



THE DIGITAL SPRINTERS

Boosting exports through
digital technologies in Mexico

October 2022

A Digital Sprinters focus report – Commissioned by Google

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Important Notice on Contents — Estimations and Reporting

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The financial figures in this report are estimated in US dollars. Conversions, where applicable, are based on the average exchange rate for the period from December 2020 to December 2021.

1. Digital Sprinters is a framework for harnessing the digital transformation of emerging markets (EMs) into sustainable, inclusive growth that could ultimately have tremendous ramifications on the global economic balance of power. The concept of "Digital Sprinters" recognizes that—with the right strategies— EMs have tremendous potential to leapfrog more established markets. It's not a question of 'if' but rather where, when, and which markets.



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THE DIGITAL SPRINTERS

The US\$40.1 billion export opportunity from digital technologies for Mexico

DIGITAL TECHNOLOGIES BOOST EXPORTS THROUGH THREE CHANNELS



Creating new exportable digital solutions

e.g., Mexican app developers earn

US\$92 MILLION ANNUALLY from app users outside the country



Reducing costs of access to overseas markets

e.g., Global digital advertising platforms increase export revenues of Mexico-based firms by

US\$2.4 BILLION ANNUALLY



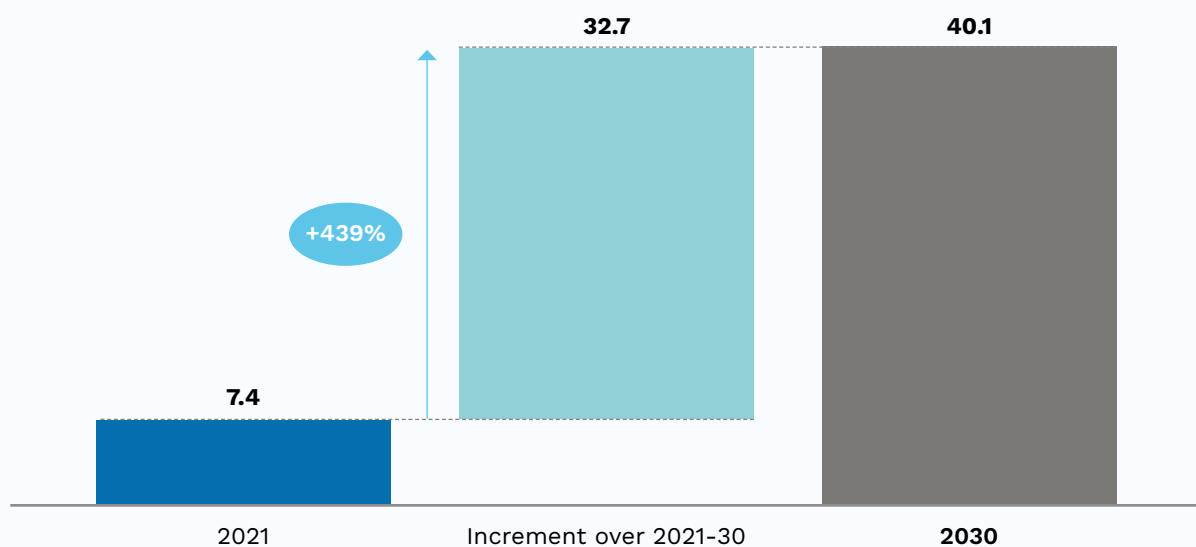
Supporting efficiency in exporting processes

e.g., Nuvocargo, a US\$180 million-valued digital platform for cross-border US-Mexico trade, launched a real-time billing dashboard, reducing billing and accounting time by

92 PERCENT

“SIZE OF THE PRIZE” FROM DIGITAL TECHNOLOGIES FROM EXPORTS, US\$ BILLIONS

Mexico is already experiencing a **US\$7.4 BILLION** boost to its annual export value from digital technologies, but this value could increase by more than five times to reach **US\$40.1 BILLION** in 2030¹



1. This is a conservative estimate as it does not include all the efficiency benefits that digital technologies can bring to export-related industries (e.g., through better tracking of goods in transit through Internet of Things technology). In addition, the 2030 estimate was projected based on the 2021 performance of the best-in-class within the six focus countries only and will likely be much higher if we used global best-in-class countries as a reference point.



**A CONDUCIVE POLICY ENVIRONMENT IS NEEDED TO CAPTURE THIS
US\$40.1 BILLION POTENTIAL BENEFIT FOR MEXICO**



**Boost uptake of
digital payments**

Improve and expand interoperable and trusted digital payment methods



**Reduce costs of
spectrum rights**

Implement targeted local and federal programs and increase unlicensed spectrum

**This
includes:**



**Develop online
training courses**

Partner with private sector to develop online materials focused on tech-enabled tools for public officials and MSMEs



**Strengthen cybersecurity
legal framework**

Consolidate legal frameworks through a top-down approach to steer Mexico's cybersecurity needs and policies



**Implement provisions of
the USMCA**

Reform legislation to incorporate digital trade provisions established in Article 19 of the USMCA

UNLOCKING THE DIGITAL EXPORT OPPORTUNITY IN MEXICO

The Mexican economy is rebounding from its deepest recession in decades, driven by solid growth in its export markets (e.g., the United States) and the pandemic-related re-opening of sectors. However, to continue in this recovery process, Mexico should further diversify its export base and tap into new sources of growth. The digital economy is creating large new export markets for businesses, and digital technologies are also helping to lower the costs of exporting, particularly for micro, small and medium-sized enterprises (MSMEs). With the world's largest number of Spanish speakers, Mexico is well-positioned to develop its comparative advantage in exporting, for instance, online videos at a regional level. However, as national statistics have failed to keep pace with the rapid evolution of the digital economy, digital exports have not received as much attention as they warrant.

This report aims to address this gap.² It finds that Mexico is already experiencing a **US\$7.4 billion³** boost

(1.7 percent of total exports) to its annual export value from applying digital technologies today (with Google facilitating up to 17 percent). By 2030, this value can increase by more than five times to become **US\$40.1 billion⁴**. To fully capture this significant prize, there are five policy recommendations for Mexico to focus on:

1. Improve and expand interoperable and trusted digital payment methods;
2. Reduce the cost of spectrum rights and increase unlicensed spectrum through targeted local and federal programs;
3. Develop online courses focused on digital trade for MSMEs and public officials;
4. Strengthen cybersecurity frameworks and foster trust; and
5. Reform its legislation to support the implementation of the United States-Mexico-Canada Agreement (USMCA).

2. In our methodology to size the 2030 market, the country with the lowest digital export share of GDP for a particular component will see its share grow by the most over 2021-2030 in order to "catch up" to the best-in-class country for that component. This analysis is also based on current and forecasted economic conditions in the six focus countries in 2021, and could be changed if these economic conditions are changed. See Appendix in the overall regional report 'The Digital Sprinters: Boosting exports through digital technologies' for more details on the methodology.

3. This is a conservative estimate as it does not include all the efficiency benefits that digital technologies can bring to export-related industries (e.g., through better tracking of goods in transit through Internet of Things technology).

4. This estimate was projected based on the 2021 performance of the best-in-class within the six focus countries only, and will likely be much higher if we used global best-in-class countries as a reference point.



“ WITH THE WORLD’S LARGEST NUMBER OF SPANISH SPEAKERS, MEXICO IS WELL-POSITIONED TO DEVELOP ITS COMPARATIVE ADVANTAGE IN EXPORTING, FOR INSTANCE, ONLINE VIDEOS AT A REGIONAL LEVEL. HOWEVER, AS NATIONAL STATISTICS HAVE FAILED TO KEEP PACE WITH THE RAPID EVOLUTION OF THE DIGITAL ECONOMY, DIGITAL EXPORTS HAVE NOT RECEIVED AS MUCH ATTENTION AS THEY WARRANT.

”

1. THE VALUE OF DIGITAL PRODUCTS AND SERVICES FOR MEXICO'S EXPORTS IN 2021

Digital technologies boost exports through three channels: creating new exportable digital solutions (e.g., apps); reducing costs of access to overseas markets (e.g., e-commerce, digital advertising), and supporting

efficiency in exporting processes (e.g., paperless trade, machine-to-machine (M2M) tracking, Internet of Things (IoT) applications in major ports).

1 Creating new exportable digital solutions.

Digital technologies have given rise to a range of new products and services that can be exported abroad. These include mobile applications, online video services, and digital services such as data processing rendered to overseas customers. Homegrown mobile apps have increased their share of the Mexican app economy, with success in the domestic market expected to ready app and game developers to set their sights abroad.

