

Vietnam

Potential 2035 economic impact of the metaverse

US\$9-17 B per year



Vietnam

The Vietnamese are entrepreneurial, creative and young – 37% are under 25 years of age. These traits help the country punch above its weight in shaping the future of the web. Vietnam has been one of the most active players in the Web3 space. Its tech unicorn, Sky Mavis, popularized the “GameFi” (or play-to-earn) concept with its hit blockchain-focused game Axie Infinity. Vietnam also topped the 2021 Chainalysis Global Crypto Adoption Index signalling broad social acceptance of cryptocurrencies largely driven initially by remittance payments.¹ It is still uncertain the extent to which cryptocurrencies and the decentralized web will feature in the future of the metaverse. However, this embracing attitude by not just start-ups, but also

by the broader population, of new web technologies and use cases puts the country firmly on its path to achieving its “Make in Vietnam” strategy.²

This will provide momentum for the Government to achieve its ambitious target of growing its digital economy from the current 8.2%³ of GDP to 20% by 2025 and 30% by 2030, transforming from a low-tech manufacturing to a service-oriented economy. The country launched its “Make in Vietnam” strategy in 2019 to develop its domestic ICT industry by shifting from assembly and outsourcing to one with strong local capabilities for product creation and design. The Metaverse Village in Da Nang and a burgeoning digital

content industry signal a confident future for made-in-Vietnam metaverse products and its over 1-million strong IT labor force.⁴

The Vietnamese government is actively putting in place the guardrails for the digital age, including a flurry of regulatory reviews of digital-related laws in the next 1-2 years.⁵ Already, Vietnam’s cybersecurity has improved by leaps and bounds, rising a whopping 75 places in just 5 years from 100th place in 2017 to 25th place in 2021 on ITU’s Global Cybersecurity Index.

“ Make Vietnamese tech products created in Viet Nam, manufactured in Viet Nam, designed in Viet Nam, solving Vietnamese issues, reaching out to the region and the world. ”

Nguyen Xuan Phuc, then-Prime Minister (now President) of Viet Nam, unveiling the “Make in Viet Nam” strategy at the National Forum on Developing Vietnamese Technology Companies, May 9, 2019

1. Chainalysis, “[The 2021 Global Crypto Adoption Index: Worldwide Adoption Jumps Over 880% With P2P Platforms Driving Cryptocurrency Usage in Emerging Markets](#),” accessed October 19, 2022.
2. Vietnam Investment Review, “[Make in Vietnam, by Vietnam for a fresh digital orientation](#),” accessed October 19, 2022.
3. Vietnam Net Global, “[Vietnam’s growth potential lies in the digital economy](#),” accessed October 3, 2022.
4. Saigon Online, “[One million people working in IT industry in Vietnam](#),” accessed October 19, 2022.
5. Connect on Tech, “[Vietnam: New Draft Law on e-Transactions Targeting Digital Platforms](#),” accessed October 19, 2022.



Macroeconomic Determinants

- Overall, Vietnam is a manufacturing and raw resource economy, with the three largest sectoral contributors to Vietnam's economy being manufacturing (18.5% of GVA), followed by agriculture, forestry and fishing (16.5%), and wholesale and retail trade (12.9%). Phones and computers are among the country's top 10 main export products.
- Vietnam's ICT sector currently only contributes 0.75% of GVA, but this is expected to grow with Vietnam's digital ambitions and "Make in Vietnam" strategy.⁶
- Vietnam is ranked 48th in the world on the Global Innovation Index 2022 and 2nd among 34 lower-middle income economies.
- Vietnam's GDP per capita stood at US\$10,338 in 2020, suggesting that affordability of required immersive hardware on average may be a limiting factor on the economic impact of the metaverse.

