THE GROWING DIGITAL ECONOMY IN THE PHILIPPINES:

OPPORTUNITIES, CHALLENGES, AND GOOGLE'S CONTRIBUTIONS

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strategy x economics

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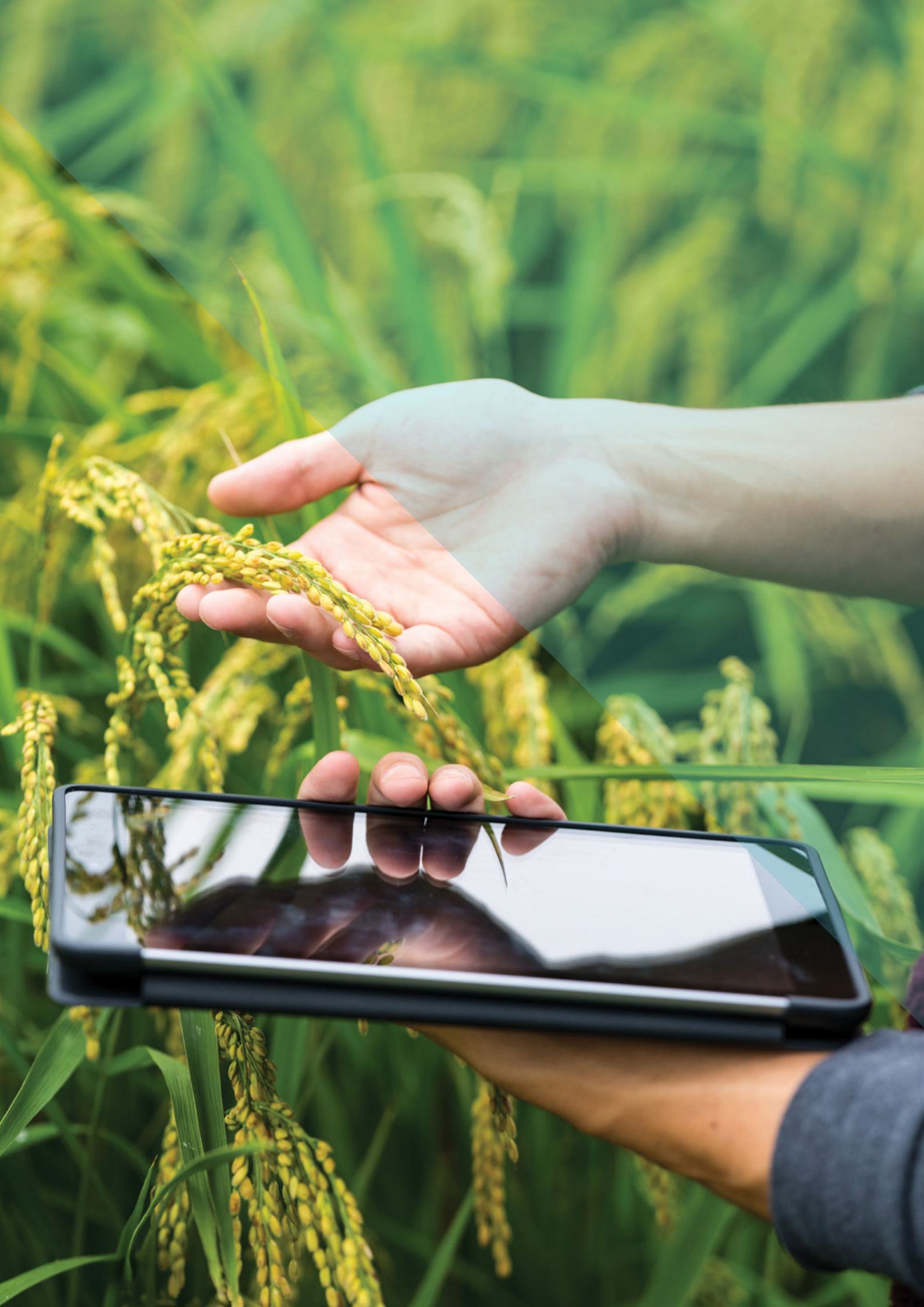


THE GROWING DIGITAL ECONOMY IN THE PHILIPPINES: OPPORTUNITIES, CHALLENGES, AND GOOGLE'S CONTRIBUTIONS

BY 2030, IF LEVERAGED FULLY, DIGITAL TRANSFORMATION CAN CREATE UP TO...