32 percent of the 1,500 most downloaded apps in Mexico in Q1 2021 were by companies headquartered in Mexico, an increase of three percentage points from 29 percent in 2019.⁵ Mexican app developers are currently estimated to earn US\$92 million annually from app users outside the country.⁶ Mexican content creators are also finding creative ways to boost their export earnings beyond depending on traditional social platforms, most notably by tying up with content monetization companies.⁷ For instance, Mexico-based MisFans focuses on gamers, e-sports enthusiasts, and other streamers. Creators can add all their profile links on social networks like YouTube, TikTok, Twitch and Instagram to their MisFans account, and earn money from exclusive content and subscription releases using MisFans' tools. Digital services in production processes are also opening up new opportunities for Mexican service providers to provide offshoring services for overseas clients. As Latin America's leading provider of information technology (IT) services and business process solutions, Mexican company Softtek serves more than 400 leading corporations across North America, Latin America, Europe and Asia in software development, testing, security and support, business process outsourcing (BPO), information and communications technology (ICT) infrastructure management, security and support, virtual (VR) and augmented reality (AR) solutions, and data analytics.⁸ Among the six focus Latin American countries in this study, Mexico is the only country where indirect services exports are higher than direct services exports. This suggests that Mexico can leverage its strengths in providing digital services to the ICT and telecommunications industry, tapping on its strong telecommunications sector which consistently surpasses GDP growth.⁹



5. App Annie & Apps Flyer (2021), "The State of App Marketing in Latin America". Available at: <https://www.data.ai/en/insights/market-data/latam-state-of-app-marketing-2021/>

6. AlphaBeta-Access Partnership analysis. See Appendix in the overall regional report 'The Digital Sprinters: Boosting exports through digital technologies' for more details on the methodology.

7. RestOfWorld (2021), "God help anyone making their living on Facebook": Why creators are ditching traditional social platforms". Available at: <https://restofworld.org/2021/why-creators-are-ditching-traditional-social-platforms/>

8. Forum for East Asia-Latin America Cooperation (2021), Bolstering East Asian-Latin American value chains through digitally deliverable services. Available at: <https://www.fealac.org/filedownload.do?idx=465ac1816b9853a6acdec8ef23fe7f4d>

9. The six focus countries covered in this study are Argentina, Brazil, Chile, Colombia, Mexico, Uruguay. International Trade Administration (2021), "Mexico – Country Commercial Guide". Available at: <https://trade.gov/country-commercial-guides/mexico-internet-and-it-services>

2 Reducing costs of access to overseas markets.

These include increases in the exports of goods through cross-border digital platforms (e.g., cross-border e-commerce) and digital advertising. Electronics and technological products alone are estimated to make up close to 80 percent of all Mexican e-commerce exports, given that Mexico is a top producer of televisions and screens, as well as home appliances such as refrigerators for home and commercial use.¹⁰ Mexico's MSMEs have benefited from active public and private sector collaboration on the e-commerce front. In 2017, the Mexican Government signed a deal with Alibaba Group to assist Mexican MSMEs in expanding into international markets, in particular China, through specialized training on international best practices pertaining to digital transformation, e-commerce, payments and logistics, and simultaneously onboarding these MSMEs onto Alibaba's marketplace platform to sell to its two billion users.¹¹ In 2020, Alibaba worked with the National Conference of Governors (CONAGO) to equip nearly 1,500 enterprises with digital stores, payment solutions and smart logistics as part of the Mexican Digital Village Project across 32 states.¹² The pandemic has also created an appetite for Mexican MSMEs to export via e-commerce. According to the Mexican Association of Online Sales (AMVO), 54 percent of Mexican MSMEs indicated that they regarded exports as the next step in their growth.¹³ Access to overseas markets is not only enhanced through e-commerce platforms, but also through digital advertising. Currently, Mexico-based firms are estimated to reap US\$2.4 billion annually in additional export revenues from digital advertising targeted at overseas customers, demonstrating how digital advertising is able to enhance access to a larger export audience.¹⁴ In particular, MSMEs in Mexico see sizable benefits as they are able to access overseas audiences at an affordable price, giving them the same amount of visibility as their larger competitors.



10. Tetakawi (2020), "10 Products You Never Knew Were Made In Mexico". Available at: <https://insights.tetakawi.com/10-things-made-in-mexico>

11. Mexico Now (2017), "Mexico to promote small businesses products in Chinese market through Alibaba Group." Available at: <https://mexico-now.com/mexico-to-promote-small-businesses-products-in-chinese-market-through-alibaba-group/>

12. Mexico Business News (2020), "Alibaba bets on Mexico's Growing E-Commerce Trend". <https://mexicobusiness.news/ecommerce/news/alibaba-bets-mexicos-growing-e-commerce-trend>

13. Mexico Business News (2021), "Selling Overseas, the Next Step After Joining E-Commerce." Available at: <https://mexicobusiness.news/tech/news/selling-overseas-next-step-after-joining-e-commerce>

14. AlphaBeta-Access Partnership analysis. See Appendix in the overall regional report 'The Digital Sprinters: Boosting exports through digital technologies' for more details on the methodology.

3 Supporting efficiency in exporting processes.

There are various examples of how technologies can do this, such as paperless trade, digital solutions for trade information and operations, M2M tracking of exported goods, and the application of IoT technologies in ports. Mexico has long benefited from its proximity to the United States market, which has provided it with easy access to freeways and roads that boost connectivity between logistical hubs through the United States, and into Canada. Digital tools have a strong potential to increase efficiency along such established trade routes to support Mexican exports. Non-digitalized freight forwarding is inefficient within Latin America, with trucks being underutilized 40 percent of the time even though trucking demand outpaces capacity, presenting a natural gap for digital tools to service this need.¹⁵ For instance, Mexico-headquartered Nuvocargo is a start-up providing a one-stop digital logistics platform for carriers and shippers transporting goods between the United States and Mexico — value-adding by consolidating key services including truck procurement, customs clearance, insurance, and trade finance.¹⁶ Since its inception in 2019, Nuvocargo has consistently grown revenues 35 percent month-over-month – including a 25-fold revenue growth in 2020, demonstrating how shippers acknowledge the role of digital tools in providing visibility into shipments and making processes such as billing and accounting more automatic and less time-consuming. Clients have also reported a reduction in billing and accounting time by 92 percent. Similarly, another Mexican automated digital freight forwarding start-up, Nowports, has introduced an inventory financing tool for customers to acquire more merchandise and pay later, enabling them to get faster approval for credit using shipping history while helping exporters export more goods.¹⁷ These benefits are especially significant for MSMEs, which may not have as much financial capabilities as their larger counterparts to invest in complex logistical networks. In such cases, the use of digital technologies can help to streamline and simplify exporting processes.



15. TechCrunch (2022), "Why Latin America's freight-forwarding opportunity is still attracting capital." Available at: <https://techcrunch.com/2022/04/28/why-latin-americas-freight-forwarding-opportunity-is-still-attracting-capital/>

16. Fast Company (2022), "The 10 most innovative companies in Latin America in 2022." Available at: <https://www.fastcompany.com/90724423/most-innovative-companies-latin-america-2022>

17. Sources include Nuvocargo (2021), "Digital Freight Forwarder Nuvocargo Launches Simpler, More Transparent Billing Dashboard for Cross-Border Shippers". Available at: <https://www.globenewswire.com/news-release/2021/09/01/2290274/0/en/Digital-Freight-Forwarder-Nuvocargo-Launches-Simpler-More-Transparent-Billing-Dashboard-for-Cross-Border-Shippers.html>; and TechCrunch (2022), "Nowports streamlines LatAm's shipping to deliver a \$1.1B valuation." Available at: <https://techcrunch.com/2022/05/24/nowports-lands-150m-at-a-1-1b-valuation-to-streamline-latams-shipping/>

Mexico is already experiencing a **US\$7.4 billion** boost to its annual export value from applying digital technologies today (Exhibit 1), making digital exports Mexico's 6th largest export sector and comprising 0.6 percent of its gross domestic product (GDP).¹⁸ 62 percent of this comes from the reduced costs of access to overseas markets (channel 2) through digital advertising and e-commerce platforms, while the remaining comes from the creation of new exportable digital solutions (channel 1). This is a conservative estimate as it does not include the increased efficiency in exporting processes (channel 3) resulting from the adoption of digital technologies. Cross-border e-commerce sales

