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THE DIGITAL SPRINTERS

Boosting exports through digital technologies in Colombia

October 2022

A Digital Sprinters focus report – Commissioned by Google

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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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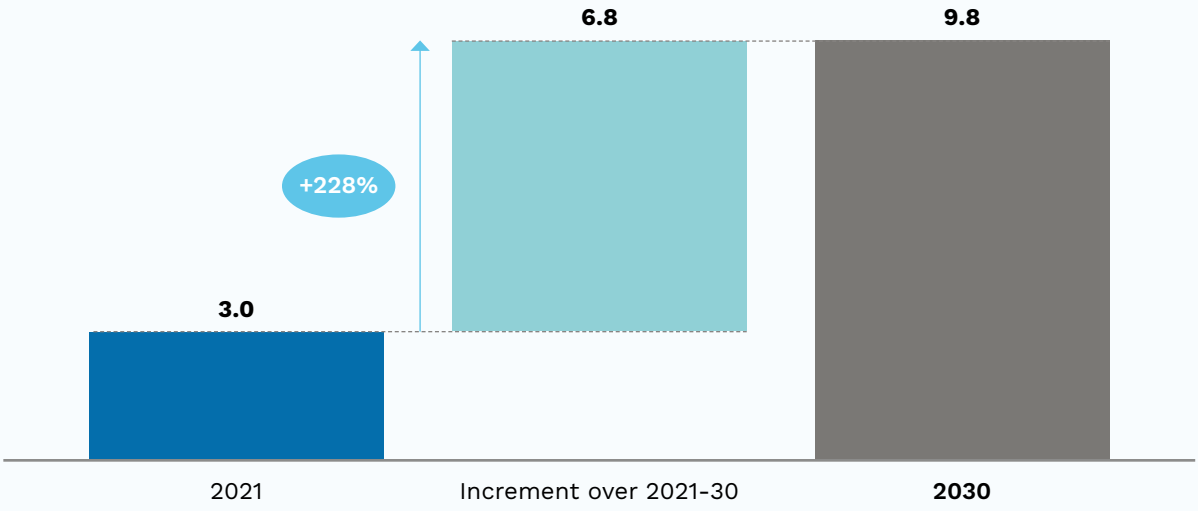
Colombia is already experiencing a **US$3 BILLION** boost to its annual export value from digital technologies, but this value could more than triple to reach **US$9.8 BILLION** in 2030[1]



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$9.8 BILLION POTENTIAL BENEFIT FOR COLOMBIA

Promote digital payments

Strengthen existing policy and regulatory frameworks to promote financial inclusion, build user trust by bridging knowledge gaps, design financial sector guidelines

Develop digital trade online courses

Equip public sector workers and MSMEs with sector-specific trainings under the Digital Government policy, to improve their digital skills

This includes:

Foster data protection culture

Uphold data protection regulations with key trading partners, drive awareness through communication efforts and capacity-building initiatives

Streamline incentives for digital tools

Centralise support for MSMEs across financial and non-financial incentives within a ministry, and access efficiency of resources and impact

Develop public-private partnerships

Establish partnerships, open industry forum discussions between the Ministry of ICT and tech companies, as well as other initiatives such as tech-camps to support innovation

SOURCE: AlphaBeta-Access Partnership analysis

UNLOCKING THE DIGITAL EXPORT OPPORTUNITY IN COLOMBIA

While relatively small in population size, Colombia is home to the fourth largest advertising market in Latin America.[2] Internet penetration stands at close to 70 percent, and almost 60 percent of consumers will research brands before making a purchase.[3] With Internet users in Colombia 1.5 times more likely to find products and services via search engines rather than social media,[4] search advertising has significant potential to become a comparative advantage vis-à-vis the rest of the region. This can also support Colombia in reaching US$1.2 billion worth of digital advertising exports by 2030.[5] Despite this vast potential, such digital exports have not received as much attention as they warrant, given that national statistics have failed to keep pace with the rapid evolution of the digital economy.

This report aims to address this gap,[6] and finds that Colombia is already experiencing a **US$3 billion[7]** boost (5.9 percent of total exports) to its annual export value from applying digital technologies today (with Google facilitating up to 17.4 percent). Moreover, by 2030, this value can increase by more than three times to become **US$9.8 billion[8]**.

To fully capture this significant prize, Colombia should focus on the following five policy recommendations:

1. Promote the implementation of digital payments by strengthening existing policy and regulatory frameworks;
2. Develop and promote online courses focused on digital trade for micro, small and medium enterprises (MSMEs) and public officials;
3. Continue fostering a data protection culture to increase consumer trust and digital trade, in a coordinated way;
4. Streamline financial and non-financial incentives to encourage MSMEs to adopt digital tools; and
5. Develop public-private partnerships on new, tech-enabled export categories to better harness thepotential of digital tools to boost exports.

2. Magna (2020), "Global Advertising Forecasts". Available at: *https //s3.amazonaws.com/media.mediapost.com/uploads/MagnaYearEnd2020Forecast.pdf*

3. DataReportal (2022), "Digital 2022: Colombia". Available at: *https //datareportal.com/reports/digital-2022-colombia*

4. Emarketer (2020), "COVID-10's Impact on Latin America". Available at: *https //www.mmaglobal.com/files/385_covid_19s_impact_in_latin_america_emarketer.pdf*

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

6. 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

7. 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).

8. 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.

> WHILE RELATIVELY SMALL IN POPULATION SIZE, COLOMBIA IS HOME TO THE FOURTH LARGEST ADVERTISING MARKET IN LATIN AMERICA. INTERNET PENETRATION STANDS CLOSE TO 70 PERCENT, AND ALMOST 60 PERCENT OF CONSUMERS WILL RESEARCH BRANDS BEFORE MAKING A PURCHASE. WITH INTERNET USERS IN COLOMBIA 1.5 TIMES MORE LIKELY TO FIND PRODUCTS AND SERVICES VIA SEARCH ENGINES RATHER THAN SOCIAL MEDIA, SEARCH ADVERTISING HAS SIGNIFICANT POTENTIAL TO BECOME A COMPARATIVE ADVANTAGE VIS-À-VIS THE REST OF THE REGION.

1. THE VALUE OF DIGITAL PRODUCTS AND SERVICES FOR COLOMBIA'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 digital solutions, many of which are exported abroad. These include mobile applications, online video services, and digital services such as data processing for overseas customers. For instance, Colombian app developers are estimated to earn US$35 million annually from app users outside the country.[9] On another note, building on information and communication technologies (ICT)-enabled services has been identified as a key growth area to diversify Colombia's export portfolio.[10] Direct services in both telecommunications and information technology (IT) sectors made up most of the digital services exports of the country, contributing an estimated 40 percent and 50 percent, respectively. There is much potential for growth in this area, given that most of the ICT services value-added produced in Colombia are currently being captured domestically rather than exported.[11] For example, the real estate start-up market in Colombia has been experiencing rapid growth, and real-estate firms have pioneered the use of technology to streamline the processes of selling, financing, and buying real estate. More than 65 of such companies have been born in Colombia in the past three years, amidst a booming property market bogged down by outdated and cumbersome processes. One such company is La Haus, which obtained more than US$158 million from investors, including Bezos Expeditions, a venture capital firm owned by Jeff Bezos. La Haus used the technology it developed to expand its operations in Mexico through the purchase of Mexican real estate firms, and eventually hopes to enter other Latin American countries, given the similar challenges these countries face relating to the purchase and rental of properties.[12] Other real estate start-ups echo similar sentiments, with the long-term goal of offering technology-driven services throughout the region.

9. 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.

