UNLOCKING VIETNAM'S DIGITAL POTENTIAL:

Harnessing the economic opportunities of digital transformation with Google's contribution

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UNLOCKING VIETNAM'S DIGITAL POTENTIAL

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

VND1,733 TRILLION (USD74 BILLION)
in annual economic value[1]

70%
of this value[1] could come from technologies that mitigate the impact of the COVID-19 pandemic

THREE PILLARS OF ACTION

1 DEVELOP THE LOCAL TECH ECOSYSTEM

2 DIGITALLY UPSKILL WORKERS AND STUDENTS

3 DEVELOP A CONDUCIVE ENVIRONMENT FOR DIGITAL TRADE

EXAMPLES OF GOOGLE'S CONTRIBUTIONS TO EACH PILLAR

Google's **"INDIE GAMES ACCELERATOR"** program supports the growth of Vietnam's game development industry

"ACCELERATE VIETNAM DIGITAL 4.0" provided digital skills training for more than 500,000 SMEs and students

"GROW WITH GOOGLE" provides digital tools for local businesses to conduct cross-border transactions

GOOGLE'S BROADER ECONOMIC BENEFITS

BUSINESSES

Google supports **VND64.9 TRILLION (USD2.8 BILLION)** in annual benefits to businesses in Vietnam[2]

INTERNET USERS

Google supports **VND149.5 TRILLION (USD6.4 BILLION)** in annual benefits to Internet users in Vietnam[2]

SOCIETY

Google.org is solving some of humanity's biggest challenges by combining funding, innovation, and technical expertise to support underserved communities and provide opportunities for everyone

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. See report's Appendix for methodology.

EXECUTIVE SUMMARY

With a young and tech-savvy population, Vietnam is well placed to benefit from the digital economy. With 70 percent of its citizens below the age of 35, a high literacy rate of over 98 percent among those aged 15 to 35 (surpassing the global rate of 91 percent), and more than a third of the population who use smartphones, Vietnam has a young, educated and technologically-savvy population.[1] The country also has the second-fastest-growing Internet economy (behind Indonesia) in Southeast Asia, with a recent study projecting the gross merchandise value (GMV) of its Internet economy services to grow at 29 percent per annum between 2020 and 2025.[2] In recognition of the significant economic prospects presented by digital technologies, the government has established a range of policies to advance digital adoption and innovation in the country. Key strategies include its "Industry 4.0" policy and the "Vietnam National E-commerce Development Program 2014-2020".[3]

However, Vietnam still faces several obstacles to fully unlocking the benefits of digital technologies. These include regulatory obstacles that could constrain the full potential of its local tech ecosystem, limited digital connectivity, and a shortage of digital skills. A study commissioned by the Asia Internet Coalition (AIC) highlighted that regulations on data localization and data privacy could inhibit the expansion of Vietnam's tech players.[4] Internet users in Vietnam have also been facing slow connectivity issues, where the average broadband speed is estimated to be significantly slower than other Southeast Asian countries – about ten times slower than Singapore (70.86 Mbps), and at a third of Malaysia's (23.86 Mbps) and half of Thailand's (18.21 Mbps).[5] In relation to digital skills, while increased emphasis has been placed on upskilling its workforce digitally in recent years, there is scope for more efforts here. The World Economic Forum's "Global Competitiveness Index 2019", for example, ranked Vietnam 67th out of 141 countries on the level of digital skills in its working population.[6] The country also performed poorly on the "2020 Global Talent Competitiveness Index", where it was ranked 96th out of 132 countries.[7] These are important hurdles the country needs to address in order to capture the full economic potential afforded by technology.

Digital transformation is not just about the technology sector – most of the benefits, in fact, go to traditional, non-tech sectors. Neglecting the impact of digital technology on traditional sectors in Vietnam, such as manufacturing, risks overlooking its transformative

