce exporters, importers, distributors, 3PLs, integrators, customs brokers and customs officials in several Latin American countries identified the following obstacles engrained in their import regulations:

- In general, import regulations and customs auditing systems are still geared for reviewing bulk freight imports, shipped in containers or pallets, not for reviewing on a daily basis tens to hundreds of thousands of e-commerce packages.
- None of the countries studied have customs regulations specifically written for e-commerce shipments, or for that matter individual parcel deliveries more broadly; as such, enforcement of rules can vary from one customs office to the next within the same country as different customs officials do their best to interpret how outdated customs rules are applied to B2C cross-border shipments.
- There are no specific customs regulations in any of the countries that govern the return of paid tariffs should an e-commerce imported product be returned to its country of origin or intermediary. This makes it almost impossible for the customer or the e-commerce merchant to recoup taxes paid on a returned product. Furthermore, the return shipment may be levied fees as an export when leaving the original destination country.
- Shipments of equal size, weight and value are treated differently by customs if sent via postal services versus courier or 3PL services, the latter being subject to more costly measures in time delays and applicable fees and taxes.
- The maximum value threshold at which an imported product can enter the market without paying tariffs (de minimis value) varies widely from market to market across Latin America as demonstrated in the table below.

Streamlining the customs unions that govern cross-border e-commerce in Latin America will require the continued lobbying efforts of organizations like CLADEC (The Latin American Association of Express Delivery Companies) which works to educate governments across the region on the importance and economic benefit of implementing more time and cost efficient customs regulations, processes and technology. Representing the region's most important courier companies, CLADEC brings the best cross-border practices of its members, utilized around the world, to national governments in Latin America.

In addition, the International Development Bank has begun researching and publishing best practice papers related to cross-border e-commerce in an effort to help Latin American countries compete both as importers and exporters of e-commerce.

DOING BUSINESS REPORT INDICATORS, 2019

Country	Trading Across Borders Rank	Customs Clearance (in hours)	Import Compliance Costs
USA	36	9	$275
Germany	40	1	$-
Canada	50	3	$335
Panama	57	30	$540
Dominican Republic	63	38	$619
China	65	72	$448
Mexico	66	62	$550
Chile	71	90	$340
Costa Rica	73	86	$495
Guatemala	83	104	$442
Brazil	106	54	$482
Ecuador	109	144	$325
Peru	110	144	$780
Argentina	125	252	$1,320
Colombia	133	176	$595

Source: World Bank Doing Business Report

DE MINIMIS TABLE – LATIN AMERICAN & CARIBBEAN MARKETS

Country	Postal Shipment (USD Value)	Courier Shipment (USD Value)
Argentina	$25	$0
Belize	$50	$50
Bolivia	$100	$0
Brazil	$50	$0
Chile	$30	$30
Colombia	$200	$200
Costa Rica	$0	$0
Dominican Republic	$176	$176
Ecuador	$400	$0
El Salvador	$0	$0
Guatemala	$0	$0
Honduras	$500	$500
Mexico	$300	$50
Panama	$100	$100
Paraguay	$0	$0
Peru	$200	$200
St. Lucia	$22	$22
Trinidad & Tobago	$0	$0
Uruguay	$200	$200
Venezuela	$100	$100

Source: Global Express Association.

3.3 LAST-MILE DELIVERY

The last-mile delivery in Latin America also poses challenges due to various factors:

- If no one is home to receive a package in Latin America, it is normally unsafe to leave the delivery on the front step.
- Getting through the security labyrinth of high-end Latin American residential neighborhoods can lead to costly delays.
- Deliveries to the humblest neighborhoods can pose security risks.
- Traffic can be paralyzing: of the 25 most congested cities in the world, according to a 2017 Tom Tom Traffic index report, four are found in Latin America – Mexico City (1st), Rio de Janeiro (8th), Santiago de Chile (17th), and Buenos Aires (19th).
- GPS navigation systems may not work in old city centers where signals fail to penetrate centuries-old structures or suburban and rural areas were data signal shadows still exist.
- Street address enumeration sequences may make no sense or not even exist in the first place, complicating delivery.
- Digital navigation software may prove useless in some areas where digital mapping is yet to be completed.
- Apartment buildings may not include elevators and/or may have narrow passage ways that can complicate the delivery of heavy and bulky products like mattresses and refrigerators.
- Limited or non-existent loading and unloading areas for trucks in congested city centers.

All of these challenges add valuable time to the delivery process. Each time a delivery attempt fails or is delayed, the delivery company loses money. This discourages logistics players from investing in last-mile delivery in Latin America, driving up costs and lowering the standards, which only discourages e-commerce customers from buying online in future.

Conquering the high costs posed by Latin America's urban traffic and residential access challenges, requires a new approach to delivery with an agile fleet of delivery personnel including many on motorbikes or even foot in dense quarters. Teaming up with emerging last-mile start-ups — which approach delivery on a jobbing basis — will likely be the direction pursued by many mid-size and even large couriers in future because of the impressive cost savings such methods provide.

Instead of delivering products to the customer's fixed address, delivery will likely be executed one of three alternative ways:

- Via a point of sale counter, either in the offices of the logistics provider or a convenience retail partner.
- Delivered to a locker in a convenient location near the customer's home or office that is accessible via a texted code for a limited time period.
- Delivered to the customer based upon GPS pinging on the phone, just as an Uber driver identifies their customer on a street corner. This solution will be especially valued by vendors of luxury and pharmaceutical products.

CASE STUDY

DHL INNOVATIONS IN LAST MILE DELIVERY

The DHL Cubicycle

The “Cubicycle” is a bicycle with a removable container that has a cargo volume of one cubic meter. Key advantages of the bicycle in comparison with similar types of non-motorized transport are its volume and better integration into DHL’s operational systems. The reclining position and the speed that comes from this position, as well as electric power assistance allow for faster acceleration from a starting position. The Cubicycle’s container is preloaded in an operational facility of DHL. Thanks to its dimensions (80 x 120 x 100 cm), which correspond to the size of a standard shipping pallet, it is easy to integrate into the company’s standardized shipment handling process. The container is delivered to a location near the city center, from where the bike starts its route. This makes the process even more efficient. On an average ride, it can be loaded with 125 kg of shipments and the courier is expected to cycle about 50 kilometers per day.

“DHL Express has already replaced up to 60% of inner-city vehicle routes in some European countries with cargo bicycles, and we expect that the City Hub and Cubicycle will both help us to accelerate this approach in other markets over the next 3-5 years,” said John Pearson, CEO, DHL Express. ”Bicycles offer a number of advantages in express delivery operations: they can bypass traffic congestion and make up to two times as many stops per hour than a delivery vehicle. The total cost of ownership over their lifetime is less than half of a van. And crucially, they generate zero emissions, which reinforces our own ongoing program to minimize our environmental footprint and supports city governments’ efforts to promote sustainable city living.”

Sources:

Cargo bike cubicycle

Urban delivery cargo bicycles

CASE STUDY

DHL INNOVATIONS IN LAST MILE DELIVERY

DHL StreetScooter

With the StreetScooter, DPDHL Group has collaborated with StreetScooter GmbH and institutes within RWTH Aachen University to develop its own pioneering electric car to be used specifically for mail and parcel deliveries. In 2012, the first prototype was tested in various workshops and proved to be suitable in terms of equipment, load capacity and safety standards. At the beginning of 2014, DPDHL Group then put into operation a total of 150 pre-series vehicles at various delivery bases across Germany. Efficiency and environmental compatibility, in particular, were tested in the process. The vehicle's maximum range extends to 80 kilometers. 9,000 StreetScooters are on the road today for DPDHL Group, mostly in Germany.