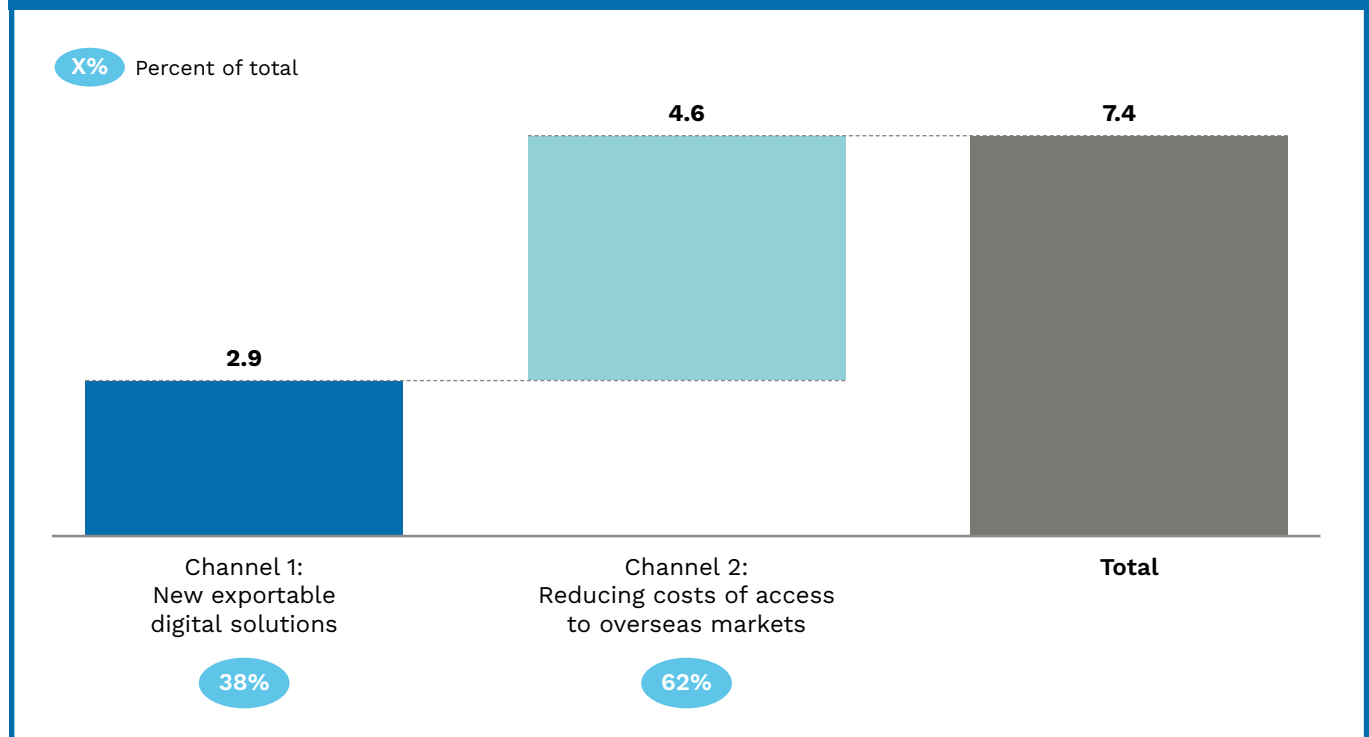
of US\$2.2 billion constitute a substantial bulk of this benefit. More than 80 percent of Mexico's exports are concentrated in the United States, Canada, China and Germany.¹⁹ It has benefited from good e-commerce infrastructure, with its world ranking of 53 in the World Bank Logistics Performance Index (among 180 countries), the second highest among the six focus Latin American economies.²⁰ While 15 percent of Mexican MSMEs export internationally through online channels today, 48 percent of these MSMEs only began to do so after the pandemic, demonstrating how the pandemic had provided the impetus for Mexican MSMEs to join cross-border trade in this new context.²¹

Exhibit 1:

MEXICO IS ALREADY EXPERIENCING A US\$7.4 BILLION BOOST TO ITS ANNUAL EXPORT VALUE FROM DIGITAL TECHNOLOGIES TODAY



BOOST TO THE ANNUAL VALUE OF MEXICO'S EXPORTS FROM DIGITAL TECHNOLOGIES, 2021 US\$ BILLIONS



NOTE: Figures may not sum due to rounding. Figures are conservative estimates as they do not include all the efficiency benefits that digital technologies can bring to export-related industries under channel 3 (e.g., through better tracking of goods in transit through Internet of Things technology).

SOURCE: AlphaBeta-Access Partnership analysis

18. Channel 1 (Creating new exportable digital solutions) and Channel 2 (Reducing costs of access to overseas markets) are sized. Figures may not sum due to rounding. As there are numerous ways in which technology applications drive efficiencies in the exporting process (e.g., overseas shipping, streamlining trade paperwork), rather than sizing this value (which can turn out to be less than comprehensive), Channel 3 (Supporting the efficiency of exporting processes) is assessed through case studies. See Appendix for more details. For comparison, merchandise and services exports were segmented into 8 key sectors: healthcare, financial services, agriculture and food, education and training, consumer and retail, resources and mining, manufacturing, and infrastructure. This analysis assumed that we are able to define digital trade as a sector. OEC (2020), Yearly Exports. Historical Data. Available at: <https://oec.world/en/profile/country/mex#yearly-trade>

19. OEC (2020), Yearly Exports. Historical Data. Available at: <https://oec.world/en/profile/country/mex#yearly-trade>

20. The World Bank Logistics Performance Index (LPI) is an interactive benchmarking tool created to help countries identify the challenges and opportunities they face in their performance on trade logistics and what they can do to improve their performance. It measures a country's performance on six key dimensions – clearance process efficiency, quality of trade and transport infrastructure, price competitiveness of logistics, quality of logistics services, timeliness of shipments, tracking and tracing technology. World Bank (2018), "International LPI: Global Rankings". Available at: <https://lpi.worldbank.org/international/global>. The six focus Latin American economies analyzed in this report are Argentina, Brazil, Chile, Colombia, Mexico, and Uruguay.

21. The Paypers (2022), "Potential growth of cross-border ecommerce in Mexico due to the pandemic impact". Available at: <https://thepayers.com/expert-opinion/potential-growth-of-cross-border-ecommerce-in-mexico-due-to-the-pandemic-impact--1255173>

2. THE VALUE OF GOOGLE'S PRODUCTS FOR MEXICO'S EXPORTS IN 2021

Google has been instrumental in advancing Mexico's digital export journey through its products such as Google Play, YouTube, Google Ads and Google Cloud. For instance, Google Play, an app distribution platform with over 111.3 billion app downloads in 2021, allows app developers in Mexico to reach overseas users with minimal cost. According to data.ai and AppsFlyer, Google Play represented 44 percent of all app store consumer spending in Q1 2021 in Mexico, up six percentage points from 2020, underlining the growing opportunity for Mexico app and game developers through Google's platforms.²²

It is estimated that Google's products helped to facilitate more than **US\$1.2 billion** (or 17 percent) of Mexico's

digital export opportunity in 2021. Box 1 lists examples of how Mexican businesses have benefited from exports facilitated by Google's products.

In addition, Google also helps businesses in Mexico build their e-commerce presence and make better decisions regarding exports. Google's Market Finder, a free platform provided by Google, identifies the markets with the highest export potential for each business based on their product or service and various factors such as search traffic volumes, advertising costs, and purchasing power of consumers.²³ After the initial market shortlist, the platform guides businesses to plan their internationalization operations and market their products and services in new countries.



22. App Annie & Apps Flyer (2021), "The State of App Marketing in Latin America". Available at: <https://www.data.ai/en/insights/market-data/latam-state-of-app-marketing-2021/>

23. Google (n.d.), "Market Finder". Available at: <https://marketfinder.thinkwithgoogle.com/intl/en/>

BOX 1.

GOOGLE'S TOOLS HELP BUSINESSES IN MEXICO REACH OVERSEAS CUSTOMERS AND OPTIMIZE BUSINESS PROCESSES

FLORES DE OAXACA: MEXICAN FLORIST REACHES CUSTOMERS IN OTHER COUNTRIES WITH THE HELP OF GOOGLE ADS²⁴

Flores de Oaxaca is a Mexican flower business started by Doris Canseco in 2004. While it started as a brick-and-mortar store, the business soon moved online due to low footfall in the area. However, online sales did not initially pick up.

Doris decided to run Google Ads campaigns to publicize her business and reach out to potential customers. As a result, Flores de Oaxaca's website saw a great increase in web traffic, and they were even able to reach customers outside of Mexico. The business has grown significantly over the past fifteen years, and while previously run by Doris herself, Flores de Oaxaca now has 18 full-time employees, with the number growing up to 30 during peak seasons. In addition, online sales now account for between 60 and 85 percent of its total revenue.

