

2019 SOUTHEAST ASIA INTERNET TRENDS REPORT A Primer

November 2019



NORTH RIDGE PARTNERS



FOREWORD



ever before.

From a macro perspective, as investors and technology professionals, we can allow ourselves to get consumed by Western challenges like Brexit and trade wars or we can look to Southeast Asia as a highly prospective alternative destination for investment capital.

Southeast Asia is embracing technology much quicker than its Western counterparts thanks to progressive governments, comparatively more affordable and reliable internet connectivity and a large, young population. Indeed, the internet economy has allowed Southeast Asia to leapfrog traditional industries and serve a mobile-first digital savvy market with economic opportunities and lifestyles that could have only been dreamt about a generation or two ago.

This 2019 Southeast Asia Internet Trends Report provides a concise view of the regional technology market – a short 'one stop' guide on regional technology strategies, geographies, investors and companies. We give the lowdown on what's happening, who is doing what and we offer an insight into companies to watch (there are plenty on the radar!). Of course, we cannot cover everything in detail in the report, but we can certainly continue the dialogue in person.

North Ridge Partners exists to support technology entrepreneurs on their journey from start-up to exit by advising on strategy execution, raising capital and executing M&A.

Tech entrepreneurs are the heroes of our report and we acknowledge them first. Special thanks also to Dr. Gang Lu (CEO) and Stanley Chong (Head of Southeast Asia) at TechNode Global for our ongoing partnership in forging greater linkages across the region and their contribution to the preparation of this report.

Chris Tran Head of Asia North Ridge Partners

November 2019

We live in exciting times, with technological change more profound and happening faster than

Asia is an incubator for so-called Unicorns, with 14 residing in Southeast Asia today. If we look to China with more than 200 Unicorns, we see incubation periods rapidly decreasing from c. 20 years to as little as two years. We predict that the number of Unicorns across Asia will continue to grow quickly as more investors look to the region thanks to its relative political stability and economic growth potential.

CONTENTS



- I. Welcome

- IV. Sectors

- **VII.** Conclusion

Appendices

- Β.
- C.

Introduction

Southeast Asia (SEA) Technology Investment Trends

Key Findings

II. Everything has Changed The Rules: SEA – Technology Strategy Insights

III. Living the Dream The SEA Miracle

Sectors and Companies

North Ridge Partners House Views

V. Meet the Companies NRP's Top Private Company Watchlist

Risks and Realities

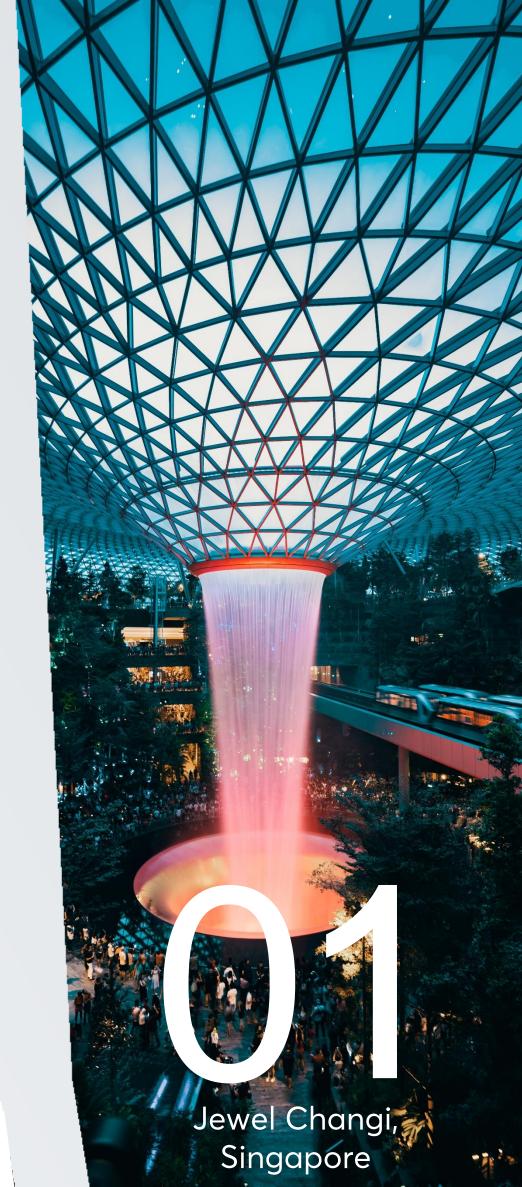
VI. Risks and Realities

Conclusion

A. About NRP About TechNode Global Acknowledgements, Methodology & Disclaimer

I. WELCOME

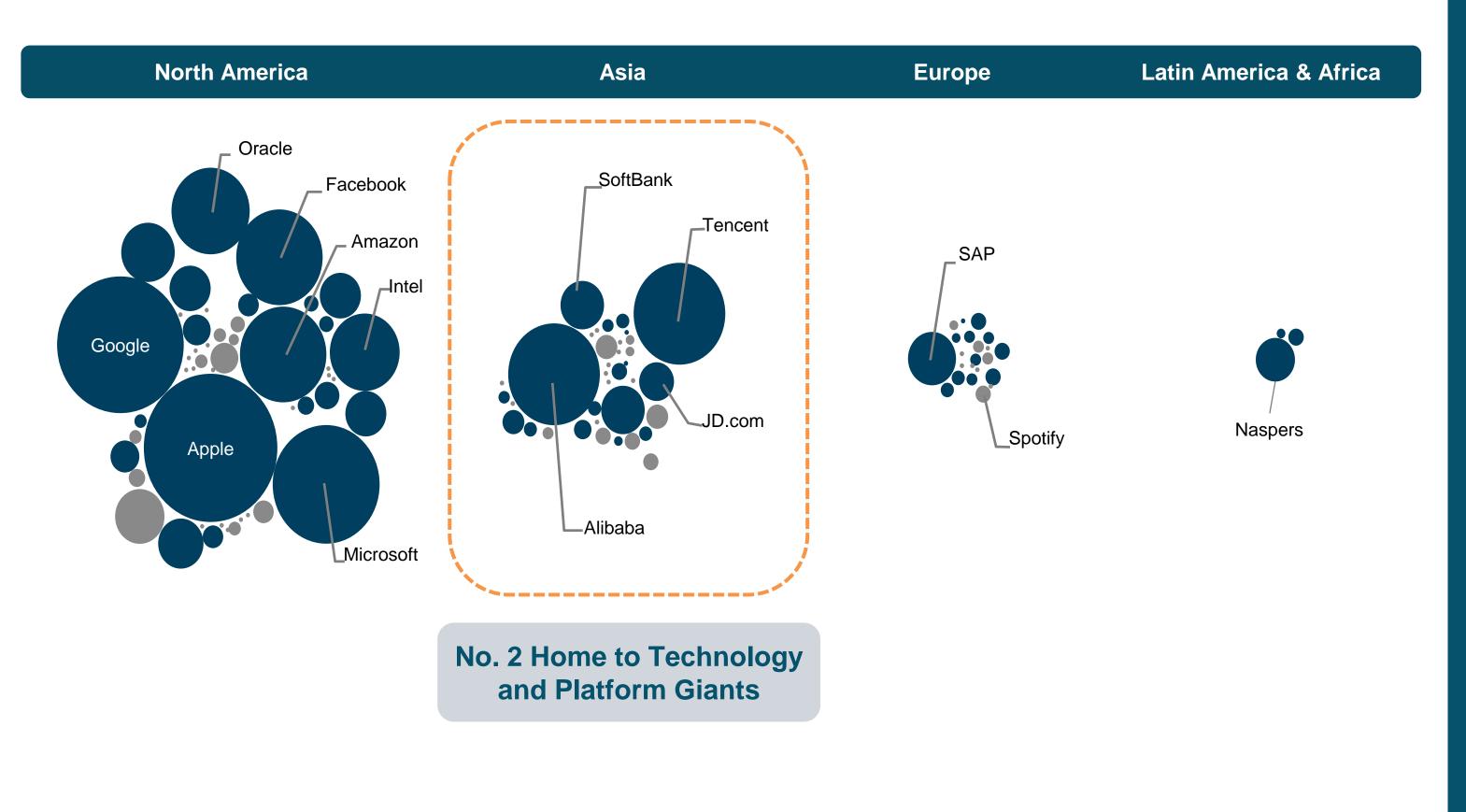
Southeast Asia (SEA) Technology Investment Trends



ASIA - THE NEXT OPPORTUNITY

After the USA, Asia is the Second Largest Home to Tech Giants

- Integrated Economic Region vs Protectionism
- Lack of Physical Infrastructure
 - Digital economy can fix/side-step gaps
- Leap Frogging Technology
 - \succ E.g. China skipping credit cards altogether. The region is a birthing home to technology giants across the full spectrum of E-commerce, FinTech, Consumer, Big Data/AI, Manufacturing, Supply Chain, etc..



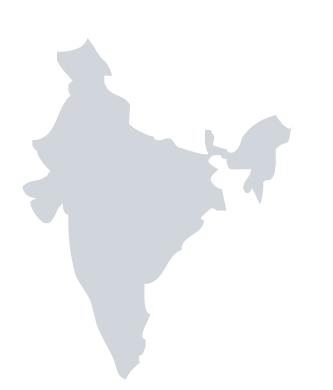


ASIA INVESTMENT TRENDS Planet Asia – 10,000 Feet View



GREATER CHINA

- Massive growth in AI/Robotics/IoT \$279Bn in 2017
- ByteDance, Alibaba, Tencent ('new BAT')



INDIA

- Trade tensions make India a net beneficiary
- Demonetisation and Aadhar (Biometric/Identity) system driving banking and digital services adoption, resolving the unbanked
- Rise of Reliance Jio free voice call, cheaper smartphones and cheaper data plans doubled data usage in India, growing India's internet economy

Note: Maps are not drawn to scale and used are for illustrative purpose only. Currency is denoted in US dollars throughout this report, unless otherwise indicated Source: SCMP



JAPAN & SOUTH KOREA

- SoftBank Fund (\$100Bn+) changing the market
- Ageing electronics companies moving up the value chain (Sony and Samsung)

SOUTHEAST ASIA

- Trade tensions make SEA a net beneficiary
- Significant investment in Indonesian E-commerce
- Singapore driving FinTech development encouraged by a favourable regulator
- Regional VCs raising record funds
- Vietnam is the new manufacturing giant

global

ENTER SOUTHEAST ASIA

The Other 'China/India' Technology Miracle

- Dependent on Source: SEA has ~400 million internet users. Indonesia, Malaysia, Philippines and Thailand are among the Top 10 most engaged countries on mobile internet globally
- Tech fundraising in SEA in 2018 reached \$9.1Bn, an increase of more than 50% compared to 2017
- By the end of 2019, SEA will have 460 million internet users and \$10Bn raised in private tech funding

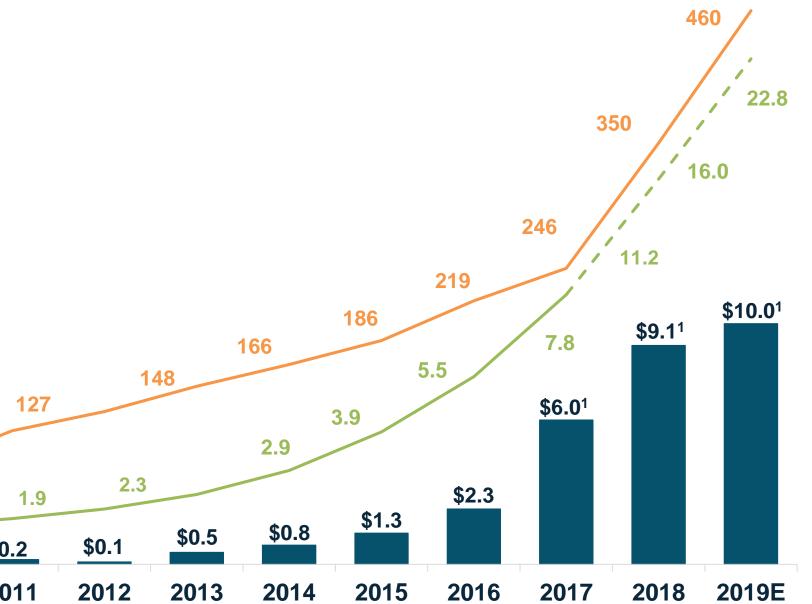
d	
,	
	SEA Private Tech Funding (Bn)
	—Fixed Broadband Speed (Mbps)

—Internet Users (Mn)

68	75	80	111	
1.1	1.2	1.5	1.6	
\$0.0	\$0.0	\$0.0	\$0.1	\$0
2007	2008	2009	2010	20

Notes: (1) Gojek, Grab, Lazada, Tokopedia and Sea Group fundraising activities captures on average 70% of total tech funds. Figures shown are as at 30 November 2018. We have taken different data sources, therefore, some of the numbers may not match. Source: Catcha Group's – 8 Predictions for the Southeast Asian Tech Scene – A Checkpoint Plus 3 New Predictions for Indonesia', Google, Temasek and Bain SEA E-Conomy (2019)

Tech Ecosystem Overview

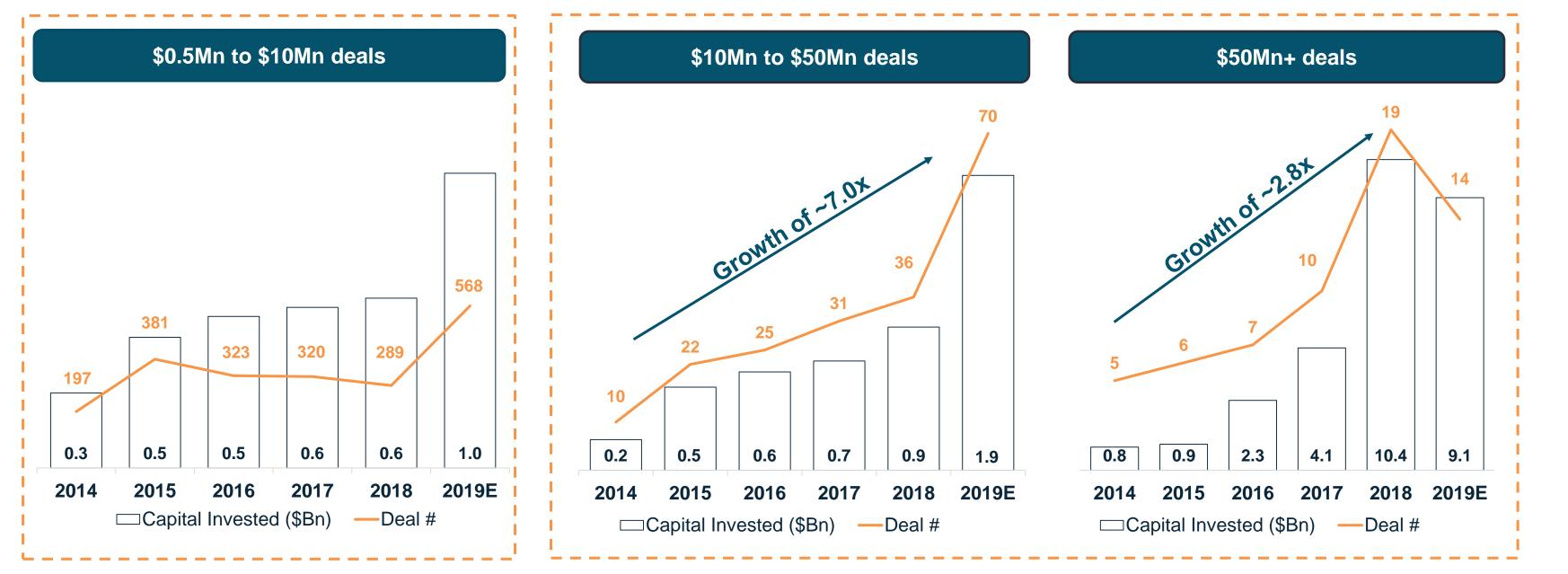




LARGER DEALS GETTING DONE Over \$12Bn of Investments in SEA Technology in 2018

- SEA internet technology related investments continues to set new records in 2018
- Larger rounds are being raised
- There was a fear of a return to a pre-Series A gap, however, there has been a recent surge in smaller fundraisings

Funding Gaps In Earlier Rounds



Note: Various incubators that funded early stage companies are yet to be included in the data. Source: Cento Research – Southeast Asia Tech Investment – H1 2019

\$10Mn+ Deals Continue to Grow

technode global

GREATER CHINA CHALLENGES THE US FOR TECH IPO Hong Kong Has Been a Top Three IPO Market for Tech

- US exchanges have been the primary destination for Chinese tech IPOs such as Alibaba and Tencent
- Since 2017, Greater China has become more attractive; Zhong An and Xiaomi both listed on the Hong Kong Stock Exchange (HKEX) while Foxconn listed in Taiwan Stock Exchange (TWSE)
- HKEX has been a top IPO market globally for tech companies due to familiarity and strong valuations
- Dual class shares and other reforms ongoing
- Chinese authorities are encouraging to bring home Chinese tech companies listed on foreign exchanges by allowing them to issue 'Chinese Depositary Receipts'; Baidu, Netease and Trip (CTrip) are actively considering this option

- since 2013
- Foxconn

Recent Listing Trends by Region

Asia

HKEX has been consistently ranked as one of the top three IPO markets globally

Major recent IPOs: Zhong An, Xiaomi,

Weighted voting rights reforms



USA

• Number of Nasdaq IPOs down from 2016

10 out of 16 are trading below IPO price

• Qudian Inc – three year old online lender shares slumped 46.1%





GREATER CHINA CHALLENGES THE US FOR TECH IPO STAR Market (Shanghai) Targets Homegrown Talent