Electric vehicles are particularly suitable for trips involving lots of stop-start traffic. Since they are almost completely emission-free in terms of pollutants and noise, the cars are very environmentally friendly and quiet. Their independence from fossil fuels also makes the use of vehicles with electric drives an investment in the future.

Source: DHL

DHL Packstation

DHL Packstation is a parcel locker solution available in the German market. Lockers are placed at convenient for customers locations such as train stations, supermarkets and gas stations and are accessible 24/7. Customers need to select a DHL Packstation as their delivery address at the time they are placing their online order.

DHL Packstations are currently available across Germany with over 3,500 locations and continuously growing.

3.4 REVERSE LOGISTICS

One of the biggest obstacles to e-commerce development in Latin America is the profit-killing practice of product returns. In the US, some categories like fashion and clothing have return rates close to 50% of online purchases versus 9% in brick-and-mortar stores. E-commerce returns across all product categories in semi-mature markets like the U.K., Germany and US is close to 35%, while in Latin America, returns range between 10% and 25% (see graph).[25]

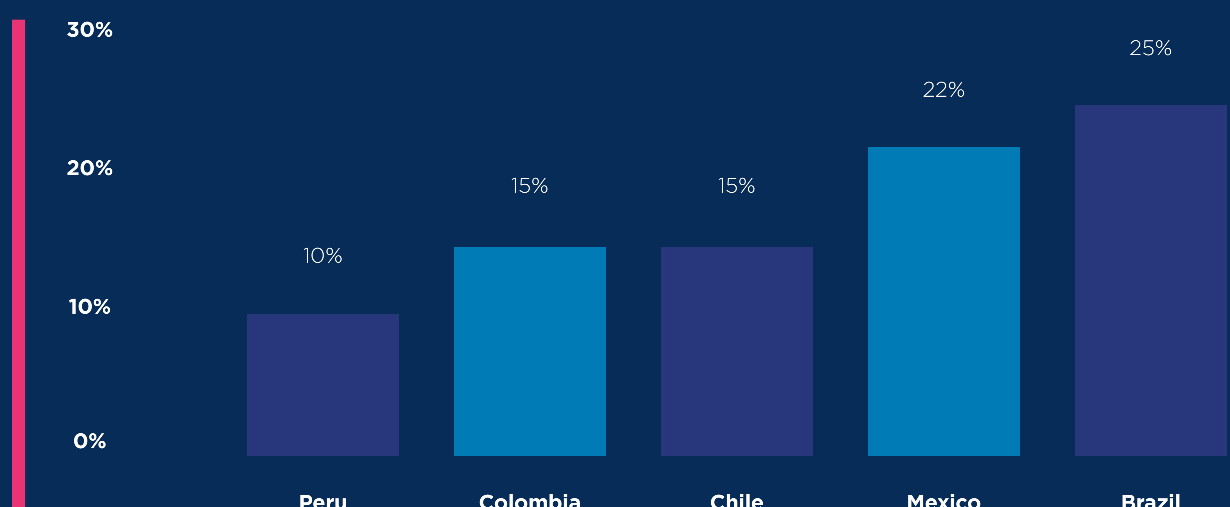
When goods are returned or exchanged, retailers suffer from more than just higher logistics costs. The returned product also needs to be inspected and brought back in the merchants' inventory. Sometimes, the returned product cannot be re-sold at the original price due to damage, wear and tear, or obsolescence — an issue impacting fashion and other seasonal merchandise.

For example, Amazon operates an unlimited returns policy and is lauded for its reverse logistics. Other online retailers, like shoe seller Zappos (owned by Amazon), stress unlimited returns as a differentiator to disrupt the consumer habit of purchasing in a physical store. But in Latin America, where fulfilment and delivery more complicated and costly, MercadoLibre appears to be leading a retailer rebellion against the imported concept of unlimited returns. According to the Future of Fulfillment Vision Study sponsored by Zebra in 2018, a provider of fulfillment solutions, shipping fees and returns are about to change in Latin America. Approximately 40% of respondents plan to discontinue free shipping, 55% expect to end free return shipping and 61% forecast the elimination of separate returns facilities that are managed by third-party companies.

In 2018, MercadoLibre reported that it will limit its customers to one free return per month.[25] For additional returns, MercadoLibre will provide customers with a downloadable returns label, but they will have to pay for the shipping. It remains to be seen if this bold initiative will lower the bar of customer expectations and whether such a policy can weather under the competitive expansion of both Amazon and Alibaba into Latin America.

Until very recently, e-commerce merchants focused on getting their products to consumers in a timely and cost-competitive manner. Consumer expectations on returns were low. But as e-commerce markets mature, consumers grow wiser and more demanding of merchants. Returns are now a pressing issue for any serious e-commerce merchants selling in the region. Finding a cost-effective returns solution (often across borders) that keeps clients loyal is possibly the greatest challenge today in Latin American e-commerce logistics.

PRODUCT RETURNS AS % OF TOTAL SALES



Source: Americas Market Intelligence study, 2018

25. Source: Americas Market Intelligence Perspectiva.

CASE STUDY

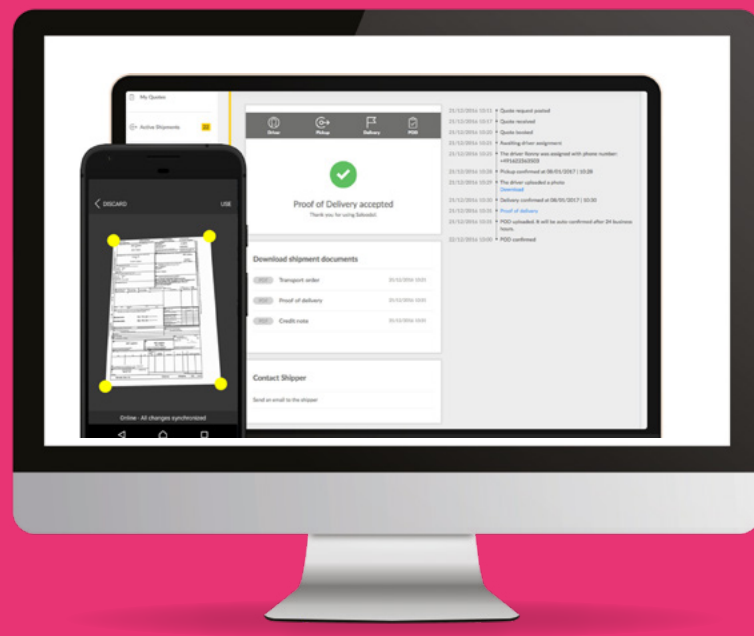
DHL'S OWN FREIGHT FORWARDING MARKETPLACE – MEET SALOODO!

The digital freight platform Saloodo! is a pioneer in the area of digitalization in the transport and logistics industry. Saloodo! customers benefit from the end-to-end digital handling of their shipments, without lengthy price negotiations on the telephone and conclusion of contracts via fax. It's a concept that's going down well. More than 10,000 shippers and over 6,000 freight forwarders with around 250,000 available trucks are already working with Saloodo!.