Doris now plans to expand her business to other cities in Mexico and scale up their capabilities to cater to larger-scale events such as weddings.

AEROMÉXICO: REACHING CUSTOMERS ACROSS THE BORDER WITH A YOUTUBE CAMPAIGN²⁵

Aeroméxico, Mexico's biggest flight carrier, was looking to encourage more Americans to travel to Mexico. To do so, they hoped to challenge American perspectives about Mexico, given largely hostile attitudes from Americans about the country.

The online video campaign, titled DNA Discounts, revealed to a number of interviewees that they had some Mexican heritage in them, making them eligible for a discount on their flights to Mexico. These discounts were pegged to the percentage of one's Mexican ancestry, meaning that Americans with a greater share of Mexican heritage would be offered a greater price reduction. Through this campaign, 54 percent of customers tested in the

states of Texas, Colorado, Utah, and Nevada found that they had Mexican DNA.

The campaign racked up more than 900,000 views on YouTube, and Aeroméxico was mentioned in 166 countries across social media and other digital platforms. Within the United States, searches for "vacation to Mexico" increased by 322 percent, highlighting the campaign's success in encouraging Americans to travel to Mexico.

BANCO AZTECA: LEVERAGING GOOGLE CLOUD TO MANAGE LARGE VOLUMES OF STORED DATA AFFORDABLY²⁶

Banco Azteca is Mexico's largest digital banking institution. It relies on an affiliate network to offer tailored financial solutions to a wide range of customers. These affiliates advertise their products and services through their own distribution channels, providing Banco Azteca with more points of sale and potential leads. However, they realized that data from their affiliate networks were being kept in silos, preventing them from obtaining a holistic view of prospects around the world.

Banco Azteca decided to use Google Cloud to develop an integrated solution that would allow it to aggregate data from all its prospective customers' data sources, allowing them to deliver a more customized and relevant website experience. This allowed users to see recommended products based on both their online and offline behaviors with an affiliate or Banco Azteca. Communicating the right message to the right user allowed Banco Azteca to generate higher-quality leads and accelerate customer acquisition.

During the first two quarters of 2020, the bank's average sales for its financial products grew by 178 percent, reaching 20 million prospective customers each month. Today, they serve more than 14 million digital clients across the globe with their new systems, with an affiliate network that has grown eight-fold.

24. Google (2018), Relatório de Impacto Econômico. Mexico 2018. Available at: https://storage.googleapis.com/gweb-econ-impact-report.appspot.com/reports/2018/es_mx/ei-report-2018.pdf

25. WFA (2020), "Case study | Aeromexico: Not quite all-American". Available at: <https://wfanet.org/knowledge/diversity-and-inclusion/item/2021/01/20/Case-study--Aeromexico-Not-quite-all-American>

26. Google Marketing Platform (n.d.), "Banco Azteca increases financial product sales by 178% with Google Marketing Platform". Available at: <https://marketingplatform.google.com/about/resources/banco-azteca-increases-financial-product-sales-by-178-with-google-marketing-platform/>

3. THE DIGITAL EXPORT POTENTIAL OF US\$40.1 BILLION BY 2030

Mexico could still work towards a significant “size of the prize” for exports in the next few years. By 2030, the boost to its annual export value from digital technologies could grow more than five times to reach **US\$40.1 billion** by 2030 (Exhibit 2).²⁷

In particular, digital services have the strongest potential for growth in Mexico. Currently, Mexico has a large ICT sector comprising five percent of its GDP, only surpassed by Brazil (6.9 percent) among the focus Latin American economies.²⁸ However, ICT services exports and total services exports are not a huge part of the economy. Based on World Bank data, Mexico continues to be a goods exports-centric economy, with ICT services

exports in Mexico the lowest among the six countries, even on an absolute basis.²⁹ Nevertheless, there is unprecedented demand for digital transformation across the region, with Mexico’s ICT service providers seeing revenue increases of eight percent in 2021. Technology product and services providers, including cloud vendors, recorded a 20 percent increase in annual revenue, far outpacing the 5.1 percent growth in the overall economy in 2021.³⁰ If supply-side issues such as talent turnover and specialist shortages are resolved and a more conducive policy environment is enacted, Mexico’s digital services can grow by a compound annual growth rate (CAGR) of 26 percent, from US\$2.7 billion today to US\$21.7 billion by 2030.

27. This is a conservative estimate as it does not include all the efficiency benefits that digital technologies can bring to export-related industries (e.g., through better tracking of goods in transit through Internet of Things technology). In addition, the 2030 estimate was projected based on the 2021 performance of the best-in-class within the six focus countries only, and will likely be much higher if we used global best-in-class countries as a reference point.

28. Statista (2020), “Information and communications technology (ICT) industry revenue in Mexico in 2019 and 2020, by sector”. Available at: <https://www.statista.com/statistics/1184451/ict-sector-revenue-mexico/>. The six focus Latin American economies analyzed in this report are Argentina, Brazil, Chile, Colombia, Mexico, and Uruguay.

29. World Bank (2021), “ICT service exports (BoP, current US\$).” Available at: <https://data.worldbank.org/indicator/BX.GSR.CCIS.CD>

30. Nearshore Americas (2022), “Mexican ICT Revenue Soars to US\$60 Billion.” Available at: <https://nearshoreamericas.com/mexican-ict-revenue-services/>

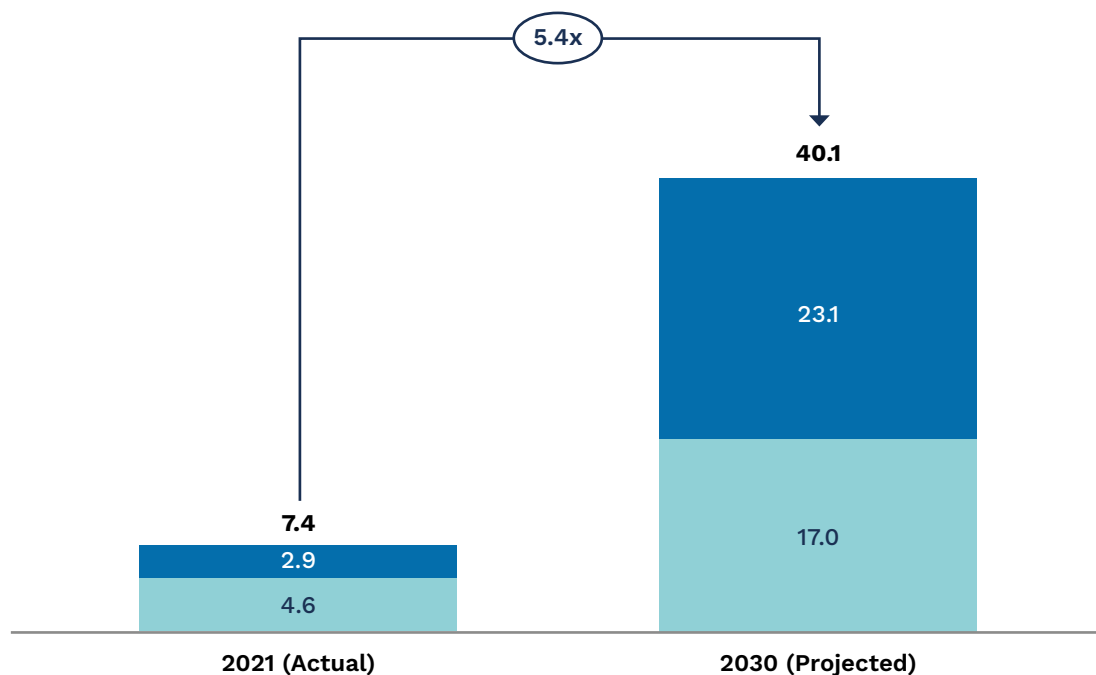
Exhibit 2:

BY 2030, THE TECH-ENABLED BOOST TO MEXICO'S ANNUAL EXPORT VALUE COULD INCREASE BY MORE THAN FIVE TIMES FROM 2021 TO REACH US\$40.1 BILLION



BOOST TO THE ANNUAL VALUE OF MEXICO'S EXPORTS FROM DIGITAL TECHNOLOGIES, 2021 & 2030
US\$ BILLIONS

- Channel 1: New exportable digital solutions
- Channel 2: Reducing costs of access to overseas markets



NOTE: Figures may not sum due to rounding. Figures are conservative estimates as they do not include all the efficiency benefits that digital technologies can bring to export-related industries in channel 3 (e.g., through better tracking of goods in transit through Internet of Things technology). In addition, the 2030 estimate was projected based on the 2021 performance of the best-in-class within the six focus countries only and will likely be much higher if we used global best-in-class countries as a reference point.