- Launched in July 2019, Shanghai Stock Exchange (SSE) STAR Market is enticing homegrown technology firms to list in China
 - > Allows dual-class shares preserving founders' control and lowering listing requirements allowing pre-revenue firms
 - ➤ Registration-based system warrants IPO approvals process taking ≤ three months
- In four months since July 2019 the STAR Market:
 - Received 141 listing applications, with 31 companies winning approval to list¹
 - > Started with 25 companies raising \$5.4Bn Yuan combined. IPO demand from retail investors oversubscribed by 1,800 times
- UBTech Robotics, a Shenzhen-based manufacturer of humanoid robots and valued at \$5Bn is predicted to list domestically, potentially on STAR Market²



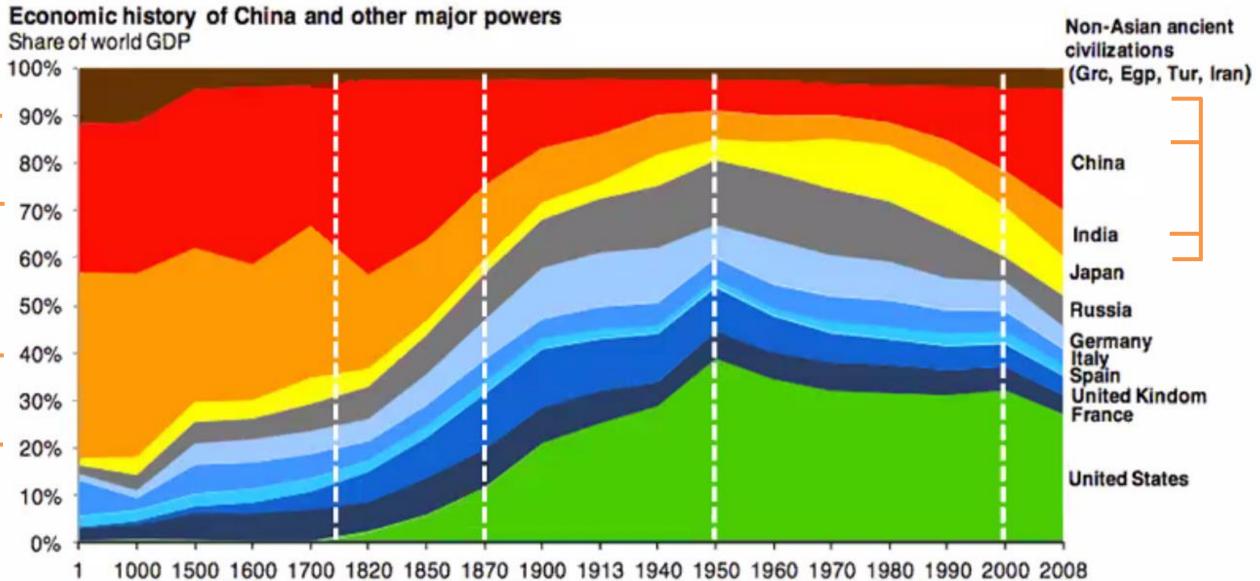




CHINA AND INDIA

The Giants are Re-emerging

- China and India are where the global economy has been for much of history
- Soft power (money and diplomacy) vs hard power. Belt and Road Initiative to fund and connect countries and economies to share prosperity
- New leadership position supports free trade and sustainable development to make up for a US absence. E.g. Xi Jinping's speech at Davos



Sources: 'Statistics on World Population, GDP and Per Capita GDP, 1-2008 AD', Angus Maddison, University of Groningen



SEA – CHINA AT THE GATE Baidu, Alibaba, Tencent (BATs) and Others Looking to Dominate SEA

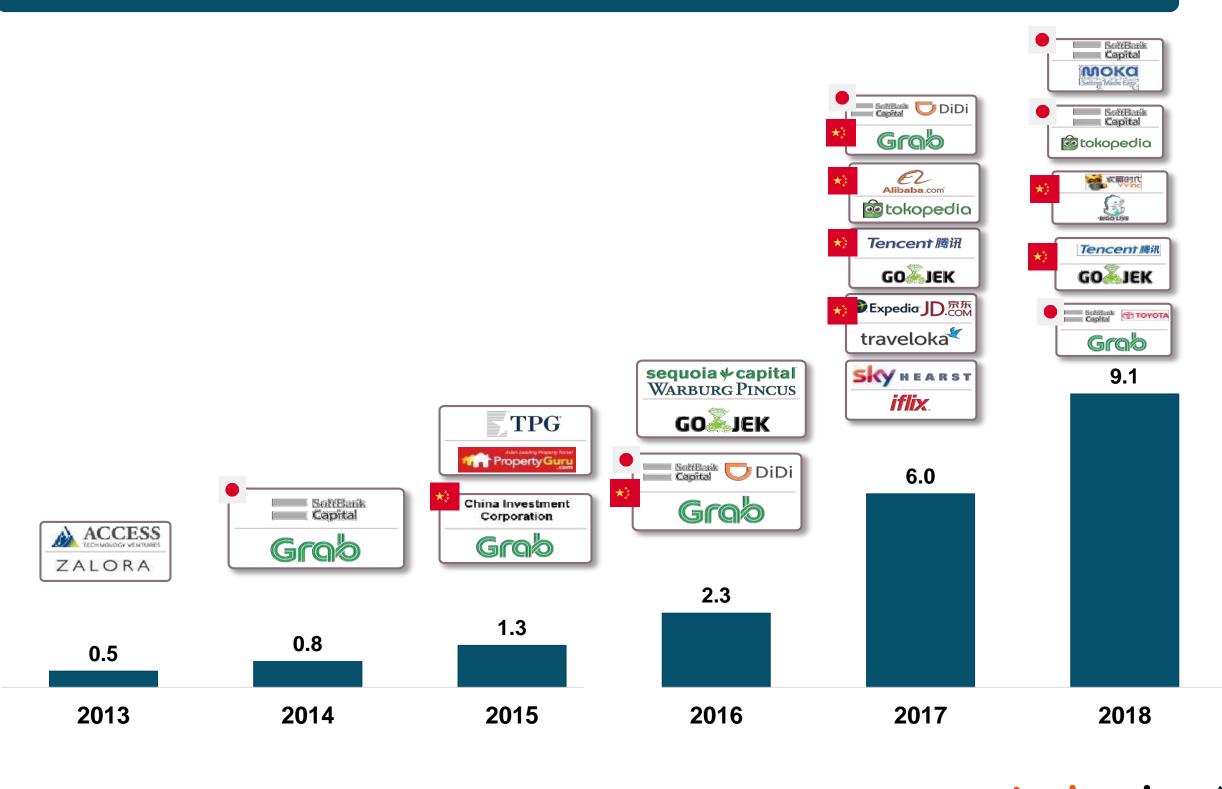




CHINA AT THE GATE

Chinese Companies Remain the Largest Source of Tech Funding in SEA

- China dominated the Asian VC market with record investment levels and continues to grow rapidly as more Chinese CVC seek disruptive technologies to enhance their core businesses
- In terms of funding value, China is still leading the way in SEA investments despite having slightly lower number of funded deals compared to Japan (led by SoftBank)
- North America is active but behind its Asian counterparts



Source: Catcha Group – 8 Predictions for the Southeast Asian Tech Scene – A Checkpoint Plus 3 New Predictions for Indonesia (Data as at 31 Dec 2017). Only deals with disclosed investors and size of more than \$100Mn are included)

Total SEA Private Tech Funding (\$Bn)



CHINA AT THE GATE Proxy Battles are Fought in SEA

- Alibaba with the largest war chest appears to be best placed
- SEA tech companies are also building Super-Apps mirroring the Chinese and challenging Chinese VC domination

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	しiDi ふ众安保险	Tencent 腾讯 JD.京东 COM	EZ Alibaba.co
HILIPPUIES HILIPPUIES HILIPPUIES HILIPPUIES HILIPPUIES HILIPPUIES HILIPPUIES HILIPPUIES HILIPPUIES HILIPPUIES HILIPPUIES	Grað	GO JEK	LAZAC rec'ma
E-commerce			\checkmark
Ride Sharing	\checkmark	\checkmark	
Financial Services	\checkmark	\checkmark	\checkmark
Food Delivery	\checkmark	\checkmark	
Ticketing			
Travel			





SOFTBANK EFFECT

World's Largest Tech Fund \$100Bn+

What?

- Sheer size has distorted capital management
- Investee business strategy has shifted towards attracting capital versus capital self sufficiency e.g. immediate profitability
- Funds have provided liquidity for pre-IPO and secondaries and also promoted partnerships/joint ventures (JVs)

Why?

- Dominate the ecosystem by moving money around in various sectors
- Drive synergies across industries and portfolio companies

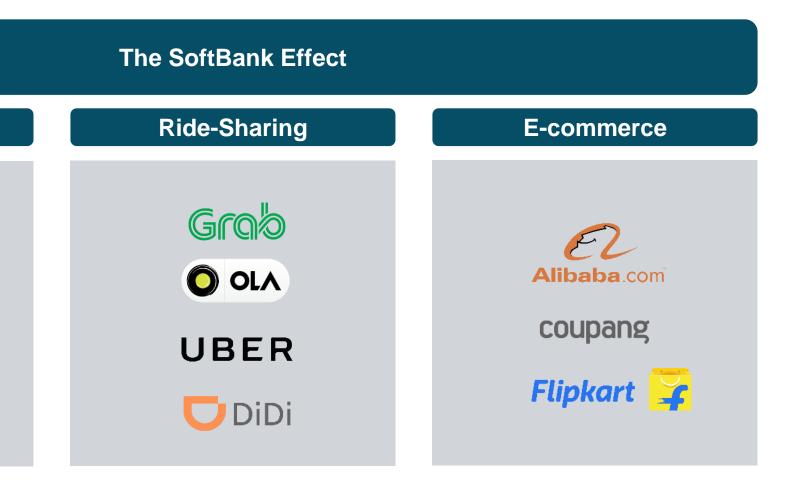
How?

• Moving the \$\$\$

Food Delivery

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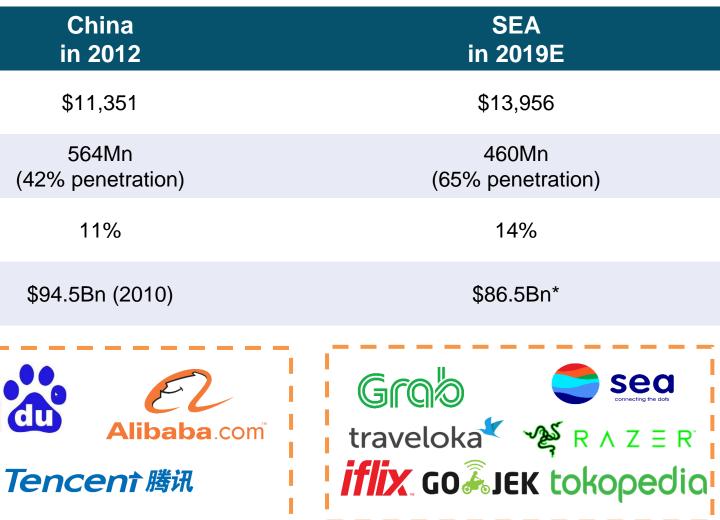


SEA LOOKS LIKE CHINA 5 TO 10 YEARS AGO SEA is the Next Frontier for Technology Investment

- SEA is similar to China five to ten years ago when E-commerce and internet start-ups first took off
- Drawing a parallel, we expect SEA will see an inflection point in unicorn formation in the next five years

	China in 2012
GDP Per Capita (PPP) ¹	\$11,351
Internet Population ²	564Mn (42% penetration)
Internet Population Growth Rate ²	11%
Market Capitalisation of Market Leaders ³	\$94.5Bn (2010)
	Bai du

Note: *Estimation is based on extrapolation from SEA market capitalisation in 2017, assuming SEA between 2017 and 2019 achieves the same growth rate of market capitalisation per internet user as China between 2008 and 2010 Sources: (1) International Monetary Fund (2) Golden Gate Venture Southeast Asia Report (3) Catcha Group – '8 Predictions for the Southeast Asian Tech Scene – A Checkpoint Plus 3 New Predictions for Indonesia'





WORLD'S FIRST FROM SOUTHEAST ASIA Innovation is Truly Global. SEA is No Exception

PatSnap is the world's leading provider of research and development analytics on intellectual properties (IP) utilising proprietary neural networks, AI and machine learning technologies. Headquartered in Singapore and serving more than 8,000 companies, government agencies and academic institutions in over 20 countries

Warung Pintar offers a 'Smart kiosk' concept digitising Indonesia's stall vendors via a prefabricated kiosk, a twist to O2O E-commerce

CXA Group is Asia's only integrated, AI-powered health and wellness corporate benefit solution – digitising the insurance industry

Source: Techcrunch – Warung Pintar raises \$27.5Mn to digitise Indonesia's street vendors



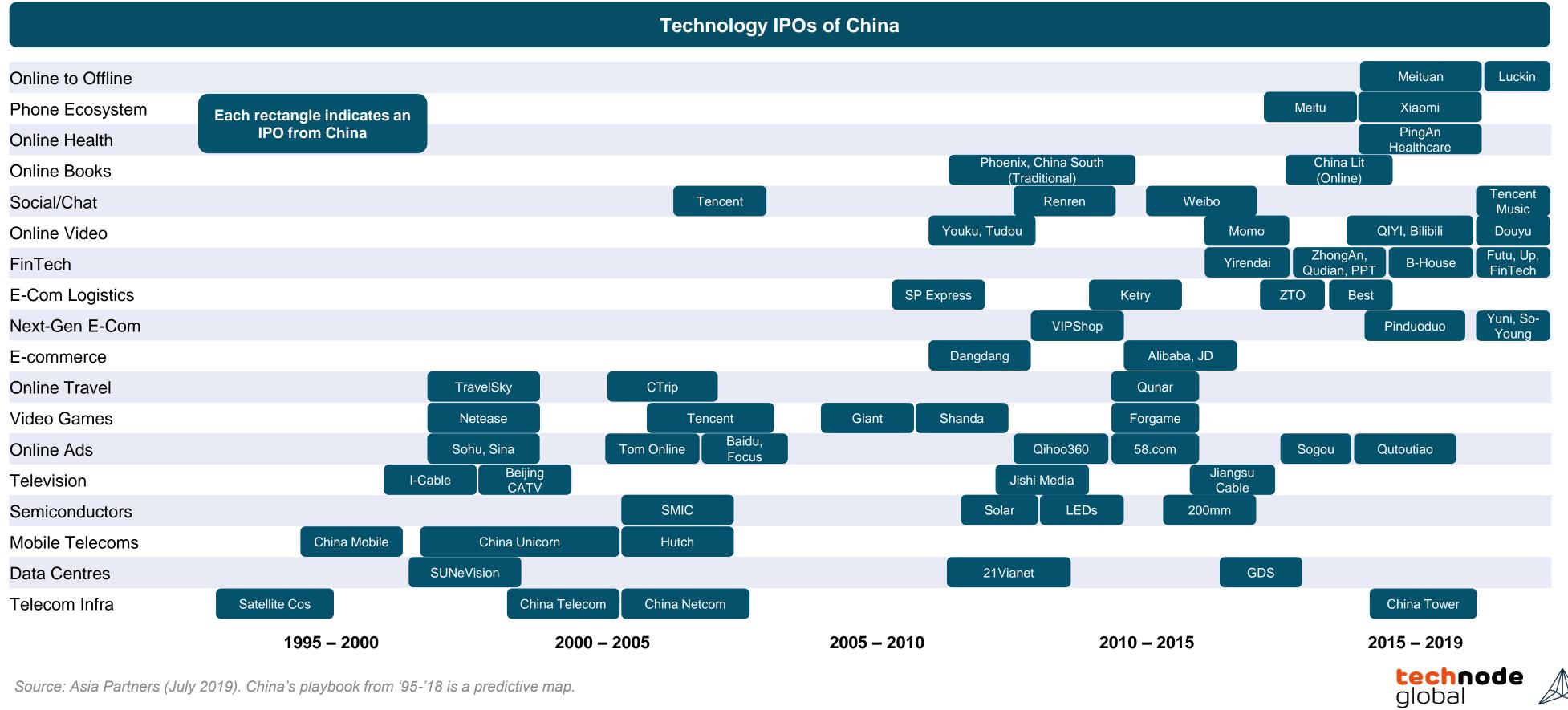
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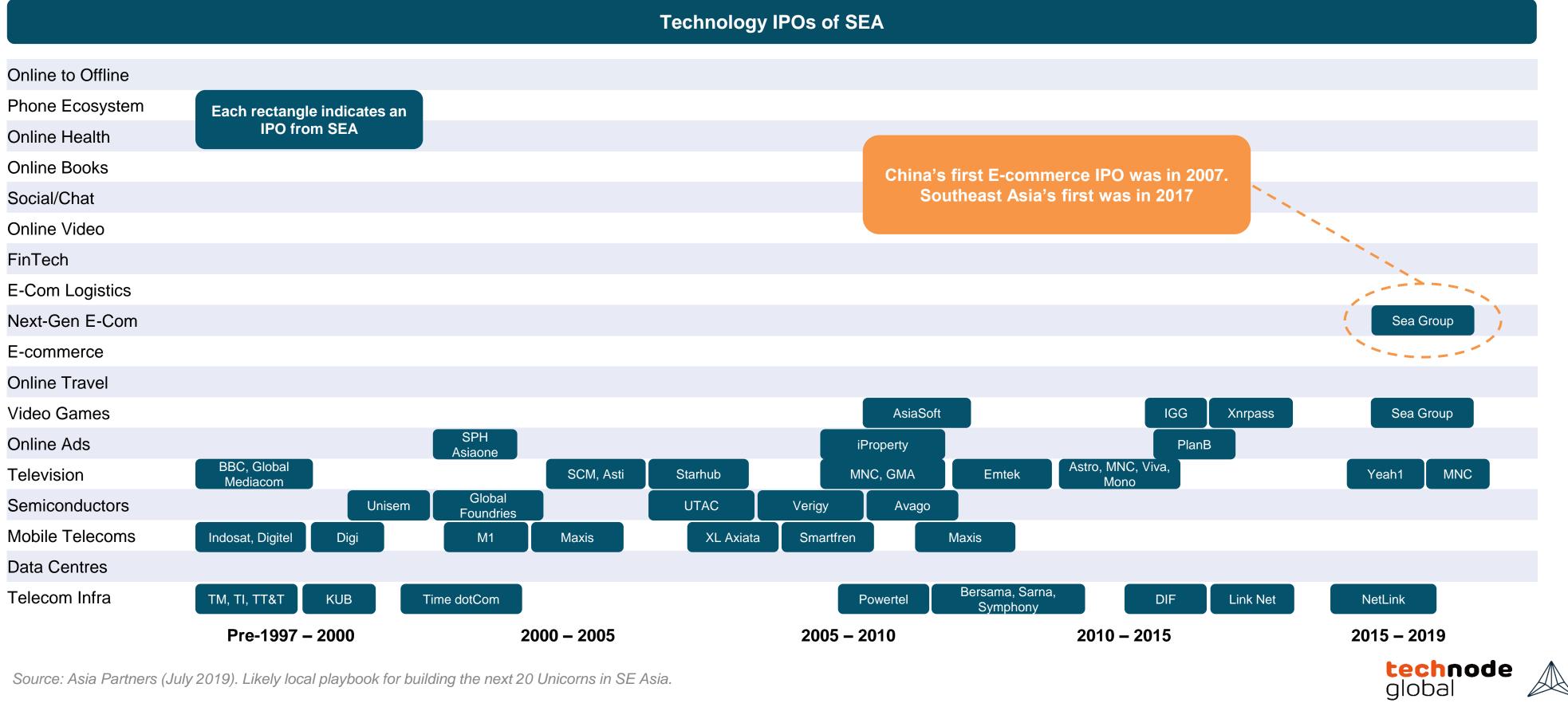
CHINA'S PLAYBOOK (1995-2018) - A PREDICTIVE MAP