VIETNAM IN NUMBERS

Potential 2035 economic impact of the metaverse:

US\$9-17B per year, 1.3-2.4% of GDP

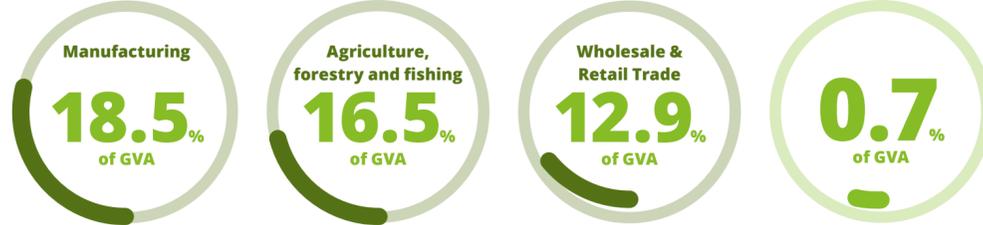
2020 GDP:

US\$259B

Per capita
(Constant 2017 US\$):

US\$10,338
(lower middle income)

Key sectors:



ICT sector:

Population:

96M

37% urban

37% below 25

17% with basic digital skills

Global innovation index:

#48/132

EIU business environment ranking:

#45/99

Digital readiness index:

