

e-Conomy SEA Spotlight 2017

**Unprecedented growth for Southeast
Asia's \$50B internet economy**



Introduction

Google and Temasek released “e-Economy SEA—Unlocking the \$200B digital opportunity in Southeast Asia” in May 2016, shedding light on the fast growing internet economy in the region. Google-Temasek e-Economy SEA Spotlight 2017 aims to highlight the most significant consumer trends observed in 2017, to identify industry segments and key players experiencing accelerated growth, and to discuss progress made in solving ecosystem challenges.

Sources

The research leverages proprietary Google data, Temasek research, expert interviews, and secondary data sources to provide best available estimates of industry metrics and trends. All monetary values are expressed in US dollars unless specified otherwise.

Scope

The research covers four key sectors of the internet economy with significant business size and growth: travel (flights, hotels), media (ads, gaming), ride hailing and e-commerce (first-hand goods). It does not include other sectors of the internet economy such as education, entertainment, health, and financial services that are still in early stage of development and monetization in Southeast Asia. The research covers the six largest markets in Southeast Asia: Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam.

Acknowledgements

Google-Temasek e-Economy SEA is a joint research initiative led by Google and Temasek. Eric Salmon & Partners and Trellis Network contributed perspectives on the talent challenge. Golden Gate Ventures and Monk’s Hill Ventures provided additional insights on fundraising in Southeast Asia.

1 Unprecedented growth for Southeast Asia's \$50B internet economy

Google-Temasek e-Economy SEA, released in May 2016, highlighted Southeast Asia as the world's fastest growing internet region, with an existing internet user base of 260 million projected to grow to 480 million users by 2020.

In the research, we predicted that Southeast Asia's internet economy will grow to \$200B by 2025 driven mostly by the growth of online travel, e-commerce, and online media.

Furthermore, we estimated that to build a \$200B Southeast Asian internet economy, \$40-50B investments would be required in a decade. In addition to funding, the key challenges to realize the growth potential included availability of homegrown tech talent, a developed digital payment ecosystem, last-mile logistics infrastructure, high-speed internet access and consumer trust.

Fast forward to 2017, Southeast Asia's internet user base continues to grow rapidly. There will be 330M monthly active internet users by year-end 2017, adding over 70 million new users since 2015 at 13% CAGR. In Southeast Asia, mobile is the internet, as more than 90% of Southeast Asia's internet users are on smartphones. It is hard to overestimate the absolute prominence of mobile as the access point and driver of Southeast Asia's internet economy.

Users in Southeast Asia are incredibly engaged, spending an average of 3.6 hours per day on mobile internet,¹ more than in any other region in the world. Users in Thailand lead the world with 4.2 hours per day spent on mobile internet, and users in Indonesia come a close second at 3.9 hours per day. By comparison, users in the U.S. spend an average 2.0 hours per day on mobile internet; users in the U.K., 1.8 hours per day; and users in Japan, 1.0 hour per day.