PHP5 TRILLION (USD101.3 BILLION) in annual economic value[1]

THREE PILLARS OF ACTION

1 ENHANCE DIGITAL SKILLS TRAINING AND EDUCATION

2 ACCELERATE DIGITAL ADOPTION AND INNOVATION

3 PROMOTE DIGITAL TRADE OPPORTUNITIES

KEY CHALLENGES TO EACH PILLAR

1	2	3
Low participation rates in digital skills courses as well as the lack of relevant and suitable courses for training	Low digital adoption among businesses and the lack of access to capital and support for digital transformation	Complex cross-border transaction regulations which are not entirely compatible with regional partners

EXAMPLES OF GOOGLE'S CONTRIBUTIONS TO EACH PILLAR

1	2	3
Google partnered with the Department of Education to provide 22 million **Google Workspace for Education accounts** for learners across the country	From 2020 to Sept 2021, **"MSME Caravan"** has trained more than 46,000 MSME owners and their employees. This is made possible through collaborative efforts with partners including the Department of Trade and Industry (DTI)	**Business Profile,** previously known as Google My Business, has been instrumental to boosting the visibility of local businesses and helping them realize their global ambitions

GOOGLE'S BROADER ECONOMIC BENEFITS

BUSINESSES

Google supports **PHP363.4 BILLION (USD7.4 BILLION)** in annual benefits to businesses in the Philippines[2]

CONSUMERS

Google supports **PHP214.5 BILLION (USD4.3 BILLION)** in annual benefits to consumers in the Philippines[2]

SOCIETY

By enabling businesses to unlock new revenue streams and expand their businesses, Google indirectly supports **OVER 110,000 JOBS** in the Philippines. Its other initiatives also bring strong intangible benefits such as "Digiskarteng Pinay", a program that aims to equip women with new skills through YouTube

1. Economic value refers to GDP increments, productivity gains, cost savings, time savings, increased revenues, increased wages and increased tax collection.
2. Figures are estimated based on the latest available annual data as at time of research in 2020.
Note: Estimates are based on AlphaBeta analysis using a range of original and third-party sources.

EXECUTIVE SUMMARY

Backed by strong government support, the Philippines' digital sector contributes significantly to its economy today. In 2020, the Internet economy in the Philippines was estimated to be worth USD7.5 billion and is expected to grow by 30 percent annually to reach USD28 billion by 2025.[1] To realize this digital potential, the Philippine Government has crafted specific roadmaps to guide policymaking. For instance, the "E-Commerce Philippine 2022 Roadmap" is a strategic framework that presents the country's strategic plans, policies, and other support measures to harness the benefits of e-commerce.[2] The roadmap targets to increase the contribution of e-commerce to gross domestic product (GDP) from 3.4 percent in 2020 to 5.5 percent in 2022.[3] In collaboration with the Philippines Digital Economy Steering Committee coordinated by the National Economic and Development Authority (NEDA), the World Bank published the "Philippines Digital Economy Report 2020".[4] The report assesses the state of the digital economy in the Philippines and prescribes policy recommendations to help the country harness the potential of the digital economy.

Despite the progress, there is room for further digital transformation efforts, and the COVID-19 pandemic has further reinforced their importance. With its young and digitally savvy population, there is considerable potential for the expansion of the Philippines' digital sector. In January 2021, Filipinos aged 16 to 64 spent the highest average amount of time using the Internet globally and the number of digital buyers in the Philippines is expected to grow by 16.7 percent annually from 2017 to 2022, the second-highest growth rate in Asia Pacific (APAC) behind Indonesia.[5] The pandemic has also amplified the importance of digital transformation. A study has found that, globally, the pandemic has effectively pushed forward the digital revolution by five years, providing an opportunity for the Philippines to ride the next digital wave.[6] Digital transformation will be important to boost the country's economic recovery efforts and enhance the long-term resilience of its economy in the post-pandemic future.