1. Temasek (2018), "Generation V: how Vietnam's youths are powering the e-conomy". Available at: https://www.temasek.com.sg/en/news-and-views/stories/future/generation-v-how-vietnams-youths-are-powering-the-e-conomy
2. Google (2020), e-Conomy SEA 2020. Available at: https://www.thinkwithgoogle.com/intl/en-apac/consumer-insights/consumer-journey/e-conomy-sea-2020-resilient-and-racing-ahead-what-marketers-need-to-know-about-this-years-digital-shifts/
3. Sources include: Vietnam Investment Review (2019), "Resolution to aid 4.0 breakthrough". Available at: https://www.vir.com.vn/resolution-to-aid-40-breakthrough-71065.html; Huong Dieu Nguyen, Vietnam E-commerce and Digital Economy Agency, Ministry of Industry and Trade (undated), "Vietnam's policies to promote the development of e-commerce" (Presentation deck). Available at: https://www.unescap.org/sites/default/files/3.%20Vietnam%20Huong%20Dieu%20Nguyen_0.pdf
4. Asia Internet Coalition (2017), Digital platforms and services: A development opportunity for ASEAN. Available at: https://aicasia.org/wp-content/uploads/2019/07/AIC_final-report.pdf
5. Sources include: Saigoneer (2019), "Laggy Internet plagues Vietnam once again after 3 undersea cables break". Available at: https://saigoneer.com/vietnam-news/18104-laggy-internet-plagues-vietnam-once-again-after-3-undersea-cables-break; Vietnam Insider (2020), "Slow Internet in Vietnam to continue for longer as undersea cable repair delayed again". Available at: https://vietnaminsider.vn/slow-internet-in-vietnam-to-continue-for-longer-as-undersea-cable-repair-delayed-again/
6. World Economic Forum, (2019) "The Global Competitiveness Report 2019". Available at: http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf
7. 2020 Global Talent Competitiveness Index. Available at: https://gtcistudy.com/the-gtci-index/

effects. Digital technologies applied in traditional industries have the potential to revolutionize the way businesses are conducted. In fact, a recent study shows that traditional industries such as retail can experience up to 75 percent of the economic benefits afforded by the Internet, because of these sectors' large sizes (e.g., the retail industry contributes 16 percent of Vietnam's total gross domestic product or GDP) and low technology adoption rates (implying the significant potential for digitization).[8]

This report finds that, if leveraged fully in the economy, digital technologies can unlock VND1,733 trillion (USD74 billion) in Vietnam by 2030.[9] To put this into perspective, this is equivalent to about 27 percent of the country's GDP in 2020. The largest projected beneficiaries are the manufacturing, agriculture and food, and education and training sectors.

The key messages of this report include:

- **Eight key technologies hold transformative potential for businesses and workers in Vietnam.** These include the mobile Internet; cloud computing; big data; artificial intelligence (AI); financial technology (Fintech); Internet of Things (IoT) and remote sensing; advanced robotics; and additive manufacturing. By allowing for new business models, revenue streams, productivity savings, and GDP increments, these technologies could create significant economic value for both businesses and the government in Vietnam.

- **Digital adoption is also crucial for the country to gain resilience during the COVID-19 crisis and in the post-pandemic future.** By allowing businesses to engage customers digitally, and minimize logistical bottlenecks amidst supply chain disruptions, technologies can help businesses manage the severe economic impacts of COVID-19. It is estimated that a substantial 70 percent of the country's total digital opportunity – worth VND1,216 trillion (USD52 billion) – could be derived from such technology applications.[10]

- **Three pillars of action are required for Vietnam to fully capture its digital opportunity:**

  - First, it is crucial that the country continues ***to develop the local technology ecosystem***. Regulations on foreign technology transfer and improvements to digital infrastructure have been conducive to the development of the local tech ecosystem.[11] Vietnam could go further to address gaps in the coverage of its digital infrastructure, as well as address regulatory challenges faced by local developers and make it easier for them to do business. There are positive examples of supportive regulations in other countries. For example, Singapore's "FinTech Regulatory Sandbox" allows financial institutions and fintech players to experiment with innovative financial products and services by relaxing specific legal and regulatory requirements, which the sandbox participant will otherwise be subject to, over a six-month period.

  - Second, the government could continue to ***digitally upskill workers and students***. The government has placed a strong focus on equipping the current workers and future workforce with the digital skills required to access digital opportunities. The country could go further in creating sector-specific digital skills training programs, increasing the availability of Science, Technology, Engineering and Mathematics (STEM) apprenticeships, and enhancing the focus on "soft skills" in K-12 curriculums. For example, Finland's "phenomenon-based teaching and learning" (PBL) adopts a multidisciplinary

8. World Bank (2019), The digital economy in Southeast Asia: Strengthening the foundations for future growth. Available at: http://documents1.worldbank.org/curated/en/328941558708267736/pdf/The-Digital-Economy-in-Southeast-Asia-Strengthening-the-Foundations-for-Future-Growth.pdf
9. This economic value includes productivity gains, revenue boosts, cost savings, time savings, increased wages, increased tax collection and GDP increments generated by digital technologies.
10. Based on AlphaBeta analysis. See Appendix A for details on the methodology.
11. These include: (i) commitments not to impose custom duties on digital products; (ii) commitments to adopt or maintain a legal framework that provides for the protection of the personal information of e-commerce users; (iii) non-discriminatory treatment of digital products; (iv) rules against localization requirements; (v) commitments to provide reasonable network access for telecommunications suppliers. See: Henry S. Gao (2018), "Digital or trade? The contrasting approaches of China and US to digital trade", Journal of International Economic Law, Vol 21, Issue 2. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3162557

approach to equip students with critical thinking skills and the ability to approach issues from different angles.[12]