Presented with Acknowledgement to Asia Partners



SEA'S PLAYBOOK - BUILDING THE NEXT UNICORNS

Presented with Acknowledgement to Asia Partners

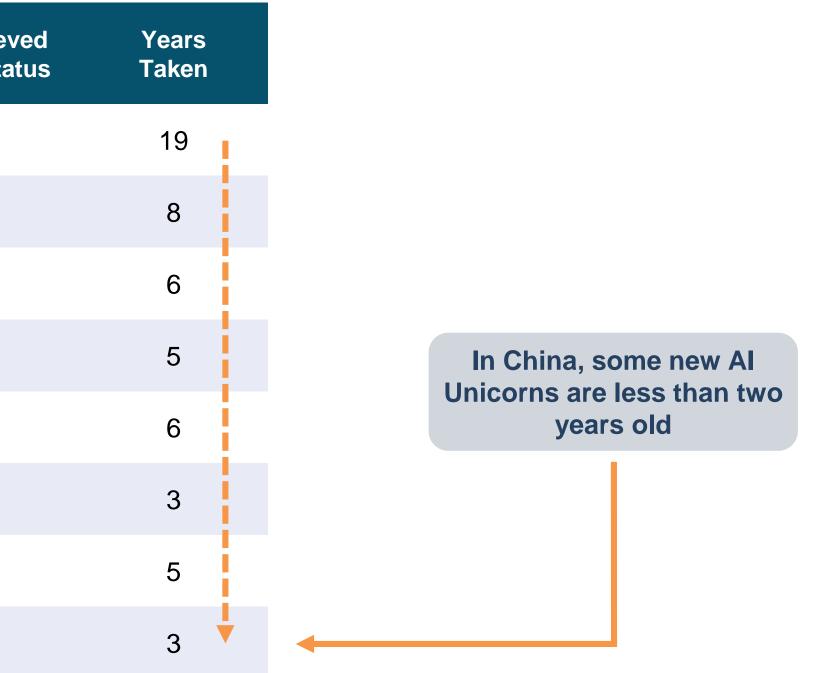


ACCELERATING TECH GIANT CREATION

Asia is Creating Unicorns Faster than Before

Companies	Year Founded	Year Achiev Unicorn Sta
JobStreet.com No. 1 Job Site in Southeast Asia	1995	2014
iProperty Group Asia's No.1 Online Property Group	2007	2015
Seq canrecting the dots	2009	2015
oo tokopedia	2009	2014
GOLJEK	2010	2016
Lazada	2011	2014
traveloka	2012	2017
Grað	2012	2015

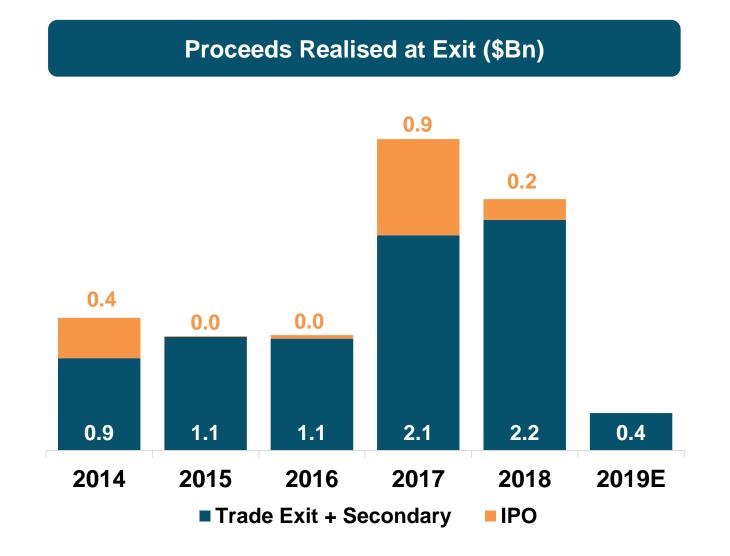
Source: Catcha Group – 8 Predictions for the Southeast Asian Tech Scene – A Checkpoint Plus 3 New Predictions for Indonesia



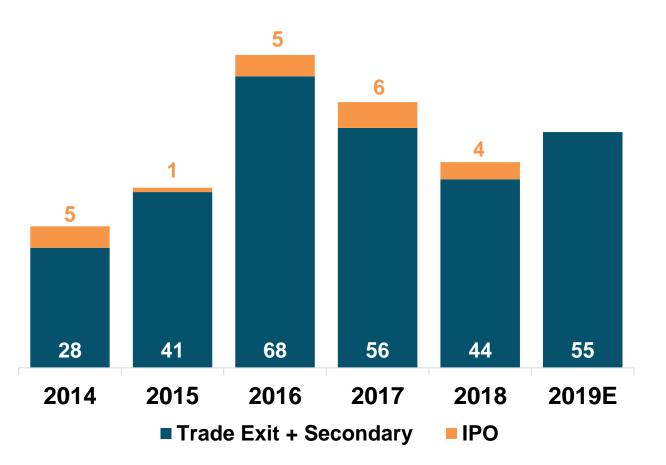


LIQUIDITY - IT'S COMING **SEA Exit Path**

- There is a lack of a strong public market for tech stocks within SEA
- Tech companies have defaulted to the ASX, Nasdaq and NYSE, although HKEX and the STAR Market are emerging as attractive alternatives
- M&A remains the predominant exit strategy for tech start-ups in SEA and we expect this to continue









LIQUIDITY – IT'S COMING SEA Unicorns are on an Acquisition Spree

• Start-ups themselves are becoming investors and acquirers

- In SEA Grab and GoJek are the most active acquirers via the launch of their own investment vehicles
- Private equity corporates, family offices and other investor types provide greater flexibility and liquidity





II. EVERYTHING HAS CHANGED The Rules: SEA – Technology Strategy Insights

Kuala Lumpur,

STRATEGY INSIGHT (I) What is the Platform Strategy?

The world's largest mobility player Uber has **no vehicles**, likewise OYO has **no hotels**, and TikTok has **no content creators**

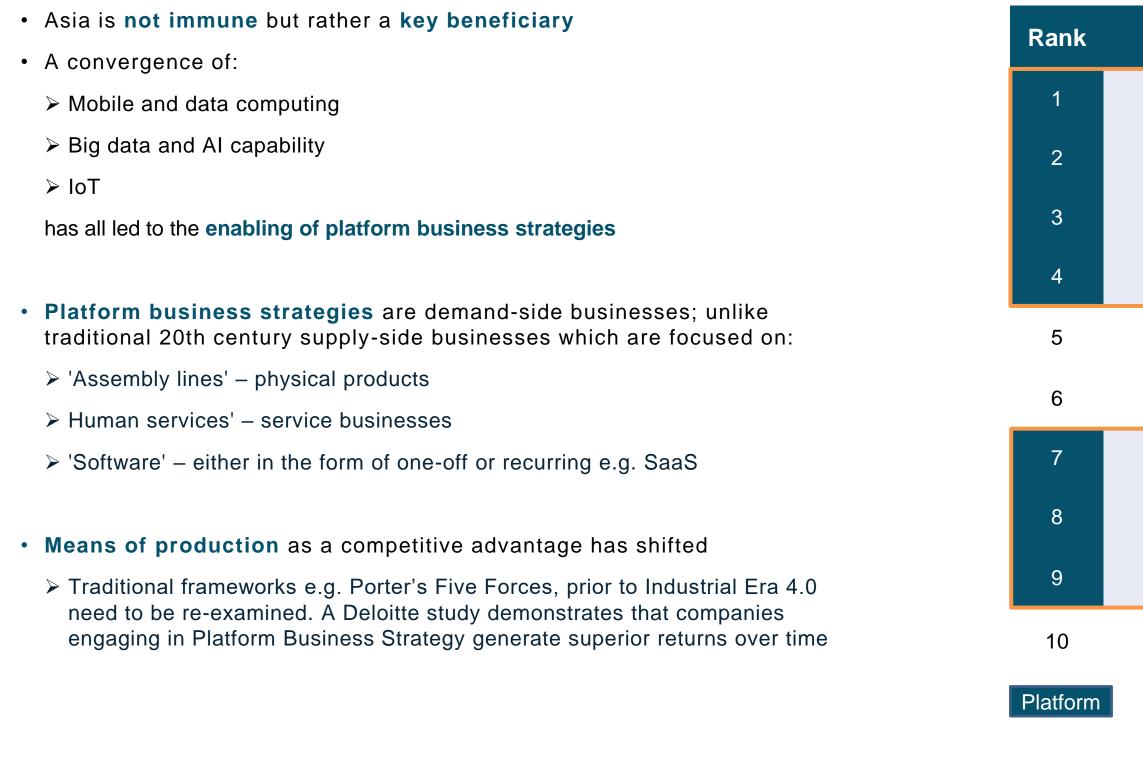
	Definition	Asia	USA/Global
1	Exchange between buyers, sellers and users	E2 Alibaba.com	ebay
2	Low cost and frictionless transactions	GoPay G>	stripe
3	Buyer-seller discovery and curation	Instant Reservation	OpenTable [*]
4	Trusted environment	Grað	airbnb
5	Reliable information	Baide百度	Google



The Rules: SEA – Technology Strategy Insights | 24

STRATEGY INSIGHT (II)

Traditional Business Strategies are Being Ousted



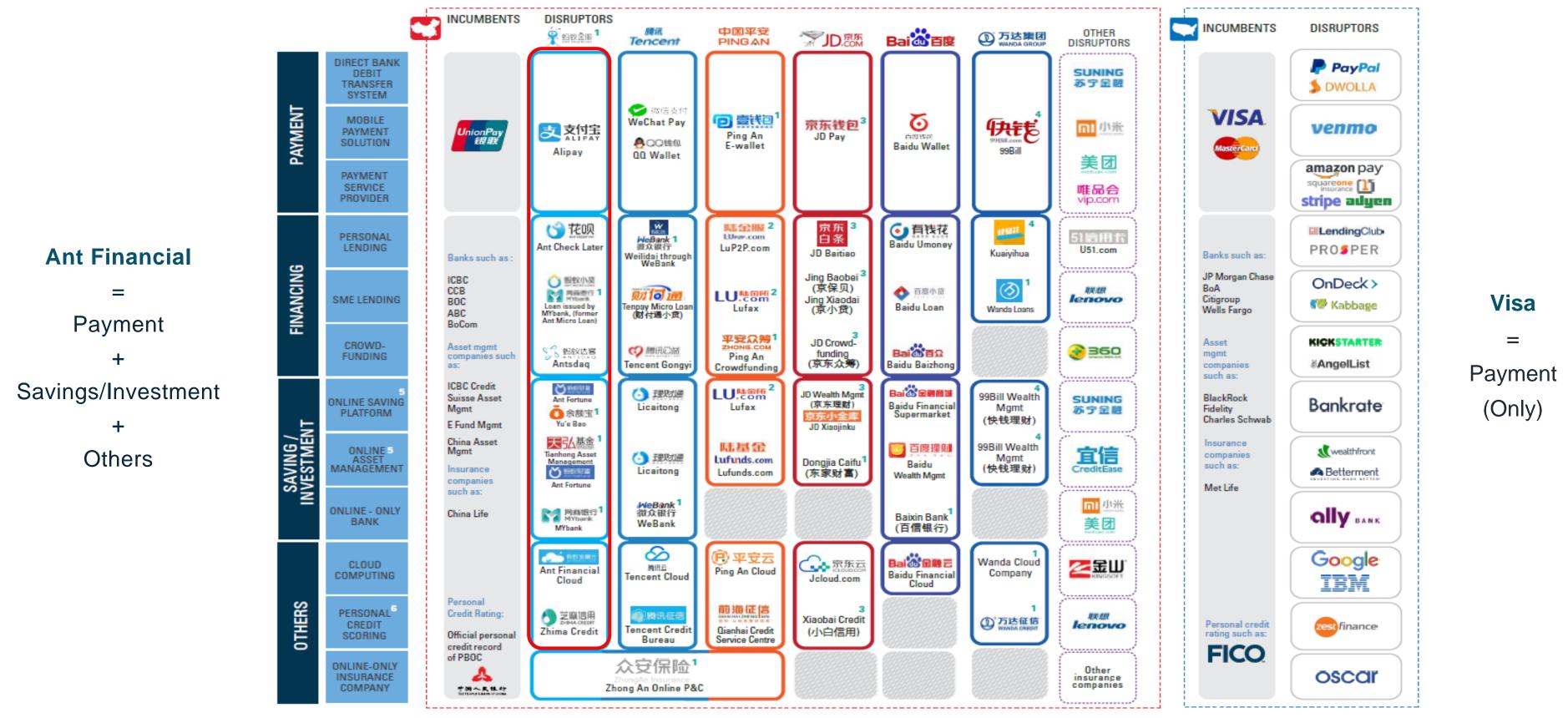
Country	Company	Market Cap (\$Bn)	
	Ú	1,156	
	Microsoft	1,114	-
	Google	909	
	amazon.com	885	tform
	facebook.	544	n Stra
	BERKSHIRE HATHAWAY INC.	541	Platform Strategy
*>	EZ Alibaba.com	490	
	J.P.Morgan	409	-
**	Tencent 腾讯	396	
	Johnson 4Johnson	357	•



The Rules: SEA – Technology Strategy Insights | 25

STRATEGY INSIGHT (III)