Saloodo! also provides carriers with innovative functions that make their daily business routine easier and more efficient . The dynamic transport pricing calculator, which is based on real-time data and specially developed algorithms, helps carriers make their shipping offers more competitive.

Drivers are notified immediately, via the innovative Saloodo! driver app of which order they will be handling. All the necessary information regarding pending delivery runs is sent directly to their smartphone. Proof of delivery, invoices and any damage during on- and off-loading can also be documented directly in the app. Saloodo! enables the entire shipment handling process to be digitally displayed and managed, including freight document administration, billing and payment. Since Saloodo! is the contract partner and the point of contact, carriers benefit from short payment terms with invoices being paid within just 14 days.

Saloodo! is currently available for domestic and international shipments to/ from Germany and Netherlands.



Source: DHL, Saloodo!

3.5 THE E-COMMERCE VALUE CHAIN AND POTENTIAL DISRUPTIONS IN LATIN AMERICA

The era of vertical integration may soon come to an end in logistics, as it has in so many industries, as inefficient business models come under attack by well-financed disruptive technologies.

The logistics challenges of Latin America offer start-ups plenty of opportunities to innovate. Many logistics start-ups are focused on bringing down costs and accelerating service in the most inefficient stages of the Latin American supply chain, identified in the schematic below. They employ three weapons of change: productivity enhancing technology, "uberization" of labor-intensive activities and the use of marketplaces to level the playing field for hungry competitors. All three approaches drive down costs.

#1 PRODUCTIVITY TOOLS

New tools are being developed that dramatically accelerate productivity in logistics, enabling early adopters to compete with large competitors and helping the industry reduce head count. A good example is Logiety, which takes the mystery and manpower out of codifying imported products. As an app on a phone, Logiety can visually scan a product and immediately classify it for customs purposes, label it with the correct national safety codes, HS code, and other compliance norms. A process that once took hundreds of man hours to execute on a mixed container of products now takes a few hours.

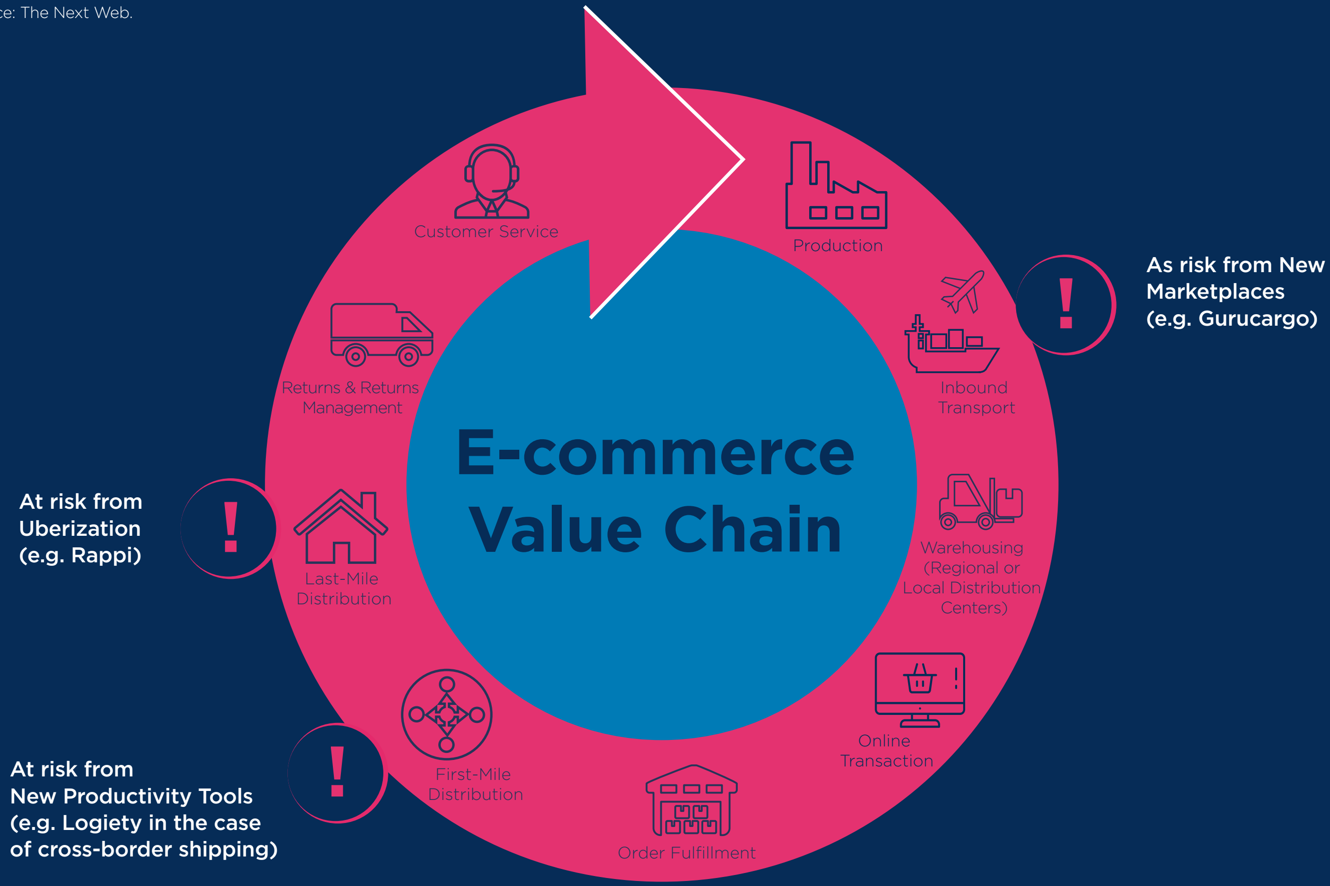
#2 UBERIZATION

Uberization is being applied to employ underutilized, usually independent truckers by way of dynamic spot pricing, based upon competitive bids for single transport jobs from point A to point B. Such models help squeeze profits out of the inefficiency of empty back-haul. At the other end of the supply chain, last-mile delivery of e-commerce orders is increasingly executed by individuals driving cars, motorbikes and even bicycles through the heavy traffic of Latin American cities, all of them working for themselves. The most promising example is Rappi, Latin America's first logistics unicorn, now valued at more than $5bn USD and serving close to 1.5 million customers across seven countries. Over 30,000 independent delivery men and women bring e-commerce, food orders, and anything else you can think of to people's homes or offices for a $1.50 USD delivery fee or unlimited deliveries for Rappi Prime members who pay $7 USD per month.[28]

#3 NEW MARKETPLACES FOR ESTABLISHED CARRIERS

The establishment of marketplaces filled with traditional carriers brings to cargo buyers what Orbitz brought to airline ticket customers. That is the idea behind Gurucargo, which aims to connect customers in the highest volume intercontinental lanes (e.g. Shanghai to São Paulo) to multiple offers from established providers who discount underutilized capacity. Not only does Gurucargo save transport costs, its technology compiles, computes and compares the multiple components of cross-border shipping costs, saving customers hours of painful negotiation.

Source: The Next Web.



