

# Digitalisation & IT Sector Brief CAMBODIA





Cambodia packs a lot into its relatively small dimensions. Few haven't heard of the temples at Angkor just outside Siem Reap. Phnom Penh, the country's increasingly dynamic capital, meanwhile, has matured into one of the region's most happening cities, with its striking location on the Mekong River complemented by a growing quotient of high-rise residential projects and modern lifestyle amenities.

Away from the country's big two draws, Cambodia retains a classic feel. Nevertheless, other destinations like Battambang, Siem reap, Kampot and Sihanoukville are rapidly developing. It's a far cry from the situation in the last quarter of the 20th Century when Cambodia was devastated by first the genocidal reign of the Khmer Rouge and then the long civil war that followed.

The country's economy has been on the up and up since the turn of the millennium. The nation attained lower-middle-income status in 2015 and aspires to attain upper-middle-income status by 2030. Driven by garment exports and tourism, Cambodia's economy has sustained an average annual growth rate of 7.7 per cent between 1998 and 2019, making it one of the fastest-growing economies in the world.



Cambodia has youthful demography with a median age of 25 years among its population of approximately 16 million. With internet penetration high countrywide, the ground is fertile for digital economy growth.

The government has long championed the digital economy as a new engine of economic growth. In 2021, it launched a 15-year policy framework for the country's evolving digital socioeconomic environment. The onus on digital policy opens major opportunities in the MSME segment. Cambodia has approximately 500,000 micro, small and medium enterprises, of which 95 per cent are informal unregistered businesses.

However, the country faces major challenges in achieving its goals. Internet subscriptions are uncompetitive to other countries in ASEAN, digital adoption at the firm level remains challenging and there's limited uptake of digital financial services, lack of IT skills and incomplete legal framework. According to a World Bank report entitled Benefitting from the Digital Economy, dated 2018, Cambodia's "next economic transformation will rest on its ability to empower domestic entrepreneurs and citizens with capabilities and tools for the modern economy of tomorrow."

#### General characteristics and trends

Cambodia plans to accelerate a digital shift as it seeks to attract hi-tech FDI and progress to an uppermiddle-income economy by 2030. The government has several advantages as it moves to execute this shift. The country has one of the highest mobile penetration rates in the world, with 20.8 million mobile connections or 124 per cent of the population.

10.7 million smartphones are connected to the internet and data rates are one of the cheapest in the region at US\$1 per 10GB. Internet usage is highly social. For example, by mid-2020 the country had an estimated 10.8 million Facebook users.

According to Statista, about 71.3 per cent of the Cambodian population were active social media users by 2021. To put that into context, only 27 per cent of the population were active social media users in 2016. 4G and 3G coverage is 80 per cent and 85 per cent of the population, respectively.

5G has yet to take off as mobile operators wait for regulatory clearance and access to the spectrum of radio waves needed to roll out the network. The country's rapidly growing financial services sector, meanwhile, offers huge potential for the adoption of fintech.

 Government prioritization: The National Policy on Science, Technology & Innovation (STI) 2020-2030 is to strengthen the STI sector to support an innovation environment for sustainable and inclusive development and achieve the vision of the government to become an upper-middle-income by 2030 and high-income by 2050. To comply with government decisions and fulfill this achievement, the Ministry of Industry, Science, Technology & Innovation has developed Cambodia's Science, Technology & Innovation Roadmap 2030 (STI Roadmap 2030) that is to serve as the national strategic document help guide government officials in line ministries and other key stakeholders on the critical actions to take milestone to achieve the vision of government 2050. The roadmap is built on five pillars, one seeks to enhance the governance of the STI system and identifies MISTI as the leading STI policy and implementation. Second, seeks to build on human capital in STI. Third, improve on scientific research. Fourth, aims to strengthen collaboration and fit is seek to foster an ecosystem for vibrant national innovation system. Additionally, Cambodia Digital Economy and Society Policy Framework 2021-2035 is expected to inject fresh momentum into the Kingdom's information and communication technology (ICT) sector. Key economic benefits to be gleaned through the strategy include job creation; skills development; an improved investment climate; boosts to trade and business activity; links in regional and global production and value chains; and more efficient public service delivery. The framework focuses on five major priorities: two foundations-developing digital infrastructure; and fostering digital trust and confidence, as well as three pillars - creating digital citizens; building the digital government, and promoting digital businesses.