However, the country faces several barriers to fully effecting digital transformation. As the Philippines ramps up its digital transformation efforts, there are several obstacles that could hinder the country from realizing the full potential of digital technologies. First, digital adoption among businesses, particularly micro, small and medium-sized enterprises (MSMEs), is low. According to a 2020 survey of MSMEs by the Department of Trade and Industry (DTI), over half of the respondents did not have any web presence (e.g., a website, or presence on social media or an e-commerce platform).[7] Second, there is a lack of

1. The value of the Internet economy was sized in terms of the Gross Merchandise Value (GMV) of products and services of sectors within the Internet economy. These sectors include e-commerce, transport and food, online travel, online media and financial services. For more details, see source: Google, Temasek, and Bain & Company (2020), "e-Conomy SEA 2020." Available at: https://storage.googleapis.com/gweb-economy-sea.appspot.com/assets/pdf/Philippines-e-Conomy_SEA_2020_Country_Insights.pdf
2. Department of Trade and Industry (2021), "Basta e-Commerce Madali". Available at: https://ecommerce.dti.gov.ph/madali/
3. Department of Trade and Industry (2021), "Outcomes and measures of success." Available at: https://ecommerce.dti.gov.ph/madali/outcome.html
4. World Bank (2020), A better normal under COVID-19: Digitalizing the Philippine economy now. Available at: http://documents1.worldbank.org/curated/en/796871601650398190/pdf/Philippines-Digital-Economy-Report-2020-A-Better-Normal-Under-COVID-19-Digitalizing-the-Philippine-Economy-Now.pdf
5. Digital buyers refer to Internet users who directly buy goods and services from a seller over the Internet using a web browser. For more details, see sources: Accenture (2017), Insights to Digital Commerce. Available at: https://www.accenture.com/_acnmedia/PDF-67/Accenture-Insight-Digital-Commerce.pdf; Datareportal (2021), "Digital 2021: The Philippines". Available at: https://datareportal.com/reports/digital-2021-philippines
6. McKinsey & Company (2020), The Next Normal: The recovery will be digital. Available at: https://www.mckinsey.com/~/media/mckinsey/business%20functions/mckinsey%20digital/our%20insights/how%20six%20companies%20are%20using%20technology%20and%20data%20to%20transform%20themselves/the-next-normal-the-recovery-will-be-digital.pdf
7. Department of Trade and Industry (2021), "Understanding e-commerce in the Philippines." Available at: https://ecommerce.dti.gov.ph/madali/baseline_survey.html

awareness of existing programs and policies to facilitate digital adoption. The same DTI survey revealed that only 26 percent of MSMEs were aware of digitalization programs offered by the government and other institutions.[8] Third, there are gaps in access to digital tools, fueled by factors such as the lack of digital infrastructure. A 2019 government survey revealed that while 32 percent of households in the National Capital Region had access to the Internet, only five percent in predominantly rural regions such as the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) and Bicol provinces had access.[9] Finally, a digital skills gap in the workforce could hamper digital transformation. The World Economic Forum's Competitiveness report found that while the skills of the current workforce (e.g., years of schooling) in the Philippines are above the regional average; the country lags its neighbors on equipping skills for the future workforce (e.g., digital education).[10]

This report finds that, if leveraged fully, digital technologies could create an annual economic value of PHP5 trillion (USD101.3 billion) by 2030.[11] To put this in perspective, this is equivalent to about 27 percent of the Philippines' GDP in 2020.[12]

The key messages of this report include:

- **Eight key technologies hold transformative potential for businesses and workers in the Philippines.** These include mobile Internet; cloud computing; big data; Artificial Intelligence (AI); financial technology (FinTech); the Internet of Things (IoT) and remote sensing; advanced robotics; and additive manufacturing. By allowing the creation of new business models and productivity savings, these technologies could create significant economic value for the Philippines.