4

Chapter 4
Panama as e-commerce hub – service & investment opportunities

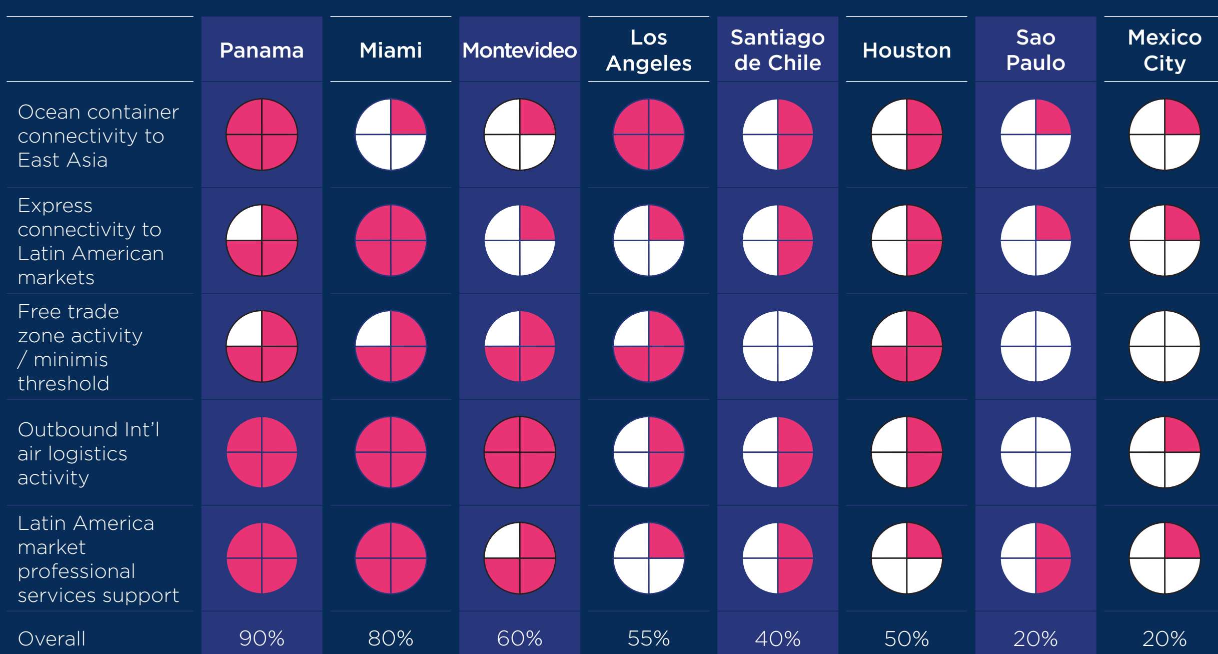
Panama as e-commerce hub – service & investment opportunities

For close to 500 years, Panama has served as a trade bridge between Pacific and Atlantic waters and populations, the question now being if the country can benefit from the fast growth in international e-commerce.

In the 16th century, close to 60% of gold exported from the new world to Spain travelled via Panama to Spanish galleons awaiting in Atlantic waters to transport the precious cargo to Iberia.[26] Andean gold and silver was joined by Asian spices from Spain's colony of the Philippines that also came over Panama's land bridge. Trade fairs in Panama enabled buyers from Lima, the hub of Spanish South America, to purchase prized finished products from Spain – wine, cloth, weapons. Panama's logistics industry was born.

Today, most exports from Asia to Latin America pass through Panama, the majority of which are only lightly touched by Panama in the form of canal fees and warehousing. However, e-commerce and the spin-off traditional distribution traffic that it can generate, promises to inject much more value added economic investment to Panama than pure ocean cargo trade can deliver. Close to 135 million consumers live in more than 40 small economies (nations and territories) of Central and South America and the Caribbean that will continue to rely on cross-border e-commerce for the foreseeable future. E-commerce marketplaces and other merchants have begun their search for hub locations through which they can fulfill cross-border e-commerce into these markets.

BENCHMARK OF E-COMMERCE HUB READINESS FOR KEY CITIES IN THE AMERICAS



Source: Americas Market Intelligence

26. Source: UNESCO - The Colonial Transisthmian Route of Panamá.

DETAILED BENCHMARK DATA ON THE TOP FOUR E-COMMERCE HUB CANDIDATE CITIES

Indicator	Panama	Miami	Montevideo	Los Angeles
Free Trade Zones (active)[27]	4	3	6	6
Lead cargo sea port (key port statistics below)	Colon	Miami	Montevideo	Long Beach
20' ft container shipping costs from Shanghai (indexed)[28]	109	168	222	100
Sea cargo transit time from Shanghai (number of days)[29]	18	30	36	16
Ocean cargo throughput (millions of TEUs)[30]	3.9	1.1	0.9	9.7
Lead cargo airport	PTY	MIA	MVD	LAX
Cargo throughput (millions of tones)[31]	0.11	2.01	0.03	2.04
Latin American countries/territories served by direct flights[32]	28	38	6	10
Latin American cities served by direct flights[33]	58	81	11	22
World Bank Overall Logistics Performance Index ranking (national, 2018)	38	14	85	14
Customs performance rank	45	10	87	10
Infastructure rank	38	14	83	14
Logistics competence rank	35	16	78	16
Timeliness rank	46	19	108	19

4.1 BENCHMARKING OF E-COMMERCE HUB READINESS

In a 2016, Americas Market Intelligence conducted a benchmark analysis of eight leading hub cities across the Americas, the results of which are summarized in the graph on the previous page.

Based on the benchmarking, four principal cities emerged as best enabled to serve as an e-commerce hub for the Americas: Panama, Miami, Montevideo and Los Angeles. They also reflect the fact that most physical e-commerce sales transacted in Latin America originate in factories in Asia and are often fulfilled through US centric supply chains.

Panama : The expansion of the canal helps capture more Asian cargo bound to Atlantic ports, which means that drop-shipment in Panama can be facilitated more frequently and cheaper than in the past. Panama's strong history in logistics and growing air hub status further adds to the country's credentials. Panama is unique in the region as a dollarized economy with a long track-record of pro-trade, open economy policies built around a regional service economy. Panama has one of the most open high skill immigration policies anywhere, allowing companies to source talent worldwide. Its labor costs average about 30-40% less than US cities.

Miami : Self promoted as the gateway to the Americas, Miami is home to more multinational Latin America regional headquarters than any other city including, some of the world's most important integrators and 3PLs. Miami International Airport is the largest international air cargo airport in the Western Hemisphere with direct connectivity to more cities in the Latin America region that any of its peers. Miami is the leading center for Latin America focused professional service expertise including legal and accounting advice, marketing and promotion, and trade finance.

Montevideo : The city in front of has long served as an agile logistics hub for market entry into its two giant Mercosur trade partners, Brazil and Argentina. Home to a dozen free trade zones, the small country of Uruguay, like Panama, is uniquely structured as a service economy. Uruguay prides itself on being much less bureaucratic and more economically stable as its neighbors, with a strong banking culture, that has helped weather regional volatility and serve as a business friendly capital for Mercosur reaching enterprise.

Los Angeles : Its port (Long Beach) and airport (LAX) carry more in-bound container traffic from East Asia than any city in the Americas. Los Angeles is less of a gateway to Latin America than it is to the US market, but that serves as an advantage for US supply-chain centric e-commerce bound to Latin America. LAX serves 16 Mexican cities directly, which together represent close to 90% of the Mexican population.