SOURCE: AlphaBeta-Access Partnership analysis

4. POLICY RECOMMENDATIONS AND MEASURES TO ACHIEVE GOALS

A review of impactful, innovative, and practical digital policies, using the Digital Sprinters Framework with an export focus, identified 11 policy levers linked to five strategic imperatives crucial for capturing the technology-enabled export opportunity identified earlier in this report (Exhibit 3).³¹ Each policy lever has also been classified as a general or critical enabler of digital exports. In this context, general enablers refer to those which contribute to the broader digitalization of the country, whereas critical enablers are specific and crucial to the achievement of digital exports.

Four of these policy levers have been identified as being most relevant to Mexico, and translate into the core recommendations outlined below (Exhibit 4). We used a two-step process to identify the policy gaps and determine the most applicable recommendations for Mexico. First, we identified which policies and initiatives linked to the 11 policy levers have already been enacted or are currently in place. The policies identified were then ranked following a scoring protocol (a set of questions that serve as parameters to ensure a consistent scoring methodology across all six country reports). This allowed us to rank the policies on a scale of one (low level of progress) to three (high level of progress) and identify areas where further policy action is required. We then drafted our recommendations after considering the data and

literature available to support the proposed arguments, the cost-effectiveness of each measure, and their priority and level of urgency (e.g., whether they act as structural bottlenecks to other policy gaps).

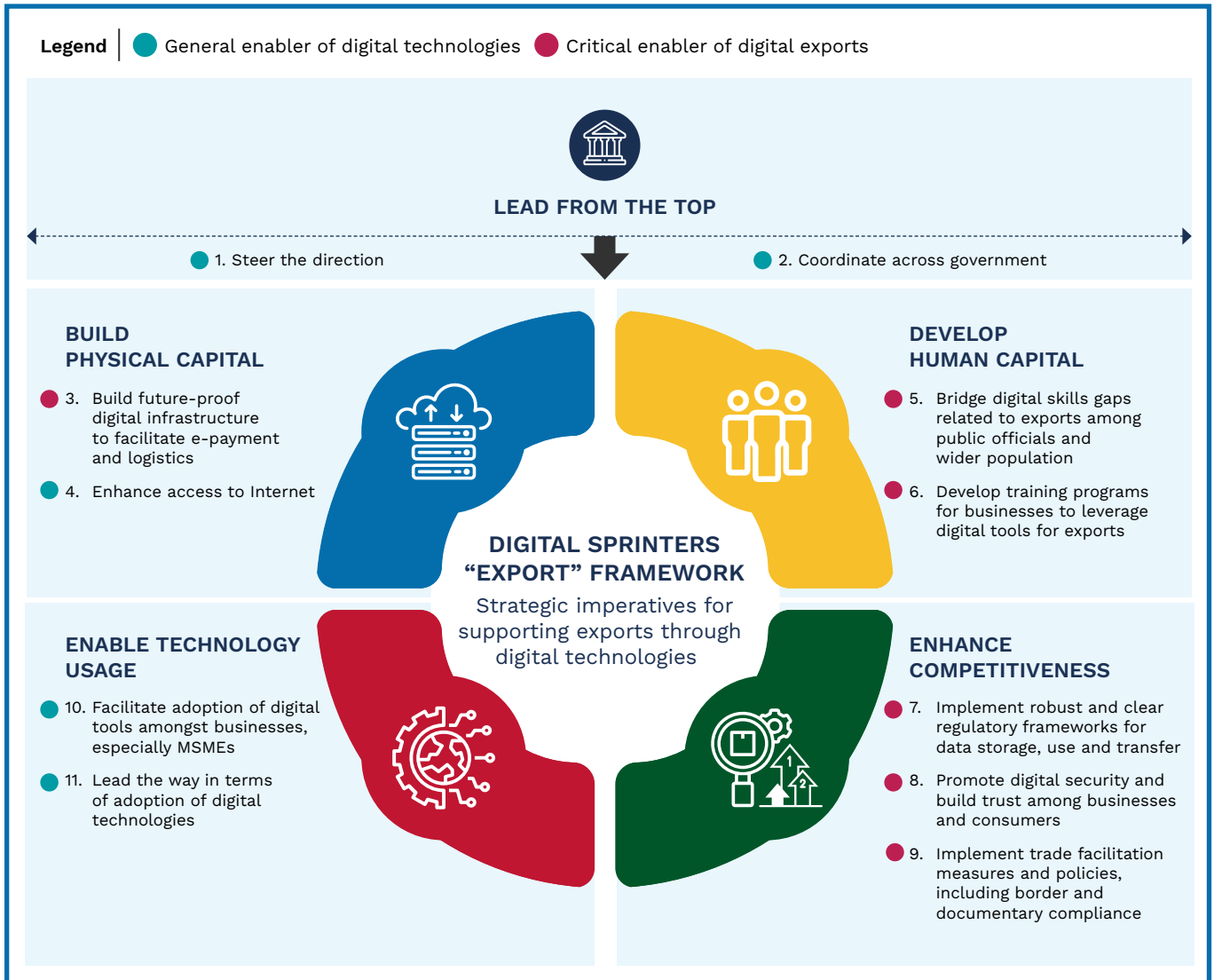
These recommendations are designed to support Mexico in alleviating the bottlenecks currently hindering its export growth from moving forward in capturing the potential digital export opportunity, and are regarded as the most actionable in the short and medium term compared to other possibilities that would require more time or depend on extraordinary political conditions. Notwithstanding this, the government should lead from the top to ensure coordinated efforts in achieving the main goal of supporting exports through digital technologies.

For Mexico to achieve the US\$40.1 billion “size of the prize” for digital exports by 2030, it will require policymakers to find ways to integrate the implementation of the five policy recommendations highlighted above. Crucially, these five policy recommendations are cross-cutting in nature, and are targeted at strengthening the enabling environment for the respective digital components to unlock higher export growth for Mexico (Exhibit 5). If leveraged and implemented well, it would go a long way in helping Mexico capture its digital export opportunity.

31. The Digital Sprinters Framework focuses on key areas such as physical capital, human capital, technology innovation and competitiveness. Google (2020), The Digital Sprinters: Driving Growth in Emerging Markets. Available at: https://blog.google/documents/94/The_Digital_Sprinters_FINAL.pdf/

Exhibit 3:

11 POLICY LEVERS CAN HELP UNLOCK THE BENEFITS OF THE TECHNOLOGY-ENABLED EXPORT OPPORTUNITY AND ADDRESS POTENTIAL CONCERNS



SOURCE: Google; AlphaBeta-Access Partnership analysis

Exhibit 4:

FIVE RECOMMENDATIONS CAN HELP MEXICO ADDRESS CURRENT GAPS HINDERING EXPORT-LED GROWTH



Policy Lever	Recommendation	From...	...To	Best Practice
Build future-proof digital infrastructure	Improve and expand interoperable and trusted digital payment methods to boost uptake	Low uptake of digital payments in the country	Increased uptake of digital payments through extended government welfare programs and greater convergence of technical standards	Brazilian Central Bank's Pix system
Enhance access to Internet	Improve connectivity and make the Internet accessible by reducing the costs of spectrum rights through targeted programs and increasing unlicensed spectrum	High costs of connectivity due to yearly fees which elevate the cost of the spectrum	Affordable Internet access through rural coverage programs and increased use of unlicensed spectrum	Costa Rica's re-auction of unsold concession
Bridge digital skills gaps related to exports	Develop human capital and improve digital capabilities through online courses focused on digital trade for MSMEs and public officials	Shortage of digital skills which could unlock the benefits of existing trade agreements	Improved digital skills among public officials and awareness of existing digital trade agreements	ECLAC's online courses organized for policymakers
Promote digital security and build trust	Enhance competitiveness by strengthening cybersecurity frameworks and fostering trust	Lack of top-down frameworks which steer Mexico's cybersecurity priorities	Holistic enhancement of cybersecurity capabilities through consolidation of legal frameworks	German IT Security Act 2.0
	Enhance competitiveness by supporting the full implementation of the provisions of Chapter 19 of the USMCA	USMCA provisions on digital trade have not been fully implemented	Reformed legislations to incorporate provisions established in the USMCA	UK's consumer and business safeguards for digital trade

Exhibit 5:

THE POLICY RECOMMENDATIONS CAN HELP MEXICO CAPTURE THE FAST-GROWING DIGITAL COMPONENTS



RELEVANCE OF POLICY RECOMMENDATIONS FOR EACH DIGITAL COMPONENT					
POLICY RECOMMENDATIONS	MOBILE APPS	ONLINE VIDEO	E-COMMERCE	DIGITAL SERVICES	DIGITAL ADS
	<p>Relevance¹ Strong Moderate</p> <p>Strategic Imperative Lead from the top Build physical capital Develop human capital Enhance competitiveness</p>				
<p> Improve and expand interoperable and trusted digital payment methods to boost uptake</p>					
<p> Improve connectivity and make the Internet accessible by reducing the costs of spectrum rights through targeted local and federal programs and increasing unlicensed spectrum</p>					
<p> Develop human capital and improve digital capabilities through online courses focused on digital trade for MSMEs and public officials</p>					
<p> Enhance competitiveness by strengthening cybersecurity frameworks and fostering trust</p>					
<p> Enhance competitiveness by supporting the full implementation of the provisions of Chapter 19 of the USMCA</p>					

1. "Strong": Policy lever is extremely relevant to help capture the digital component as it pertains directly to the component or strongly enables its growth; "Moderate": Lever is relevant for the country as it indirectly enables its growth. In the absence of "Strong" or "Moderate", the policy lever does not directly affect the digital component nor provide a critical enabling environment.