- Improvement in telecommunications infrastructure: In 2021, Telecommunications Minister Chea Vandeth said that Cambodia is on track to have telephone antennas in all communes and districts across the Kingdom by 2027. The country's major telecom companies have also been rising to the connectivity challenge. By 2017, the rivalry between the six most prominent mobile operators-Smart Axiata, CamGSM, Viettel, Seatel, Xinwei, and Cadcommsdeveloped into a race to satisfy the growing market for internet consumption at the lowest possible cost. This race has been ongoing since 2017 and prices have continued to drop, with companies such as Smart Axiata and Cellcard offering more than \$200 worth of mobile services for \$1. As of June 2021, the speed testing company Ookla recorded Cambodia's mobile internet download speed at 25.52 megabits per second (Mbps), ranking 91st globally for mobile internet download speeds. The government has expressed support for the rollout of 5G for mobile networks. In April 2019, it signed an MoU with Chinese firm Huawei to build its 5G network. Several mobile carriers, including Cellcard, Smart Axiata and Metfone, have aimed to introduce 5G services. However, progress has been disjointed with the government halting the progress of the rollout due to lack of policy or a roadmap.
- Hyper-localised tech initiatives: Cambodia's growing tech sector has shown its ability to pioneer world-class country-specific initiatives. One of these, Virtual Angkor, was awarded the Digital Humanities and Multimedia Studies Prize from the Medieval Academy of America in 2021. Through virtual reality and 3D experience, the Virtual Angkor, project aims to recreate Angkor, the capital of the once-mighty Khmer Empire that ruled over swathes of Southeast Asia. Technology is also helping to raise awareness among young Cambodians of the country's tragic recent history. With around 70% of the total population under age 30, many Cambodians are under-informed about the past. An app supported by Bophana Audiovisual Resource Centre aims to educate the youth by using multimedia to shine a light on the genocidal rule of the Khmer Rouge.
- Blockchain technology promotes financial inclusion: Cambodia is still a largely agrarian country and an estimated 78% of the population does not have access to banking services. Technology is helping the country overcome the challenge of insufficient financial inclusion. The most significant step in this direction has been the launch of "Bakong", a central bank-backed digital currency that draws on blockchain technology designed by a Japanese company. The e-money, an initiative of the National Bank of Cambodia, joins a very small group of digital currencies backed by central banks that have gone fully operational. Supporting transactions in the dollar and riel (Cambodia's home currency), Bakong is helping Cambodians make payments and transfer money between individuals using their smartphones.
- Other up-and-coming Fintech players: Cambodia's large population of unbanked offers huge potential for FinTech startups to thrive. Indeed, numerous players are already helping to shape the sector. Founded in 2016, Clik Payment is developing a payment processing application designed to cater to Cambodia's fragmented payment industry. The payment aggregator will allow offline merchants and their consumers to carry out cashless payments using mobile wallets as well as debit and credit cards. Another startup, Pi Pay, is a digital wallet that has formed strategic partnerships with key financial institutions and internet financiers such as Alipay, WeChat Pay and Korea's KB Kookmin Bank. A little longer-established is mobile banking service provider Wing. The company, which accounts for more than half of the value of the digital transactions conducted in the nation, provides a range of specialized services varying from local and international money transfers, bill payments, phone top-ups and online shopping to QR code payments and payroll and disbursement services to merchants. Its services represent a lifeline for the underbanked. Garment workers, the majority of whom are women, have the option of receiving loans from Wing with no conditions or interest applied, freeing them from unscrupulous and predatory loan providers.



#### E-payment options and apps

Cambodia (and especially Phnom Penh) has witnessed a proliferation of mobile apps in recent times. And these apps have been especially useful during the pandemic, with periodical lockdowns posing logistical difficulties and forcing restaurants

to limit in-person dining services. In the ridehailing category, local startup PassApp long held the upper hand. In recent years, however, it has been challenged by Grab. A similar push and pull between local familiarity and international financial clout is ongoing in the food delivery app sphere where homegrown favorite Meal Temple is battling it out for supremacy with Foodpanda. Newcomers who have experienced success during the pandemic include Muuve and Nham24. The latter player has partnered with more than 2000 restaurants and stores in Phnom Penh and Siem Reap and has plans to expand to three other provinces: Kampong Cham, Kampot and Battambang.