27. Source: local media scan. **28.** Source: Ocean cargo mystery shopping. **29.** Source: ocean cargo mystery shopping. **30.** Sources: Each official port website. **31.** Sources: Each official airport website. **32.** Source: flightsfrom.com. **33.** Source: flightsfrom.com.

KEY LOGISTICS SERVICES ALONG THE E-COMMERCE VALUE CHAIN

Inbound Transport	Warehousing	Order Fulfillment	First-Mile Distribution	Last-Mile Distribution	Returns & Returns Management	Customer Service
Vendor management Drop shipping Break-bulk Documentation management	Flexible & scalable warehousing Inventory control Climate control Free Trade Zone Services – Customs bonded warehousing services – Exception documentation	Order processing Picking, custom packing, repacking Destination specific labeling and finishing	International – Reconsolidation – Export documentation preparation – Freight forwarding – Pallet documentation for customs – Customs brokerage – Distribution/ local postal coordination Domestic – Distribution/ local postal coordination	Dispatching Last-mile delivery	Return labels and instructions on collection Validation against Goods Return Note Quality control Reuse, recycle, resell Reverse customs clearance	Call center support Online support End-to-end tracking and PO box services

4.2 LOGISTICS SERVICES NEEDED IN A CROSS-BORDER E-COMMERCE HUB

An e-commerce hub must combine traditional supply-chain services with rapidly evolving distribution, fulfillment, and reverse logistics capabilities. In Latin America, postal systems can be unreliable partners for fulfillment. Additionally, many customs unions discriminate against cross-border fulfillment of individual parcels by private couriers versus postal services. For these reasons, typically source products will arrive to the hub by ocean or ground logistics in freight (container) format. New merchandize is deconsolidated at the hub and fulfillment preparations ensue, focused on preparing each individual order. To move prepared parcels onto the destination market, they can either be shipped via postal services, with the corresponding risks, or re-consolidated again and sent via deferred air to save on transport costs and simplify customs clearance in the destination market.

The schematic above breaks down the multitude of logistics services provided or coordinated by the e-commerce hub.

Infrastructure, process and human capital needs to support future e-comm logistics requirements

When it comes to cross-border e-commerce, online merchants, logistics suppliers, infrastructure providers, and government are all playing catch up with demand. Blockchain and artificial intelligence innovations offer promising new solutions and logistical enhancements that can boost productivity.

No country had made greater strides in building an e-commerce ready economy than China, where e-commerce represents about 25% of all retail sales and is the fastest growing platform for SME exports. E-commerce is not only an economic opportunity in China, it is a political and strategic imperative. For aspiring e-commerce hub centers in the Americas, where China's e-commerce sector is investing today foreshadows where the global industry will follow (see Case Studies on next page).

Best Practices from Chinese e-Commerce

CASE STUDY

JD.COM: THE FIRST HUMANLESS WAREHOUSE

In the field of warehouse automation, China's e-commerce giants are beginning to build a new range of smart warehouses. Companies such as JD.com are making large investments in smart warehouses in order to gain advantages to deliver packages faster than their rivals.

In 2017, JD.com began operating its first fully automated warehouse, which is located in Shanghai. The installation of 40,000 square meters mainly performs two functions: storage and classification through robots and robotic arms. The facility has the capacity to handle up to 200,000 items per day, double the volume of all Mexican cross-border e-commerce imports. More than 1,000 robots work in the warehouse that together with other advanced technologies allow the elimination of 100% of human personnel. The warehouse can handle the tasks of receiving, storing, classifying, packaging, sorting and dispatching merchandise for most types of products.

Source: Business Review (2018). The world's first robot-run warehouse.

CASE STUDY

SPECIAL E-FREE TRADE ZONES: THE EXAMPLE OF HANGZHOU

In 2015 China established a comprehensive pilot cross-border e-commerce zone in Hangzhou, province of Zhejiang, to drive innovations in policy, administration and services. This special FTZ has lower corporate taxes and, therefore, promotes international companies to open businesses directly within China. Under the customs warehouse model, products are imported wholesale to cross-border e-commerce zones approved in China. Then the products go through customs once Chinese consumers place an order on a registered cross-border e-commerce website. The products that are listed in the positive lists can be imported and will receive the benefit of a faster and easier customs clearance. In addition, foreign merchants can postpone import taxes and VAT taxes until the time of actual sale.[34]

The Hangzhou pilot zone has been exploring a "six systems and two platforms" scheme that encompasses systems for e-commerce credit, intelligent logistics, financial services, statistical monitoring, risk management and information exchange, together with platforms for online single windows and comprehensive offline service. The digital single window model tries to connect all the interested parties and build an integrated industrial chain and an ecosystem.

Among the benefits of the model are the proximity to end consumer enabling fast delivery, postponement of tariff payments until after the goods are sold to consumers and the overall favorable business environment and infrastructure for cross-border e-commerce.[35]

34. Source: Xinhuanet (2018). China to set up new comprehensive cross-border e-commerce pilot zones for greater opening-up. **35.** Source: (2018) Asia Briefing – Cross border e-commerce in China.

4.3 KEY BUILDING BLOCKS TO SUCCESS

There are several basic building blocks required for any city to position itself as a logistics e-commerce hub, according to interviews conducted with various e-commerce players operating in the region today.

Free trade zones (FTZs)

In some Latin American and Caribbean nations, underfunded government run customs, onerous trade bureaucracy, and burdensome tax structures cannot be reformed fast or thoroughly enough to accommodate the digital velocity of cross-border e-commerce. The creation of free trade zones or special economic zones that operate like separate enclaves within a country are the only viable platform for hosting a cross-border e-commerce hub economy.

How multiple free trade zones are governed within one country remains an on-going debate. Centralized policy making helps harmonize all free trade zones under the same regulatory umbrella, helping demystify the selection process for customers. De-centralized policy making (via state, provincial or municipal governments) helps foster competition between free trade zones.

Regardless of who governs free trade zones, the business environment they provide must be compelling enough in terms of tax breaks, duties exemptions, reporting requirements, etc., to attract global and regional logistics firms who will make the necessary warehouse focused investments to compete.

With dozens, even hundreds of cross-border logistics players working inside one free trade zone, FTZ operators ensure smooth connectivity with the in-bound ocean port(s) and outbound airport(s) and ocean port(s). Beyond road or rail connectivity, the free trade zone must support high band-width telecom infrastructure and redundant energy supply to ensure high speed and reliable data connectivity. E-commerce is a 24/7 business. There are no days off, no tolerance for delays.

Port and airport infrastructure

Ocean ports and air cargo airports are two important potential bottlenecks that can make or break the viability of a logistical hub economy. In spite of its very high wages and land costs, Singapore continues to strive as a logistical hub to many industries, including e-commerce, because its ocean port and airport are some of the most efficient in the world. No ports or airports in the Americas can match the infrastructure of Asia's top ports but they will have to if they want to catch up to Asian levels of e-commerce throughput.

An important component of modern port and airport infrastructure, and often the greatest source of port delay, is customs infrastructure. Outside of the most modern export nations of Asia and Europe, few countries have invested sufficiently in customs modernization, such that customs clearance is subject to labor intensive auditing processes instead of automated ones. In a study commissioned by CLADEC, the Latin American courier association, it was found that express shipments took over five days to clear customs entering Argentina, while they took on average 18 minutes to achieve the same in Taiwan – where the manifest and certificate of origin documents were digitized and pre-verified, such that the goods cleared customs before they were unloaded from the plane.