10. Ministerio de Tecnologías de la Información y las Comunicaciones (MinTic) (2015), "Vive Digital 2014-2018". Available at: https://www.slideshare.net/Ministerio_TIC/vive-digital-2014-2018-english-version

11. OECD (2019), "OECD Reviews of Digital Transformation: Going Digital in Colombia". Available at: https://www.oecd-ilibrary.org/science-and-technology/oecd-reviews-of-digital-transformation-going-digital-in-colombia_781185b1-en

12. Rest of World (2022), "Colombian real estate start-ups want to take over Latin America". Available at: https://restofworld.org/2022/colombia-real-estate-startups-proptech/

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. Colombia has the fourth largest e-commerce market in the region, and the adoption of e-commerce has helped to boost exports by about 16 percent in 2021.[13] Colombia's e-commerce exports are well-spread across key sectors such as health and beauty, apparel, and electronics. Colombia ranks 33rd worldwide in terms of export revenue from beauty products in 2020, mainly shipping to its regional counterparts of Mexico, Ecuador, Peru, and Chile.[14] The use of e-commerce platforms helps Colombian companies to compete internationally by unlocking access to a global customer base.[15] For instance, Colombian flower company Eclipse Flowers first explored the use of selling flowers via e-commerce platforms in 2020, amidst the Covid-19 pandemic. Since then, e-commerce sales have grown to account for 20 to 25 percent of total sales, especially during festive seasons like Valentine's Day.[16] More broadly, through programs such as "Colombia a un Click", an initiative launched by ProColombia, the entity responsible for promoting Colombian exports, flower companies in the country have seen sales through e-commerce platforms soar to double digit numbers, even during the pandemic.[17] Colombian companies can now export products not just to neighboring countries, but also to markets across the globe such as South Korea. It is important to note that access to overseas markets is not only enhanced through e-commerce platforms, but also through digital advertising. Currently, Colombia-based firms are estimated to reap US$763 million annually in additional export revenues from digital advertising targeted at overseas customers, demonstrating how digital advertising platforms can enhance access to a larger export audience.[18] In particular, MSMEs in Colombia 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.

13. International Trade Administration (2021), "Colombia – Country Commercial Guide". Available at: https //www.trade.gov/country-commercial-guides/colombia-ecommerce-0

14. OEC (2020), "Beauty Products in Colombia". Available at: https //oec.world/en/profile/bilateral-product/beauty-products/reporter/col# ~ text=About&text=Exports%20In%202020%2C%20Colombia%20exported,most%20exported%20product%20in%20Colombia.

15. CNN (2021), "The ecommerce boom in Colombia". Available at: https //sponsorcontent.cnn.com/int/the-ecommerce-boom-in-colombia/

16. ProColombia (2021), "E-commerce, the ally of Colombian flower exports for Valentine's Day". Available at: https //procolombia.co/noticias/en/e-commerce-ally-colombian-flower-exports-valentines-day

17. ProColombia (2021), "E-commerce, the ally of Colombian flower exports for Valentine's Day". Available at: https //procolombia.co/noticias/en/e-commerce-ally-colombian-flower-exports-valentines-day

18. 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, machine-to-machine (M2M) tracking of exported goods, and the application of Internet-of-Things (IoT) technologies in ports. The use of digital technologies in Colombia has great potential to boost exports in the country, with an increasing number of companies exploring the use of technologies such as IoT to enhance efficiency in the industry.[19] It is estimated that, within the next three years, nearly two-thirds of companies in the transportation and logistics sector will have explored the deployment of predictive analytics and artificial intelligence, allowing them to drive greater efficiency and value creation.[20] For instance, Liftit, a Colombian trucking and logistics services start-up, uses a ride-hailing-inspired model to connect truck drivers to businesses that need cargo delivered. This helps companies in the country decrease shipping costs by about 25 percent while enabling drivers to find work more easily and receive payment promptly.[21] Liftit, which has already expanded to Mexico, aims to improve broader business and retail operations across the region, where the current lack of technology in the logistics sector has hampered commerce and limited the flow of goods and services. With reduced shipping expenses, companies can now provide more efficient logistics services, both domestically and internationally. Such 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.

19. INM (2017), "AOS and IBM developing logistics and transportation solution built on IBM Blockchain and Watson IoT". Available at: *https //newsroom.ibm.com/2017-06-21-AOS-and-IBM-developing-logistics-and-transportation-solution-built-on-IBM-Blockchain-and-Watson-IoT*

20. Deloitte (2019), "Creating IoT ecosystems in transportation". Available at: *https //www2.deloitte.com/xe/en/insights/focus/internet-of-things/transportation-iot-internet-of-things-ecosystem.html*

21. IFC (2019), "Technology fuels better logistics operations in Latin America". Available at: *https //www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/news+and+events/news/impact-stories/technology-fuels-logistics-operations-latin-america-en*

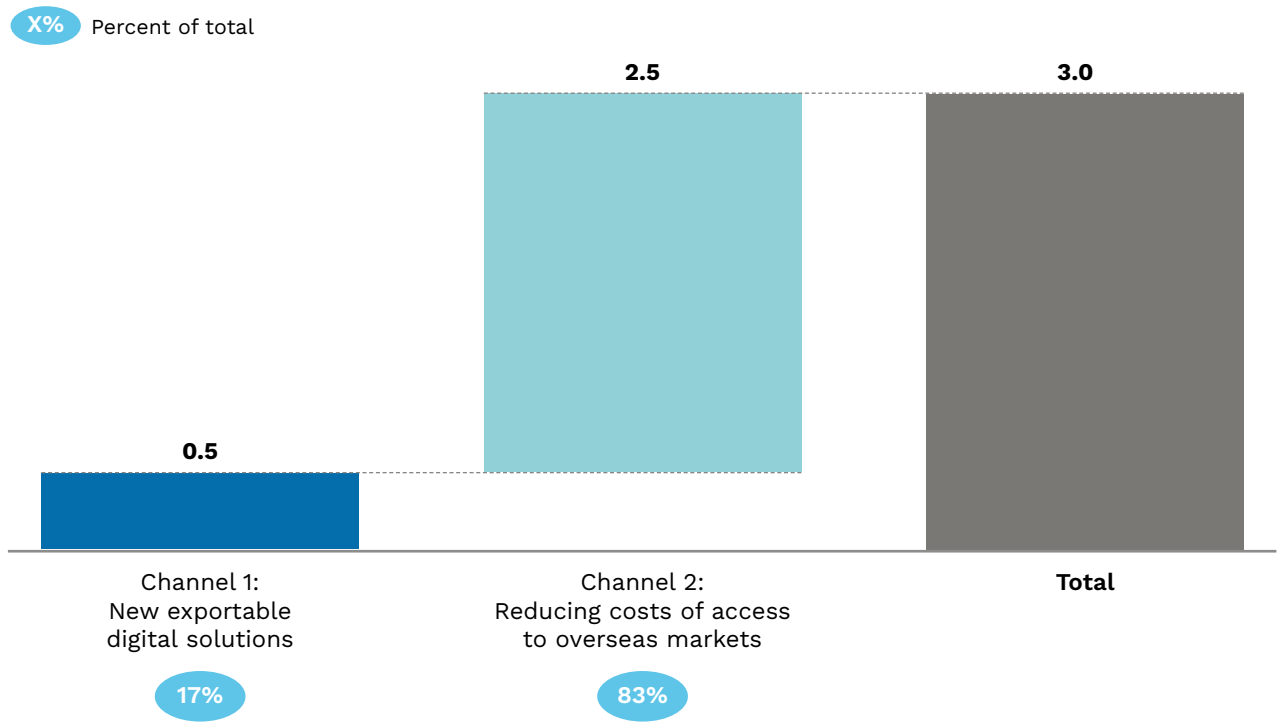
As of today, Colombia is already experiencing a **US$3 billion** boost to its annual export value from digital technologies (Exhibit 1), making digital exports the 6th largest export sector. Being only one percent of its GDP, Colombia has significant untapped potential for digital exports.[22] 83 percent of the current US$3 billion export boost comes from the reduction in costs due to the improved ability to access overseas markets (channel 2) through digital advertising and e-commerce platforms, equivalent to 4.9 percent of total exports.

The remaining stems from the creation of new exportable digital solutions (channel 1), similar to one percent of total exports. This is a conservative estimate as it does not include the increased efficiency in exporting processes (channel 3) resulting from adopting digital technologies. Cross-border e-commerce sales of US$1.7 billion constitute a large bulk of this benefit, with 22.3 percent of MSMEs engaging in e-commerce as of 2020.[23] This figure is close to the Organization for Economic Co-operation and Development (OECD) average.