Conglomerates vs Specialists



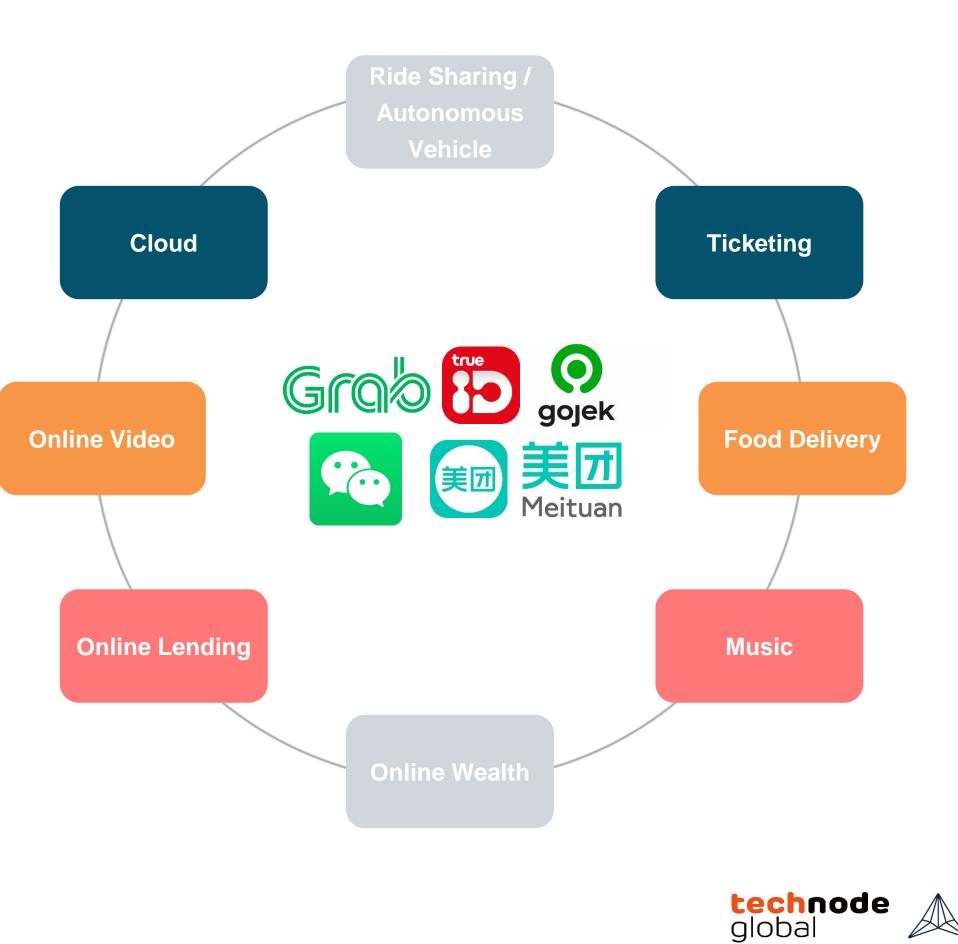
Note: 1. Not wholly owned. 2. Wholly owned by Lufax Holdings. 3. Wholly owned by JD Finance. 4. Wholly owned by 99Bill.com. 5. At current stage, most of the online savings/asset management platforms in China are distributors instead of asset managers, except for Tianhong Asset Management, who has a mutual funds license. 6. Zhima Credit, Tencent Credit and Qianhai Credit, along with 5 other companies, were selected by PBOC as pilot companies. Please refer to the Appendix for further details. Source: Goldman Sachs – The Rise of Chinese FinTech



STRATEGY INSIGHT (IV)

The Race to Build the Super-App is On as They Expand the Breadth of Services

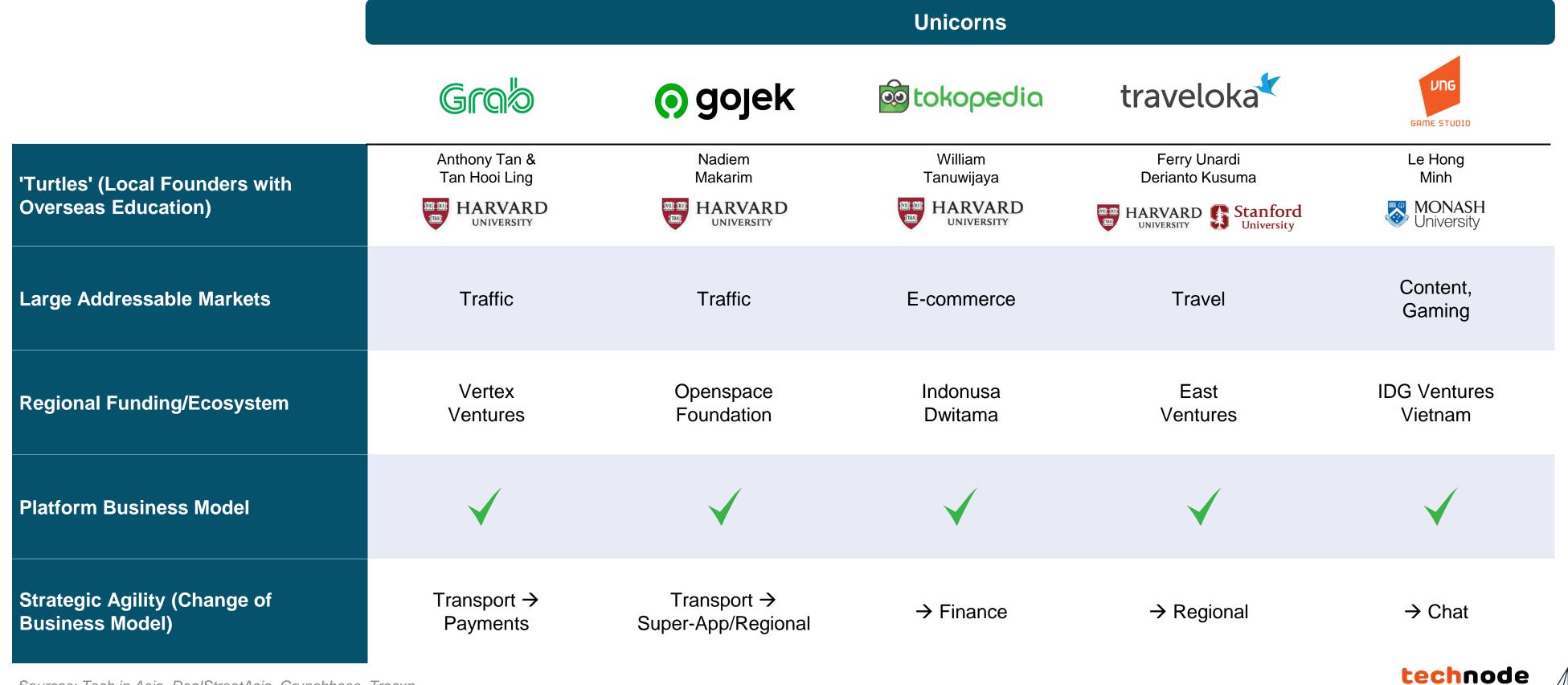
- The online ecosystem fulfills a user's communication, entertainment and lifestyle needs
- Super-Apps are built around the consumer and not around product/services offered – from food delivery to music streaming to ride sharing to livestreaming. Each service line increases customer stickiness and collection of richer data sets
- Augmented reality is next



The Rules: SEA – Technology Strategy Insights | 27

STRATEGY INSIGHT (V)

The Winner's DNA



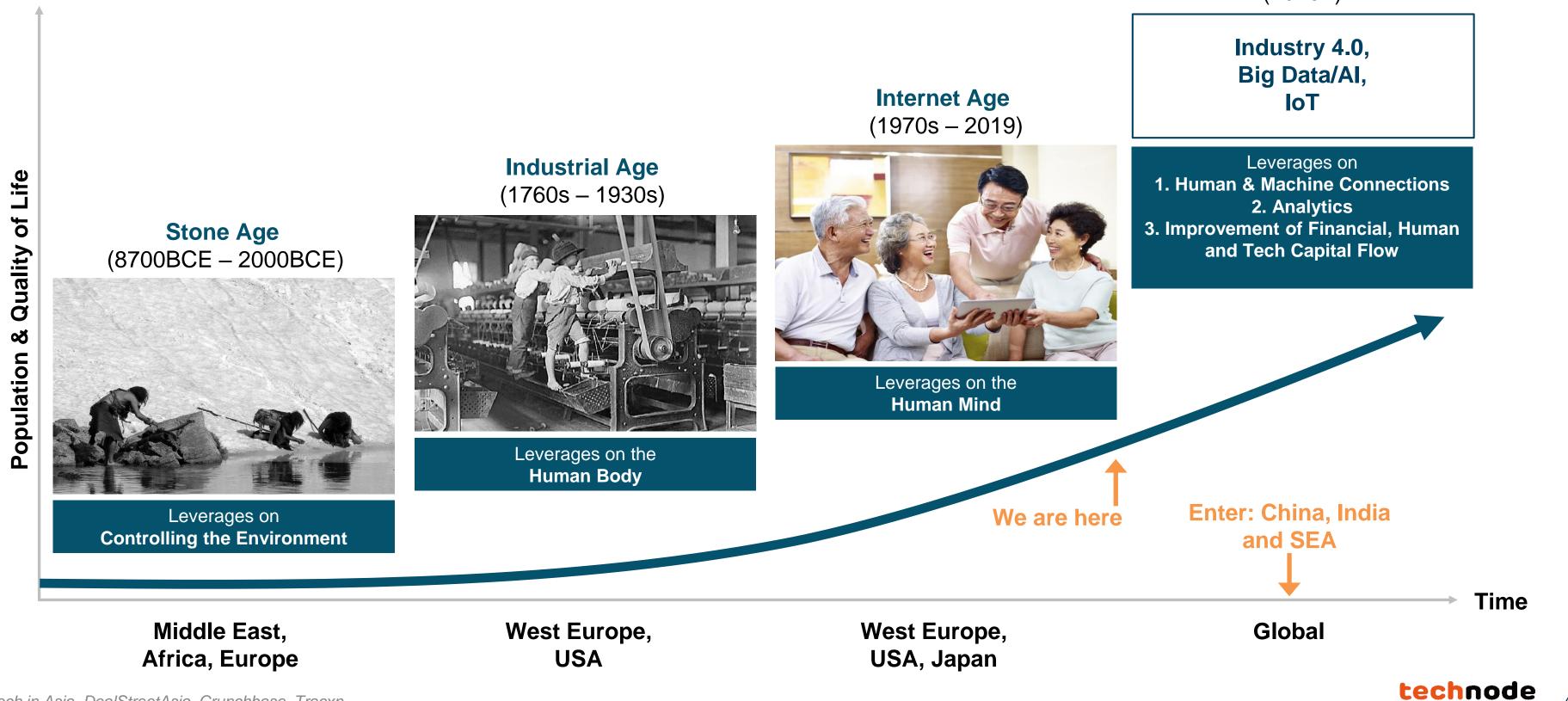
Sources: Tech in Asia, DealStreetAsia, Crunchbase, Tracxn

The Rules: SEA – Technology Strategy Insights | 28

global

STRATEGY INSIGHT (VI)

We are Now Experiencing the Biggest Technology Change Ever on a Global Scale



Sources: Tech in Asia. DealStreetAsia. Crunchbase. Tracxn

New Age (2019+)

The Rules: SEA – Technology Strategy Insights | 29

global

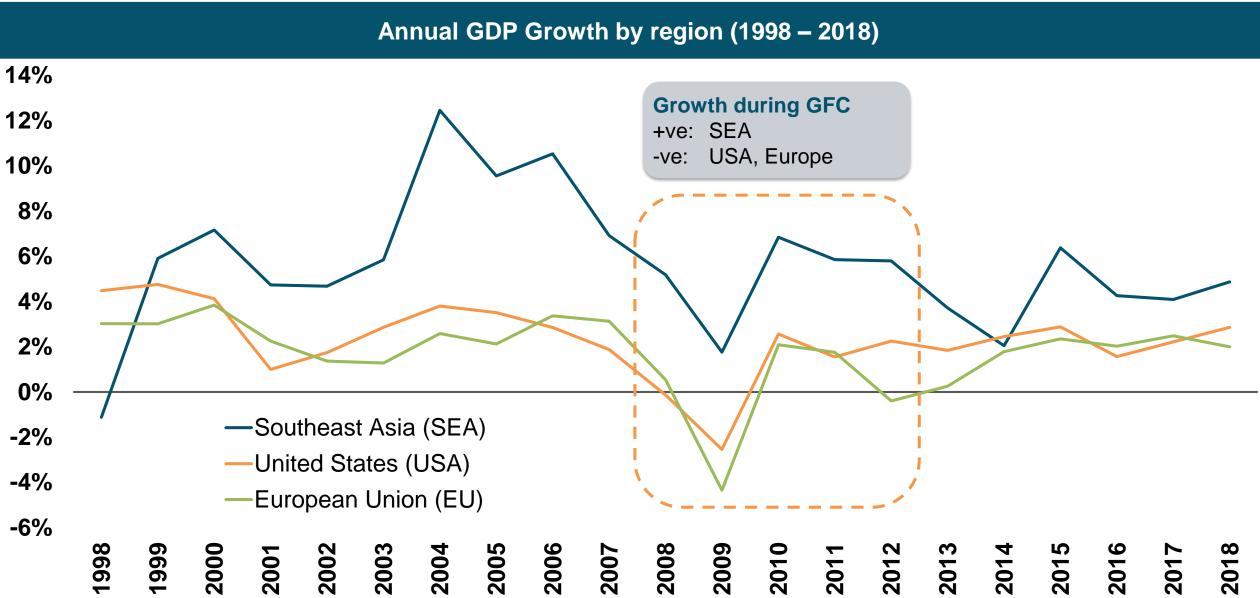
III. LIVING THE DREAM The SEA Miracle

Indonesia

SOUTHEAST ASIA (I)

The Underrated Economic Success Story

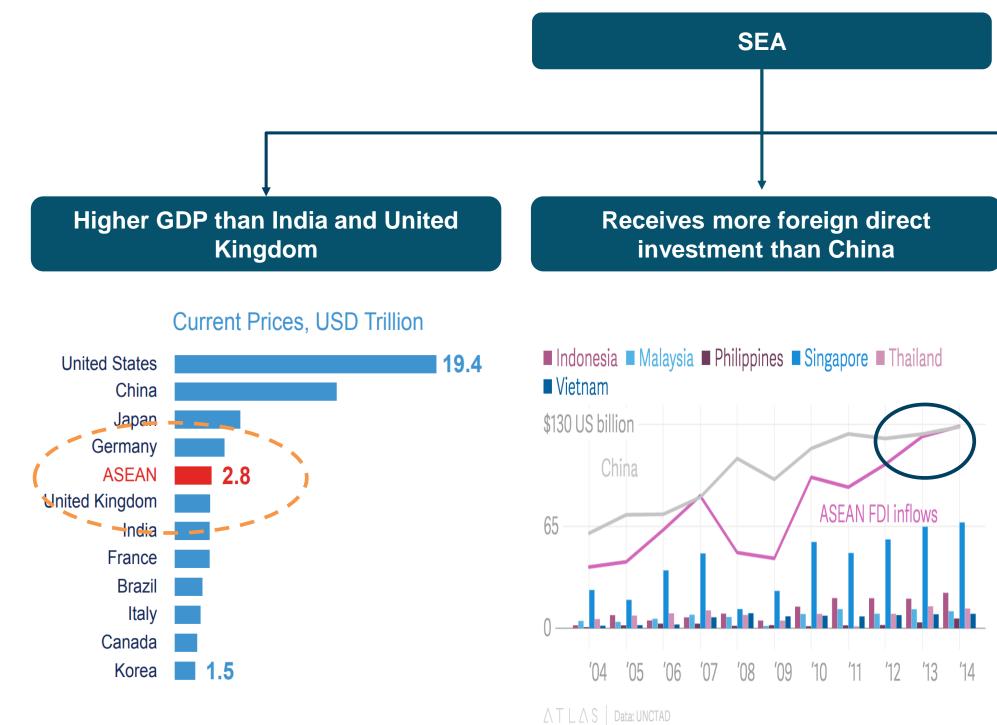
- SEA's GDP growth has been c. 4% higher than the USA and EU with average growth of 6% since 2000
- SEA is an open and culturally diverse economy that has benefited from a lack of major internal conflicts and with increasing regional cooperation and growth





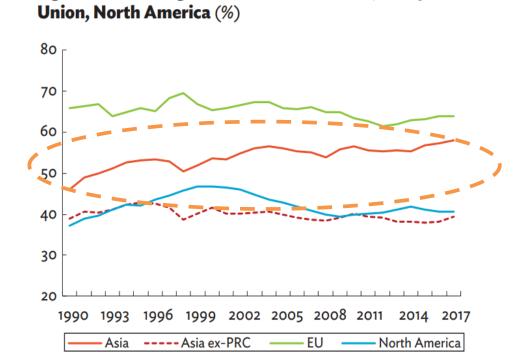
SOUTHEAST ASIA (II)

The Underrated Economic Success Story



Self-sustaining: intra-trade exceeds external trade

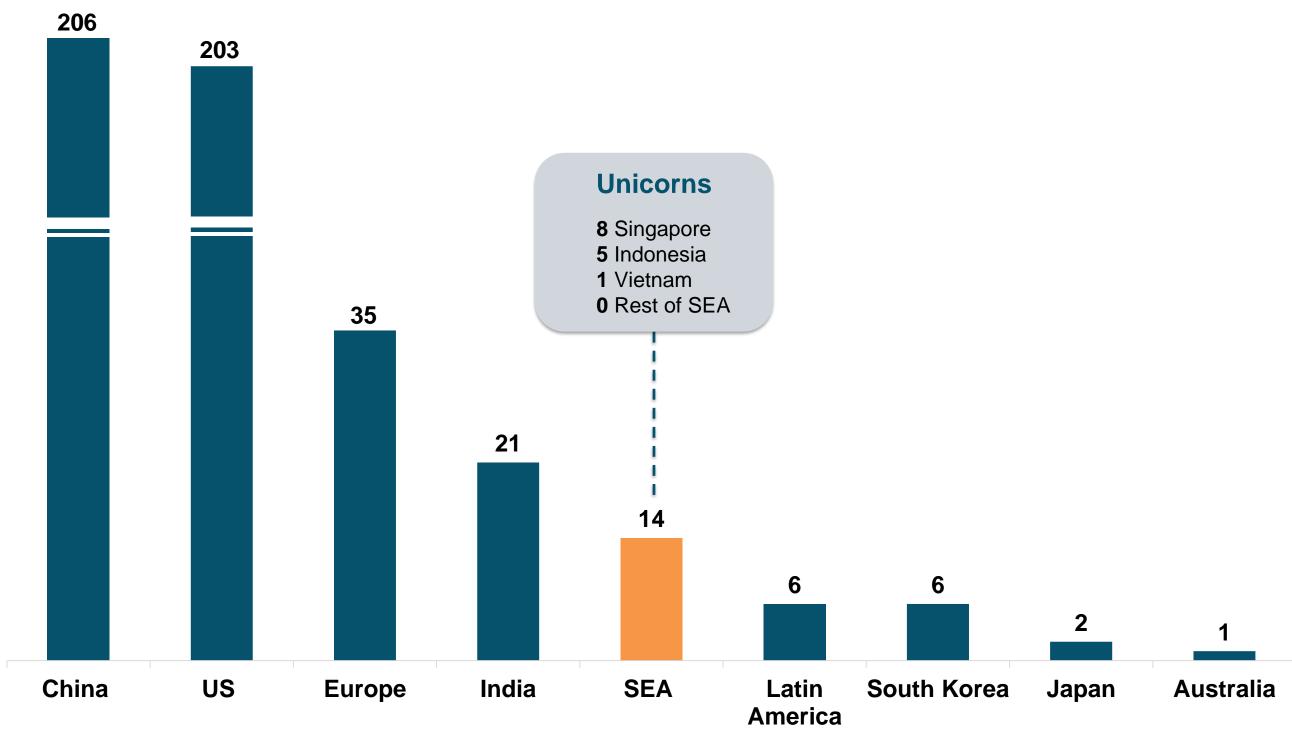
Figure 2.7: Intraregional Trade Share—Asia, European