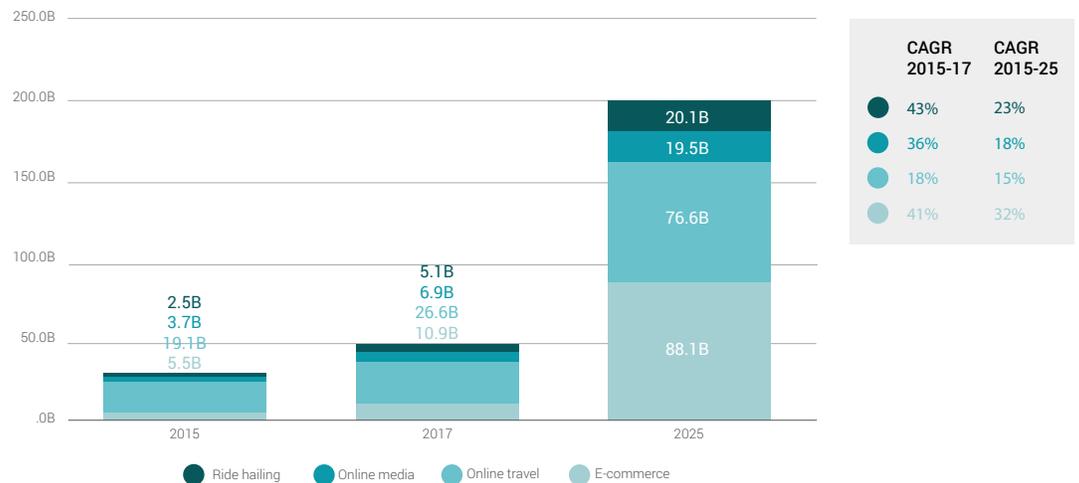
These incredible levels of engagement have led to a sizeable market opportunity. We estimate that Southeast Asia's internet economy will reach \$50B in 2017. Growing at 27% CAGR, it has outpaced the 20% 10-year CAGR projected in Google-Temasek e-Economy SEA and is on a solid trajectory to exceed \$200B by 2025. Southeast Asia's internet economy accounts for 2% of the region's GDP in 2017, up from 1.3% in 2015 and projected to reach 6% of the GDP by 2025.

Source:

1. Hootsuite 2017 report, based on a GlobalWebIndex survey of internet users in the age group 16-64.

All sectors of the internet economy have experienced solid growth in 2017. Online travel reached \$26.6B led by growth in airline and hotel online bookings. Online media touched \$6.9B driven by online ads and gaming. E-commerce and ride hailing have been under the spotlight: growing the fastest at over 40% CAGR, capturing consumers' preferences with evolving business models, and attracting the majority of the investments in the region. As a result, they are the focus of Google-Temasek e-Economy SEA Spotlight 2017.

Exhibit 1: SEA internet e-Economy market size (\$B)



2 E-commerce reaches \$11B, fueled by investments in booming marketplaces

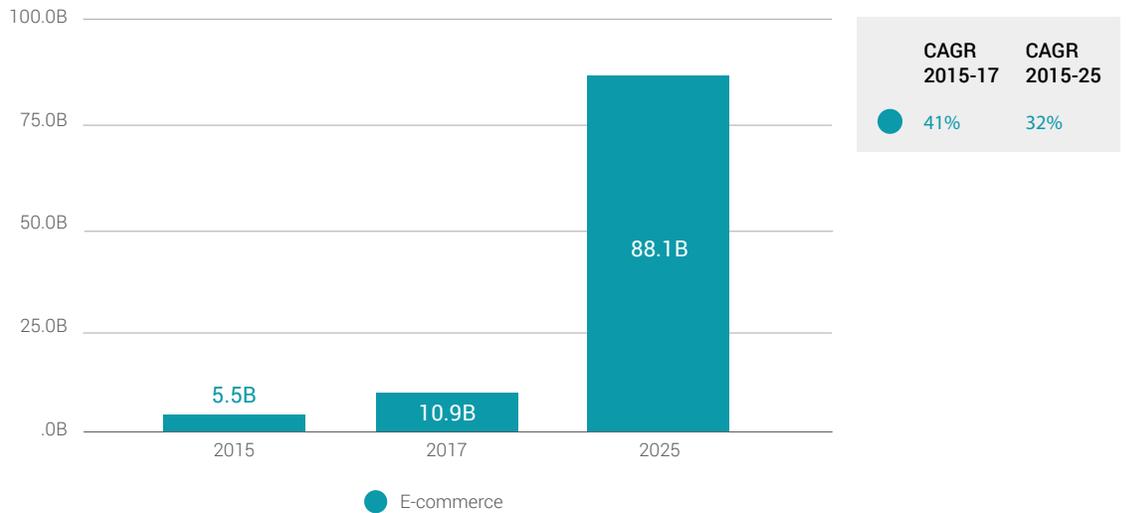
The Southeast Asian e-commerce market is extremely dynamic and highly fragmented, with multiple coexisting business models. For the purpose of our research, we have included business-to-consumer (B2C) sales, and sales on marketplaces where first-hand goods sold by small and medium businesses (SMB) to consumers represents the majority of transactions. We have excluded second-hand sales of goods sold by consumers to consumers in marketplaces, classifieds, and social media apps (C2C).