Exhibit 1:

COLOMBIA IS ALREADY EXPERIENCING A US$3 BILLION BOOST TO ITS ANNUAL EXPORT VALUE FROM DIGITAL TECHNOLOGIES TODAY

BOOST TO THE ANNUAL VALUE OF COLOMBIA'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

22. Channel 1 (Creating new exportable digital solutions) and Channel 2 (Reducing costs of access to overseas markets) are sized. 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 eight 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/col*

23. OECD (2021), OECD SME and Entrepreneurship Outlook 2021: Country Profiles. Available at: *https //www.oecd.org/industry/smes/SME-Outlook-2021-Country-profiles.pdf*.

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

Google has been instrumental in advancing Colombia'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 Colombia to reach overseas users with minimal cost. According to data.ai and AppsFlyer, Google Play represented 49 percent of all app store consumer spending in Q1 2021 in Spanish-speaking countries (Argentina, Chile, Colombia, Costa Rica and Peru). This figure is significantly higher than the 32 percent share in Q1 2020, underlining the growing opportunity for Colombian app and game developers through Google's platforms.[24] In addition, YouTube provides a platform for Colombian content creators to showcase their content to a large overseas online viewership. For instance, these content creators obtain around two-thirds of their total video views from viewers outside Colombia.[25] In the e-commerce space, Google has facilitated businesses' move to e-commerce through a collaboration with the Colombian Chamber of Electronic Commerce (CCCE) to sponsor Ya estoy Online, a free online digital platform that supports Colombian businesses in adopting digital tools to sell online through e-commerce.[26]

It is estimated that Google's products helped to facilitate **US$518 million** (or 17.4 percent) of Colombia's digital export opportunity in 2021. Box 1 lists examples of how Colombian businesses have benefited from exports facilitated by Google's products.

24. 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/*

25. Representative and stratified sampling of firms' paid traffic into overseas and domestic channels was conducted on the SEMRush database, available at: *https //semrush.com*. AdWeek (2011), "60% Of YouTube Views Come From A Non-English Speaking Audience". Available at: *https //www.adweek.com/performance-marketing/youtube-views-non-english-speaking-audience/*

26. Ya estoy Online (n.d.), "¿Qué es Ya Estoy Online ?" Available at: *https //www.yaestoyonline.co/que-es-ya-estoy-online*

BOX 1.
GOOGLE'S TOOLS HELP BUSINESSES IN COLOMBIA REACH OVERSEAS CUSTOMERS AND OPTIMIZE BUSINESS PROCESSES

CLARO: LEADING TELECOMMUNICATIONS COMPANY INCREASES VISIBILITY AMONG POTENTIAL CUSTOMERS THROUGH YOUTUBE CAMPAIGN STRATEGY[27]

In 2021, Claro, one of the leading telecommunications companies in Colombia, held a virtual pride walk In Colombia to show their support for the LGBT+ community during Pride month. This campaign raised awareness of the struggles of the LGBT+ community, empowering those discriminated against by society.

The campaign hoped to bring together 7,000 participants, a target based on attendance at past physical events in recent years. Via YouTube, the campaign reached more than four million people from more than ten countries. It generated about 95 percent of positive conversations in virtual rooms, allowing participants from different backgrounds to connect and show their support for the LGBT+ community. This successful campaign enabled Claro to reach potential customers across the region and stand out amongst its competitors by positioning itself as an inclusive brand that supports marginalized communities.

RAPPI: COLOMBIAN DELIVERY START-UP EXPANDS ACROSS THE REGION THROUGH THE GOOGLE PLAY PLATFORM

Rappi, one of the most well-funded start-ups in Latin America, started as a food delivery service in Colombia in 2015. The app was initially seen as a digital pantry store, with its founders promoting it by giving away donuts in exchange for downloads. However, it soon added to its portfolio many options, including restaurants, food chains, pharmacies, and supermarkets.

The Google Play platform has been critical in facilitating the company's growth across the region, given Android's growing market share in South America in recent years.[28] This has allowed Rappi to reach customers beyond Colombia due to the interoperability of the Android platform. Today, Rappi is present in 200 cities across nine countries, reaching more than seven million users in Latin America.[29] In the region, the application now has over 50 million downloads on the Google Play platform alone,[30] making up more than 75 percent of its total downloads.[31]

BANLINEA: FINTECH COMPANY ACCELERATES INNOVATION WITH THE USE OF GOOGLE CLOUD[32]

Banlinea is a Colombian Fintech company specializing in digital transformation and the online sale of financial products. It aims to help users make better financial decisions through digital tools and offers a one-of-a-kind app to bring collective investment funds to digital media.

Banlinea chose to adopt the use of Google Cloud to create a robust and secure infrastructure that delivered information in a timely manner. Google Cloud has helped Banlinea to utilize virtual servers, mailing, storage, and monitoring services while allowing access to different databases in a non-restrictive manner. It has also facilitated big data analysis, enabling Banlinea to acquire more accurate information on user behavior to meet customer needs.

Since the deployment of Google Cloud, Banlinea has managed to process about 2,000 daily transactions despite only having one infrastructure administrator – a difficult feat in the past. The flexibility offered by Google Cloud has also allowed the company to offer its services remotely to reach customers across the globe, with no physical constraints. Furthermore, despite scaling up its operations, Banlinea has reduced costs by 32 percent, due to savings in physical infrastructure and management.

27. YouTube Advertising (2022), "YouTube Works Awards – 2021 winners".
Available at: https //www.youtube.com/intl/es-419_co/ads/youtube-works/#youtube-works-winners

28. GlobalStats Statcounter (2022), "Mobile operating system market share South America".
Available at: https //gs.statcounter.com/os-market-share/mobile/south-america

29. LABS (2021), "Colombian start-up unicorn Rappi: why the company wants to be the first Latin American super app".
Available at: https //labsnews.com/en/articles/business/colombian-startup-unicorn-rappi-super-app/

30. AppBrain (n.d.), "Rappi". Available at: https //www.appbrain.com/app/rappi/com.grability.rappi

31. Statista (2021), "Number of downloads of Rappi app in selected Latin American countries as of June 2021, by operating system".
Available at: https //www.statista.com/statistics/1236243/rappi-downloads-latin-american-countries/

32. Google (n.d.), "Banlinea: Innovation in Colombia financial e-transactions thanks to Google Cloud". Available at: https //cloud.google.com/customers/banlinea

3. THE DIGITAL EXPORT POTENTIAL OF US$9.8 BILLION BY 2030

Colombia 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 three times to reach **US$9.8 billion** by 2030 (Exhibit 2).[33]

Digging deeper into how Colombia is currently faring in various measures of export-enabling factors, Colombia has a vast untapped potential regarding its digital maturity level and e-commerce infrastructure. In terms of digital maturity, its score of 46.3 in the ICT usage index in the United Nations International Telecommunication Union's (ITU) ICT Development Index (a measure of digital adoption among the workforce and population) is the lowest among the six focus Latin American economies.[34] In addition, 46 percent of Colombia's population has a bank account, which is currently the 2nd lowest among the six economies. According to the IMD World Digital Competitive Ranking (WDCR), Colombia ranks 55th out of 64 economies in its banking and financial services capital readiness, which amounts to 3rd lowest among the six focus economies.[35] For e-commerce infrastructure, Colombia's world ranking of 71 in the World Bank Logistics Performance Index (among 180 countries) is the 2nd lowest among the six focus economies.[36] With the right policy levers, Colombia can catch up and capitalize on this US$9.8 billion export opportunity by 2030.

According to our estimates, digital services in Colombia are expected to grow at a compound annual growth rate (CAGR) of 31.2 percent, from US$458 million in 2021 to US$5.3 billion by 2030, a large opportunity especially if Colombia is able to invest in digital infrastructure, bridge digital skill gaps, and develop new public-private partnerships on tech-enabled export categories. Statistics show that digitally deliverable services, which include a wider umbrella of digitally-enabled services beyond digital services, have not substantially grown as a percentage of total Colombian exports in the recent 15 years, representing a significant area of improvement.[37]

Another fast-growing though nascent area is mobile application exports. Colombia's mobile application exports are projected to grow by a CAGR of 26.3 percent between 2021 and 2030 to reach US$284 million. According to AGDI Colombia (International Association of Video Game Developers), the national games industry already consists of at least 60 companies that are members of Fedesoft (Colombia's software and IT industry association) and the Colombian Video Games Association. If more designers, developers, and programmers can fill the demand gap, this will go a long way in furthering the international reach of the Colombian mobile app industry.[38]

33. 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.