- **If leveraged fully, digital transformation can unlock PHP5 trillion (USD101.3 billion) worth of economic value in the Philippines by 2030.** By generating productivity gains, revenue boosts, cost savings, and GDP increments, digital technologies can unlock up to PHP5 trillion (USD101.3 billion) worth of economic value annually in the Philippines by 2030. The sectors projected to be the largest beneficiaries are the consumer, retail and hospitality; education and training; and agriculture and food sectors.

- **Digital adoption is also crucial for the country to gain resilience in the post-pandemic future.** Beyond its immediate economic impacts, the COVID-19 pandemic is likely to have long-term implications in three aspects of the Philippine economy, namely: 1) the emergence of a hybrid workplace that supports digital freelancing; 2) accelerating the shift towards digital payments, and 3) severe disruptions to the business operations of MSMEs. By providing MSMEs access to global markets, equipping businesses with digital capabilities to conduct electronic transactions, and facilitating remote work, technology applications can help businesses manage the long-term economic implications of the COVID-19 pandemic while staying resilient against future "black swan" events.[13] These applications can generate an annual economic value of up to PHP3.5 trillion (USD69.9 billion) – this is equivalent to about 69 percent of the total estimated digital opportunity for the Philippines. While digital technologies can support businesses in adapting to adverse events, there have been intensifying worries of job losses as technologies displace workers. However, this is not always

8. Department of Trade and Industry (2021), "Understanding e-commerce in the Philippines." Available at: https://ecommerce.dti.gov.ph/madali/baseline_survey.html
9. Department of Information and Communications Technology (2020), "National Information and Communications Technology Household Survey (NICTHS)". Available at: https://dict.gov.ph/ictstatistics/wp-content/uploads/2020/06/NICTHS-FINAL-REPORT-PRESENTATION_26-JUNE-2020.pdf
10. World Bank (2020), Philippines Digital Economy Report 2020. Available at: https://openknowledge.worldbank.org/handle/10986/34606
11. Economic value refers to GDP increments, productivity gains, cost savings, time savings, increased revenues, increased wages and increased tax collection.
12. Based on AlphaBeta analysis.
13. A black swan is an unpredictable event that is beyond what is normally expected of a situation and has potentially severe consequences. Examples include the current COVID-19 pandemic.

the case as digital adoption could support higher-quality jobs for Filipinos and improve the country's productivity.

- **Three pillars of action are required for the Philippines to fully capture its digital opportunity.** While the Philippines is already making significant progress in some of these areas, there is scope for the country to push further on three policy areas:

  – First, it is crucial for the Philippines to ***enhance digital skills training and education***. The country is already making significant efforts in developing digital talent, such as ensuring the responsiveness of tertiary curriculums to equip the future workforce with emerging skills needs. For example, the IT and Business Process Association of the Philippines (IBPAP) partnered with the Commission on Higher Education (CHED) to develop a systems thinking course.[14] The country also inculcates a strong focus on the use of information and communications technology (ICT) in the education sector through the "Digital Rise Program", under which digital boards and televisions were installed in over 707,600 classrooms, and teachers and students were provided with tablets and laptops to access online learning resources.[15] In addition, a key priority highlighted in the "Philippine Development Plan 2017-2022" is to strengthen the inclusion of skills and education programs. This is achieved by targeting community-based training at low-income and other marginalized individuals who are unable to access formal training provisions due to financial or geographical challenges.[16] To upskill the current workforce, the government has been actively involving industry partners to shape the curriculums of training institutes. As part of the "National Technical Skills Development Plan (NTESDP) 2018-2022", enterprise-based training programs are implemented by companies through apprenticeships of up to six months or dual training programs where such apprenticeships run concurrently with school or training curriculums.[17] Despite significant government efforts to improve the availability and accessibility of digital skills courses, participation rates remain low. To increase participation rates in these training courses, the country needs to raise awareness of the "in-demand" skills that are required at the workplace and reskilling opportunities available. The country can also consider implementing