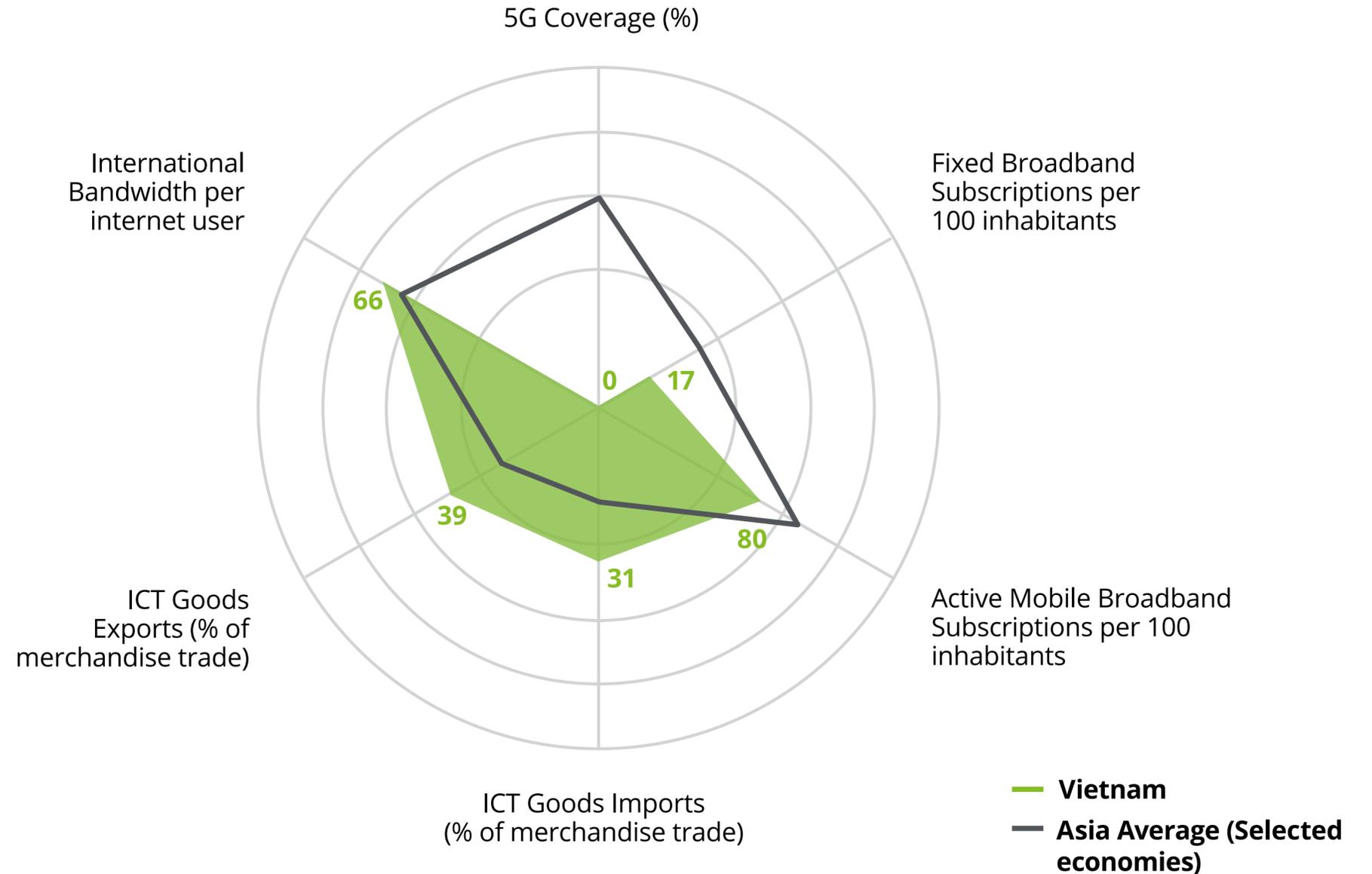
#70/141

6. Vietnam Investment Review, "Make in Vietnam, by Vietnam for a fresh digital orientation," accessed October 19, 2022.

Sources: World Bank World Development Indicators 2020, Our World in Data 2017, ITU Digital Development Dataset 2019, World Bank Global Findex, UN Data

Technology Fundamentals

- Vietnam was one of the first developing countries to implement 5G trials in 2019 and rolled out 5G deployment in 2022.⁷
- The Ministry of Information and Communications targets to achieve nationwide 5G coverage within 1 year, prioritizing industrial and high-tech parks and dense urban centers.⁸ The Ministry has already set up a steering committee to promote 6G R&D.
- Smartphone penetration is high at 68% with plans to increase this to 85% by end 2022.⁹ Given affordability challenges, mass smartphone ownership may provide an entry path to metaverse experiences, albeit limited immersivity.
- Vietnam has a high unbanked population, with only 70% of adults having a bank account and nearly half without access to credit.¹⁰ This has driven many to cryptocurrency markets. Ironically, this breeds familiarity with the potential future payment rails of the internet despite the low interaction with traditional banking services.



7. Techwire Asia, "[Vietnam is ahead of the game with commercial 5G](#)," accessed October 19, 2022.
 8. Ministry of Information and Communications, "[Vietnam ready for 5G commercialization](#)," press release, December 31, 2021.
 9. OpenGov Asia, "[Vietnam Targets 85% Smartphone Usage by 2022-End](#)," accessed October 19, 2022.
 10. Vietnam Investment Review, "[Vietnam faces a possible gap in financial accessibility and awareness](#)," accessed October 19, 2022.

Sources: 'GSMA Mobile Connectivity Index 2021, ITU Digital Development Dashboard 2020, UNCTADStat 2019'

Ecosystem Enablers

Competition within the metaverse

Overall, Vietnam is ranked 54th out of 100 countries by StartupBlink's Global Startup Ecosystem Index 2022, up 5 places from 2021. Vietnam also ranks 5th in Southeast Asia. Targeted focus could help it develop a niche advantage. A Metaverse Village¹¹ has been set up in Da Nang to build the ecosystem for metaverse technologies including researchers, start-ups, funders and other individuals. The Vietnam Blockchain Association is working with global cryptocurrency exchange leader, Binance, on blockchain research and application in Vietnam. Vietnam can capitalize on the success of tech unicorns like Sky Mavis to attract talent and investment.

Digital Regulations

Comprehensive legislative reform is underway to support Vietnam's digital transformation and prepare for the digital age. In May 2022, the Ministry of Information and Communications released a Draft Law on E-Transaction, which includes a new chapter to regulate digital platforms.¹²

Large platforms will have additional obligations to mitigate risks such as negative impacts on personal lives, freedom of press, children's rights, national health and security. Dominant large platforms must also provide users with information and options to manage algorithmic recommendations.¹³

Other legislations that form the guardrails for the metaverse are also under review, including data privacy, cyber security, consumer protection, and intellectual property.¹⁴ Regulatory reviews for specific sectors such as telecommunication and digital technology industry are also expected in the next 1-2 years. These regulations are anticipated to place Vietnam's digital economy on a firm foundation of clear laws that protect its citizens while allowing new metaverse technologies to flourish.