34. The ICT usage index measures the degree of ICT usage in a country. It is a composite indicator that weights three ICT indicators (33% each): (1) Percentage of individuals using the Internet; (2) Fixed (wired)- broadband Internet subscriptions per 100 inhabitants; (3) Active mobile-broadband subscriptions per 100 inhabitants. It is the second sub-index in ITU's ICT Development Index (IDI). The six focus Latin American economies covered in this study are Argentina, Brazil, Chile, Colombia, Mexico, and Uruguay. Sources include WIPO (2021), "Global Innovation Index". Available at: *https //www.globalinnovationindex.org/analysis-indicator*; and ITU (2017), "The ICT Development Index (IDI): conceptual framework and methodology". Available at: *https //www.itu.int/en/ITU-D/Statistics/Pages/publications/mis2017/methodology.aspx*

35. The IMD World Digital Competitiveness Ranking, produced by the IMD World Competitiveness Center, measures the capacity and readiness of 64 economies to adopt and explore digital technologies as a key driver for economic transformation in business, government and wider society. International Institute for Management Development (2021), IMD World Digital Competitiveness Ranking 2021. Available at: *https //www.imd.org/globalassets/wcc/docs/release-2021/digital_2021.pdf*

36. 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*

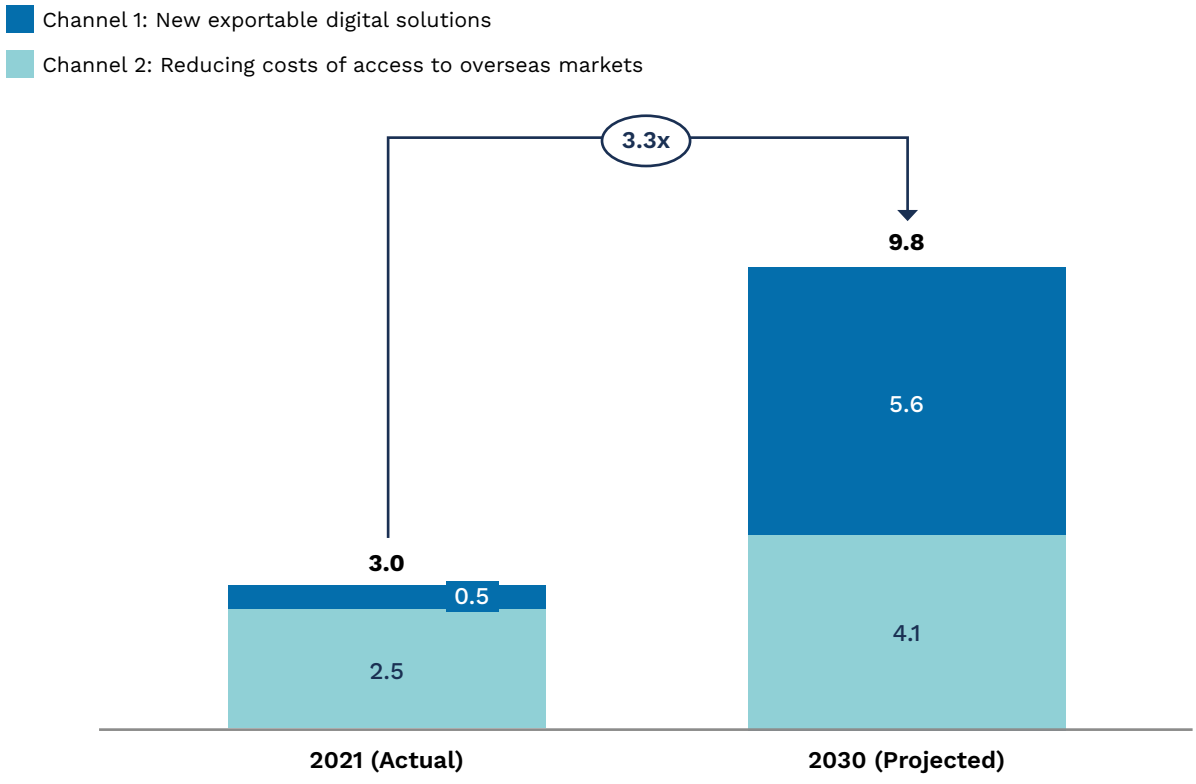
37. UNCTADSTAT, United Nations Conference on Trade and Development (2020), "Exports in digitally-deliverable services, value, shares and growth, annual," *https //unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=158358*.

38. Impacto TIC (2019), "Video Games are not just a gamers thing; Colombia on the right track." Available at: *https //impactotic.co/en/the-Colombian-video-game-industry/*

Exhibit 2:

BY 2030, THE TECH-ENABLED BOOST TO COLOMBIA'S ANNUAL EXPORT VALUE COULD MORE THAN TRIPLE FROM 2021 TO REACH US$9.8 BILLION

BOOST TO THE ANNUAL VALUE OF COLOMBIA'S EXPORTS FROM DIGITAL TECHNOLOGIES, 2021 & 2030
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 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

Using the Digital Sprinters Framework with an added export focus, the report identified 11 policy levers linked to five strategic imperatives crucial for capturing the technology-enabled export opportunity enlisted earlier in this report (Exhibit 3).[39] Each policy lever has been classified as a general or critical enabler of digital exports. General enablers entail elements that contribute to the broader digitalization of the country, whereas critical enablers pertain specific and crucial factors to the achievement of digital exports.

Four of these policy levers have been identified as most relevant to Colombia, 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 Colombia. 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 Colombia in alleviating the bottlenecks currently hindering its export growth from moving forward in capturing the potential digital export opportunity. They 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.

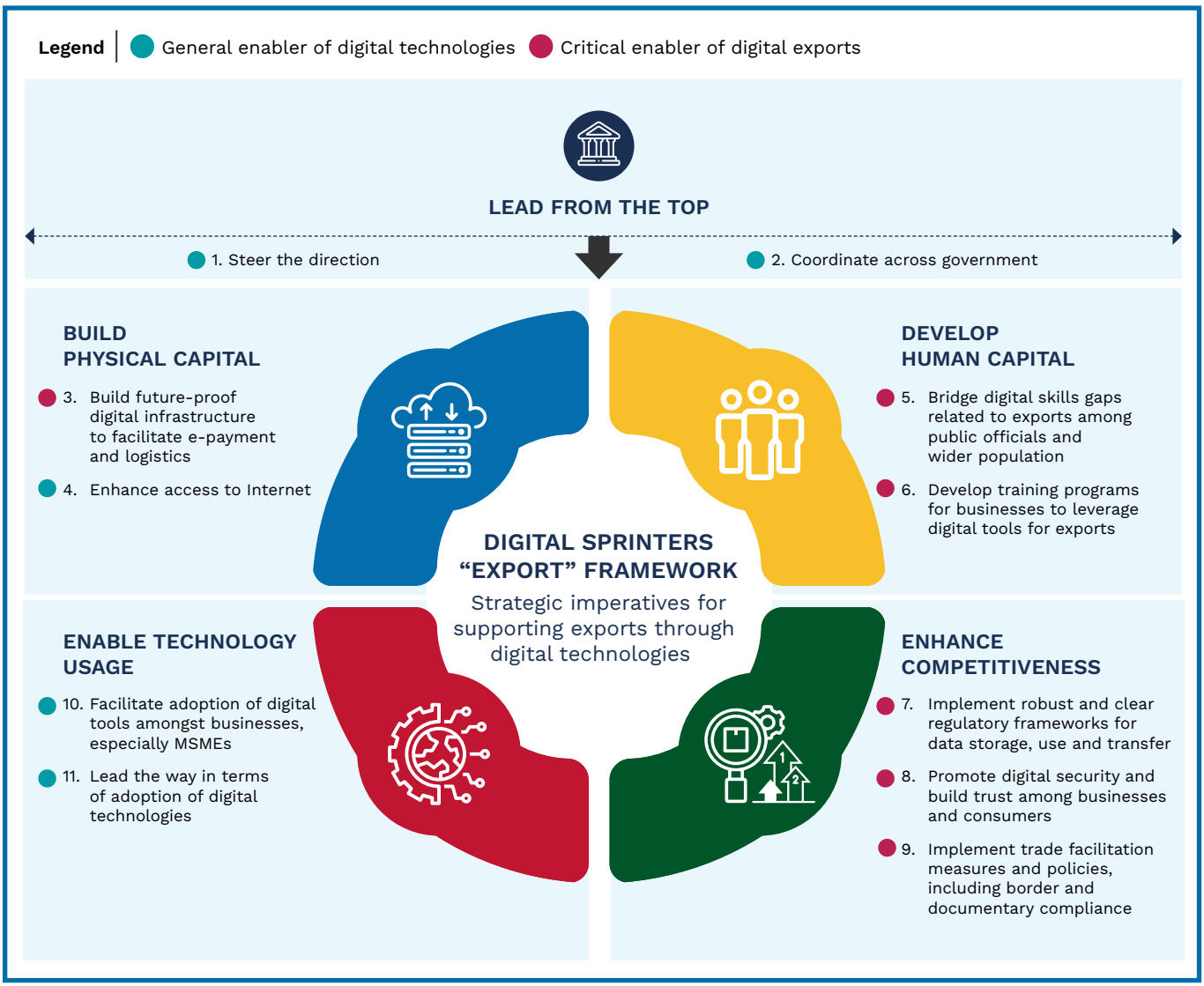
For Colombia to achieve the US$9.8 billion “size of the prize” for digital exports by 2030, it will require policymakers to find ways to integrate the implementation of the five policy recommendations highlighted above. Crucially, these five policy recommendations are cross-cutting in nature and are targeted at strengthening the enabling environment for the respective digital components to unlock higher export growth for Colombia (Exhibit 5). If leveraged and implemented correctly, it would go a long way in helping Colombia capture its digital export opportunity.