UNICORNS

Number of Unicorns Across the Globe



Note: chart is not to scale

Note: Number of Unicorns may not align due to the different definition of 'Unicorn' defined in the Hurun report; chart not to scale Source: The Hurun Research Institute – Hurun Global Unicorn List 2019 (30 June 2019)



MALAYSIA, BRUNEI & MYANMAR They Have a Long Way to Go

	Malaysia		Brunei
•	With the introduction of fresh political leadership in 2018, Malaysia's new direction is yet to be ascertained	•	While a potential source of funds due to its wealthy population, Brunei does not have significant sway in the region
•	Otherwise, it remains a country stuck in the middle with low growth and a medium-sized market	•	The lack of technology 'investment talent' will only exacerbate the gap between Brunei and the other members of the region
•	As a source of exported talent in the region, market potential is also limited by brain drain		





Myanmar

- Comparably larger market size than Malaysia and Brunei
- A frontier market for the right investor, but given the **political risks** there are more 'investable' options elsewhere
- Great opportunity for the digital 'Infra' player, or overseas players who are currently building the telecommunications and finance ecosystem



MALAYSIA, BRUNEI & MYANMAR

Demographics ¹	Malaysia	Brunei	Myanmar	Investment Landscape	Malaysia	Brunei	
Population (#, % of SEA)	31.5Mn (5.0%)	0.4Mn (0.1%)	53.7Mn (8.5%)	Funds invested in Internet Economy (% in SEA) ²	2%	-	
Median Age	29 y/o	30 y/o	28 y/o	2019 Deals Done ² (% in SEA)	10%	-	
GDP per capita	\$11,200	\$31,600	\$1,300	Unicorns (#)	-	-	
GDP Growth	4.70%	0.10%	6.20%	Ease of Doing	#15	#55	
Internet Economy	Malaysia	Brunei	Myanmar	Business Rank ⁵ Global Innovation	#35	#71	
2019 Economy ² (% of SEA)	11% (11Bn)	-	_	Index Rank ⁶			
Mobile Penetration ³	96%	NA	NA				
Monthly Cost of Internet ⁴	\$25	\$33	\$28				

Note: Internet economy covers online travel, online media, ride hailing and E-commerce. It does not include other sectors of internet economy that are in the early stages of development. NA = Not available.

Source: (1) World Bank Open Data (2) Google and Temasek (2018) & Google, Temasek and Bain SEA E-conomy (2019) (3) We Are Social & Hootsuite (4) Expatistan (6) Global Innovation Index



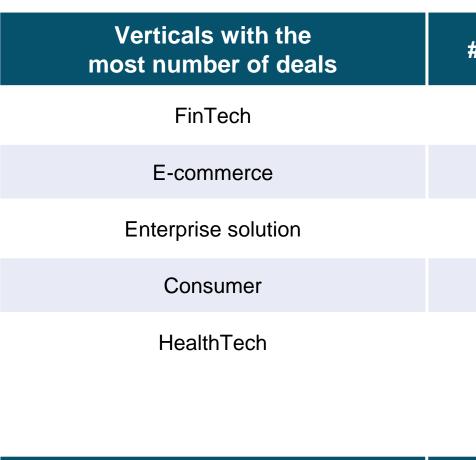


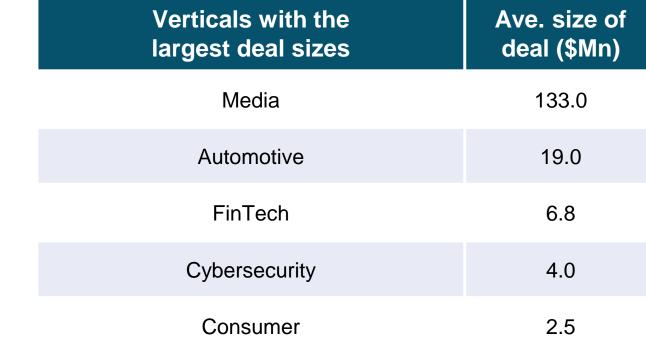


MALAYSIA

Key Investment Deal Flow

- Supportive government reforms include the earmarking of RM\$2Bn in matching grants and fund options for start-up companies
- E-commerce market grew from \$1Bn (2015) to \$2Bn (2018)





Note: *NE = Non-exhaustive and in no particular order, includes investors domiciled and/or invested in this jurisdiction Source: e27 – Southeast Asia start-up Ecosystem 2018





# of deals	Notable Local Investors (*NE)	Туре
6	Frontier Digital Ventures	VC
4	Axiata Digital Innovation Fund	VC
3	RHL Ventures	VC
3	Asia Venture Group	VC
2	Vynn Capital	VC
	Captii Ventures (Captii)	CVC



THAILAND

Manufacturing Powerhouse of SEA

- A hub for high quality manufacturing, health and tourism
- 2019 saw the launch of the \$20Mn True Digital Park in Bangkok, an innovation and start-up campus that aims to incubate Thailand's first unicorn
- Government driven economic blueprint, Thailand 4.0, aims to revitalise the high-income but slow growth market
- While not a show stopper, the political situation is difficult to interpret and limits the ease of doing business

Demographics¹

Population (#, % of SEA)	69.4Mn (11.0%)
Median Age	38 y/o
GDP per capita	\$7,300
GDP Growth	4.10%

Internet Economy

2019 Economy ² (% of SEA)	16% (16Bn)
Mobile Penetration ³	98%
Monthly Cost of Internet ⁴	\$15

Note: Internet economy covers online travel, online media, ride hailing and E-commerce. It does not include other sectors of internet economy that are in the early stages of development.

Source: (1) World Bank Open Data (2) Google and Temasek (2018) & Google, Temasek and Bain SEA E-conomy (2019) (3) We Are Social & Hootsuite (4) Expatistan (5) Doing Business (2018) (6) Global Innovation Index



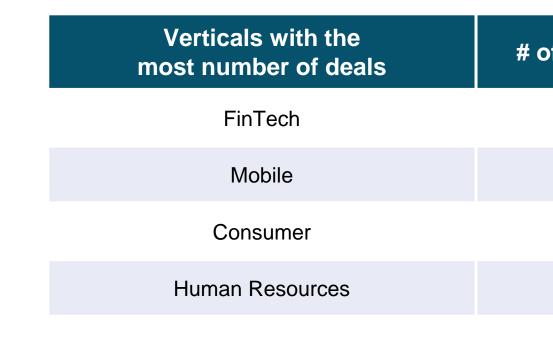


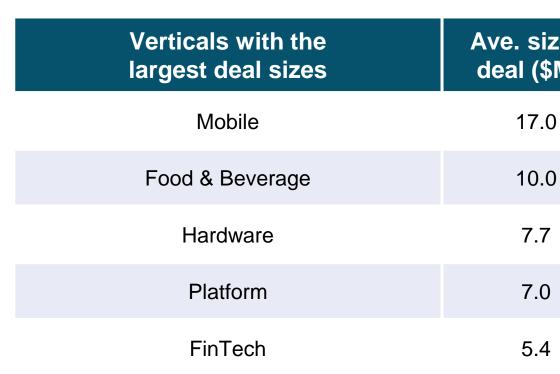


THAILAND

Key Investment Deal Flow

- Thailand 4.0 roadmap agenda includes bolstering FDI in its economy and to be a global start-up hub
- Digital economy constituted 2.3% of Thailand's GDP in 2018, worth \$12Bn – a 25% jump from 2015
- Second largest online travel industry in SEA worth \$6.1Bn, just after Indonesia





Note: *NE = Non-exhaustive and in no particular order, includes investors domiciled and/or invested in this jurisdiction Source: e27 – Southeast Asia start-up Ecosystem 2018



deals	Notable Local Investors (*NE)	Туре
4	Digital Ventures (SCB Group)	CVC
2	Beacon Venture Capital (Kasikorn Bank)	CVC
2	AddVentures (Siam Cement Group)	CVC
2	Singha Ventures (Singha Corporation)	CVC
	Inspire Ventures	VC
	K2 Venture Capital	VC
size of (\$Mn)	Expara Thailand	VC



PHILIPPINES

Resource Rich – A Transition Story

- Resource-rich with great opportunities in tourism, agriculture and energy sectors
- **Connectivity infrastructure is limited** by archipelago geography spanning 7,641 islands
- New laws governing digital initiatives and supportive government investments laying the foundation to bolster the lagging tech ecosystem
- A young population and great opportunities in the tourism, agriculture and energy sectors

Demographics¹

Population (#, % of SEA)	106.7Mn (16.9%)
Median Age	24 y/o
GDP per capita	\$3,100
GDP Growth	6.20%

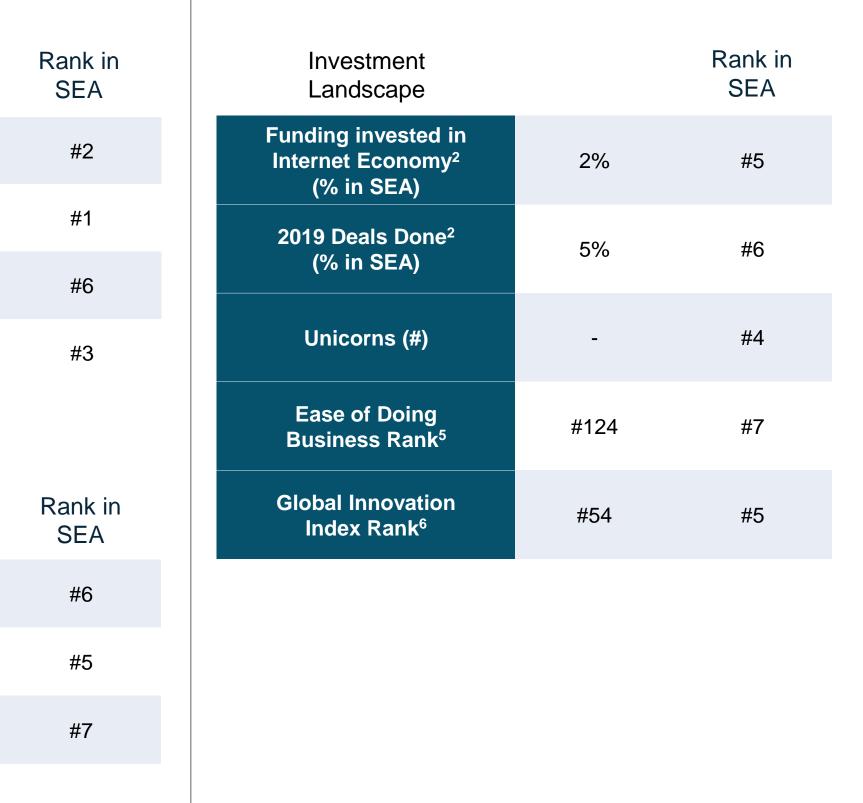
Internet Economy

2019 Economy ² (% of SEA)	7% (7Bn)
Mobile Penetration ³	89%
Monthly Cost of Internet ⁴	\$31

Note: Internet economy covers online travel, online media, ride hailing and E-commerce. It does not include other sectors of internet economy that are in the early stages of development.

Source: (1) World Bank Open Data (2) Google and Temasek (2018) & Google, Temasek and Bain SEA E-conomy (2019) (3) We Are Social & Hootsuite (4) Expatistan (5) Doing Business (2018) (6) Global Innovation Index







PHILIPPINES

Key Investment Deal Flow

- Supportive government investments as well as central bank policies lay the groundwork for a positive long-term outlook
- Internet economy is valued at \$5Bn (2019), a 30% increase since 2015

Verticals with the most number of deals	# of deals	Notable Local Investors (*NE)
Enterprise Solution	5	SM Investments Corporation
InfoComm & Tech	2	Kickstart Ventures (Globe Telco, part of Ayala Group)
FinTech	2	JG Digital Equity Ventures (JG Summit)
Data & Analytics	2	PDLT Capital & IdeaSpace Foundation (First Pacific Company Limited)
Verticals with the	Ave. size of	
largest deal sizes	deal (\$Mn)	
InfoComm & Tech	107.0	

Note: *NE = Non-exhaustive and in no particular order, includes investors domiciled and/or invested in this jurisdiction Source: e27 – Southeast Asia start-up Ecosystem 2018



ve. size of eal (\$Mn)	
107.0	
20.4	
10.0	
9.0	
2.3	

FinTech

Enterprise Solution

InsurTech

Food & Beverage



VIETNAM

The New Manufacturing Giant

- Vietnam is the new manufacturing hub, moving toward **Industry 4.0**
- Vietnam has considerable technological expertise in software development
- A young large population of digitally active consumers
- **Single-party, communist government** provides strategic direction and relative political stability
- Unproven track record for foreign investment and returns

Demographics¹

Population (#, % of SEA)	95.5Mn (15.2%)
Median Age	31 y/o
GDP per capita	\$2,600
GDP Growth	7.10%

Internet Economy

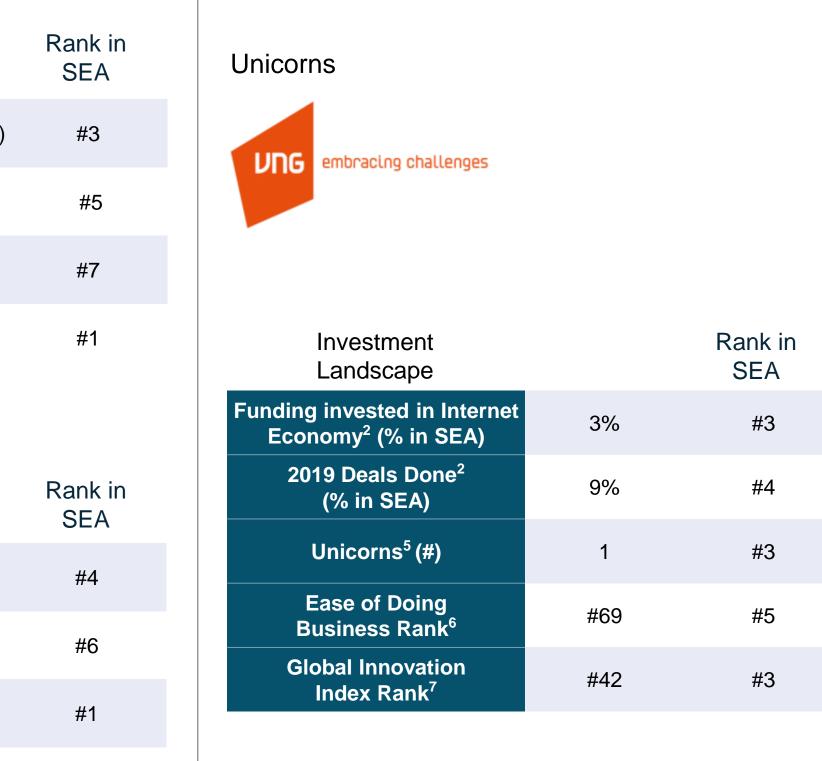
2019 Economy ² (% of SEA)	12% (12Bn)
Mobile Penetration ³	97%
Monthly Cost of Internet ⁴	\$10

Note: Internet economy covers online travel, online media, ride hailing and E-commerce. It does not include other sectors of internet economy that are in the early stages of development.