Accessibility

To fully realize the economic and social benefits of the metaverse, digital inclusion is a priority. With only about 70% of its population using the internet, and 17% with basic digital skills, there is a significant number at risk of being excluded from the metaverse economy. On the cost front, the country has managed to keep its internet rates among the cheapest in the world, with its fixed internet unit price per capita income at 41% of the world's average and mobile equivalent at one-third of the world average.¹⁵ This has contributed to the high level of mobile broadband subscriptions. Nevertheless, gaps in digital and financial literacy will need to be closed for more to participate in Vietnam's digital economy.

11. Vietnam Net Global, "[Metaverse Village set up, connecting startups in virtual reality](#)," accessed October 19, 2022.

12. Tilleke & Gibbins, "[Understanding Vietnam's Draft Law on E-Transactions](#)," accessed October 19, 2022.

13. Baker McKenzie, "[Vietnam: New Draft Law on e-Transactions Targeting Digital Platforms](#)," Lexology, May 1, 2022.

14. These include the Draft Decree detailing the Law on Cybersecurity ("CSD"); the Draft Decree on Personal Data Protection ("PDPD"); the Draft Decree amending Decree No. 72/2013/ND-CP on the Management, Provision, and Use of Internet Services and Online Information ("Draft Decree 72"); the Draft Amendment of Law on Consumers' Rights Protection ("LCRP"); and the Amended Intellectual Property Law. Source: Manh-Hung Tran "[Rise of the metaverse in Vietnam – What's happening?](#)" July 1, 2022.

15. Ministry of Information and Communications of Vietnam, "[Internet rates in Vietnam are among the world's cheapest](#)," accessed October 3, 2022.

Sectors to Watch

Gaming

Five of the top 10 game publishers, based on worldwide downloads, in the Southeast Asia, Australia and New Zealand region come from Vietnam. The country accounted for 22% of all games downloaded in Southeast Asia, second to Indonesia with 38%.¹⁶ With a high smartphone penetration rate, mobile gaming forms the largest segment and is growing exponentially. Average mobile gaming revenue per user grew at a compound annual growth rate (CAGR) of 30% over the past 5 years.¹⁷

With the support of the Ministry of Information and Communications, the Vietnam Game Development Alliance was formed in June 2022 with 60 online video game companies and a 10-member Coordination Committee including VNG, Vietnam Esports, and Viettel Media.¹⁸ With the success of Sky Mavis, VNG and the fast-growing base of mobile gamers in Southeast Asia, Vietnam could leverage these early advantages in designing user-centric experiences and applying the latest digital technologies to drive progress in the country's digital transformation.

Education

Vietnam's e-learning market is projected to reach US\$3 billion by 2023.¹⁹ The country was ranked among the top 10 growing Edtech markets globally, posting annual growth rates of 44%, according to the Vietnam Edtech Report 2021. With a growing demand for skilled labor in the manufacturing and tech sectors, the Vietnamese government has set a goal to make online education available at 90% of universities and 80% of secondary schools and vocational training facilities by 2030.²⁰

FPT, a leading IT services provider in Vietnam, is capitalizing on these opportunities, rolling out an AI-enabled education app that has garnered 3 million accounts across 40,000 schools so far.²¹ One of Vietnam's top prestigious schools, The High School for Gifted Students, Hanoi National University of Education, has also forayed into the metaverse with a digital cultural museum. The museum will contain 3D artifacts and contributions from students across the generations.²²

Given Vietnam's young population, delivering education using the latest technologies will give students first-hand experience, which will have knock-on effects on other sectors as these digitally-native students graduate.

16. Data AI, "[Vietnam as one of the world's most dynamic mobile gaming markets](#)", accessed October 3, 2022.

17. Statista, "[Video Games - Vietnam](#)," accessed September 19, 2022.

18. IT Zone, "[Launching an alliance of online video game publishers and manufacturers in Vietnam](#)," accessed October 19, 2022.

19. Vietnam+, "[Vietnam's e-learning market projected to hit 3 billion USD by 2023](#)," accessed October 19, 2022.

20. Nikkei Asia, "[Vietnam edtech market soars to \\$3bn on remote learning boom](#)," December 18, 2021.

21. Ibid.

22. Coincu, "[One of Vietnam's top prestigious schools enters the metaverse](#)," accessed October 19, 2022.