Based on these definitions, we estimate that e-commerce sales of first-hand goods will reach \$10.9B in gross merchandise value (GMV)² in 2017, up from \$5.5B in 2015, growing at 41% CAGR.

Source:

2. Note: Gross merchandise value of shipped orders (including VAT). First-hand goods only. Excludes resale of second-hand goods through marketplaces, classified ads, or social media.

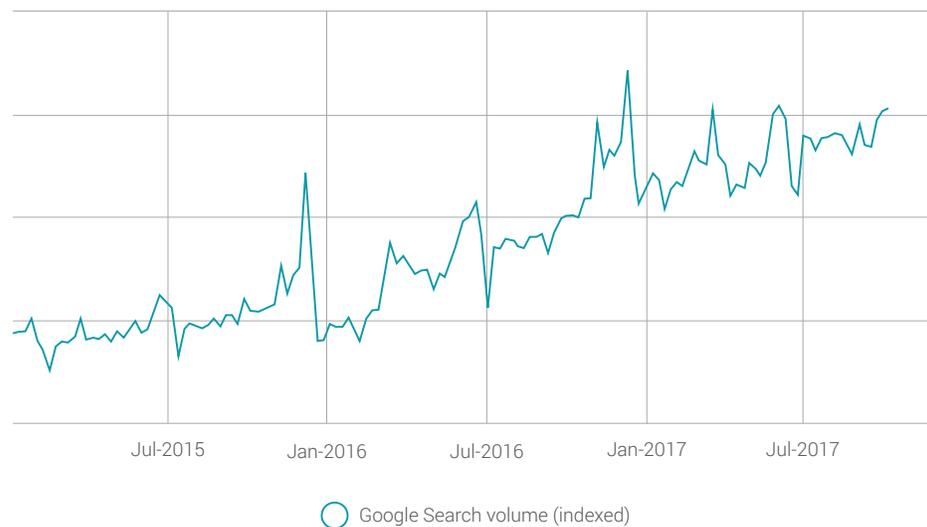
Exhibit 2: SEA e-commerce market size (\$B)



Business to consumer (B2C)	SMB to consumer (SMB-2-C)	Consumer to consumer (C2C)
First-hand goods		Second-hand goods
Included		Excluded

Consumer interest for e-commerce has grown quickly across Southeast Asia, with Google Search interest for e-commerce brands growing more than two-fold in two years, supported by promotional activities and marketing investments by leading regional and global e-commerce players as well as co-marketing initiatives with top brands in consumer electronics, fashion, and consumer goods industries.

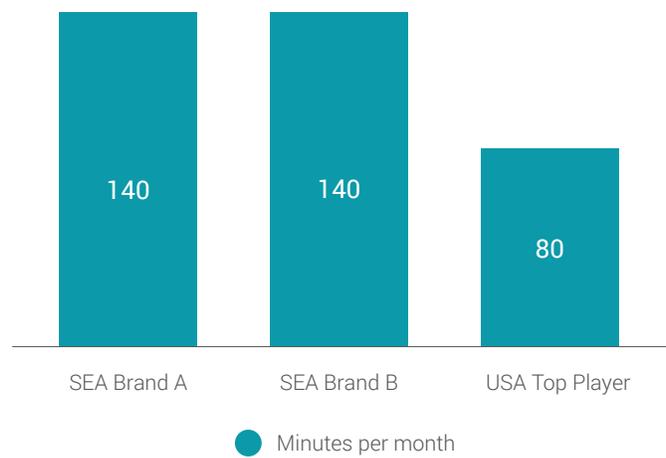
Exhibit 3: Google Search growth for top SEA e-commerce brands



The acceleration of Southeast Asian e-commerce has been driven by the surge of marketplaces where SMBs sell to consumers on mobile-first platforms (SMB-2-C). Top players in this space, like Lazada, Shopee, and Tokopedia, have enabled the growth of SMB-2-C by providing scalable, readily accessible platforms where the long-tail of smaller retail players can transact online and reach new consumers within and beyond Southeast Asia.