14. Systems thinking is an approach to problem solving that views problems as part of a wider, dynamic system. It is the process of understanding how things influence one another as part of a whole.
15. TeacherPH (2020), "Accelerating the DepEd Computerization Program in the light of COVID-19 pandemic".
Available at: https://www.teacherph.com/deped-computerization-program-covid-19-pandemic/
16. Technical Education and Skills Development Authority (2019), "Community Based Programs". Available at: http://www.tesda.gov.ph/about/tesda/37
17. Technical Education and Skills Development Authority (2019). "Enterprise Based Programs". Available at: http://www.tesda.gov.ph/About/TESDA/38

sector-specific digital skilling roadmaps similar to Singapore's Industry Transformation Maps (ITMs), which provide sector-based information on career pathways, the skills required for relevant technologies to the sector, and reskilling options.[18]

- Second, there is scope to further ***accelerate digital adoption and innovation*** in the Philippines. To achieve the full benefits of digital transformation, the Philippines needs to promote an environment that is conducive for innovation and pursue policies that support entrepreneurial activities and the deployment of cutting-edge technologies, such as AI and cloud computing. The country is currently pursuing several policies in this regard. The Department of Science and Technology (DOST) and the Philippine Council for Industry, Energy and Emerging Technology Research and Development (PCIEERD) have jointly developed the "Startup Research Grant Program" to fund research and development (R&D) activities and accelerate the commercialization of innovative products across sectors.[19] The DTI also recently launched the "National AI Roadmap" to accelerate the adoption and utilization of AI in the country.[20] Despite a comprehensive range of policies to promote digital adoption and innovation, the country faces several roadblocks including the lack of access to capital and limited understanding of the benefits of digital transformation. To lower the barriers to digital adoption, the government can consider funding the cost of acquiring digital talent and technologies and providing access to digitalization resources and advisory. In addition, there is scope for the Philippines to upgrade its digital infrastructure to ensure affordable and reliable Internet access nationwide.

- Third, it is crucial that the Philippines continues to ***promote digital trade opportunities*** for businesses in the country. To do this, the country is already currently engaged in several multilateral trade agreements to align its trade-related practices with the international community. These include the "Regional Comprehensive Economic Partnership" (RCEP) which the country is targeting to ratify by 2021, and the United Nations Economic and Social Commission for Asia and the Pacific's (UNESCAP) "Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and

18. Koh, F. (2020) The Straits Times. "Review of growth strategy for 23 sectors to be completed by next year, says DPM Heng." Available at: https://www.straitstimes.com/singapore/politics/review-of-growth-strategy-for-23-sectors-to-be-completed-by-next-year-says-dpm
19. Philippine Council for Industry, Energy and Emerging Technology Research and Development (2019), "Featured news: Get to know the fifteen pioneer grantees of DOST's Startup Research Grant Program." available at: https://pcieerd.dost.gov.ph/2-uncategorised/367-get-to-know-the-fifteen-15-pioneer-grantees-of-dost-s-startup-research-grant-program
20. Open Gov Asia (2021), "The Philippines launches National AI Roadmap". Available at: https://opengovasia.com/the-philippines-launches-national-ai-roadmap/

the Pacific".[21] The country is also supporting businesses in building up their digital capabilities through the "Philippine Export Competitiveness Program" (PECP) which introduces enabling technologies that facilitate cross-border transactions and boost the competitiveness of Filipino exports. For the Philippines to be well positioned to capture the growth of cross-border transactions in the region, it is important for the country to address existing high trade costs and improve the efficiency of export-related processes. Businesses will benefit from streamlined administrative procedures that reduce the cost of compliance associated with non-tariff measures and harmonizing customs procedures (e.g., "Customs Modernization and Tariff Act") with globally recognized frameworks. The country could also take a more proactive approach to participate in international agreements with a strong focus on promoting digital trade, such as the "Digital Economy Partnership Agreement" (DEPA) signed between Singapore, New Zealand, and Chile.[22]