E-commerce fulfillment knowledge and skill-sets

Logistics management and engineering are young and evolving fields in academia. The best practices continue to be developed by global practitioners. Their knowledge is generally passed on both within the companies where they work and through guest lecturing at universities and colleges.

However, e-commerce fulfillment is such a new field that best practices emerge or are re-defined each month. Sharing that knowledge is challenge for anyone working in the field from logistics providers to merchants to government. Traditional academia, that relies on classrooms and text books to deliver its training content simply cannot keep up with the pace of new developments in e-commerce fulfillment. Instead, knowledge is captured by head-hunting experienced practitioners, analyzing internet delivered papers and trainings, and via the information exchanges of conferences and trade shows.

The most knowledgeable practitioners of e-commerce fulfillment are usually the logistics personnel working inside the e-commerce merchants and marketplaces who learned best practices the hard way, by failing, and whose companies bear the financial and reputational costs of fulfillment error. These people are the most sought after by logistics providers, free trade zone operators, and online merchants

Trade and customs regulations and processes

Government regulations that govern cross-border trade tend to be written for bulk freight traffic. Without specific rules governing e-commerce shipments, customs enforcement varies by officer on duty, causing confusion and delays. Without reasonably high de minimis thresholds, e-commerce can be subject to onerous taxes that disincentivizes cross-border e-commerce.

An e-commerce hub nation or municipality should look to lobby for higher de minimis levels and smoother market entry from its client states. Case in point is the agreement struck in January 2019 between Miami International Airport (MIA) and Correios, the Brazilian national postal company, to pre-clear Brazilian customs of Brazil bound e-commerce shipments in a facility near the Miami airport. Such an initiative promises to shorten fulfillment of US website purchases into Brazil from weeks to days and will further expand the more than $12 billion of air delivered exports sent each year from MIA to Brazil.[36]

To solve the most pressing need in cross-border logistics today – product returns management – hub country regulations and systems must be able to track the movement of a product in real time and refund taxes levied. Again, cooperation is required from e-commerce client nations to enhance the business case for an e-commerce hub.

Since most e-commerce hub activity will be housed inside free trade zones, import regulations are less important than export regulations. Any costs or paperwork that hinders exports can render a hub uncompetitive in the global race to the bottom of e-commerce logistics pricing.

Last but not least, regulations should treat the cross-border movement of e-commerce parcels the same, regardless of the carrier, be they a courier, postal service or 3PL. Levelling the playing field saves time and costs in the auditing process and helps attract much needed investment from global logistics providers whose practices are more advanced than postal players.

Industry cooperation and coordination

E-commerce is a sector with many moving parts and inter-related players. Governments will not reap the growth benefits of an e-commerce hub if the private sector is timid about investing ahead of demand. E-commerce logistics providers cannot grow their business without flight network and schedule commitments from the air cargo and courier players nor without sensible export regulations from the host government. Air cargo and courier operators will not invest in expanded lift or new destinations without a healthy e-commerce industry outlook. Unless all of these players move together and constantly meet to plan the next steps of e-commerce hub development, then no one will want to make the first move. In China, this coordination is mostly led by government. In Latin America, the lead will more effectively come from private sector associations who bring the expertise and vision of their global constituent clients to the planning process.

36. Source: Miami Today, January 29th, 2019 - Miami International Airport joins Brazil's post office to aid e-commerce.

COMPARING TAX REGIMES

	Colon	Panama Pacifico	Del Istmo	Parque Sur
Corporate income tax (i)	25%	0%	25%	25%
Dividend taxes	5%	0%	5%	10%
Withholding tax (ii)	12.5%	0.0%	12.5%	12.5%
Municipal tax	0%	0%	0%	Not defined
Operation notice tax	0%	0.5%	0.5%	2%
Complementary tax	0%	5%	5%	4%

i) Applies only to profits earned on domestic sales inside Panama.
ii) Not applicable if tax can be taken as credit in the country of the beneficiary of the payment.
Source: Panama tax authorities, Free trade zone regulatory handbooks.

4.4 PANAMA REPORT CARD

Free trade zones (A-)

Panama long ago recognized the value of free trade zones as an essential component of a trade hub economy. Established in 1948 on the Canal's Caribbean entry point, the Colón Free Zone is one of the oldest special economic zones and the world's second largest.[37] The Colon free trade zone is home to over 3,000 enterprises, most of which are focused on the re-export of break-bulk inbound shipments, sent onwards to small and medium sized economies in the Americas. But free trade zones serve more than exporters and logistics providers. The low taxation and simplified operating regulations also attract many other businesses including education, scientific research, medical services, manufacturing, assembly, off-shore professional services, environmental services, among others.

There are four established free trade zones in Panama:

- Special Economic Area of Panamá-Pacífico, governed by Law No.41 of 2004
- Colón Free Trade Zone, governed by Law No.8 of 2016
- Del Istmo Free Trade Zone, governed by Law No.32 of 2011
- Parque Sur Logistic Center, no applicable Law

Each is unique, located in different parts of the country, thereby providing differing accessibility to ocean and air ports, labor and target client markets. Perhaps, somewhat confusingly to investors, these four free trade zones are governed under separate sets of rules. Harmonizing those rules would help reduce the guess work for new investors and provide a more even playing field for these competing economic entities.

Ocean cargo infrastructure and routes (A)

The Panama canal is the country's greatest asset. Its expansion has already begun to bear fruit. In 2018, tonnage passing through the canal increased 9.5% versus 2017.[38] Since expanding, the canal has attracted 16 new container services and the average size of containerships transiting the waterway has increased by 28%.[39] Given that global trade growth has slowed, it is clear that the canal is beginning to rob market share from other routes. Since 60%[40] of the canal's cargo starts or ends in the US, then it is likely that much of the acquired market share comes at the expense of trans-continental rail and truck traffic.

This achievement is an important development because the leading fulfillment conduit for e-commerce sales in the Americas today is through the US, whose websites are responsible for an estimated 35-40% of total e-commerce sales in Latin America.[41] Cheaper and faster logistics delivery of e-commerce to Latin American and Caribbean markets versus Miami and other competing hubs begins with competitive shipping costs from Asia to Panama with easy drop-shipment options while the container ship crosses the country en route to Eastern US ports.

Air cargo infrastructure and routes (B-)

Panama's air cargo industry is underdeveloped. At only 110,000 tons per year,[42] the Tocumen airport punches well below its weight as an air cargo hub. Miami International Airport's cargo volume is almost 20 times larger than Tocumen's. To make matters worse, the canal's expansion helped dent Panama's small air cargo business. Speaking at the Air and Sea Cargo Americas event in Miami, Copa Airlines' senior director of cargo Jaime Alvarez Price explained that the number of shipping line services transiting the artery over recent years had increased and this had a knock-down effect for air cargo. "Panama has more and more activity on the marine side," he said. "Since we are in airfreight, what we have seen is more and more of the airfreight being transported by sea. There are more ships coming into the port more frequently than before. Previously it would take a week to get a ship to destination, now there are two or three per week."