Source: (1) World Bank Open Data (2) Google and Temasek (2018) & Google, Temasek and Bain SEA E-conomy (2019) (3) We Are Social & Hootsuite (4) Expatistan (5) Abacus (6) Doing Business (2018) (7) Global Innovation Index







global

VIETNAM

Key Investment Deal Flow

- **Strong government support** provided to start-ups. 2,400 start-ups to receive financial and legal assistance over 10 years.
- Education is a strong focus in Vietnam







# of deals	Notable Local Investors (*NE)	Туре
7	NextTech Group	Corp
3	VinaCapital Ventures	VC
2	Vingroup Ventures	CVC
2	VNG Group	Corp
2	Access Ventures	VC

ve. size of eal (\$Mn)
51.0
26.6
10.5
3.3
2.4



INDONESIA

The Next Global Consumer Upgrade Story

- The country's sheer size and growth effect on SEA should not be underestimated
- c. 50% of the population subscribed to internet economy
- Investment flow aided by improvements in governance and ease of doing business
- Indonesia's connectivity infrastructure is under pressure while its higher value manufacturing sector, lags behind

Demographics¹

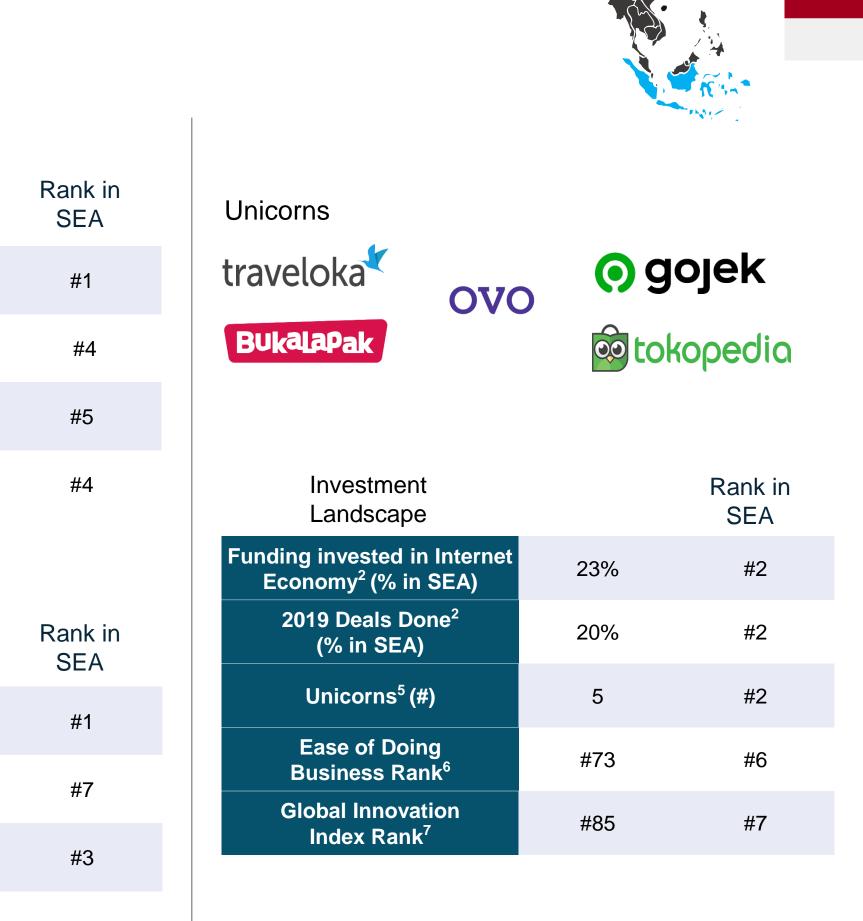
Population (#, % of SEA)	267.7Mn (42.4%)
Median Age	30 y/o
GDP per capita	\$3,900
GDP Growth	5.20%

Internet Economy

2019 Economy ² (% of SEA)	40% (40Bn)
Mobile Penetration ³	91%
Monthly Cost of Internet ⁴	\$19

Note: Internet economy covers online travel, online media, ride hailing and E-commerce. It does not include other sectors of internet economy that are in the early stages of development.

Source: (1) World Bank Open Data (2) Google and Temasek (2018) & Google, Temasek and Bain SEA E-conomy (2019) (3) We Are Social & Hootsuite (4) Expatistan (5) Abacus (6) Doing Business (2018) (7) Global Innovation Index





$\mathsf{INDONESIA}$

The Next Global Consumer Upgrade Story

Notable Local Investors (*NE)	Туре	Notable Local Investors (*NE)	Туре
East Ventures	VC	SMDV (Sinar Mas)	CVC
Alpha JWC Ventures	VC	MDI Ventures (Telkom Indonesia)	CVC
Convergence Ventures	VC	BRI Ventures (Bank Rakyat Indonesia)	CVC
Koru Partners	VC	Emtek Group	CVC
Venturra Capital	VC	Go Ventures (GoJek)	CVC
Kejora Ventures	VC	Mandiri Capital (Mandiri Capital Indonesia)	CVC
Indogen Capital	VC	Gunung Sewu Group	CVC
Ideosource	VC	Central Capital Ventura (Bank Central Asia)	CVC
Intudo Ventures	VC		
Skystar Capital	VC		
Endeavor	VC		

Note: *NE = Non-exhaustive and in no particular order, includes investors domiciled and/or invested in this jurisdiction





INDONESIA

Key Investment Deal Flow

- Remains focused on consumer-facing services
- E-commerce and FinTech the most popular vertical for investors

Ver



Verticals with the largest deal sizes	Ave. size of deal (\$Mn)
Logistics	2,700
E-commerce	1,110
FinTech	182
Platform	30
Enterprise Solution	19

rticals with the most number of deals	# of deals
E-commerce	10
FinTech	9
Enterprise Solution	3
HealthTech	3
Education	3



SINGAPORE

The New York of Southeast Asia

- · Forward thinking government and investmentfriendly. Favourable tax policies, transparency and rule of law
- A top five destination for capital, research and talent, alongside Silicon Valley, Israel, Berlin and Shenzhen.
- Exports new business models regionally and globally

Demographics¹

Population (#, % of SEA)	5.6Mn (0.9%)
Median Age	35 y/o
GDP per capita	\$64,600
GDP Growth	3.10%

Internet Economy

2019 Economy ² (% of SEA)	12% (12Bn)
Mobile Penetration ³	95%
Monthly Cost of Internet ⁴	\$30

Note: Internet economy covers online travel, online media, ride hailing and E-commerce. It does not include other sectors of internet economy that are in the early stages of development.

Source: (1) World Bank Open Data (2) Google and Temasek (2018) & Google, Temasek and Bain SEA E-conomy (2019) (3) We Are Social & Hootsuite (4) Expatistan (5) Doing Business (2018) (6) Global Innovation Index







SINGAPORE

Key Investment Deal Flow

Notable Regional Investors (*NE)	Туре	Notable Regional Investors (*NE)	Туре
Temasek Holdings ('Temasek Main', Pavilion Capital, Heliconia Capital, Vertex Ventures) & EDBI & GIC, etc.	Singapore Inc	Korea Investment Partners	Global VC
Openspace Ventures, Golden Gate Ventures, Jungle Ventures, Monk's Hill Ventures	VC	Mirae Asset Ventures JAFCO Asia	Global VC Global VC
Sequoia Capital ('Sequoia Main', Sequoia Surge)	VC	Rakuten Capital	Global VC
Insignia Ventures Partners	VC	SoftBank Ventures Asia (SoftBank Group)	CVC
Cento Ventures	VC	Eight Roads Ventures (Fidelity)	CVC
Wavemaker Partners (Draper Venture Network)	VC	Dymon Asia Ventures	CVC
Vickers Ventures Partners	VC	SPH Media Funds (SPH)	CVC
Quest Ventures	VC	UOB Ventures (UOB)	CVC
Qualgro Ventures Capital	VC	Apis Partners	Specialty VC/P
BEENEXT	VC	Kaizen Private Equity	Specialty VC/P
GSR Ventures	VC	ReefKnot (Temasek and Kuehne + Nagel JV)	Specialty VC/P
Gobi Partners	VC	SGInnovate	Specialty VC
Qiming Ventures Partners	Global VC	InnoVen Capital	VC Debt
Cathay Innovation	Global VC		

Note: *NE = Non-exhaustive and in no particular order, includes investors domiciled and/or invested in this jurisdiction





SINGAPORE

Key Investment Deal Flow

- Business friendly environment with a mature start-up ecosystem
- Smart Nation initiative delivering deep-tech innovations

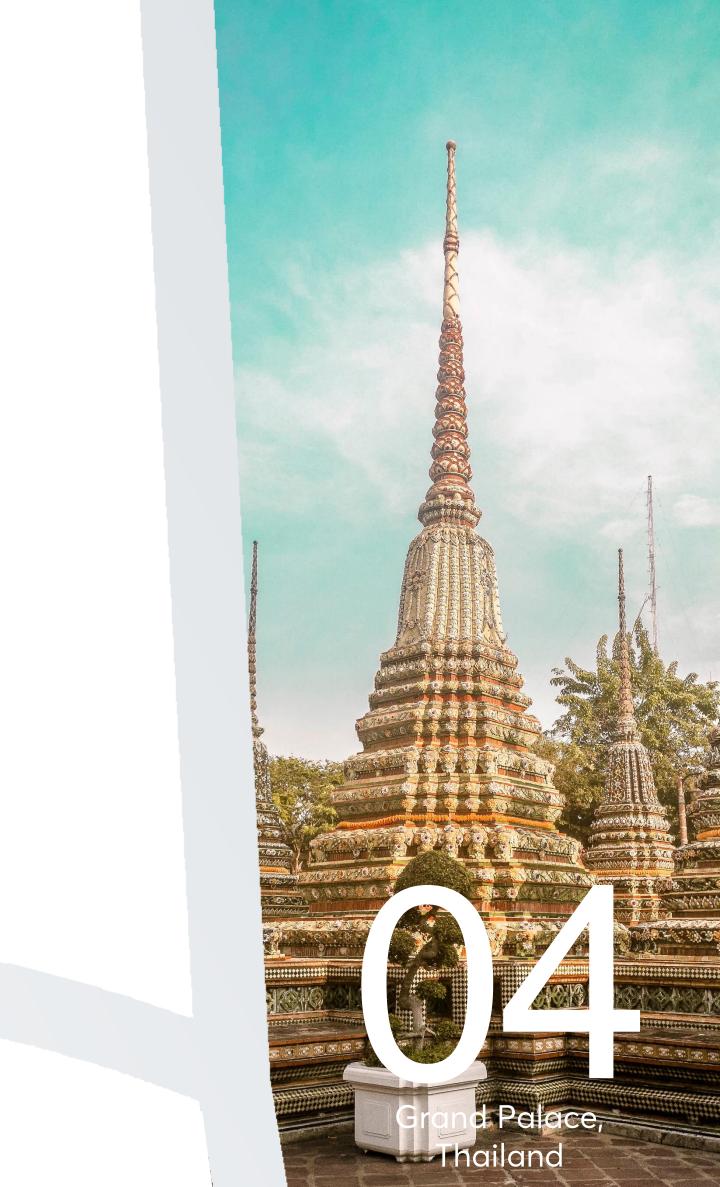


Verticals with the largest deal sizes	Ave. size of deal (\$Mn)
Automotive	1,300
InfoComm & Tech	303
Entertainment	214
E-commerce	150
Aerospace	50

Verticals with the most number of deals	# of deals
FinTech	21
Enterprise Solution	20
E-commerce	14
HealthTech	13
Big Data	12
Consumer	12

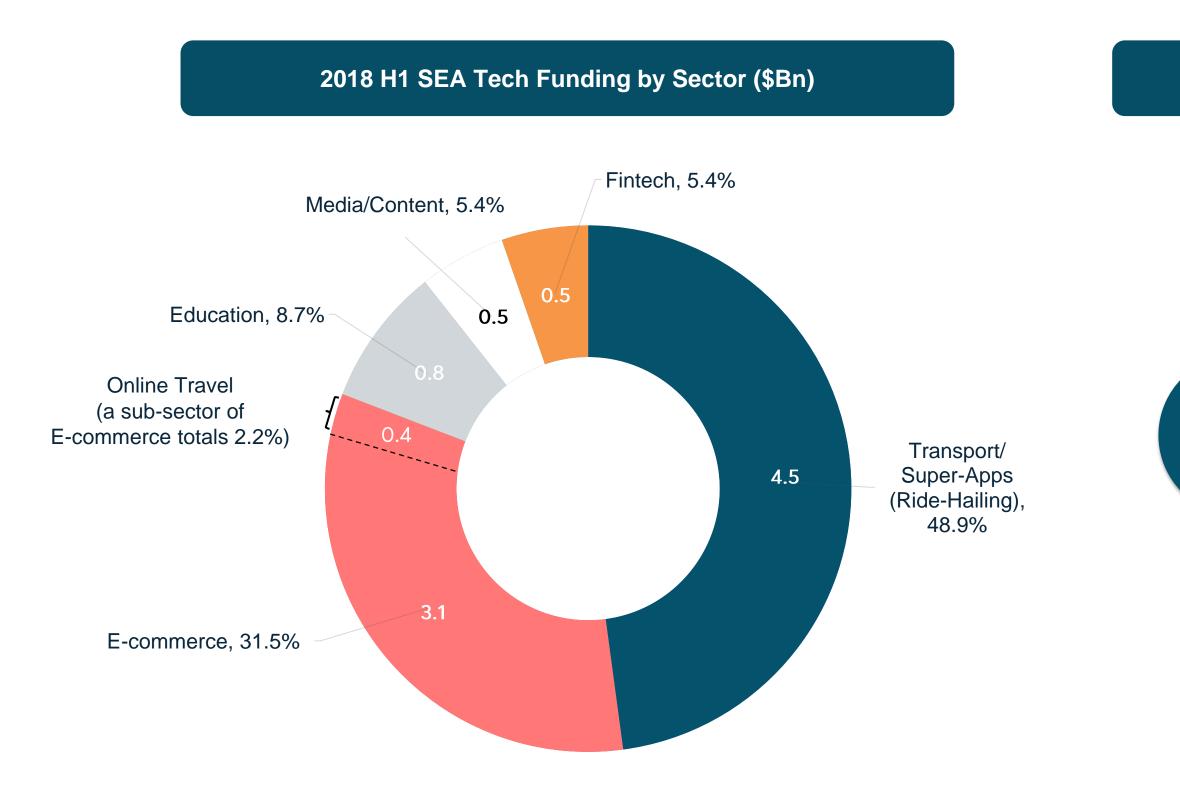


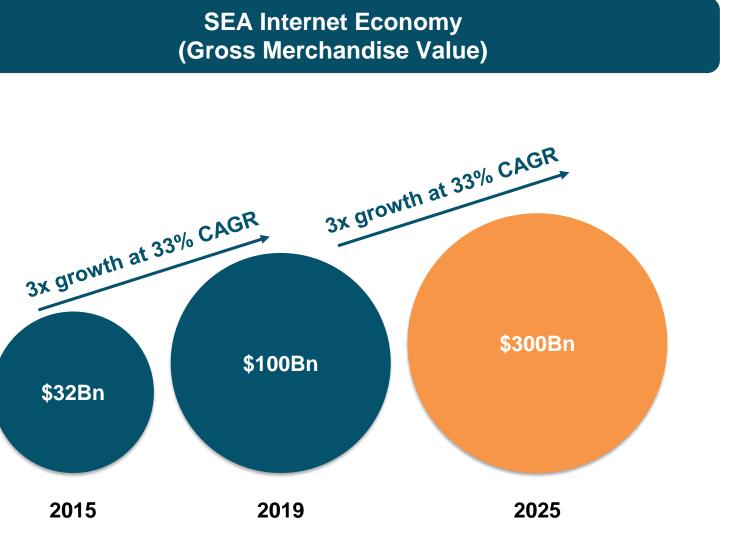
IV. SECTORS NRP House Views



SECTORS

Upcoming Sectors to Watch







NRP House Views | 50

TRANSPORT/SUPER-APPS (RIDE HAILING) **One Stop Shop**

Context

- Grab and GoJek have differentiated themselves from Tencent, building a Super-App around mobility.
- · In a stunning transaction, Grab vigorously defended its backyard negotiating Uber's exit from SEA leavi two major regional players competing geographically and offering-wise
- The World's first Autonomous Vehicle Bus was trialed in Singapore in 2016

Trends

- The pace of economic growth in SEA outstrips development of already constrained transportation infrastructul
- Start-ups offering mobility/smart city and E-commerce solutions such as B2B logistics platform participan NinjaVan and Deliveree, deliver efficiency and ease the burden