#### E-Commerce

Cambodia's e-commerce sector has experienced rapid growth within the past decade driven by affordable internet access. The pandemic has accelerated the uptick in business. For instance, homegrown startup Grocerdel, which delivers fresh farm produce and locally made products in Phnom Penh, has seen orders skyrocket by over 180% as people have resorted to shopping online. The government has stepped up efforts to strengthen the country's e-commerce ecosystem in line with the recommendations of a UNCTAD eTrade Readiness Assessment by promulgating the Law on E-commerce in 2019, published E-commerce strategy in 2020 and later Online Business Registration platform. Also, the private sector has rolled out various initiatives to improve the business environment, such as Business Information Center (BIC) www.bizinfo.com.kh platform, which offers information needed to register a business in Cambodia.

#### Banking and money transfer

Incumbent financial institutions are investing heavily in digital channels to strengthen competitiveness. This emphasis has been accelerated by the global pandemic which has accelerated the acceptance of digital payments for merchants and consumers underpinned by the rise of e-commerce and convenience offered by contactless and QR payments.

In a joint statement dated late 2020, the Association of Banks in Cambodia (ABC), the Cambodia Microfinance Association (CMA) and the Cambodian Association of Finance and Technology, strongly encouraged their customers, the public and business owners to both settle accounts and accept payments electronically via digital platforms.

In the MSME sphere, merchant acquisition through digitizing has become increasingly competitive. Banks and fintech startups are partnering to offer innovative solutions to service the market segment. Analysts believe that the move towards digital banking and mobile finance may be poised to bring Cambodia's deficit in financial inclusion to an end.

"We know from our global experience at IFC that mobile payments can significantly spur financial inclusion," Asad Yaqub, International Finance Corp (IFC) representative in Cambodia told the Khmer Times in January 2021.

# Healthtech

Cambodia has made clear strides in healthcare. In 1990 the average life expectancy from birth was just 53.6 years. But between 1997 and 2019 the average life expectancy from birth rose by 13 years, from 56.2 years to 69.3 years, according to United Nations Development Program's data. However, Cambodians still live, on average, some six years less than their neighbors in Thailand, and seven years less than the Vietnamese. With the amount the Cambodian government spends on healthcare as a percentage of GDP remaining static at around 6 per cent, the country's healthcare system is overstretched and often inadequate.

Health tech startups have stepped into the breach to address some of the challenges. Cloud-based hospital management software platform Peth Yoeung Healthtech is one of the prime movers in the field. It allows hospitals to keep and share medical records and patient data securely on the cloud, which uses multiple servers to store data. The platform is used in nearly 200 public and private hospitals and clinics in Phnom Penh and 15 provinces across the Kingdom. Nearly 10,000 doctors, nurses, pharmacists, and other health professionals use the service. To support better public health, MISTI has developed a Health Technology Roadmap to be launched mid this year, while digital services for health is the priority research agenda adopted by the National Council of Science, Technology & Innovation.

In 2021, the parent group of Peth Yoeung Healthtech — First Womentech Asia Co Ltd — signed a partnership with Singapore's Ssivix Lab Pte Ltd to support Cambodia's healthcare service providers with on-demand telehealth consulting services.

Ssivix Lab is behind the MyCLNQ mobile app, a one-stop healthcare ecosystem platform that provides health solutions in Cambodia and the region, with remote monitoring to keep patients and healthcare practitioners connected and up to date on patient care.

## Higher education and vocational training

The percentage of the Cambodian GDP expenditure in education remains low compared to other ASEAN countries. And the potential for professional development remains a challenge. Massive open online courses (Moocs) debuted in Cambodia in the middle of the last decade and advances in digital education is part of the government's policy regarding the direction of Cambodia's digital economy.

The government plans to promote digital education through information and communication technology programs as tools for teaching and learning. It is also working to establish an International Institute of Online Education in partnership with at least 10 higher education institutions in Cambodia.