SOURCE: Literature review; Expert interviews; AlphaBeta-Access Partnership analysis

Recommendation 1: Improve and expand interoperable and trusted digital payment methods to boost uptake

In line with *Policy Lever 3: Build future-proof digital infrastructure (Critical enabler)*, Mexico should expand its interoperable and trusted digital payment systems. Currently, one of the main barriers to cross-border digital trade is Mexico's inadequate infrastructure and the scarcity of support services such as payment systems. As such, Mexican regulators could push for greater convergence of technical standards, communication protocols, and support hardware and software infrastructure to ensure cross-border payment platforms and solutions are developed in a sustainable and interoperable manner.

Mexico already has key elements for digital payments to expand, but greater collaboration is needed to ensure efforts yield results. For instance, according to the National Institute of Statistics and Geography (INEGI), only 47 percent of the Mexican population has a bank account and only 56 percent of them use financial products or services.^{32, 33} To address the issue, Mexico has built a robust framework to facilitate e-payments, which has enabled initiatives such as CoDi, the Mexican Central Bank's free mobile electronic transfer system launched in 2020.³⁴ Despite this, adoption remains low and could be improved through mobile applications, such as digital wallets and mobile payment systems.³⁵

The Mexican government has focused on supporting the low-income population by granting direct economic support through the government bank (Banco del Bienestar) and Telecom.³⁶ Using these branch offices, the government could establish a program of financial education for its clients to use digital wallets and promote the use of CoDi for digital payments, as well as encourage



local businesses in the community to accept payments with CoDi. This program could be advanced gradually, together with the availability of mobile telecommunications coverage in the communities, until the only form of support is granted through digital wallets.

At the same time, the Fintech Law requires additional regulations to boost and support Mexico's Fintech industry.³⁷ For example, rules and regulations around Application Programming Interfaces (APIs) are much needed for many Fintech products and services to work as smoothly and securely as intended.³⁸ Likewise, it is necessary to provide certainty regarding the use of transactional data and guarantee the proper technical integration with the required security levels. In this regard, Mexico could follow Colombia's model and implement regulatory sandboxes to attract innovative businesses and help them test disruptive business models while keeping processes and practices safe.³⁹

32. Investor Latam (2021). "Según cifras del INEGI, sólo el 47% de los mexicanos tienen una cuenta bancaria". Available at: <https://inversorlatam.com/segun-cifras-del-inegi-solo-el-47-de-los-mexicanos-tienen-una-cuenta-bancaria/>

33. CONDUSEF (n.d.). "¿Cómo usamos los mexicanos los servicios financieros?". Available at: <https://www.condusef.gob.mx/?p=contenido&idc=965&idcat=1>

34. Escala Legal (2021). "Ley Fintech: a tres años de su entrada en vigor". Available at: <https://escalalegal.com/2021/08/28/ley-fintech-a-tres-anos-de-su-entrada-en-vigor/>.

35. Latin America Business Stories (2020). "Bad timing and cultural attachment to cash: Why hasn't CoDi, Mexico's instant payment system, taken off yet?". Available at: <https://labsnews.com/en/articles/business/codi-mexican-instant-payment-system/>

36. Gobierno de México (2022). "Telecomm se transformará en Financiera para el Bienestar, anuncia el Presidente" <https://www.gob.mx/presidencia/prensa/telecomm-se-transformara-en-financiera-para-el-bienestar-anuncia-presidente?idiom=es#~:text=Ciudad%20de%20M%C3%A9xico%2C%2026%20de,presidente%20Andr%C3%A9s%20Manuel%20L%C3%B3pez%20Obrador>.

37. Arena Publica (2022). "Regulación, el mayor reto del open banking para el sector financiero". Available at: www.arenapublica.com/finanzas/regulacion-el-mayor-reto-del-open-banking-para-el-sector-financiero

38. PwC (n.d.). "Regulación de Open Banking". Available at: www.pwc.com/mx/es/servicios-assurance-auditoria/actualizaciones-sector-financiero/regulacion-open-banking.html

39. El Economista (2022). "México debe consultar expertos y regulación fintech de otros países: Finerio". Available at: <https://www.eleconomista.com.mx/sectorfinanciero/Mexico-debe-consultar-expertos-y-regulacion-fintech-de-otros-paises-Finerio-20220407-0103.html>

Recommendation 2: Improve connectivity and make the Internet accessible by reducing the costs of spectrum rights through targeted local and federal programs and increasing unlicensed spectrum

In line with *Policy Lever 4: Enhance access to Internet (General enabler)*, Mexico should consider lowering the costs of spectrum rights to increase Internet penetration and facilitate the arrival of new mobile technologies, such as 5th Generation (5G) networks and Wi-Fi 6E. An interesting approach to reduce the cost of the spectrum could be to credit the payments with connectivity or accessibility programs with the national program Internet para todos (Internet for All)⁴⁰, instead of fully paying the spectrum rights.

Spectrum is a fundamental resource for mobile connectivity, and one of the most important means for the Mexican population to access the Internet.⁴¹ In the case of Mexico, spectrum payment is granted through an auction and a yearly payment established by the Federal Law of Rights (*Ley Federal de Derechos*).⁴² These annual fees increase the cost of spectrum⁴³ which led established companies (such as Telefónica) to give up on its spectrum rights, and as a result,⁴⁴ provide lower revenue for the government.⁴⁵ To address such issues, the regulator has proposed changes to the Federal Law of Rights.⁴⁶

In addition, 6 GHz unlicensed spectrum access and Wi-Fi 6E would enhance broadband coverage and improve Internet affordability. As the COVID-19 pandemic has shown, Wi-Fi represents a critical component of every country's digital infrastructure and spectrum is an essential resource to guarantee the continuity of activities by granting access to fixed networks. According to official 2020 data, 84.1 million people are connected to the Internet, which represents 72% of the population.⁴⁷

The Mexican spectrum authority, the Federal Telecommunications Institute (IFT), should consider the economic impact of more efficient use of spectrum resources and allow unlicensed operations in the 6 GHz frequency band.⁴⁸ The availability of license-exempt access to certain bands facilitates the development of mobile apps as well as the use of new technologies such as augmented reality (AR), virtual reality (VR) and innovations that require high-quality, real-time connectivity.

According to a study, use of the 6 GHz spectrum for software and apps involving AR or VR could unlock an additional US\$6.5 billion in GDP gains and US\$5 billion in producer surplus.⁴⁹ In 2021, the IFT opened a new consultation on the technical requirements for unlicensed use of the band, and, as it stands, it has yet to decide whether it will provide Wi-Fi with greater spectrum access.^{50, 51}

For example, Costa Rica's approach can serve as a point of reference, being among the top-performing countries in Central America for mobile Internet penetration, with one of the lowest mobile tariffs in the region.⁵² Following the unsold spectrum in 2011, the Superintendence of Telecommunications (SUTEL) decided to re-auction the unsold concession in 2017 at a lower reserve price (US\$70 million in 2011 versus US\$43 million in 2017). This auction aimed to foster competition between operators and benefit consumers by ensuring lower Internet prices. As a result, Mexican telecommunications providers Movistar and Claro, which provide services to the Latin American region, were able to secure the spectrum in 2017 (40 and 30 MHz respectively) for US\$43 million.