Furthermore, in terms of timing, Colombia has a unique chance to design a revamped path through the new administration’s National Development Plan (NDP) and ICT Plan for 2022-2026. Since these strategic frameworks will drive the country’s strategy for the coming years, it is essential to leverage: (1) successful practices from the past, (2) initiatives that need adjustment, and (3) concrete and actionable recommendations, such as the ones listed below. In other words, it is recommended that the proposals identified in Exhibit 4 and 5 are included in the NDP and ICT Plan.

39. 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 COLOMBIA ADDRESS CURRENT GAPS HINDERING EXPORT-LED GROWTH

Policy Lever	Recommendation	From...	...To	Best Practice
Build future-proof digital infrastructure	Promote the implementation of digital payments by strengthening existing policy and regulatory frameworks	Low uptake of digital payments in the country, caused in part by high rates of informal employment	Increased uptake of digital payments through higher financial inclusion levels supported by institutional and legal frameworks	Brazilian Central Bank's Pix system
Bridge digital skills gaps related to exports	Develop and promote online courses focused on digital trade for MSMEs and public officials	MSMEs and public officials not adequately equipped to navigate digital spaces to expand their reach	Well-equipped public and private sectors that can leverage and use digital tools	Singapore's SkillsFuture Program
Promote digital security and build trust	Continue fostering a data protection culture to increase consumer trust and digital trade, in a coordinated way	Education on data protection prevalent only among private sector	Extended data protection awareness that covers consumers	UK ICO's "Be Data Aware" campaign
Facilitate adoption of digital tools	Streamline financial and non-financial incentives to encourage MSMEs to adopt digital tools	Inadequate tools and financial support for MSMEs, which hinders access to technology	Reduced costs for adoption of specific technologies in the forms of loans or technology extension programs	Canada's Digital Adoption Program (CDAP) grants and loans
	Develop public-private partnerships on new, tech-enabled export categories to better harness the potential of digital tools to boost exports	No clear policy to foster innovation in the public and private sectors	Extensive public-private partnerships and clear policies which facilitate innovation	Mexico's partnership with Alibaba to open up e-commerce export markets

Exhibit 5:

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

RELEVANCE OF POLICY RECOMMENDATIONS FOR EACH DIGITAL COMPONENT

Relevance[1] | ✓ **Strong** ✓ **Moderate**

Strategic Imperative | Build physical capital | Develop human capital | Enhance competitiveness | Enable technology usage

POLICY RECOMMENDATIONS	MOBILE APPS	ONLINE VIDEO	E-COMMERCE	DIGITAL SERVICES	DIGITAL ADS
Promote the implementation of digital payments by strengthening existing policy and regulatory frameworks	✓		✓	✓	✓
Develop and promote online courses focused on digital trade for MSMEs and public officials	✓		✓	✓	✓
Continue fostering a data protection culture to increase consumer trust and digital trade, in a coordinated way	✓		✓	✓	✓
Streamline financial and non-financial incentives to encourage MSMEs to adopt digital tools	✓	✓	✓	✓	✓
Develop public-private partnerships on new, tech-enabled export categories to better harness the potential of digital tools to boost exports	✓		✓	✓	✓

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:
Promote the implementation of digital payments by strengthening existing policy and regulatory frameworks

In line with ***Policy Lever 3: Build future-proof digital infrastructure (Critical enabler)***, Colombia should further promote the implementation of digital payments, such as digital wallets and apps like Google Pay, by strengthening existing policy and regulatory frameworks.

The country's high rate of informal employment prevents people from opening a bank account and using digital payment systems. As of 2021, 54 percent of the population in Colombia had no access to banking.[40] Only 50 percent of payments remain digital, despite a double-digit increase propelled by the COVID-19 pandemic.[41] The lack of knowledge and understanding of digital payment solutions among the population, in part due to the vacuum in general banking literacy, leads to a lack of trust and thus adoption.

Against this backdrop, Colombia has implemented mechanisms to promote financial inclusion, including digital payments. For example, in 2020, the government published its National Policy for Financial and Economic Education and Inclusion.[42] Colombia has also issued rulings (such as Decree 1692/18[43] and Decree 1297/22[44]) to facilitate payment access through lower transactional fees and set open banking rules. For instance, Decree 1297/22 clarifies the regulations under which entities can market financial services via electronic platforms. These measures convey certainty and guidance to the market players and allow players such as Google Play to align on issues such as processing personal data, a key process component when performing payments online.[45]

Colombia's institutional architecture and policy frameworks have significantly positioned the country as a regional benchmark for digital infrastructure commitments. Moving forward, the government should continue implementing directives established on its legal frameworks, allowing the financial and digital infrastructure to increase the uptake of formal financial services, including digital payment solutions.

The government could prioritize driving formality in employment and the financial system. Using digital technologies may offer a route to increase formality in the labor market, which can be embedded as a priority in the country's upcoming 2022-2026 new ICT Plan.[46] In addition, the country should direct efforts towards building user trust in the financial system by bridging the knowledge gap on banking, digital payment solutions, digital security and safety, among others. Colombia should continue investing in capacity-building efforts around digital security for citizens in the private and public sector, as established in the 2020 National Policy on Digital Trust and Security, and Decree 338/22.[47]

Lastly, Colombia could also consider promoting the Advisory Council, an initiative established in the National Inclusion Policy enabling the private sector to issue recommendations to the Intersectoral Commission for Inclusion and Education, the body that articulates and coordinates efforts between the entities involved in financial inclusion. For this to happen, the Ministry of Finance and Public Credit will first need to issue a regulatory decree creating the Intersectoral Commission. Government and businesses should work together to design guidelines that align with the digital infrastructure reality of Colombia. While doing so, both parties should view it holistically as enabling digital payments for development and inclusion. This not only considers traditional – albeit important—risks (e.g., safety, security), but also best practices (e.g., building inclusive digital payment systems that attract vulnerable populations).

40. Statista, "Share of the population without access to the services of banks or similar organizations worldwide in 2021, by country".
Available at: https //www.statista.com/statistics/1246963/unbanked-population-in-selected-countries/

41. La Republica (2021), "Los pagos sin contacto representan 50% de nuestras transacciones presenciales".
Available at: https //www.larepublica.co/finanzas/los-pagos-sin-contacto-representan-50-de-nuestras-transacciones-presenciales-3279877

42. Consejo Nacional de Política Económica y Social de la República de Colombia (Conpes), Política Nacional de Inclusión y Educación Financiera y Económica.
Available at: https //colaboracion.dnp.gov.co/CDT/Conpes/Econ%C3%B3micos/4005.pdf

43. Colombia EVA official website, Decree 1692/18. Available at: https //www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=153787

44. Colombia EVA official website, Decree 1297/22.
Available at: https //dapre.presidencia.gov.co/normativa/normativa/DECRETO%201297%20DEL%2025%20DE%20JULIO%20DE%202022.pdf.