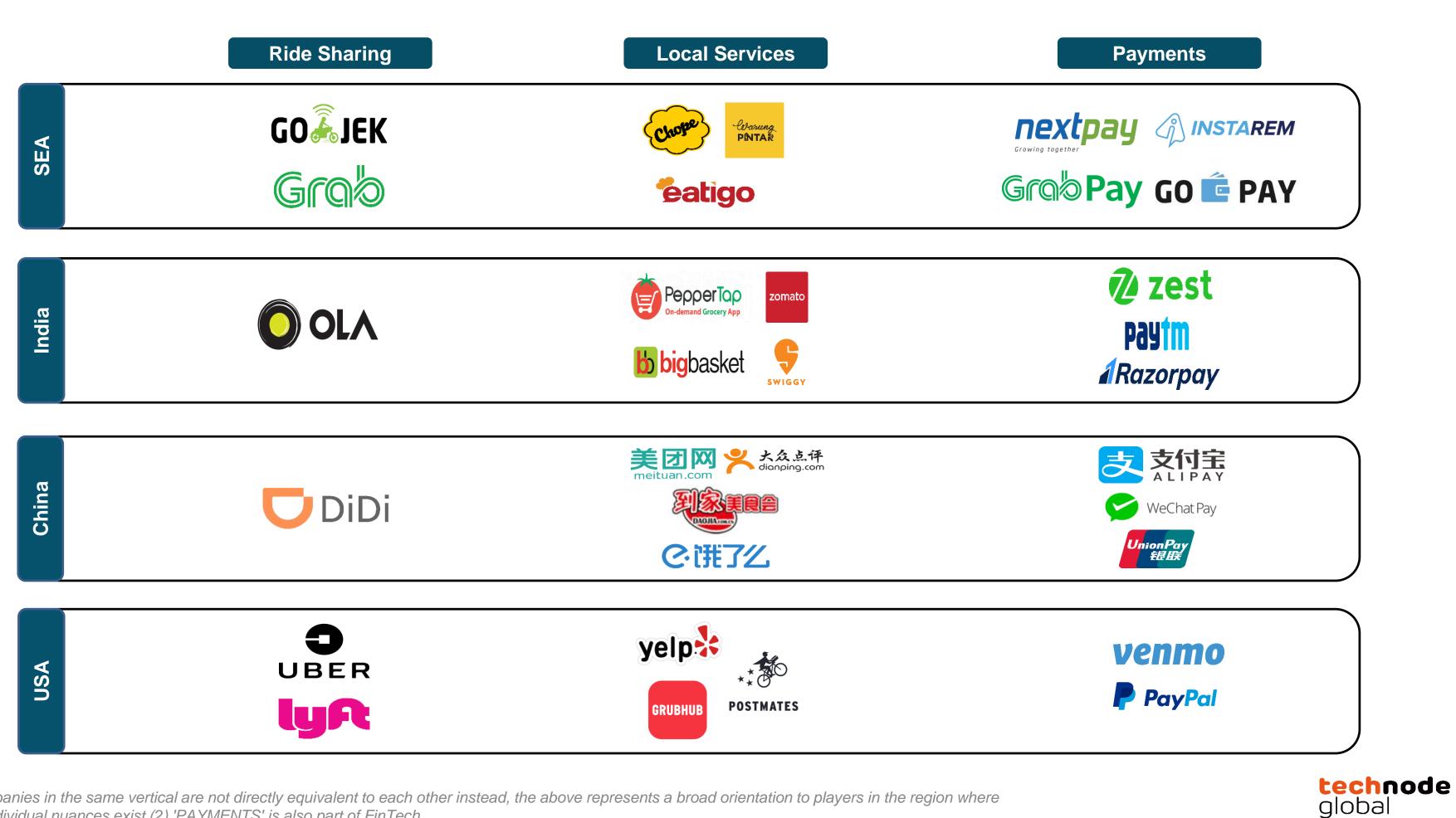
The Future

- A digital infrastructure built in parallel with 'traditional' transport infrastructure road, ports and trains
- Smart City, IoT and Mobility are not just buzz words but readily embraced by Government, Transport Authorities, Private Sector and other participants

	Notable Investors (*NE)	Relevant Investment
ving	Warburg Pincus	GoJek
	KKR	GoJek
	Tencent Holdings	GoJek
ture nts,	Northstar Group	GoJek
	Openspace Ventures	GoJek
	GGV Capital	Grab
	Tiger Global Management	Grab
	Vertex Ventures (Temasek)	Grab
	SoftBank Vision Fund	Grab
	Experian Ventures	Grab



TRANSPORT/SUPER-APPS (RIDE HAILING)



Notes: (1) Companies in the same vertical are not directly equivalent to each other instead, the above represents a broad orientation to players in the region where overlaps and individual nuances exist (2) 'PAYMENTS' is also part of FinTech Source: SCMP - China Internet Report

E-COMMERCE/TRAVEL

We're Still at the Beginning

Context

- Just like China and India before us, the lack of retail infrastructure, the internet and rising incomes have facilitated an E-commerce boom in SEA
- Initial focus on marketplaces, enablers and logistics. Companies such as aCommerce offer end-to-end brand enablement to navigate the complex landscape
- Indonesia alone has built four Unicorns in E-commerce Tokopedia, Bukalapak, Traveloka and GoJek alongside other regional E-commerce participants, Lazada (Alibaba Group) and Shopee (Sea Group)

Trends

- 'MarketPlace 2.0' driving B2B, vertical specifics, content and social are required to overcome '1.0' issues of high customer acquisition costs and low customer lifetime value e.g. JD.com investment into the Asian parent and Qiming investment into Mucho Indonesia
- New retail is the new norm, companies such as Fabelio pioneering this space
- Social commerce is in 'Retail' is a social activity

The Future

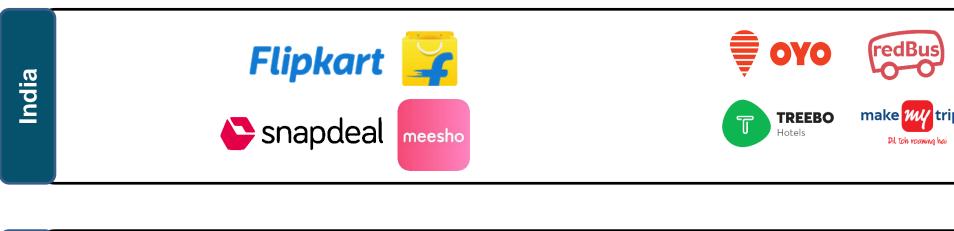
• E-commerce will be more integrated with content and financing to drive consumer attention, spend and loyalty e.g. Tokopedia's partnership with Funding Societies providing finance for merchants

Notable Investors (*NE)	Relevant Investment
Temasek Holdings	Lazada
Tengelmann Ventures	Lazada, Zalora
Qiming Ventures Partners	RedDoorz
Jungle Ventures	RedDoorz
InnoVen Capital	RedDoorz
Quest Ventures	Carro
Insignia Ventures	Carro
B Capital Group	Carro
East Ventures/EV Growth	Tokopedia
Beenos Partners	Tokopedia



E-COMMERCE/TRAVEL







Notes: (1) Companies in the same vertical are not directly equivalent to each other instead, the above represents a broad orientation to region where overlaps and individual nuances exist (2) 'PAYMENTS' is also part of FinTech Source: SCMP - China Internet Report

	Payments	
	Grab Pay GO E PAY	
	🖉 zest	
rip	Paytm ARazorpay	
O MART		
	WeChat Pay Union Pay を思想来	
	venmo	
	PayPal stripe	
o players in the		global

FINTECH

Traditional Players are Being Challenged by Well-Capitalised Super-App/Mobility Players

Context

- 27% of people in SEA have a bank account. With c. 438 million unbanked individuals, the **unbanked opportunity is immense**
- A cash economy is prevalent in SEA resulting in KYC and AML complications with the increased risk of fraud

Trends

- **Powered by data and AI, SEA** is embracing a cashless society. Traditional financial services (banking, payments, lending and insurance) are provided to the unbanked for the first time
- Traditional players need to clearly define their FinTech strategy or they will lose:
 - improve digital distribution
 - > use digital to create new product
 - become a financial services platform and/or work alongside other players to create financial and 'other' services bundled offerings
- Governments are embracing FinTech, continuously reviewing regulatory sandboxes, open bank initiatives, newer licensing regimes and pure digital bank licenses

The Future

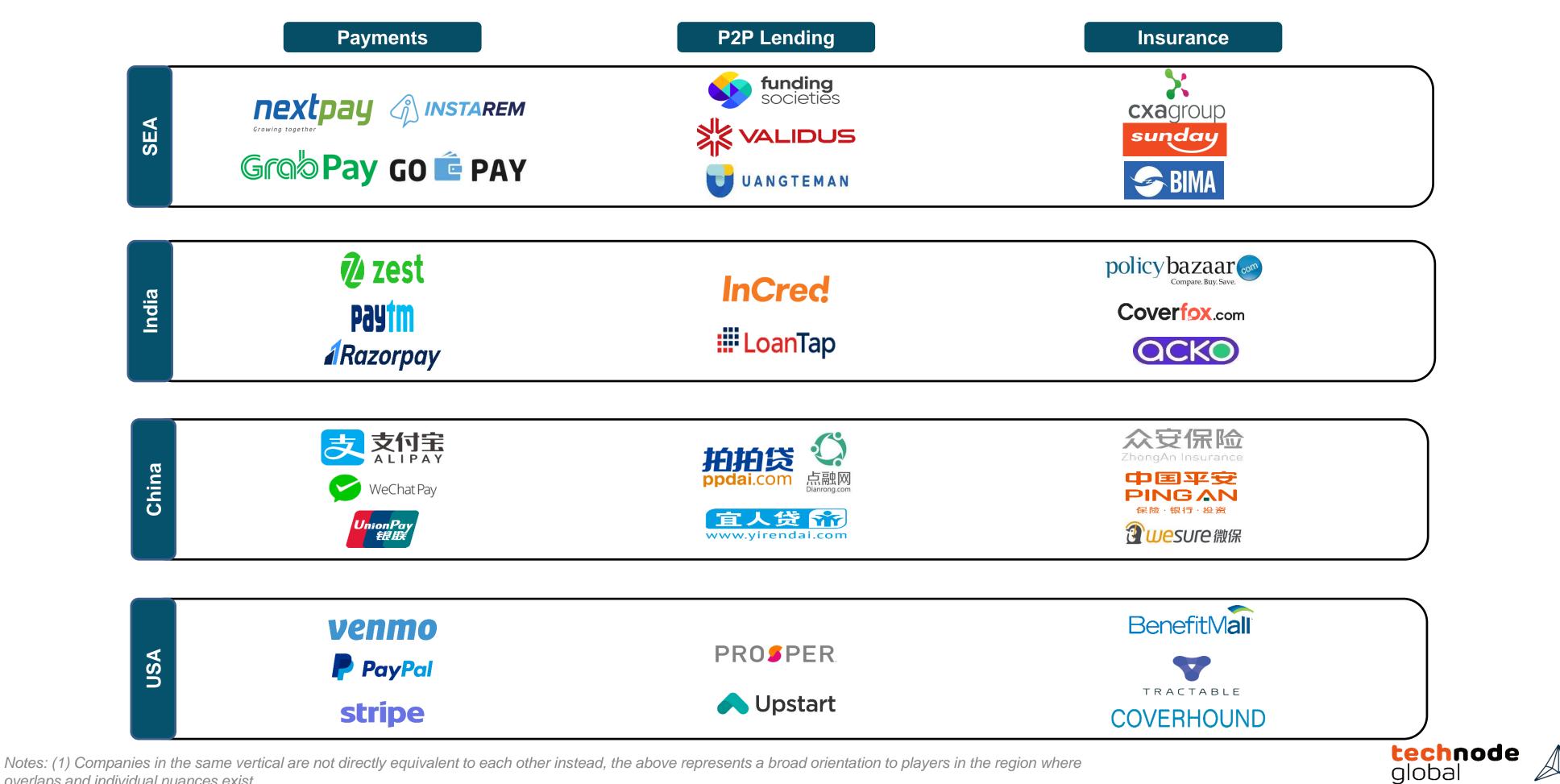
- Payments is a competitive space but loss making. If used as a gateway to other services it will create stakeholder stickiness
- Local champions are dominant. Regional players to come. Super-App/mobility players are poised to have dominant positions

Notable Investors (*NE)	Relevant Investment
SBI Ven Capital	NextPay
FMO	NextPay
Sequoia Capital	Funding Societies
Qualgro Venture Capital	Funding Societies
Draper Associates	UangTeman
Tiger Global Management	PayFazz
MDI Ventures	PayFazz
Vertex Ventures (Temasek)	Validus
B Capital Group	CXA Group
Openspace Ventures	CXA Group



NRP House Views | 55

FINTECH



overlaps and individual nuances exist Source: SCMP - China Internet Report

MEDIA/CONTENT

Digital has Overtaken Traditional Print

Context

- The majority of Southeast Asians are 'mobile first', joining the internet via mobile smart phones, just as social platforms became more readily available and squeezed consumer attention for online media
- Digital print is shared with social, E-commerce, mobility and video for audience attention where content has not seen high monetisation in and of itself

Trends

• Paying for content is on the rise, particularly localised content. China has a rapidly growing paid content market. Other regional players as such OneChampionship and iFlix are monetising well

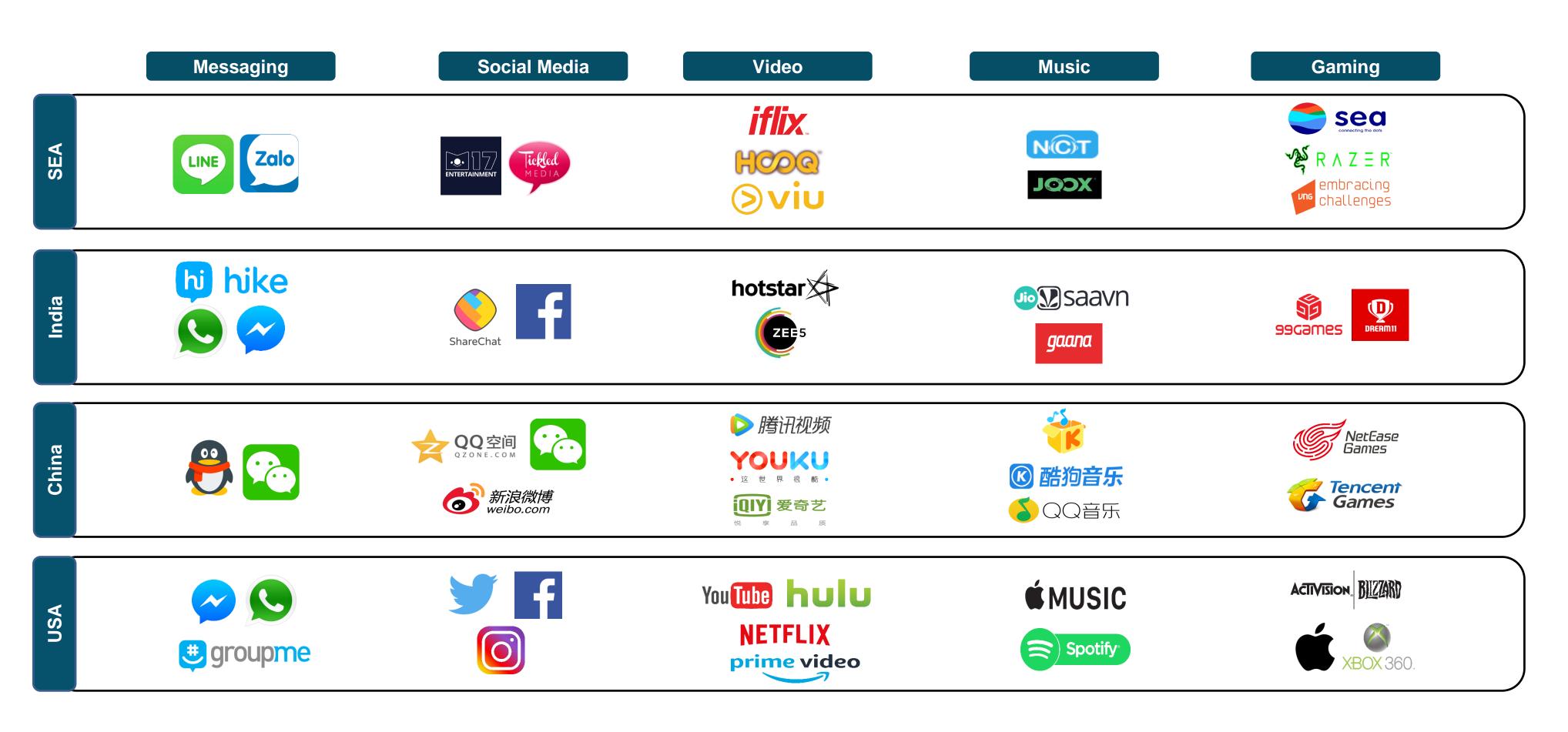
The Future

• The lack of access to physical 'sporting amenities', hot weather and high engagement on **digital increases the appeal of e-sports** which will continue to grow and capture consumer attention. **Razer has been developing a hardware, software and payments connected ecosystem around the gaming community and its needs**

Notable Investors (*NE)	Relevant Investment
Walden International	TechInAsia
Sequoia Capital	OneChampionship
'Temasek Main' & Heliconia (Temasek)	OneChampionship
Fosun RZ Capital	theAsianparent (Tickled Media)
JD.com	theAsianparent (Tickled Media)
Vertex Ventures	theAsianparent (Tickled Media)
Korea Investment Partners (KIP)	GushCloud
Hearst Communication	iFlix
VNG Group	Zalo
Pavilion Capital (Temasek)	M17 Entertainment



MEDIA/CONTENT



Notes: (1) Companies in the same vertical are not directly equivalent to each other instead, the above represents a broad orientation to players in the region where overlaps and individual nuances exist Source: SCMP - China Internet Report





EDTECH

Building a Smart Region via a Super-App

Context

- Mobile First has enabled platforms to deliver content and connect teachers, students and stakeholders. RuangGuru, Indonesia's largest digital education provider is providing solutions to students, schools partners and the government
- Digital has released pent-up demand in accessible education due to the lack of physical education options ar more cost-effective solutions

Trends

- Spend remains low but growing as companies use gamification and clever Big Data tools to improve engagement (Monthly Active Users/Average Order Value) e.g. Topica from Vietnam which pioneered the Vietnamese landscape
- Within SEA, only Singapore's universities rank in the top 300 globally. Vietnam, on the other hand, is the sixt largest sender of foreign students to USA universities