- Third, it is crucial that the country ***develops a conducive environment for digital trade***. This requires the promotion of open cross-border data flows, easing of restrictive data policies, encouraging the interoperability of digital frameworks, and minimizing border frictions. A useful first step would be for Vietnam to adopt the "Asia-Pacific Economic Cooperation (APEC) Privacy Framework" and join the "APEC Cross Border Data Privacy Rules System".[13]

- **Through its programs, partnerships, and products, Google is making a significant contribution to advancing Vietnam's digital transformation journey across all three pillars.** Through the provision of digital tools, such as Google Cloud, and programs such as "Indie Games Accelerator" and "Google for Startups Accelerator: Southeast Asia" to support the growth of tech-based startups in both traditional and emerging sectors, Google promotes an innovation-oriented environment that enables businesses to scale in a cost-efficient manner. Through digital skills programs like "Accelerate Vietnam Digital 4.0" and "Coding for the Future with Google", Google is supporting the development of a digitally skilled workforce, particularly for micro, small and medium-sized enterprises (MSMEs) that aspire to leverage digital technologies to improve productivity and customer outreach. A survey conducted between April 2019 and March 2020 found that 73 percent of small and medium-sized enterprises (SMEs) saw an increase in customer engagement and 45 percent saw an increase in revenue or profit after attending the "Accelerate Vietnam Digital 4.0" program.[14] Google products such as Google Play, as well as programs organized in partnership with the government also help accelerate the internationalization of local businesses.

- **Google also delivers wider benefits to Vietnam's businesses, Internet users, and the broader society.** Google's products are estimated to have generated total economic benefits worth **VND64.9 trillion (USD2.8 billion)** and **VND149.5 trillion (USD6.4 billion)** to businesses and Internet users in Vietnam, respectively. These products include Google Search, Google Ads, AdSense, Google Play, Google Maps, Google Drive, YouTube, and Google Docs, Sheets and Photos. Benefits to businesses come in the form of increased revenue through better customer outreach and access to new markets, and improved productivity through cost and time savings. It is estimated that over 170,000 jobs are supported in the economy through the use of Google Ads, AdSense and YouTube.[15] These jobs are created through the use of Google products that enable businesses to expand their customer base and increase revenue, thereby leading to increased hiring demand. In addition, the Android operating system supports more than 71,000 jobs in Vietnam's economy.[16] Internet users, on the other hand, experience greater convenience, access to information, and more learning and skills development opportunities. Beyond direct economic contributions to businesses and individuals, Google also delivers benefits to the broader society in Vietnam through programs such as "Google Workspace for Education" (formerly known as "G Suite for Education") for online learning, as well as initiatives like "Ad Grants" (digital advertising grants for nonprofits), "YouTube Nonprofit Program" (tools that help nonprofits receive donations via YouTube) and "Google Workspace for Nonprofits" (which help nonprofits improve internal collaboration processes).

12. Sources: World Economic Forum (2017), "Is this Finnish school the perfect design?" Available at: https://www.weforum.org/agenda/2017/10/why-finland-is-tearing-downwalls-in-schools; David Tay (2017), "Finn and fun: lessons from Finland's new school curriculum". The Straits Times. Available at: https://www.straitstimes.com/singapore/education/finn-fun
13. AlphaBeta (2018), The data revolution: how Malaysia can capture the digital trade opportunity at home and abroad. Available at: https://research.hinrichfoundation.com/hubfs/Digital%20Trade%20Project/malaysia-hinrich-foundation-digital-trade-report.pdf?__hsfp=85913225&__hssc=251652889.2.1615816368461&__hstc=251652889.93064eec0561399750d048f46d468959.1615816368460.1615816368460.1615816368460.1
14. Kantar (2020), Google Economic Impact. Available at: https://www.kantar.com.au/Google/Google_Economic_Impact.pdf
15. 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.
16. See Appendix B for details on the methodology.

Important Notice on Contents – Estimations and Reporting

This report has been prepared by AlphaBeta for Google. All information in this report is derived or estimated by AlphaBeta analysis using both non-Google proprietary and publicly available information. Google has not supplied any additional data, nor does it endorse any estimates made in the report. Where information has been obtained from third party sources and proprietary research, this is clearly referenced in the footnotes.

The amounts in this report are estimated in both Vietnamese dong (VND) and US dollars (USD). The conversion is based on the average exchange rate in 2020, sourced from the IMF Country Database, which was 1 USD = 23,243.6 VND.

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