45. Colombia EVA official website, Decree 1297/22.
Available at: https //dapre.presidencia.gov.co/normativa/normativa/DECRETO%201297%20DEL%2025%20DE%20JULIO%20DE%202022.pdf.

46. OECD (2019), "OECD Reviews of Digital Transformation: Going Digital in Colombia".
Available at: https //www.oecd-ilibrary.org/science-and-technology/oecd-reviews-of-digital-transformation-going-digital-in-colombia_781185b1-en

47. Colombia EVA oficial website, Decree 388/22.
Available at: https //dapre.presidencia.gov.co/normativa/normativa/DECRETO%20338%20DEL%208%20DE%20MARZO%20DE%202022.pdf

Recommendation 2:
Develop and promote 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)***, Colombia should empower its public sector officials and MSMEs through an approach that is coordinated and assessed, as well as accessible. Public sector officials and MSMEs need to be able to navigate the digital space to expand their capabilities and grow, hence becoming more competitive in the market and efficient for citizens.

Colombia has taken significant steps in bridging the digital skills gap; however, certain aspects can help the country enhance its road to success. For a start, it should be acknowledged that Colombia has in place numerous initiatives to improve basic digital skills. For instance, the 2018-2020 National ICT Plan includes a robust section outlining a series of programs to increase digital adoption among businesses and productive sectors.[48] Moreover, the ICT Ministry has offered sessions to officials and contractors of public entities on topics such as Open Data, security and digital risks, price framework agreements and digital services.[49] In 2022, the ICT Ministry launched 2022 TECDigital, a platform that supports companies in implementing advanced technologies.[50]

While these initiatives may be constructive, there is an urgent need to assess each project's impact to determine the value of replicating, canceling, or adjusting the efforts. This evaluation could also help remove duplicative areas and help the government improve the coordination of multiple policy programs that support the productive transformation of the country across government actors and over time.[51] The latter will assist in providing clarity around how to best approach digital skills and tools gaps. In summary, Colombia could benefit from an assessment as it draws on its 2022-2026 ICT Plan, prioritizing impact, integrity, and coordination.

Enhancing access to both digital skills and tools can facilitate the public sector and MSME uptake in Colombia. For instance, the cost of using digital tools prevents players, such as MSMEs, from integrating them into their operations. Barriers such as transaction commissions make cash-based solutions a more attractive option. To this end, the government should look into developing models and incentives that make digital tools more accessible. This also ties into digital skills, since public officials and MSMEs do not use the tools because they do not understand them. Recommendation 4 expands on potential incentives that can help address this gap.

In this regard, the ICT Ministry could also consider partnering with the private sector and industry associations (e.g., the Chamber of Commerce or the Chamber of Electronic Commerce), universities and think tanks, or regional organizations (e.g., the United Nations Economic Commission for Latin America and the Caribbean (ECLAC), the Inter-American Development Bank (IADB)) to develop exclusive training courses tailored for public officials and MSMEs. For example, topics may include digital accountability, fast-tracking process, digital signature, e-contracts, or consumer protection.

48. MinTIC, "Plan TIC 2018-2020: El Futuro Digital es de Todos". Available at: *https //micrositios.mintic.gov.co/plan_tic_2018_2022/pdf/plan_tic_2018_2022_20191121.pdf*

49. Colombia, "Digital Government strategy". Available at: *https //gobiernodigital.mintic.gov.co/portal/Politica-de-Gobierno-Digital/*

50. MinTIC (2022), "MinTIC lanza TECDigital 2022, el primer centro virtual para apoyar a las empresas del país en la implementación de tecnologías avanzadas". Available at: *https //mintic.gov.co/portal/inicio/Sala-de-prensa/Noticias/210514 MinTIC-lanza-TECDigital-2022-el-primer-centro-virtual-para-apoyar-a-las-empresas-del-pais-en-la-implementacion-de-tecnologias-avanzadas*

51. OECD (2019), "OECD Reviews of Digital Transformation: Going Digital in Colombia". Available at: *https //www.oecd-ilibrary.org/science-and-technology/oecd-reviews-of-digital-transformation-going-digital-in-colombia_781185b1-en*

Recommendation 3: Continue fostering a data protection culture to increase consumer trust and digital trade, in a coordinated way

In line with ***Policy Lever 8: Promote digital security and build trust among businesses and consumers (Critical enabler)***, Colombia should strengthen trust in its personal data protection regulatory environment through existing national institutions.

Interoperability in trade is a key enabler of digital exports – and with it comes data protection. Therefore, a country needs a robust data protection framework for cross-border transactions to flourish. In terms of the user, an enhanced capability to protect their personal data when doing business online can contribute towards increased uptake of larger digital trade transactions.

In this regard, Colombia has issued regulations to protect users' data by imposing a series of obligations on companies, such as Law 1581/2012.[52] Law 1266/2008 regulates the processing of financial data collected in Colombia or abroad.[53] Further, as mentioned above, Colombia established its National Policy on Digital Trust and Security in 2020.[54]

Nevertheless, issues around data protection are dynamic and evolving. The country's ability to uphold data protection regulations, particularly with key trading partners, is essential from a trade perspective and improves regulatory predictability and certainty around doing business. To this end, the government should continue to build trust in the regulatory environment.[55] This can be ingrained in the making of the 2022-2026 NDP and ICT Plan, granting Colombia an opportunity to position data protection as a key enabler of innovation and trade. In this regard, the Presidential Advisor for Innovation and Digital Transformation and the Superintendency of Industry and Commerce (SIC) can play a key role in stewarding said efforts.

Accounting for the existing legal framework, Colombia should also continue to drive data protection awareness at a national level. The government should leverage existing mechanisms such as the position of Presidential Advisor for Innovation and Digital Transformation to coordinate with governmental actors and advise on the monitoring and implementation of policies, guidelines, and instructions issued by the President. The SIC should remain active through (1) communication efforts (e.g., social media campaigns), (2) capacity-building initiatives by offering tailored courses on the duties of companies and public entities around personal data[56], and (3) accountability, such as fining players when they breach Colombia's national habeas data and data treatment legislation.

Supporting actions may include coordinated efforts between national and subnational authorities. Planning coordinated activities at a national level can help local governments, users and businesses bridge the gap in data protection regulation. The Presidential Advisor for Innovation and Digital Transformation could start by performing a national assessment of key threats to data protection, with a risk-mapping assessment and a contingency plan to tackle them. The assessment could be adapted to local contexts under the guidance of SIC in aiming to evaluate user and business readiness on basic (e.g., security protocols, saving passwords, selecting cookies) and complex issues (e.g., reporting data breaches, infringement to habeas data).

A culture of privacy provides a shared understanding of how personal data can and should be used to support broader strategic objectives. This improves the ability of the privacy laws to comply with their purpose more effectively. Therefore, fostering a data protection culture could help governments to validate a public structure that protects privacy by default while enabling companies to use data to its fullest potential.

52. Colombia EVA, "Data Protection Law (1581 of 2012)". Available at: https //www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=49981; and Decree 255 (2022) available at: https //www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=179087#0

53. Función Pública, "Ley 1266 de 2008". Available at: https //www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=34488

54. Colombia EVA oficial website, Decree 388/22.
Available at: https //dapre.presidencia.gov.co/normativa/normativa/DECRETO%20338%20DEL%208%20DE%20MARZO%20DE%202022.pdf

55. OECD (2019), "OECD Reviews of Digital Transformation: Going Digital in Colombia".
Available at: https //www.oecd-ilibrary.org/science-and-technology/oecd-reviews-of-digital-transformation-going-digital-in-colombia_781185b1-en

56. Superintendencia de Industrua y Comercio (SIC). Formación #AprendeconlaSIC.
Available at: https //docs.google.com/forms/d/e/1FAIpQLSfW6HmJ9g4eYROmF7wl3jy0VD5ngmO-x86oW6GMrhYbdtZPg/closedform

Recommendation 4:
Streamline financial and non-financial incentives to encourage MSMEs to adopt digital tools

In line with ***Policy Lever 10: Facilitate adoption of digital tools (General enabler)***, The government could enhance its coordination efforts around the set of financial and non-financial initiatives used to encourage MSMEs to grow their capacities around digital tools and skills. Despite digitization during the COVID-19 pandemic, these efforts remain to be well integrated among MSMEs[57]; hence, incentives could allow companies to upgrade and adapt their business operations.