Confirming the appeal of Southeast Asian e-commerce marketplaces is also the strong user engagement with these platforms. Southeast Asia's mobile internet users are among the most engaged globally, spending on average 140 minutes per month on these platforms versus 80 minutes per month for the leading marketplace in the U.S.

Exhibit 4: User engagement on SMB-2-C platforms

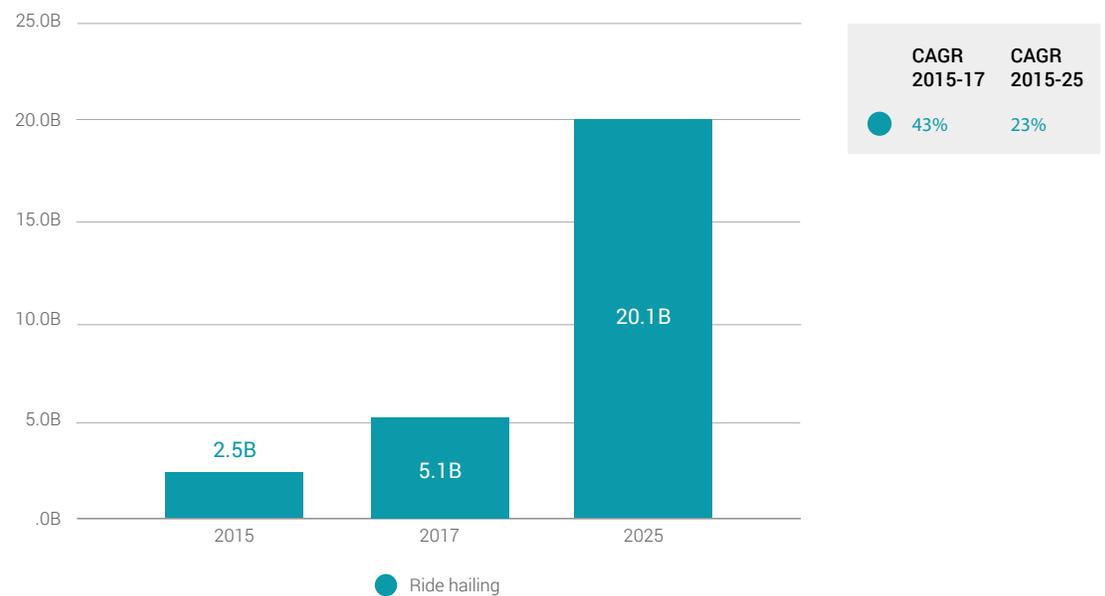


3 Ride hailing booming at 43% CAGR, top players expanding into services and payments

Another sector with massive user engagement, ride hailing services have experienced dramatic growth in the past two years. We estimate these services will reach \$5.1B GMV in 2017, more than double from \$2.5B GMV in 2015. In light of strong acceleration in penetration and usage, we have revised our 2025 projections for the ride hailing sector to \$20.1B GMV.

In Southeast Asia, this sector is hotly contested between Grab, the regional homegrown champion; Uber, the global sector leader; and Go-Jek, the Indonesia-focused two-wheeler player. These leading players have announced plans to make services available in over 100 cities in Southeast Asia by end of 2017 and to further expand to over 200 cities by 2018.

Exhibit 5: SEA ride hailing market size (\$B)



The acceleration of ride hailing services in Southeast Asia reflects steep pent-up consumer demand, attractiveness for drivers as a viable job opportunity, and product innovation leading to improved user experience. Attractive fares and ongoing promotional activity have also fueled growth, as ride prices are discounted up to 40-60%. All these have led to a more than four-fold increase since 2015, with car and motorbike bookings through ride hailing players reaching 6 million rides per day in Q3 2017 across Southeast Asia,³ and still experiencing steep quarter-on-quarter growth.