37. Source: Harvard Center for International Development (2017) – Special Economic Zones in Panama. **38.** Source: Supply Chain Quarterly: Has the Panama Canal expansion changed anything? December 2018. **39.** Source: Supply Chain Quarterly: Has the Panama Canal expansion changed anything? December, 2018. **40.** Source: Supply Chain Quarterly: Has the Panama Canal expansion changed anything? **41.** December, 2018 Source: Revista de la Facultad de Ingeniería U.C.V., Vol. 32, N°12, pp. 423-430, 2018. **42.** Source: Tocumen airport website.

It is a classic "chicken or the egg" dilemma. Panama has a compelling case to be made for Asian product destined to Latin American and Caribbean markets – ship by ocean to Panama and then by air cargo to destination markets. However, shippers are concerned about an undeveloped air cargo industry in Panama. Interviewees for this study suggested that the largest air cargo and courier players are reticent to establish routes from or through Panama. They observe that Copa and other passenger airlines offer excellent air connectivity across Latin American markets (annual traffic of over 15 million passengers)[43] but they are focused on passenger traffic and have yet to dedicate serious marketing resources to building cargo demand.

Regular air cargo delivery to client markets in Latin America is necessary to build even a competitive deferred (3-5 day) air delivery e-commerce fulfillment business out of Panama, much less an express (1-2 day) service. To induce air cargo providers to invest in expanding lift capacity, there must be a meeting of minds between themselves, Panama based logistics suppliers and leading e-commerce marketplaces and their vendor clients. Until there is a reliable forecast of future demand in place, bought into by all the key players, air cargo providers will be gun shy about building capacity.

The Tocumen airport and other investors have bet on the airport's potential as an air cargo hub via the concession to build a free trade zone facility at the airport. Once opened (estimated 2020), the temperature controlled facility will boost Panama's air cargo credentials, particularly for pharma and perishables. The success of the new free trade zone will rely on attracting more air cargo lift to the airport. Air cargo suppliers want to wait and see if the facility can attract customers.

Trade and customs regulations (B)

Future operators of e-commerce hub businesses in Panama are not too concerned about the import customs processes and infrastructure run by the government because their businesses operate in free trade zones, where bonded warehouse facilities insulate them from import laws, so long as their cargo is re-exported.

However, aspiring e-commerce fulfillment players in Panama complain that Panama's export controls and reporting processes are designed for bulk (B2B) shipments, not time sensitive B2C e-commerce export fulfillment. Case in point is the declaracion de movimentio comercial por waybill that requires (for each shipment) a copy of the invoice, a separate waybill and filled in declaration form plus a $15 USD fee. The Panamanian government has passed a law to remove this barrier. Now it is in the hands of government run free trade zones to comply with the new law and adapt its systems accordingly. Until this hurdle is removed, Panamanian entrepreneurs cannot hope to build an e-commerce hub business.

Where the Panamanian government can make a big impact is by lobbying client countries of a future e-commerce hub business to streamline the import processes of shipments fulfilled in Panama. Just like the Miami-Dade county government and Miami International Airport lobbied the Brazilian government and its national postal operator to streamline e-commerce fulfillment shipments from the US, Panama should do the same with at least a dozen Latin American countries.

43. Source: Tocumen airport annual report, 2017.

Logistics sector readiness (C+)

Today, Panama has a sizeable industry of B2B freight distribution centers, run by global manufacturers servicing distributors across dozens of Latin American markets as well as 3rd party logistics providers doing the same work on behalf of their multinational clients. For the many reasons cited previously, Panama has only a very nascent B2C e-commerce fulfillment sector run by B2B experienced but under-capitalized Panamanian operators who cannot afford to invest ahead of demand.

To convince the likes of Alibaba, Amazon and JD.com to invest in forward inventory management and fulfillment in Panama, they want to see investment commitments from air cargo providers and logistics players. From the latter, they want to be assured that Panamanian logistics operations can ramp up technologically (warehouse automation, pick and pack robotics, and IT integration capabilities) to handle the kinds of volumes their marketplaces and vendors can deliver. Amazon purportedly looked at Panama as a fulfillment hub in 2018 but chose instead to build in South Florida.

It would behoove Panama's logistics industry to combine forces with air cargo, ocean port, free trade zone and government players who all share the same goal of attracting e-commerce marketplace hub business to develop an industry plan that showcases the investment commitments each part will make to create the infrastructure and capabilities that these, particularly Asian based clients require. These e-commerce players may still come to Panama, but unless they see a commitment to modernization by Panamanian logistics providers en par with their needs, they may decide to build themselves instead of partnering.

To service smaller, less demanding e-commerce merchants, Panamanian logistics providers must focus their e-commerce fulfillment efforts in a few target countries so that they can ramp up sufficient volumes to build a reliable 3-day deferred air fulfillment schedule for customers that gets around the fixed costs of hiring air cargo and the minimal volumes associated with hiring courier services.

Human capital (C)

"I can literally count on one hand the number of people in Panama who are experienced e-commerce fulfillment professionals" – was a memorable quote provided by a leading logistics supplier and aspiring e-commerce fulfillment player in the research phase of building this whitepaper. Panama is home to some of the most sophisticated ocean logistics operators in the Americas and has developed training and education courses to build human capital for the sea logistics industry. But only a fraction of that knowledge is applicable to the e-commerce industry.

Panama's accommodating immigration laws do make it easy to import skilled labor, which has been an important strategic advantage in developing Panama's regional corporate headquarters credentials. However, the whole world is competing right now for a finite pool of e-commerce fulfillment experts located principally in Asia and the US. The recruitment costs of those people are high and the premium required to translocate them and their families to Panama is excessive. Furthermore, those foreign experts are not likely to be knowledgeable of the particular challenges of e-commerce fulfillment in Latin American and Caribbean markets, which is what Panama requires.

In the short term, logistics operators in Panama need to complement their impressive knowledge of Latin American market entry with the technical aspects of e-commerce fulfillment. This can be done by on-line training of their employees or sending key employees for intense training in places like Hong Kong, Singapore, the US and Germany.

In the medium term, interested parties (logistics players, air cargo providers, couriers, free trade zones, government) should pool resources and talent to establish an e-commerce training facility designed to spread the knowledge of e-commerce best practices, utilizing invited lecturers from the private sector.

WHERE PANAMA CAN MOST EFFECTIVELY COMPETE AS AN E-COMMERCE HUB

Client focus

The highest priority clients are e-commerce marketplaces, particularly those based in Asia and Latin America because their supply routes, or a good share thereof, are not US centric but rather Asia-Latin America. The geographic, ocean route speed, and Latin America market knowledge of Panama is most readily capitalized by these clients. Given the importance of logistics as a value-added service provided by the likes of Alibaba, such companies may be willing to invest themselves in a fulfillment center. However, many will want to partner with Panamanian logistics for their Latin America market expertise.

Of secondary priority mid to large vendors of the above marketplaces who have enough sales volumes in Latin America, both via e-commerce and traditional sales channels to justify basing inventory of their best selling products in Panama for rapid deployment. Depending upon the size of the destination market and their distributor capabilities there, these firms will either use Panama based free trade zones to store consignment inventory or will require e-commerce fulfillment out of Panama to consumers in smaller markets.