Colombia has promoted many programs to boost incentives for entrepreneurs and start-ups. For example, iNNPulsa is open to all sectors, while App.co is directed toward the ICT sector.[58] Further, in 2020 the country's financial regulator launched a regulatory sandbox as an experimental and controlled space for fintech companies to test innovative technological developments.[59]

While these initiatives demonstrate progress, funding remains dispersed as several entities oversee similar and, at times, overlapping initiatives. According to the OECD, there is a significant overlap in the aims, target groups, and methods to support MSMEs.[60] To this end, the government could consider centralizing the support under the leadership of the ICT Ministry, enhancing the efficiency of resources and impact. The Ministry could start by assessing the initiatives across different agencies and scale-up those that are more successful and adjust or terminate the others.[61] By streamlining these efforts, MSMEs and start-ups will have more clarity when navigating the system.

Likewise, this proposal is intertwined with Recommendation 2: *Develop and promote online courses focused on digital trade for MSMEs and public officials*. Both relate to enhancing access to digital tools to equip MSMEs further, especially when costs are a barrier to digital adoption. In terms of financial support, this is

sometimes provided through loans, but also by reducing the cost of adopting certain technologies, such as e-payments and digital accounting. Support could also be translated as digital skills courses or technology extension programs, including identifying areas of improvement, self-assessment tools to identify the most relevant solutions, and e-business solutions. These measures would positively impact the development of the e-commerce sector and boost digital trade.

57. La República, (2021) "Digitalizar las Pymes contribuye a una mayor productividad y a la reactivación".
Available at: *https://www.larepublica.co/empresas/digitalizar-las-pymes-contribuye-a-una-mayor-productividad-y-a-la-reactivacion-3223065*

58. OECD (2019), "OECD Reviews of Digital Transformation: Going Digital in Colombia". Available at: *https://www.oecd-ilibrary.org/science-and-technology/oecd-reviews-of-digital-transformation-going-digital-in-colombia_781185b1-en*; also MinTIC portals, "Apps.co" available at: *https://apps.co/portal/* and "iNNpulsa" available at: *https://www.innpulsacolombia.com/innformate/innpulsa-conecto-20-emprendimientos-innovadores-con-seis-paises-traves-del-programa*

59. Superintendencia Financiera de Colombia (SFC), "Superfinanciera habilita el espacio controlado de prueba para impulsar la innovación tecnológica del sistema financiero".
Available at: *https://www.superfinanciera.gov.co/jsp/10109000*

60. OECD (2019), "OECD Reviews of Digital Transformation: Going Digital in Colombia".
Available at: *https://www.oecd-ilibrary.org/science-and-technology/oecd-reviews-of-digital-transformation-going-digital-in-colombia_781185b1-en*

61. OECD (2019), "OECD Reviews of Digital Transformation: Going Digital in Colombia".
Available at: *https://www.oecd-ilibrary.org/science-and-technology/oecd-reviews-of-digital-transformation-going-digital-in-colombia_781185b1-en*

BOX 2.
GOOGLE FACILITATES THE ADOPTION OF DIGITAL TOOLS AMONG BUSINESSES IN COLOMBIA[62]

Google has been actively involved in helping companies gain access to the tools needed to improve their products and run successful digital campaigns. One example of this is the "Google for Pymes", an initiative that equips small and medium-sized companies with personalized guides on how to create or improve presence on the internet.[63]

Another relevant tool is Think with Google, a one-stop resource that allows companies to improve their marketing strategies and products with the help of consumer insights.[64] Viajala, a Colombian flight metasearch engine that operates in Latin America, serves as a beneficiary of Think with Google. Its founder, Thomas Allier, initially started the company by creating a desktop application, which was largely successful given that 70 percent of its audience was accessing its site from computers at that time. However, as mobile began to gain traction across the region, Viajala realized that about 60 percent of their customer base was utilizing the platform via their mobile devices instead.

This prompted the team to adopt a change in mindset, focusing on mobile-first rather than desktop-first. The company utilized Think with Google resources to better understand the needs and preferences of their consumers across Latin America and chose to adopt an approach vastly different from their competitors. Rather than incentivizing users to download a heavy application that would use up storage in their mobile phones, they focused on building a mobile web application and developed an accelerated mobile page (AMP) version of their landing pages. This allowed for high-speed loading, leading to a more pleasant user experience and stronger customer retention. Coupled with the use of other user experience (UX) tools offered by Think with Google, Viajala understood the demands of consumers not just in Colombia but also across Latin America, allowing them to achieve a double-digit increase in their customer decision conversion.

Photo Source: *http //bitacoranoticias.com/el-buscador-colombiano-viajala-aterriza-en-brasil/*

62. YouTube – Google Colombia (2019), "Masters of Mobile: Thomas Allier". Available at: *https //www.youtube.com/watch?v=XLHl5ccC5D4*

63. Sources include Google (n.d.), "Google for Pymes". Available at: *https //smallbusiness.withgoogle.com/intl/es_es/?c=ES#!/*; and Google (n.d.), "Google blog". Available at: *https //espana.googleblog.com/2020/09/crea-una-guia-para-digitalizar-tu.html*

64. Think with Google (2015), "About Think with Google". Available at: *https //www.thinkwithgoogle.com/intl/es-419/colecciones/about/*

Recommendation 5:
Develop public-private partnerships on new, tech-enabled export categories to better harness the potential of digital tools to boost exports

In line with ***Policy Lever 10: Facilitate adoption of digital tools (General enabler)***, Colombia should consider strengthening partnerships between key government agencies and tech companies to foster deeper collaboration between stakeholders and drive digital-led solutions across sectors.

In Colombia, Public-Private Partnership (PPP) is a regulated contract scheme to provide public services. While the PPP scheme was expanded a couple of years ago to include IT projects beyond telecommunications infrastructure, it remains challenging to fulfill the requirements for this. Taking this into account, the Office of the President and the Ministry of Information Technologies and Communications (MinTIC) could join efforts to re-examine the requirements and scope around PPP or, alternatively, drive another stream of work that allows for partnerships between the private and public sector, but not as strict as a PPP contract.

Under the collaboration above, the Presidential Advisor for Innovation and Digital Transformation would assist in its capacity as responsible for leading the development of the digital ecosystem among public entities, the private sector, and the national government. Meanwhile, the MinTIC is key as it is the primary authority charged with taking policy initiatives related to the digital economy and the resources to implement them.

Organizing open forum discussions with industry leaders could also help the government understand businesses' needs and demands, while identifying gaps and possible bottom-up solutions. In addition, the government can continue promoting initiatives around tech-camps or boost-labs with different stakeholders, bringing government and firms together to create collaborative environments that support digital innovation across economic sectors.[65] The iNNpulsa program and the ICT virtual hackathon on digital violence prevention serve as examples.[66] Such initiatives harness the resources and expertise of public and private sector partners and could support innovative technologists, engineers, and entrepreneurs.