Source:

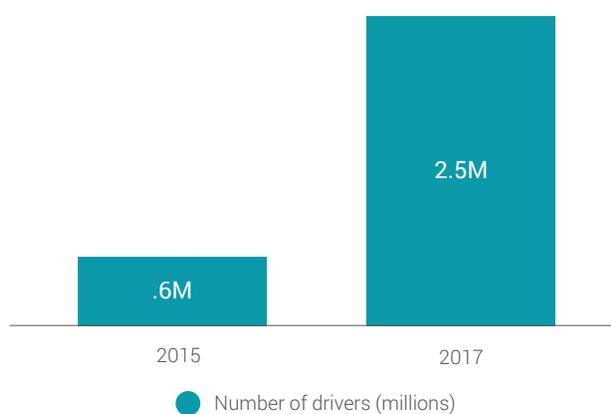
3. Google-Temasek research estimates.

Exhibit 6: SEA ride hailing daily rides (estimated, period end)



In addition to transforming personal transportation, ride hailing companies are creating employment and supplementary income opportunities for drivers in Southeast Asia. By Q3 2017, the top three ride hailing players have engaged more than 2.5 million drivers in Southeast Asia, a four-fold increase from 600,000 in 2015. As a result, ride hailing is helping make car ownership affordable in Southeast Asia, a region where there are only 70 cars per 1,000 people, compared to 103 in China and 574 in the United States.⁴

Exhibit 7: SEA ride hailing driver base (period end, estimated)



Source:

4. Grab Corporate Profile, Oct 2017.

In 2016 and 2017, ride hailing players in Southeast Asia have rapidly expanded their offerings beyond their initial focus on transportation services. Grab has launched, among others, GrabShare and GrabHitch (carpooling), GrabFood (food delivery), GrabExpress (courier), and GrabPay (payments), and it acquired Indonesian startup Kudo to build an Indonesian digital payments ecosystem. Go-Jek has developed a full suite of transportation and lifestyle services, including Go-Food (food delivery), Go-Send (courier), and Go-Pay (payments). Uber has rolled out UberEATS food delivery service in Singapore and Bangkok.⁵

Meanwhile, consumer interest for these services has rapidly increased, with Google Search volumes for food delivery services growing by 22X, for courier services by 10X, and for digital payments by 161X in Q3 2017 compared to Q3 2015.⁶

Exhibit 8: Google Search growth for on-demand services in SEA (Q3 2017 vs. Q3 2015)

Digital payments	Food delivery	Courier services
161x	22x	10x

With their large and growing base of users and drivers, ride hailing players in Southeast Asia are well positioned to become horizontal personal services platforms. Millions of users transact and pay on their platforms on a daily basis, giving them a head start as they aim to build digital payment services accepted by online and offline merchants. We expect these trends to continue, unlocking opportunities for growth for Southeast Asia's internet economy as a whole.

4 \$13B invested in Southeast Asia since 2015, majority of funds raised by unicorns

The dynamism of the e-commerce and ride hailing sectors in Southeast Asia has attracted significant investment activity since the release of Google-Temasek e-Economy SEA in 2016. In that research, we estimated that \$40-50B worth of investments would be required over 10 years to help grow Southeast Asia to a \$200B internet economy by 2025. Between 2016 and Q3 2017, Southeast Asian internet companies were able to raise more than \$12B of capital,⁷ up from just \$1B in 2015, setting the region well on track to meet the estimated 10-year requirements.