40 Gobierno de México (2022) "Internet Para Tod@s". Available at: <https://www.gob.mx/internetparatodos>

41. INEGI, IFT, SCT (2022). "Encuesta Nacional sobre Disponibilidad y Uso de Tecnologías de la Información en los Hogares (ENDUTIH) 2021 (Comunicado de prensa) 4 de julio". Available at: <https://www.ift.org.mx/comunicacion-y-medios/comunicados-ift/es/encuesta-nacional-sobre-disponibilidad-y-uso-de-tecnologias-de-la-informacion-en-los-hogares-endutih>

42. Cámara de Diputados LXV Legislatura. "Ley Federal de Telecomunicaciones y Radiodifusión, artículos 78 y 81 fracción VI". Available at: https://www.diputados.gob.mx/LeyesBiblio/pdf/LFTR_200521.pdf and "Ley Federal de Derechos, Capítulo XI Espacio Aéreo". Available at: <https://www.diputados.gob.mx/LeyesBiblio/pdf/LFD.pdf>

43. ASIET (2022). "Análisis del costo del espectro radioeléctrico en México". Available at: <https://asiet.lat/magazine-digital/analisis-del-costo-del-espectro-radioelectrico-en-mexico>

44. Excelsior, Dinero en Imagen (2022). "Telefónica concluye en junio migración a red de AT&T". www.dineroenimagen.com/maricarmen-cortes/telefonica-concluye-en-junio-migracion-red-de-att/143524?categoria=%22dinero%22

45. Expansión (2022). "La devolución de espectro de Telefónica ha costado 1,100 mdp al gobierno". www.msn.com/es-mx/dinero/noticias/la-devolucion-de-espectro-de-telefonica-ha-costado-1100-mdp-al-gobierno/ar-AAWtLkd

46. IFT (2021). "El IFT envía al Senado de la República propuestas de comunicaciones a la Ley Federal de Derechos en materia de espectro radioeléctrico (Comunicado 93/2021) 26 de octubre". www.ift.org.mx/comunicacion-y-medios/comunicados-ift/es/el-ift-envia-al-senado-de-la-republica-propuestas-de-modificaciones-la-ley-federal-de-derechos-en

47. 72% of the population 6 years and above. INEGI (2021), "En México hay 84.1 millones de usuarios de Internet y 88.2 millones de usuarios de teléfonos celulares: ENDUTIH 2021". Available at: https://www.inegi.org.mx/contenidos/saladeprensa/boletines/2021/OtrTemEcon/ENDUTIH_2020.pdf

48. Wi-Fi Alliance. "Wi-Fi Certified 6". Available at: www.wi-fi.org/discover-wi-fi/wi-fi-certified-6

49. DSA, Telecom Advisory Services. "Estimación del valor económico del uso no licenciado de la banda de 6 GHz en México" (page 7 and section 8.2). Available at: <http://dynamicspectrumalliance.org/wp-content/uploads/2021/02/Valor-economico-de-la-banda-de-6-GHz-en-Mexico.pdf>

50. IFT. "Consulta Pública sobre el Anteproyecto de Acuerdo mediante el cual el Pleno del Instituto Federal de Telecomunicaciones clasifica la banda de frecuencias 5925-7125 MHz como espectro libre y emite las condiciones técnicas de operación de la banda". Available at: www.ift.org.mx/industria/consultas-publicas/consulta-publica-sobre-el-anteproyecto-de-acuerdo-mediante-el-cual-el-pleno-del-instituto-federal-de-9

51. IFT. "PAT 2022, Programa Anual de Trabajo 2022" (item 1.31). Available at: www.ift.org.mx/sites/default/files/contenidogeneral/transparencia/pat2022.pdf

52. GSMA (2018). "Spectrum pricing in developing countries: Evidence to support better and more affordable mobile services". Available at: <https://data.gsmaintelligence.com/api-web/v2/research-file-download?id=33292319&file=Spectrum%20pricing%20in%20developing%20countries.pdf>

Recommendation 3: Develop human capital and improve digital capabilities through online courses focused on digital trade for MSMEs and public officials

In line with *Policy Lever 5: Bridge digital skills gaps related to exports (Critical enabler)*, Mexico's Ministry of Economy should partner with the private sector to develop online training for public officials and online training materials focused on tech-enabled tools, such as the use of online marketplaces to leverage exports. The Ministry's own MiPyMes MX would be a suitable platform to facilitate such courses as it connects the Ministry of Economy to Mexican MSMEs.⁵³

Furthermore, academia members could support the process by offering courses to MSMEs and public officials. Another route may be through the National Association of Universities and Higher Education Institutions (ANUIES) network, the official government interaction platform which connects undergraduates and graduates of universities to the opportunities and needs for digital trade.

The government could consider expanding the platform's beneficiaries and include targeted public officials, entrepreneurs, and MSMEs.⁵⁴

In addition to improving the digital skills of public officials and businesses, Mexico should increase awareness of the commercial and technical opportunities offered by the USMCA relating to issues such as user privacy, cross-border data transfer, paperless trading, digital payments, and online consumer protection, as well as cybersecurity provisions and the use of related standards, such as the ISO 27000 series. Indeed, while the USMCA contains many provisions specific to digital trade, these may not be as impactful if not used to their full potential.⁵⁵ Therefore, the government could assist by offering courses that support companies on the basics around USMCA implementation and its impact for businesses.⁵⁶



53. Secretaría de Economía (n.d). "Herramientas Empresariales para la Transformación Digital" <https://mipymes.economia.gob.mx/aprender/capacitate/herramientas-empresariales-para-la-transformacion-digital/>

54. ANUIES (n.d). "Acerca de la ANUIES". Available at <http://www.anui.es.mx/anui/es/acerca-de-la-anui/es>

55. Sources include Secretaría de Economía (n.d). "Herramientas empresariales para la Transformación Digital". Available at: <https://mipymes.economia.gob.mx/aprender/capacitate/herramientas-empresariales-para-la-transformacion-digital/>; USTR: USMCA "Chapter 19". Articles 19.5, 19.6, 19.7, 19.8, 19.9, 19.11, 19.13. Available at: <https://ustr.gov/sites/default/files/files/agreements/FTA/USMCA/Text/19-Digital-Trade.pdf>; CYNTHUS (2021). "Certificaciones en ciberseguridad ¿Cuál es la mejor para mí?". Available at: <https://www.cynthus.com.mx/certificaciones-en-ciberseguridad/>; and ISO (n.d). "ISO /IEC 2700:2018 Information technology – Security techniques – Information security management systems – Overview and vocabulary". Available at: <https://www.iso.org/obp/ui/#iso:std:iso-iec:27000:ed-5:v1:en>

56. USTR (n.d.) USMCA "Chapter 19, Digital Trade" <https://ustr.gov/sites/default/files/files/agreements/FTA/USMCA/Text/19-Digital-Trade.pdf>

BOX 2.

GOOGLE CONTRIBUTES TO *RECOMMENDATION 3: DEVELOP HUMAN CAPITAL AND FACILITATES GREATER DIGITAL TRADE IN MEXICO, SUCH AS THROUGH GOOGLE GARAGE DIGITAL*

Google Garage Digital offers free online courses on a range of topics to help Mexicans expand their businesses or boost their careers.⁵⁷ Topics include expanding businesses to other countries, which covers international marketing, advertising beyond borders, facilitation of purchase processes for foreign customers, and international deliveries. Upon completion, participants are also issued a certification for the Digital Marketing Basics in Digital Garage course.

More broadly, the Google Garage Digital courses help to hone the digital skills of Mexican consumers, allowing them to upskill and improve their careers. Given that these courses are offered online and free-of-charge, any business owner can now be equipped with the right tools to move their business online and expand their offerings to consumers across the globe.

Google Digital Garage

Sign in Register

Learn today's most in-demand skills

Online courses, designed for you to grow your career or business. Choose your course, register, and start learning today.

Start Now

Gain today's most in-demand skills

Gain the skills you need, whether you're growing your business, starting a career, or just want to try something new.

Data and Tech Digital Marketing Career Development

Photo Source: <https://backlinko.com/seo-certification-guide>

57. Google Garage Digital (n.d.), Online Courses. Available at: <https://learndigital.withgoogle.com/garagedigital/courses>

Recommendation 4: Enhance competitiveness by strengthening cybersecurity frameworks and fostering trust

In line with *Policy Lever 8: Promote digital security and build trust among businesses and consumers (Critical enabler)*, Mexico should consolidate and strengthen its legal framework around cybersecurity. This would not only holistically enhance the country's cybersecurity capabilities, but also enable Mexico's long-awaited adherence to the Budapest Convention, to which the country has been invited to accede since 2007.