Digital technologies can be the perfect ally for governments interested in boosting more inclusive and sustainable growth. Colombia's digital government policy - provided in Decree 1008 – can be further leveraged to encourage the use and exploitation of ICTs to consolidate a competitive, proactive, and innovative state, which generates public value in an environment of digital trust between the public and private sector.[67]

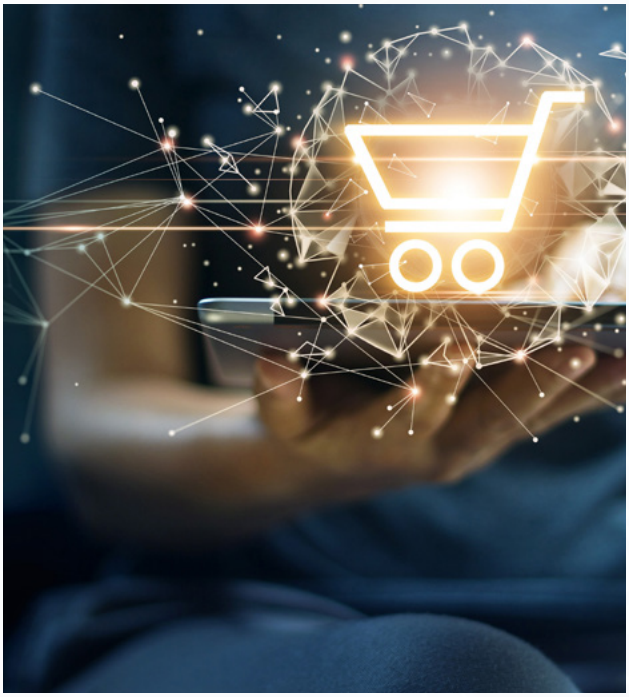
65. Uruguay, Ministry of Industry, Energy and Mining press release (2021), "Uruguay se asocia con Newlab para construir una nueva plataforma de innovación". Available at: Uruguay se asocia con Newlab para construir una nueva plataforma de innovación | Ministerio de Industria, Energía y Minería (*www.gub.uy*)

66. MinTIC, "10 millones dará hackathon virtual a la mejor solución TIC que prevenga violencia contra las mujeres en linea". Available at: *https://www.mintic.gov.co/portal/inicio/Sala-de-prensa/Noticias/194967:10-millones-dara-hackaton-virtual-a-la-mejor-solucion-TIC-que-prevenga-la-violencia-contra-las-mujeres-en-linea*

67. Colombia, "Digital Government strategy". Available at: *https://gobiernodigital.mintic.gov.co/portal/Politica-de-Gobierno-Digital/*

BOX 3.
BEST PRACTICES FOR RELEVANT POLICY LEVERS

RECOMMENDATION 1: PROMOTE THE IMPLEMENTATION OF DIGITAL PAYMENTS BY STRENGTHENING EXISTING POLICY AND REGULATORY FRAMEWORKS [BRAZIL]



In 2020, the Brazilian Central Bank launched the Pix digital platform system that enables instant payments, which now has 118 million confirmed users, representing 55 percent of the country's population.[68] Pix allows P2B (people-to-business) transactions and P2P (peer-to-peer) payment system, which facilitates small merchant exchanges between individuals. During the COVID-19 pandemic, Brazil linked Pix with government payments of emergency cash to more than 30 million people, incentivizing mass adoption of the digital solution. As part of the central bank's policy drive, Pix has driven significant financial inclusion, with 35 percent of Brazilians enrolled in CadUnico, which registers families in poverty, already having a Pix key within four months of the initial launch.[69]

RECOMMENDATION 2: DEVELOP AND PROMOTE ONLINE COURSES FOCUSED ON DIGITAL TRADE FOR MSMES AND PUBLIC OFFICIALS [UNITED KINGDOM, SINGAPORE, MEXICO]

The London Borough of Greenwich in the United Kingdom has developed the "E-business 2 program," an online training program for individuals, including e-commerce sellers, on website design, content creation, search strategies and the use of social media.[70] In particular, it seeks to support MSMEs with limited digital capabilities and aims to enable them to build and strengthen their e-commerce and payment platforms, while streamlining other operations such as e-accounting.

Another example is the "SkillsFuture" program in Singapore, which, among its wide range of course offerings, provides online courses for e-commerce sellers to gain a practical understanding of the various e-commerce marketplaces and tools available in the country.[71] SkillsFuture Singapore-supported initiatives widened their reach in 2020, with about 540,000 individuals and 14,000 enterprises benefitting from its programs, compared to 500,000 individuals and 14,000 enterprises in 2019.[72] Some of the e-commerce skillsets covered under SkillsFuture courses include creating online stores, conducting marketing using various e-commerce channels and using e-commerce fulfillment solutions.

Likewise, the Mexican Ministry of Economy signed an agreement with Mercado Libre to provide online training for MSMEs that want to start selling their products in Mercado Libre.[58] The course guides users on the e-commerce platform selling experience, including costs and commissions, publishing products, dealing with queries, and shipping products.

68. Ebanx (2021), The Pix revolution in Brazil.
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69. LABS (2022), "Brazil's PIX instant payments bring financial and digital inclusion to another level, shows EBANX's Beyond Borders study". Available at: https //labsnews.com/en/articles/economy/brazils-pix-instant-payments-bring-financial-and-digital-inclusion-to-another-level-shows-ebanxs-beyond-borders-study/

70. Gov.uk (n.d.), "E-business 2 programme - Greenwich". Available at: https //www.gov.uk/business-finance-support/e-business-support-programme-greenwich

71. MySkillsFuture (n.d.), "Courses", Available at: https //www.myskillsfuture.gov.sg/content/portal/en/training-exchange/course-directory.html?fq=Course_Supp_Period_To_1%3A%5B2021-07-14T00%3A00%3A00Z%20TO%20*%5D&fq=IsValid%3Atrue&q=e-commerce

72. SkillsFuture SG- Workforce Singapore (2021), "540,000 Individuals and 14,000 Enterprises Benefitted from SSG-Supported Programmes in 2020".
Available at: https //www.ssg-wsg.gov.sg/news-and-announcements/540-000-individuals-and-14-000-enterprises-benefitted-from-ssg-supported-programmes-in-2020.html#:~:text=SkillsFuture%20Singapore%20(SSG)%2Dsupported,and%2014%2C000%20enterprises%20in%202019.

RECOMMENDATION 4: STREAMLINE FINANCIAL AND NON-FINANCIAL INCENTIVES TO ENCOURAGE MSMES TO ADOPT DIGITAL TOOLS [CANADA]

In Canada, the government implemented the Canada Digital Adoption Program (CDAP) to help MSMEs grow their online presence and upgrade or adopt digital technologies.[73] The CDAP will provide CA$4 billion (US$3.2 billion) over four years and aims to help MSMEs leverage e-commerce opportunities, upgrade, or adopt digital technologies, and digitize their operations to stay competitive and meet their customers' needs in the digital marketplace.

Funding under the CDAP consists of CA$1.4 billion (US$1.1 billion) in grants and advisory services to MSMEs and up to CA$2.6 billion in loans from the Business Development Bank of Canada (BDC) to help MSMEs mitigate cash flow issues relating to digital transformation. In particular, the Grow Your Business Online funding provides micro grants of up to CA$2,400 (US$1,915) and youth e-commerce advisors' support to help small businesses implement digital storefronts and e-commerce capabilities. Boost Your Business Technology funding provides grants covering 90 percent of costs up to CA$15,000 (US$11,970) to access advisory services to develop a digital adoption plan, and access to zero percent interest loans from the BDC.[74]

RECOMMENDATION 5: DEVELOP PUBLIC-PRIVATE PARTNERSHIPS ON NEW, TECH-ENABLED EXPORT CATEGORIES TO BETTER HARNESS THE POTENTIAL OF DIGITAL TOOLS TO BOOST EXPORTS [MEXICO]

In Mexico, Alibaba partnered with the National Conference of Governors (Conago) to train MSMEs in digital skills, equip them with technology transfer, and strengthen their export capacity from business-to-business (B2B) in the global market and business-to-consumer (B2C) in the Chinese market.[75] The collaboration aims to empower MSMEs, facilitate their access to global value chains and generate positive value for consumers and businesses.

73. Prime Minister of Canada (2022), "New Canada Digital Adoption Program to help small businesses thrive in the digital economy". Available at: *https //pm.gc.ca/en/news/news-releases/2022/03/03/new-canada-digital-adoption-program-help-small-businesses-thrive*

74. Prime Minister of Canada (2022), "New Canada Digital Adoption Program to help small businesses thrive in the digital economy". Available at: *https //pm.gc.ca/en/news/news-releases/2022/03/03/new-canada-digital-adoption-program-help-small-businesses-thrive*

75. Forbes (2022), "Alibaba quiere llevar a las pymes mexicanas a competir al mercado global". Available at: *https //www.forbes.com.mx/alibaba-quiere-llevar-a-las-pymes-mexicanas-a-competir-al-mercado-global/*

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