- **Google is making significant contributions to each of the three pillars.** By providing access to digital tools through Google Workspace for Education and creating a learning ecosystem on YouTube, Google is supporting distance learning for both educators and learners. Coupled with Google's other initiatives (e.g., the "Grow with Google" program), Google is enhancing digital skills and education in the Philippines. To accelerate digital adoption and innovation, Google's tools and programs such as AppSheet and "MSME Caravan" help to build digital capabilities for all types of businesses. For instance, large local enterprises can benefit from using digital tools such as AppSheet to automate business processes and increase efficiency. Google's products and services have also played an important role in promoting digital trade opportunities in the country. For example, Business Profile, previously known as Google My Business, has been instrumental to boosting the visibility of local businesses online and helping them realize their global ambitions. Google's "Framework for Responsible Data Protection Regulation", which aims to provide clarity to supportive data governance laws, also advocates for interoperable and adaptable data protection regulations, enabling businesses and consumers to benefit from cross-border digital services.[23]

- **Through its products and services, Google also delivers broader economic benefits to businesses, consumers and the wider society in the Philippines.** Google's products and services are estimated to bring about total annual business and consumer benefits **worth PHP363.4 billion (USD7.4 billion)** and **PHP214.5 billion (USD4.3 billion)**, respectively. The products that these benefits were estimated for include Google Search, Google Ads, AdSense, Google Play, YouTube, Google Maps, Google Drive, and Google Docs, Sheets and Photos. For businesses, such benefits come in the form of increased revenue through better customer outreach and access to new markets, as well as improved productivity through time savings. Consumers experience greater convenience, access to information, and more avenues for learning and skills development. Beyond its economic contributions to businesses and individuals, Google also supports benefits to the wider society in the Philippines. By enabling businesses to unlock new revenue streams and expand their businesses through the use of Google Ads, AdSense, and YouTube, Google indirectly supports **over 110,000 jobs** in the Philippines.[24] Furthermore, Google delivers intangible benefits through its programs such as providing skilling and income-earning opportunities for female entrepreneurs and promoting safe Internet usage in the Philippines.

21. Business Mirror (2020), "Philippines is 1st among Asean peers to accede to UN treaty on digital trade."
Available at: https://businessmirror.com.ph/2020/01/18/philippines-is-1st-among-asean-peers-to-accede-to-un-treaty-on-digital-trade/
22. Beehive.gov.nz (2020), "NZ concludes digital economy trade talks with Singapore and Chile."
Available at: https://www.beehive.govt.nz/release/nz-concludes-digital-economy-trade-talks-singapore-and-chile
23. Google (2020), Framework for Responsible Data Protection Regulation.
Available at: https://services.google.com/fh/files/blogs/google_framework_responsible_data_protection_regulation.pdf
24. Jobs supported refer to new jobs that may have been created through a business' use of Google's platforms, as well as ongoing employment of jobs that previously existed.