Mexico should advance the creation of a solid, holistic and inclusive cybersecurity legislation that protects all categories of data from theft and damage. The new regulation could provide a framework for businesses, government and society at large. In addition, the law could include a provision to create an authority with cutting-edge technical capacity, charged with legal faculties to pursue cyber attacks, issue norms, and set compliance standards. In short, building a stronger cybersecurity framework fosters the growth of digital services by increasing consumers' trust.

Over the last few years, legislators across party lines have introduced different proposals of a Cybersecurity law, and it appears to be an active topic in Congress. The legislative branch has gone one step further, establishing a working group to design a new Cybersecurity Law, considering inputs from civil society and academia members.⁵⁸ Moreover, the Joint Science and Technology Congressional Commissions resumed discussions around several elements of the cybersecurity law, including the

definition of cybercrimes and the creation of a National Cybersecurity Agency.⁵⁹

However, despite the efforts enlisted above, the government should make a stronger push and aim for concrete results. This should be established as a top priority in the Congressional agenda given that attacks and scams in the digital world do not yield. Mexico could also benefit from incorporating international best practices and standards. Through the assessment and adoption of international practices, the Federal government can strengthen its knowledge on the topic (and its risks) and advocate using a top-down approach, steering the country's cybersecurity needs and priorities. As an example, a best practice that Mexico can draw upon is the German IT Security Act 2.0, which entered into force in 2021, introducing changes to the existing regulation of critical infrastructures covered by the Federal Office for Information Security (BSI) Act. In doing so, it regulates the protection of the federal administration, critical infrastructure companies in the special public interest, and consumer protection.⁶⁰

Lastly, the government can leverage international trade agreements, such as the USMCA, to continue moving forward in the cybersecurity conversations. The USMCA comes with legal liabilities that Mexico needs to abide by. As per Article 19.15 of the USMCA, "threats to cybersecurity undermine confidence in digital trade", which in turn impacts the way public and private sectors work towards high-level objectives and principles for digital transformation, e-commerce, and digital trade.⁶¹

58. Cámara de Diputados (2022). "Comisión realiza mesa de trabajo en materia de seguridad informática, rumbo a una Ley de Ciberseguridad: Javier López". Available at: <https://comunicacion-social.diputados.gob.mx/index.php/notilegis/comision-realiza-mesa-de-trabajo-en-materia-de-seguridad-informatica-rumbo-a-una-ley-de-ciberseguridad-javier-lopez-#qsc.tab=0>

59. Excelsior(2022). "Avanza Ley Federal de Ciberseguridad en el Congreso; existen 15 iniciativas por revisar". <https://www.excelsior.com.mx/nacional/avanza-ley-federal-de-ciberseguridad-en-el-congreso-existen-15-iniciativas-por-revisar>

60. Data Guidance (2020). "Germany: BMI adopts draft of IT Security Act 2.0". Available at: <https://www.dataguidance.com/news/germany-bmi-adopts-draft-it-security-act-20>

61. USTR: USMCA "Chapter 19". Article 19.15. Available at: <https://ustr.gov/sites/default/files/files/agreements/FTA/USMCA/Text/19-Digital-Trade.pdf>

Recommendation 5: Enhance competitiveness by supporting the full implementation of the provisions of Chapter 19 of the USMCA

In line with *Policy Lever 8: Promote digital security and build trust among businesses and consumers (Critical enabler)*, Mexico should reform its legislation to incorporate provisions established in the USMCA, including Article 19.7, which underscores the relevance of adopting and maintaining transparent and effective measures to protect consumers from fraudulent or deceptive commercial activities, and Article 19.13, which establishes the need to maintain standards for the limitation of unsolicited commercial electronic communications.⁶²

It is also crucial to modify the Mexican legal framework to guarantee unrestricted cross-border transfer of information, provided by Article 19.11, and to prevent the forced localization of computing facilities, in accordance with Article 19.12. These modifications, coupled with public policies that strengthen the use of cloud computing services and guarantee the transparent

provision of services, will increase competitiveness and promote business growth.

While the USMCA entered into force on July 1, 2020, Mexico has three years to implement Article 19.17 on Interactive Computer Services, as established in Annex 19-A. Interactive computer services are relevant for digital trade and, to foster the use of these services, there is a growing need to enhance trust and transparency in terms of liability protections for online intermediaries. Placing liability on intermediaries over content posted by third-parties may damage the flow and open freedom of the Internet. This is relevant to guarantee intermediary liability and prevent harm related to information stored, processed, transmitted, distributed, or made available by the service as established in Article 19.17.⁶³

The combination of the actions mentioned above, that is, the (i) reform to the Mexican legal framework to implement the provisions set by Chapter 19 of the USMCA; and the (ii) reform to shield interactive services from liability that originates from third-party content, per USMCA Article 19.17, will build a stronger and clear legal framework to facilitate digital trade and foster the development of interactive platforms.

For instance, the UK has in place consumer and business safeguards for digital trade. These safeguards seek to ensure stronger protection of digital consumer rights such as access to redress. They also aim to give businesses confidence that engaging in digital trade will not be detrimental to their commercial interests.⁶⁴



62. USTR: USMCA "Chapter 19". Articles 19.7 and 19.13. Available at: <https://ustr.gov/sites/default/files/files/agreements/FTA/USMCA/Text/19-Digital-Trade.pdf>

63. USTR: USMCA "Chapter 19". Article 19.17 and Annex 19-A. Available at: <https://ustr.gov/sites/default/files/files/agreements/FTA/USMCA/Text/19-Digital-Trade.pdf>

64. Gov.uk (2021), "Digital trade objectives". Available at: <https://www.gov.uk/government/publications/digital-trade-objectives-and-vision/digital-trade-objectives>

BOX 3. BEST PRACTICES FOR RELEVANT POLICY LEVERS

RECOMMENDATION 1: IMPROVE AND EXPAND INTEROPERABLE AND TRUSTED DIGITAL PAYMENT METHODS TO BOOST UPTAKE [BRAZIL]

In 2020, the Brazilian Central Bank launched Pix, the digital platform that enables instant payments. Pix now has 118 million confirmed users, representing 55 percent of the country's population.⁶⁵ However,

there is a key difference between Pix and Mexico's CoDi: Pix implemented a peer-to-peer (P2P) payment system, which facilitates small merchant exchanges between individuals, while CoDi is only used for transactions between businesses and individuals. Brazil also linked the payment system with important government transactions in support of the population during the COVID-19 pandemic, incentivizing mass adoption of the Fintech platform.



65. Ebanx (2021), The Pix revolution in Brazil. Available at: https://business.ebanx.com/hubfs/ABM/APMs/Pix/English/PIX-Revolution-EBANX-EN.pdf?utm_medium=email&hsenc=p2ANqtz-8ZL7GJJYk9n8vFKLRTexTat1qDZFMjyUWTOHibzIC5Ak4J4o_xcA3u5xM4_mklyBMD4ULiOveF-miKckGll5mU_jpys8u2OI71C3av_UFqI3Ybl&hsmi=206763316&utm_content=206763316&utm_source=hs_automati on&hsCtaTracking=5529a87a-3179-4fcd-94eb-bf706937d921%7Cf2d4b972-00a6-4aed-a46a-3d880e2cf259

**RECOMMENDATION 3:
DEVELOP HUMAN CAPITAL AND IMPROVE DIGITAL
CAPABILITIES THROUGH ONLINE COURSES
FOCUSED ON DIGITAL TRADE FOR MSMEs AND
PUBLIC OFFICIALS [ECLAC; CHILE]**

In 2021, the Economic Commission for Latin America and the Caribbean (ECLAC) organized courses which provided public officials in charge of MSME support programs with trade-oriented training.⁶⁶ These courses provided policymakers with insights on opportunities and challenges faced by companies when conducting cross-border e-commerce in the region, enabling them

to identify areas where the government can support businesses looking to export.

Another example is the program “Viraliza, Digital Transformation: E-commerce/Cyber-SMEs” implemented by Santiago Innova together with the Santiago Chamber of Commerce (CCS) in Chile.⁶⁷ The program aims to boost the digitization of SMEs and increase competitiveness in e-commerce and the digital economy by providing access to theoretical and practical training. In addition, Viraliza was specifically designed to support SMEs led by women.



66. CLAC (2021), Digital and sustainable trade facilitation in Latin America and the Caribbean. Available at: https://repositorio.cepal.org/bitstream/handle/11362/47370/1/S2100582_en.pdf

67. Santiago Innova (2022), “Viraliza Transformación Digital Ecommerce Cyber PYME”. Available at: <https://www.santiagoinnova.com/e-commerce-cyber-pyme/>



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