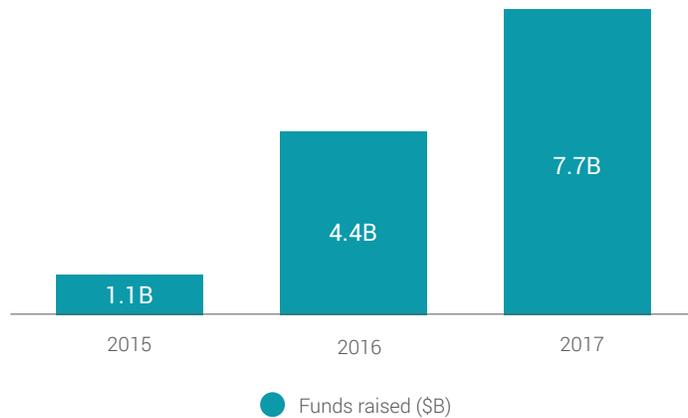
Source:

5. Grab, Uber, Go-Jek company websites.

6. Google Internal Search data (Q3 2017 vs. Q3 2015).

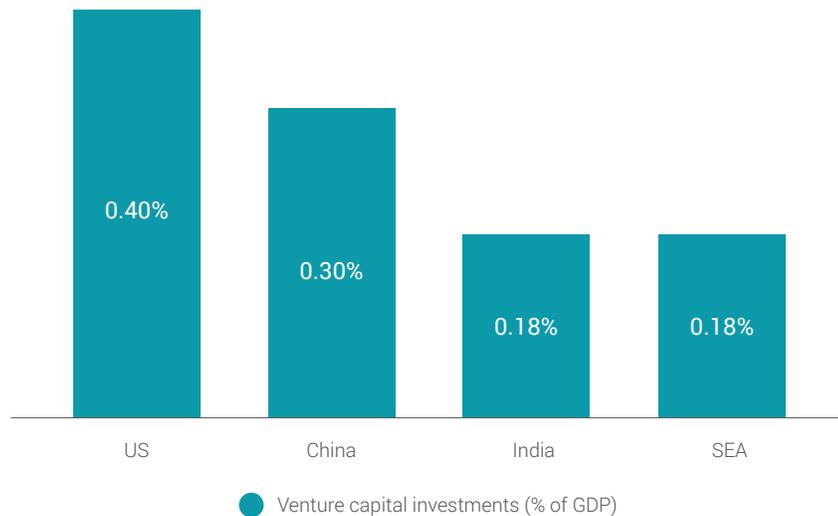
7. Google-Temasek research.

Exhibit 9: SEA internet companies fundraising (2015-2017 Q3)



Venture capital investments in Southeast Asian companies signal a strong vote of confidence in the potential of Southeast Asia's internet economy by global and regional investors. These investments stood at 0.18% of Southeast Asia GDP in 2016, up from 0.04% in 2014, putting Southeast Asia on par with India (0.18% of GDP in 2016) and narrowing the gap with China (0.30% of GDP in 2016).⁸

Exhibit 10: Venture capital investments (2016)

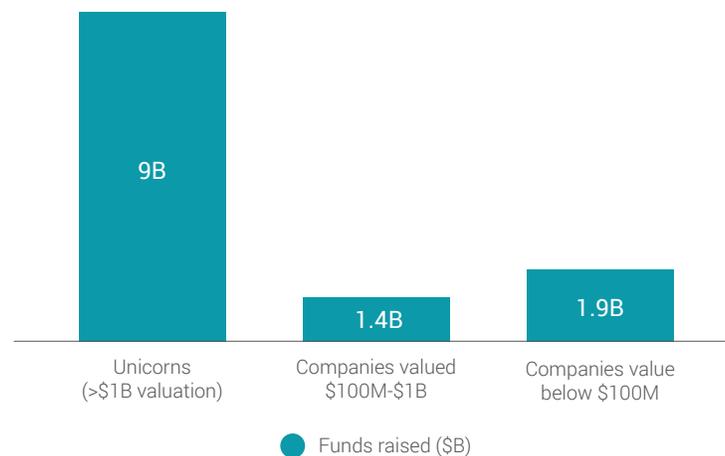


Source:

8. World Bank, Pitchbook.

Based on public information, Southeast Asia is currently home to seven internet unicorns (i.e., companies with over \$1B valuation): Go-Jek, Grab, Lazada, Razer, Sea Ltd. (formerly known as Garena),⁹ Traveloka, and Tokopedia. Of the \$12B of capital invested in Southeast Asia since 2016, \$9B were raised by its unicorns. Another \$1.4B was raised by companies in the \$100M-1B valuation range, and \$1.9B by companies with valuation below \$100M. This shows how global and regional investors have favored the largest and most established internet companies, while fundraising has remained challenging for Southeast Asia internet start-ups and smaller ventures.