"UNLOCKING THE PRIZE"
THREE PILLARS OF ACTION

Three pillars of action are required to fully unlock the digital opportunity

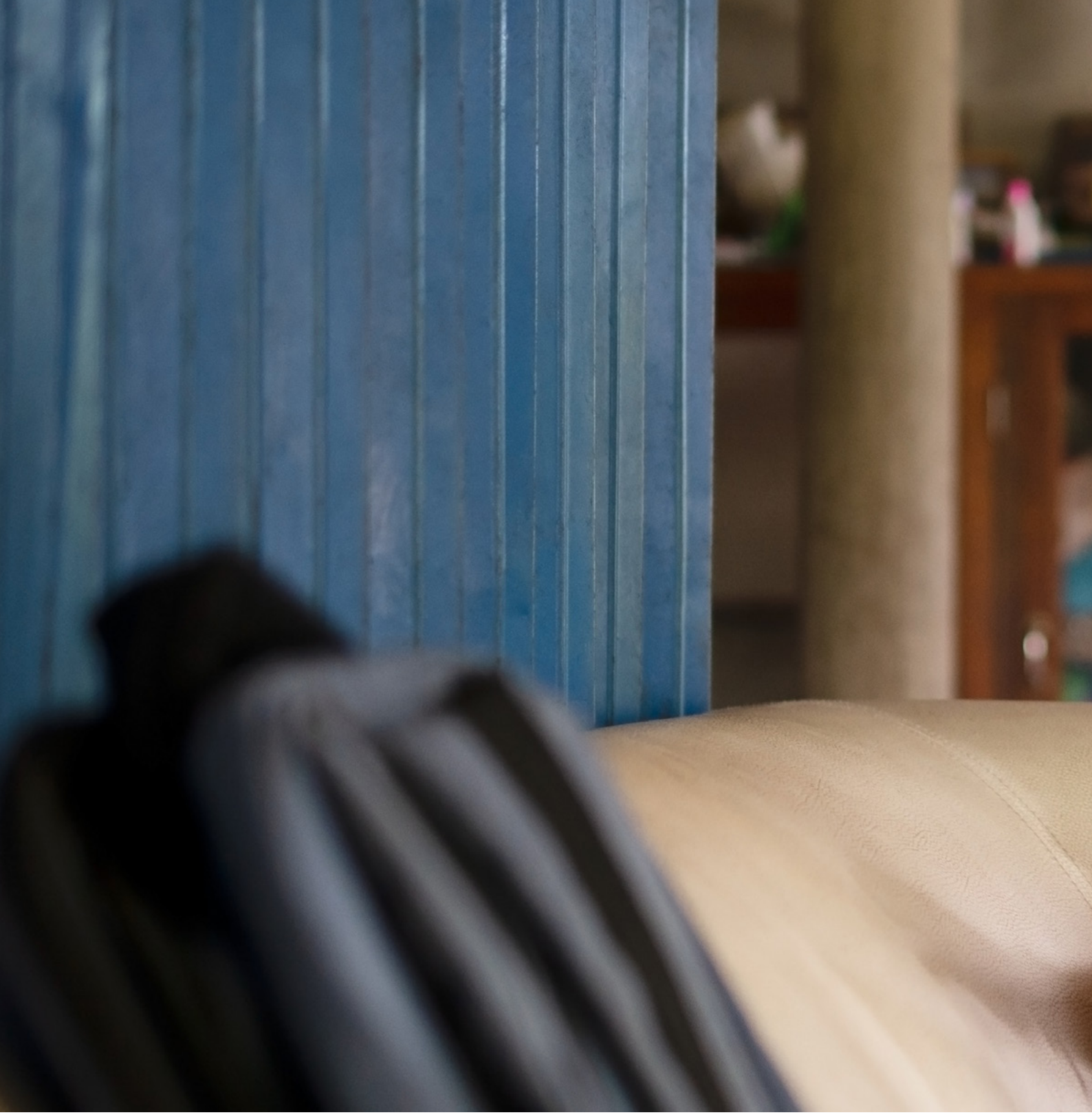
1. Enhance digital skills training and education
2. Accelerate digital adoption and innovation
3. Promote digital trade opportunities

Significant effort has already been made in the following areas

- Ensuring the responsiveness of tertiary curriculums
- Inculcating a strong focus on ICT
- Extending digital skilling opportunities to underserved communities
- Collaborating with industry partners to develop training programs
- Implementing favorable policies to support the development of the local startup ecosystem
- Lowering the barriers to digital adoption for MSMEs
- Leveraging cutting-edge technologies, such as AI and cloud computing
- Aligning trade-related practices with the international community
- Providing capacity-building support for businesses to capture digital trade opportunities

However there are areas in which the Philippines can further strengthen its approach on

- Boost awareness on reskilling opportunities
- Incentivize training centers to provide high-quality, industry-relevant courses
- Create flexible qualification pathways to promote skill-based accreditation
- Foster partnerships between global and local technology companies
- Enhance digital infrastructure to support deployment of technology applications
- Build up digital capabilities for enterprises of all sizes
- Streamline and harmonize administrative procedures involved in cross-border transactions
- Participate in multilateral agreements to promote digital trade in the region