A third priority are US based e-commerce marketplaces and pure e-tailers who source primarily from Asia. Though some markets that they service like the Caribbean and central America may continue to be done so via Miami, other middle markets like Colombia, Peru, Ecuador, Chile, etc. may be better served via fulfillment partnerships in Panama. The same goes for their vendors.

An even broader set of clients can be served with a Panama based returns management center that offers repairs, refurbishing and resale from a centralized location. Such a service will be of particular interest to consumer electronics manufacturers.

Viable sectors

Products that are best moved by ocean from Asia to Panama and then by air or ocean to Latin American markets are the best suited for the space in which Panama would be most competitive as an e-commerce hub. These are also products that generate above average rates of returns. These include, but are not exclusive to:

- Consumer electronics including cellular phones
- Apparel and shoes
- Sports equipment
- Aftermarket auto parts
- Furniture

Viable services

Distribution : Panama's most competitive logistics service today will continue to be an important component of what is offered to e-commerce related customers, break-bulk, inventory management and distribution of container packaged inventory to B2B customers across Latin America. Vendors who follow their e-commerce marketplace platform partners into Latin America will need to decide which products and clients are i) best served by the fulfillment services of the e-commerce marketplace, ii) where should they employ local last-mile delivery in market and iii) how best to serve B2B customers who approach them once their product shows up in new Latin American markets. The second and third options will likely require maintaining consignment inventory in a free trade zone location like Panama.

Fulfillment : Panama's ocean logistics players have traditionally served all customers to all markets because the canal made Panama a necessary port of call of all. However, building a fulfillment business from scratch in Panama requires market focus in order to build volume. Better to win a share of the pie rather than lose the whole pie. Latin America's largest e-commerce markets, Brazil and Mexico, will continue to rely mostly on domestically fulfilled e-commerce. Caribbean markets buy disproportionately from US websites and are very competitively serviced from Miami. That leaves Central American markets that can be fulfilled by truck from Panama and select South American markets: Colombia, Venezuela, Ecuador, and Peru in particular where Panama's competitive strengths are best utilized.

Fulfillment out of Panama of customers in these targeted markets is viable within a five working day window, not sooner. Orders in destination countries must accumulate to the point where they can be consolidated into a container or pallet and shipped via courier or air cargo.

Reverse logistics : Capital electronics companies are under increased scrutiny to properly dispose of products and have mostly abandoned the practice of discarding product returns in landfills. Furthermore, product returns from on-line sales are 3-4 times more frequent than via traditional retail sales so these companies cannot afford such high product loss. Managing returns from customer service centers to product pick up to repairs and refurbishing to resale via secondary markets is a major burden for companies in the consumer electronics and fashion sectors. In Latin America's large and mid-size markets (Brazil, Mexico, Argentina, Peru, Colombia, Chile), reverse logistics and returns management services are likely to be provided by local third party players. However, to manage the process for smaller markets, it makes sense to centralize in one location. Panama's connectivity, service sector strengths and lower labor costs (vis-à-vis Miami) give it a strong competitive advantage in this field. As logistics providers can attest, solving a client's reverse logistics and returns management headaches can also be fastest route to earning customer loyalty and cross-selling other services like fulfillment and distribution services.

5

Chapter 5
Summary & Outlook

While e-commerce still represents less than 10% of global retail sales, it has already re-written the rules of how products are marketed, distributed and sold the world over.

It has put consumers in control of how, where and when they purchase goods and services. This has pushed brands and retailers to re-invent how they sell and interact with their consumers, how they engage and keep their interest, and how they ensure a seamless experience across all sales and social media channels. E-commerce has also brought big demands and changes to logistics, which is a critical component in making e-commerce sales work. This is the only sales channels where end consumers have direct touchpoints with the logistics providers via the delivery and returns. In addition, e-commerce has democratized sales – customers are now not limited to the goods sold only in a specific radius to where they live, but can purchase items across countries, increasing demand for cross-border shipping.

Latin America is still early on its e-commerce journey. However, smart phones and internet data plans are growing fast, driving demand for new products and services that can be consumed online. In addition, many start-ups in the area addressing the challenges of e-commerce such as payment (e.g. PayU) or urban last mile delivery (e.g. Rappi) are removing the barriers for e-commerce growth. Bigger markets such as Brazil and Mexico are at the forefront with large e-commerce players such as Amazon already actively growing there. Mid-sized markets are also seeing volumes increase fast but often with a larger share of cross-border e-commerce.

There are three key challenges to e-commerce logistics in Latin America: customs clearance, last mile delivery and reverse logistics. Customs clearance can be often long and burdensome, with processes designed for bulk shipments and no single B2C shipments as is often the case in e-commerce. Last mile delivery is challenged by traffic congestions, lack of reliable navigation and security risks among others. E-commerce has higher product return rates than brick and mortar sales, which poses the challenge of reverse logistics. This is a cost burden for the retailers, and especially difficult for cross-border sales.

In the context of the e-commerce landscape in Latin America, we assessed the opportunity to position Panama as an e-commerce hub for Latin America. In a benchmark of few key cities in the Americas, Panama scores best on various logistics-related indicators such as connectivity to Asia and Latin America, Free Trade Zone (FTZ) activity and professional service support. To understand better what Panama has and where it can improve, we further broke down the assessment in few key categories and assessed how Panama scores on each single one.

Panama is very well positioned with regards to availability of FTZs, with four trade zones in place across the country providing different air and ocean freight port accessibility. FTZ are important pre-requisite to setting up a cross border e-commerce hub. The four FTZs, somewhat confusingly, are governed by different set of rules.

With the expanded canal, Panama boasts great ocean freight routes and connectivity and has good and frequent connections to key destinations in Asia, US and Latin America. This enables fast and inexpensive means to import goods to be stored in a potential e-commerce hub in Panama. On the air cargo side, however, Panama can do more to attract logistics providers and airlines to expand air uplift capacity. The plan to build a FTZ on Tocumen airport including temperature controlled section is a move in the right direction and can help attract customers and logistics provider to set up operations there. It is important to build up frequent enough airlift capability that is critical to enable fast delivery of e-commerce sales to end consumers in neighboring Latin American and Caribbean markets.

Trade and customs regulations are also critical for positioning Panama as an international e-commerce hub. While import regulations are less critical due to the usage of FTZs, export regulations and agreements with targeted Latin American markets are critical to enable fast deliveries to end consumers.

In addition, readiness of logistics sector to serve e-commerce in Panama can still be improved. While Panama's supply chain providers have great expertise in B2B freight distribution they are less prepared for the type of fulfillment and distribution services required for e-commerce. Building know-how may also be not easy due to lack of e-commerce fulfillment knowledge within the country. However, those challenges can be overcome, e.g. by sourcing skilled people from overseas. In addition, attracting marketplace providers that have own logistics arms to set up operations in Panama can be another way to generate fast knowledge transfer.

The outlook of Panama as an e-commerce hub for key target markets in Latin America is overall positive even if some challenges are still in place. Attracting the right companies to set up operations (e.g. key marketplaces) and trying to position capabilities in areas currently lacking (e.g. returns management) can offer good opportunities for growth.

logistics.dhl/ecom-latam

Global Center of Excellence
(Collaboration Initiative between
DHL & Ministry of Commerce & Industry in Panama)

Domingo Diaz Avenue
Industrial Park and Corporate South
Panama City, Panama

Email: gcoe@dhl.com