Such focus offers ample opportunities for ed-tech MSMEs to fill the gap. Notable players in the nascent edtech sector include System Experts, a business that helps schools in Cambodia implement open-source solutions for their most critical functions. Another notable disruptor is edemy, which uses inexpensive tech set-ups to provide offline training to students in remote areas of the country.



# Registration and legal requirements

Cambodia's government has made moves to regulate its digital landscape in recent times.

In 2019, the authorities enacted a law on electronic commerce (E-commerce Law) and a law on consumer protection (Consumer Protection Law). The E-commerce Law regulates domestic and cross-border e-commerce activities in Cambodia, establishes legal certainty for electronic transactions and enacts several important protections for consumers.

The law was updated in 2021 as part of the broader strategy policy by Cambodia's Ministry of Commerce. A digital service tax (VAT) on international tech companies was introduced. Further new e-commerce policies – a deadline for the companies to register with the Ministry of Commerce (MoC) and a reverse charge VAT mechanism relating to business-to-business (B2B) transactions – signaled the government's seriousness in tightening tax measures. For both policies, the penalties for failing to comply are severe, involving the termination of service and fines, demonstrating the authority's frustration in trying to get the companies to obey the law.

Cambodia launched its online business registration system in 2020. The tool allows investors to register their business and taxes under one platform, thus reducing unnecessary bureaucratic roadblocks.



#### Setting up a business in Cambodia

Cambodia's ranking 144<sup>th</sup> out of 190 countries in the ease of doing business In the World Bank's Doing Business 2020 report (In 2021, World bank decided to discontinue this report)

Its ranking was partly attributable to the relatively high costs associated with business registration at the Ministry of Labour and Vocational Training. However, the government claims it has made significant efforts to facilitate doing business, including the introduction of its online business registration system in 2020.

### Promotion

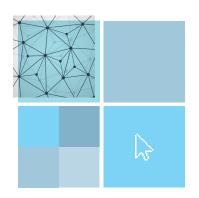
The Cambodia General Directorate of Trade Promotion (GDTP) is a part of the Ministry of Commerce and is responsible for state management, coordination and implementation of trade, and trade investment promotion activities. Its online portal provides Cambodia trade news, trade statistics, annual reports, trade agreements, and information about the GDTP's departments. Other FDI and Taxes incentives which also been endorsed/issued in recent years to attract foreign businesses.



Cambodia is expected to enter a phase that will witness the most rapid growth yet regarding digital and IT services and products in the country. National Policy on STI 2020-2030, Cambodia's STI Roadmap 2030, and the 2021-2035 policy framework laid out by the government outline several goals and targets. Opportunities within the digital sector include:

- Governance: There are opportunities for Cambodia's government to double down on its digital strategy in several areas. These include better support and resource cross-incentivized programs to promote Cambodian startups and SMEs in regional forums, trade shows and events. This includes creating incentives, initiatives, and campaigns to encourage strategic international and regional investment. The government has also been encouraged to collaborate with regional partners such as accelerators, incubators, government agencies and other support programs to bring in expertise and mentorship to the market.
- Collaboration: These can play a big role in improving the chances of success for a startup SME. Collaboration in the form of sharing of learning is crucial in addressing widespread ecosystem challenges. Co-working spaces already growing in number in major cities like Siem Reap and Phnom Penh should focus on identifying key market gaps, exchanging with each other, and developing targeted expertise. With innovation spaces and incubation services coming online there's potential for the provision of more targeted services beyond desk space such as legal, tax and regulatory consultation.
- Social media potential: With its young population and high social media usage, there's huge potential for SMEs to utilize social networks. SMEs make up the vast majority of businesses in Cambodia and can take advantage of social media marketing tools to access global value chains. These networks are powerful tools employed by brands to reach their consumers both domestically and internationally. As a result, social-media related strategies such as social commerce and influencer marketing are increasingly seen as key to winning over the market.
- Improving digital skills, scientific research, and human capital: Universities and educational institutions in Cambodia play a crucial role in developing a generation of a workforce equipped with technical skills and problem-solving skills and aptitude for continued learning, critical for future tech roles. The government has taken measures to increase enrolment rates by increasing public awareness of ICT and providing scholarships. Additional steps education, upskilling teaching capacity and transitioning to continuous learning curricula with the use of UCT and creating long-term partnerships with regional education providers to update the capacity of faculty with programs and share innovation space.





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