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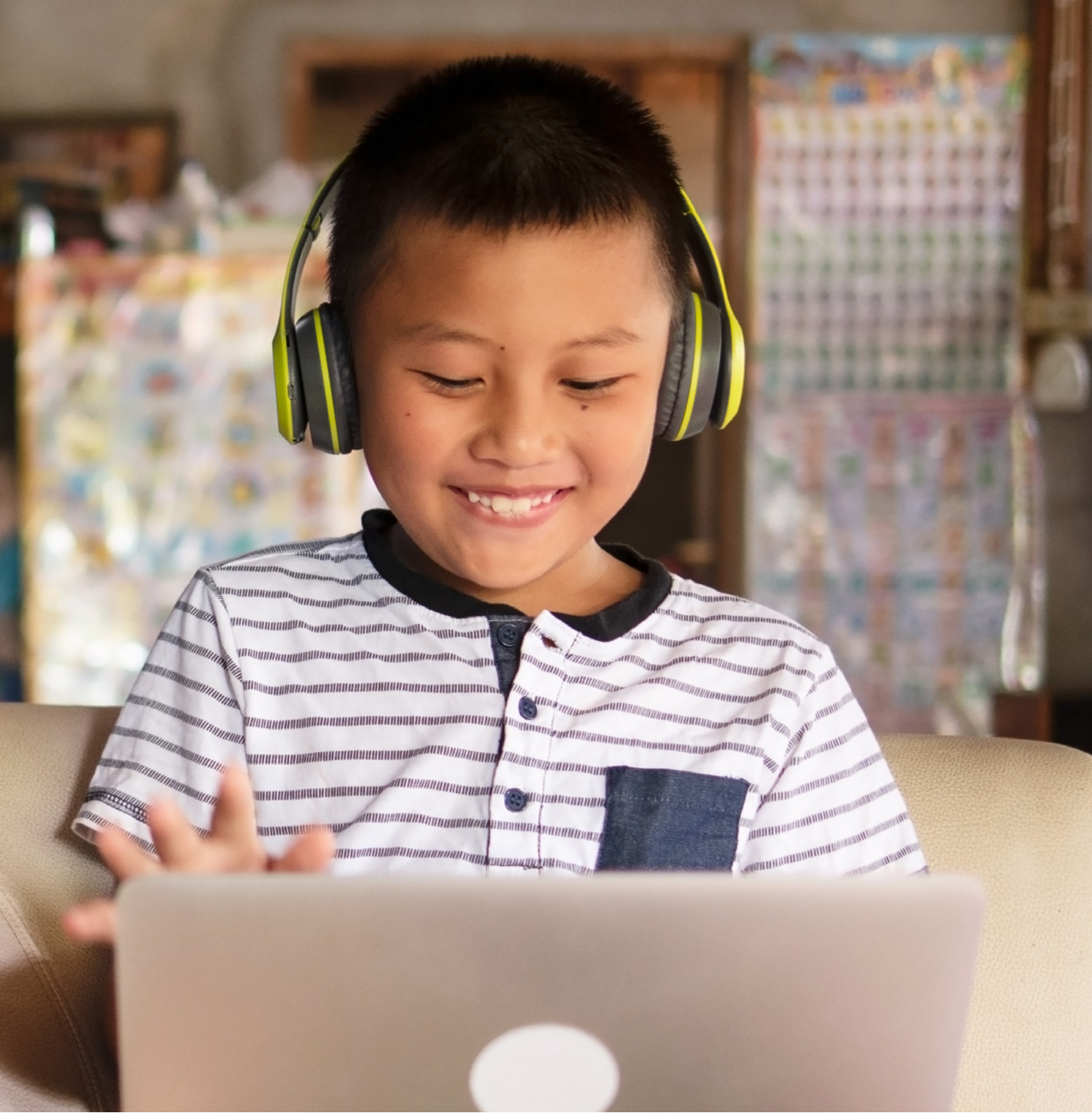

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