Exhibit 11: SEA internet companies fundraising (2016-2017 Q3)



From 2016 to Q3 2017 there were 1,370 deals involving Southeast Asia internet companies. Of these, the vast majority were Series A and earlier deals (1,095), illustrating how access to capital in this stage is fairly achievable. The number of deals in Series B and C dropped drastically to just 94, and there were only 8 Series D and later deals completed. This funding bottleneck still prevents most internet companies in Southeast Asia from securing access to capital through subsequent funding rounds.

Source:

9. Sea Ltd. (formerly known as Garena) started trading on the New York Stock Exchange in October 2017.

Exhibit 12: SEA internet companies fundraising (2016-Q3 2017)



The majority of investments in Southeast Asia from 2016 to Q3 2017 targeted companies based in Singapore and Indonesia. Singapore-based companies have been involved in 609 deals, representing 58% of total funds raised in Southeast Asia, while Indonesia-based companies received 34% of their total funds from 261 deals. Malaysia, Thailand, and Vietnam each recorded close to 130 deals, collectively amounting to less than 10% of total funds raised. While investments in Singapore-based companies like Grab, Lazada, and Sea Ltd. bolster the country's position as Southeast Asia's financial and tech hub, a sizable share of the funds they raise is deployed into operations in other Southeast Asia markets. Indonesia continues to be the market that attracts most investors' interest because of its huge population, burgeoning middle class, and rapidly developing digital ecosystem.

5 Shortage of homegrown tech talent remains the most pressing challenge for growth

In 2016, Google-Temasek e-Economy SEA identified six key challenges to unlock the growth potential of Southeast Asia's internet economy. In the last two years, venture capital fundraising has accelerated, and advances in the development of e-payment solutions, internet infrastructure, delivery networks, and consumer trust in online transactions have improved. Nonetheless, there remain areas where continual focus and investments are needed for the region to realise its full potential. In particular, the talent challenge remains largely unsolved.

There is still a real shortage of local, homegrown talent, particularly in senior engineering roles. This has led to Southeast Asia players such as Grab and Go-Jek opening tech hubs in China, India, and the U.S. where top engineering talent is more readily available. As an example, Grab seeks to equip Southeast Asia engineers with globally competitive skills through training opportunities provided by global teams at R&D centers in Singapore, Beijing, and Seattle.

Meanwhile, as funding in the region has increased, many startups in Southeast Asia have transformed from two-person projects into substantial businesses and founding teams are now facing new challenges.¹⁰ They grapple with identifying the right executives, choosing between highly experienced foreigners or nationals who understand the local context but have less experience. They struggle to simultaneously attain high employee morale and high revenue performance. They question how to shape a company culture that will best promote their vision. In Southeast Asia, unlike in Silicon Valley, there is not a deep reservoir of executive experience around these topics.

Response to these challenges by Southeast Asia start-ups has been mixed. Companies that have been pursuing controlled growth strategies in relatively uncompetitive markets are finding they need to rapidly raise their games, as they increasingly encounter competition from international players and better-funded local firms. Companies pursuing hyper growth strategies have always felt this pressure, and they are pushing harder than ever to build world-class management teams that can stay ahead of the company's growth curve.

The challenge for CEOs is to guide their companies through these transitions. The success of Southeast Asia startups in the next phase of the ecosystem will depend largely on how well CEOs can manage the transitions and how rapidly they can grow themselves to lead the process.

Source:

10. "Beyond the Age of Innocence—Can Southeast Asian Start-ups Build World-Class Organisations?", 6:30 Partners, Eric Salmon & Partners, Yale-NUS.