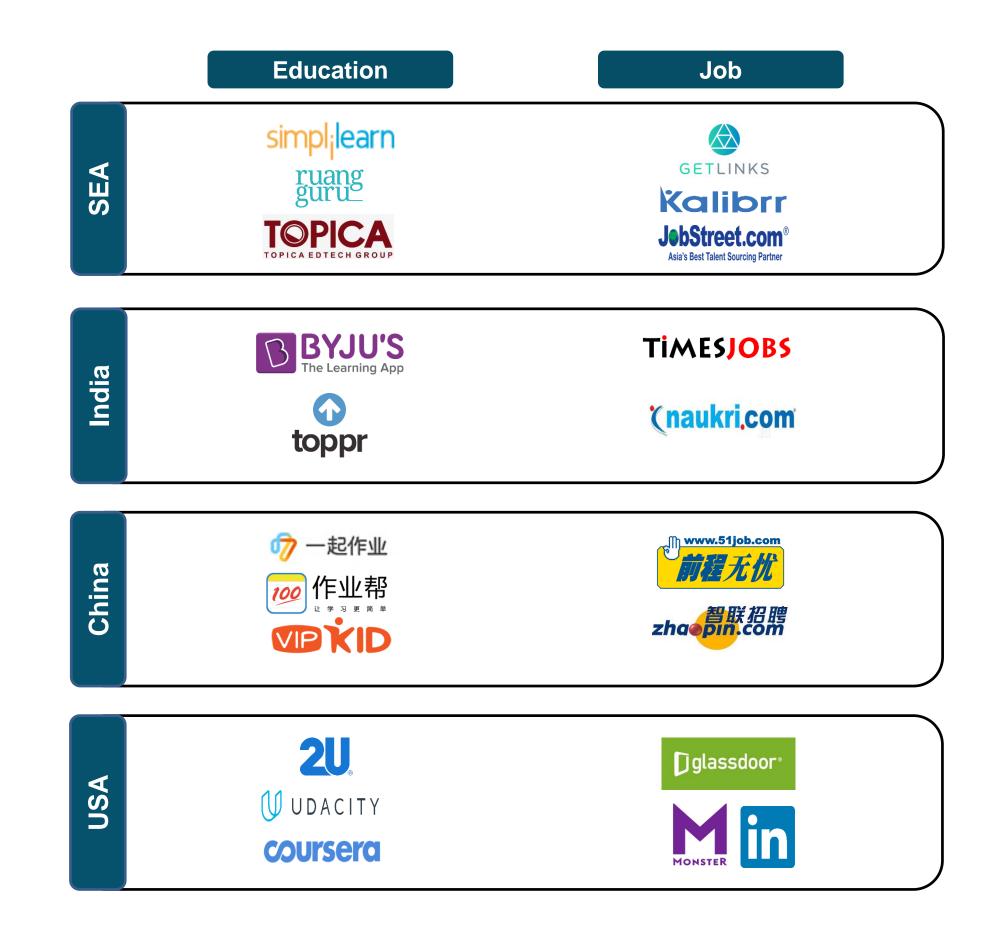
The Future

- The Super-App of education, employment and finance is coming providing a one-stop shop for 'work life'. GetLinks from Thailand is a 'placement platform' rolling out training and looking into financing as a complete learner/work focused 'career partner' to engineers
- Increasing wages and competition is driving all major SEA governments to focus on productivity. The 'New Retail' of education is coming blending offline and online e.g. Yola (Vietnam) featuring mandatory on-premi learning to drive physical social connections and engagement
- Autonomy and Al/Robots are changing the nature of work requiring reskilling

	Notable Investors (*NE)	Relevant Investment
ſS	Warburg Pincus	Topica
and	Openspace Ventures	Topica
	Venturra	RuangGuru
	UOB Ventures	RuangGuru
kth	East Ventures	RuangGuru
	Kickstart Ventures	Kalibrr
	Wavemaker Partners	Kalibrr
)	Kaizen Private Equity	YOLA
nise	Kaizen Private Equity	Toppr
	Alibaba Entrepreneurs Fund	GetLinks



EDTECH



Notes: (1) Companies in the same vertical are not directly equivalent to each other instead, the above represents a broad orientation to players in the region where overlaps and individual nuances exist Source: SCMP - China Internet Report



NRP House Views | 60

WHAT MORE?

We Couldn't Cover Everything Here but Look Out For....

- More and more Blockchain. No longer an application looking for a solution, companies such as Ascent are combing IoT and Blockchain to transform supply chain finance and insurance
- Manufacturing 4.0. The USA and China trade war makes SEA a beneficiary as companies diversify the risk of China operations into Vietnam, Malaysia, Singapore and Indonesia
- IoT and 5G. End-to-end manufacturing and supply chain has increasing demands in terms of flexibility, performance and cost. IoT and 5G technologies are required to digitise every aspect of this chain
- And we can simply debate for hours on what we haven't included here such as Tourism, Health, Logistics, Supply Chain or AgriTech

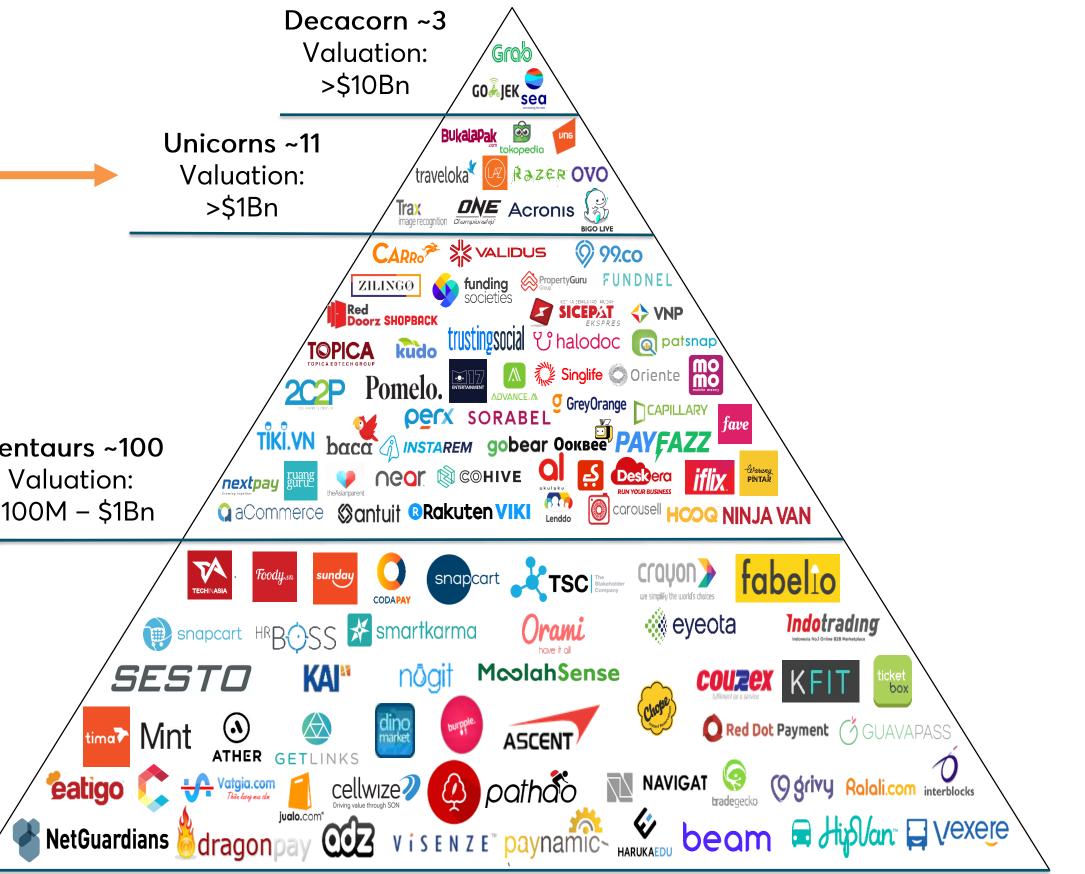


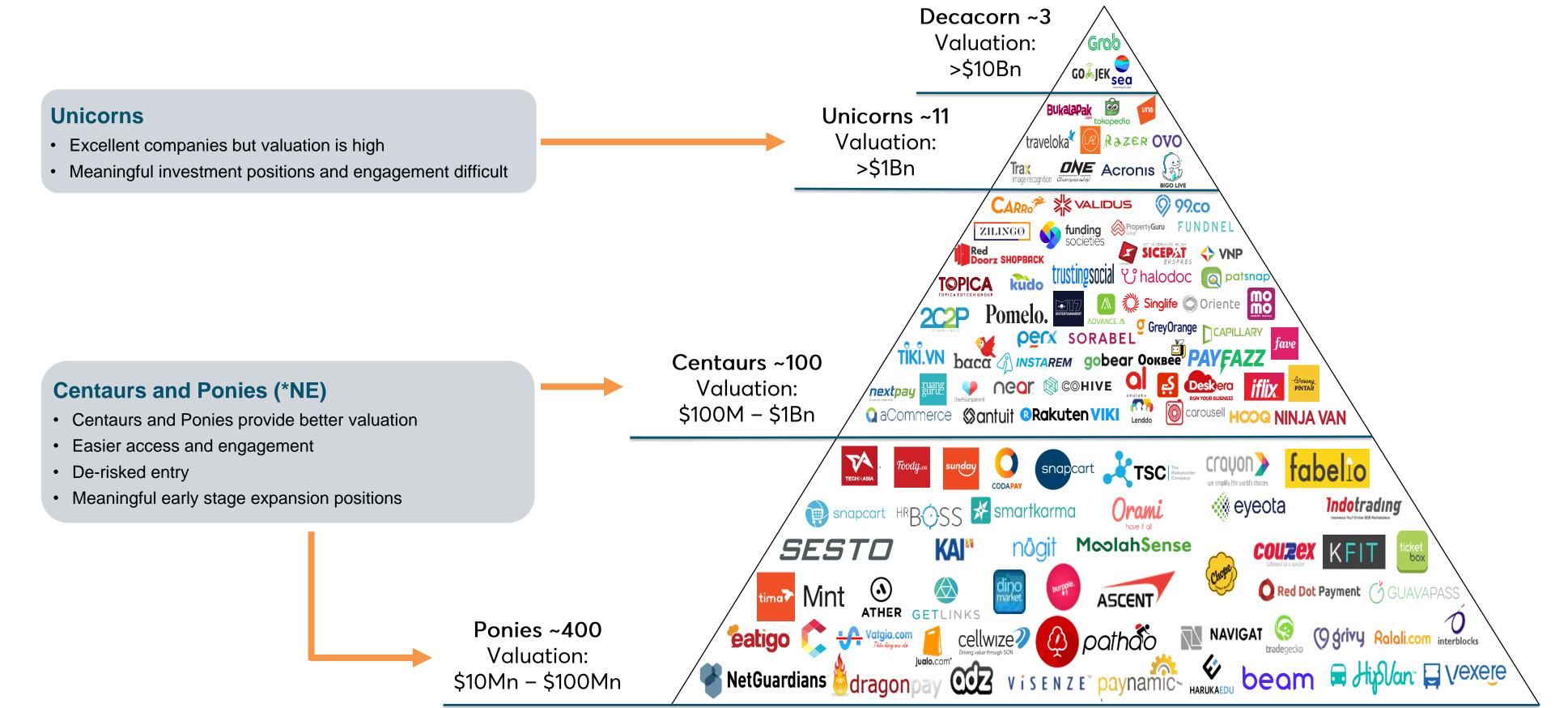
NRP House Views | 61

V. MEET THE COMPANIES NRP's Top Private Company Watchlist



THESE ARE THE WONDERFUL HEROES







Company Watchlist | 63

NRP'S TOP PRIVATE COMPANY WATCHLIST Keep These Future Unicorns on Your Radar

The following list summarises companies we believe require special attention. All have a unique selling proposition and are market leaders with a strong value offering

No.	Country	Industry	Category	Name	Description	Key Investors
1	Thailand	E-commerce	Centaurs	aCommerce	E-commerce end-to-end enablement company (including marketing and logistics) – Cainiao/Baozun for SEA	döcomo KKR EMERALD MEDIA
2	Thailand	HR Tech	Ponies	GETLINKS	Alibaba-backed employment platform. Leader in Thailand, blue chip clients, explosive growth	Alibaba Entrepreneurs Fund 阿里巴巴創業者基金 GOBI PARTNERS
3	Vietnam	Payments/FinTech Platform	Centaurs	nextpay Growing together	No.1 merchant side payment-led FinTech platform – 'Stripe/Square' of Vietnam	GHL Life. SREDA wrture captal
4	Vietnam	Education Tech	Centaurs	TOPICA EDTECH GROUP	Multinational educational technology company providing online education solutions	IDG Ventures northstar
5	Indonesia	Proptech – Co- working	Centaurs	I © HIVE	Indonesia's largest co-working space e.g. WeWork	SoftBank Ventures Asia
6	Indonesia	E-commerce/ New Retail/Furniture	Ponies	fabelio	Indonesia's new retail platform for furniture e.g. Houzz	KORU 500



Company Watchlist | 64

NRP'S TOP PRIVATE COMPANY WATCHLIST

No.	Country	Industry	Category	Name	Description	Key Investors
7	Indonesia	Education Tech	Centaurs	ruang guru	Technology company in Indonesia focusing on education-based services	VENTURRA Cast Centures
8	Indonesia	E-commerce	Centaurs	CARRo	Automotive marketplace offering a full-stack service for all aspects of car ownership	INSIGNIA VENTURES PARTNERS SoftBank Ventures Asia
9	Singapore	E-commerce/ Fashion and Beauty	Centaurs	ZILINGØ	Commerce platform making the fashion and beauty supply chain more efficient through technology	SEQUOIA C KORU TEMASEK
10	Singapore	Fintech	Centaurs	funding societies funding societies	SEA No.1 SME P2P financing platform	SoftBank Ventures Korea SEQUOIA 些
11	Singapore	Insurance Tech	Centaurs	cxa group	Asia's first employee benefits market creator	
12	Singapore	Fintech	Centaurs	FUNDNEL	No.1 private investment platform	ThirdRock Dymon Asia
13	Singapore	Robotics, AMR	Ponies	SESTO ^M	The only independently owned autonomous mobile robotics company that is tier one grade and deployed globally	innov8 HELICONIA
						global Company Watchlist

NRP'S TOP PRIVATE COMPANY WATCHLIST

No.	Country	Industry	Category	Name	Description
14	Singapore	Big Data/AI	Ponies	TSC TSC Company	21 st century Bloomberg for management
15	Singapore	Big Data/Al	Centaurs	o patsnap	Leading provider of resea specially in intellectual pro
16	Singapore	Consumer Tech/Al	Centaurs	theAsianparent	Digital publishing house f platforms for Asian wome
17	Singapore	Consumer Tech/AI	Centaurs	99.co	A complete property trans buyers, sellers and prope fast, reliable and efficient and tools to help consum decisions.
18	Singapore	MedTech	Ponies	Oncoshot	A platform to match Onco using Big Data, AI and te availability of suitable trea effective manner
19	Singapore	IoT + Blockchain Platform Supply Chain/Smart City Solutions	Ponies	ASCENT	Only IoT and Blockchain- solutions platform in SEA

Key Investors

for Big Data/AI powered Public Relations



earch and development (R&D) analytics, property (IP) vertical





focusing on content and community nen

insaction platform that connects renters, perty agents; providing a comprehensive, nt property marketplace, as well as data mers and agents make the best property

cology clinical trials with eligible patients technology in order to increase the eatment options in the most cost and time

n-enabled supply chain and smart city A with \$10Mn+ revenues

FOSUN 复星 JD.^{京东} **マ**vertex

Cast entures Eduardo Saverin SEQUOIA 些

Funded by Angel Investors

TEMASEK/ **HELICONIA**



Company Watchlist | 66

VI. RISKS AND REALITIES



RISKS AND REALITIES

Moderating the Bull Case with Some Lessons from the Past

- We are convinced that **SEA is the world's most compelling digital hotspot**
- However, the region isn't immune from the global economy:
 - > SEA went through a major meltdown in the late 1990s. It will go through another one in the future
 - > Unorthodox global monetary policy is fuelling a bubble that will be followed by a day of reckoning
 - > There could be any number of triggers to the next financial crisis, from the trade war to geopolitical events
 - > We won't know until it happens
 - > When the world sneezes, SEA will catch a cold
 - > The world is so interconnected that the near failure of The We Company, the failure of prominent tech IPOs and write downs in the Vision Fund etc. will have an inevitable impact on funding and pricing across the region
- SEA has historically demonstrated its ability to recover very quickly
 - > The combination of cheap internet, tech-savvy consumers and foreign investment into excellent homegrown technologies will see SEA come out of the other side faster than the rest of the world
- Unicorn valuations are a market construct and a marker of progress, but not an absolute indicator of value
 - > Real value is achieved not by upward revaluations, but by exits by trade buyers and capital markets transactions
 - \succ When the music stops, unicorns without cash flows will come down to earth quickly



Risks and Realities | 68

VII. CONCLUSION



CONCLUSION

What does this all Mean?

- SEA is the next technology driven economic opportunity after China and India. The original BATs companies have led the way and a wider range of participants exist to further expand the ecosystem
- Many opportunities are investible right now for a modest amount across FinTech, E-commerce, BigData/AI, IoT, Blockchain, Supply Chain, and Smart City verticals
- Countries within SEA offer unique advantages and enjoy increasing growth, overseas cooperation and investment attention
- The time is NOW for companies/investors to participate and benefit from the most risk-adjusted promising technology-driven economic opportunities
- Make sure you do so with an eye to recent history, an eye to the global economy and with an understanding of the risks



Conclusion | 70

CONTINUE THE CONVERSATION

- Find us next at:
 - > Singapore FinTech Festival x SWITCH 2019 (Singapore, 13 November 2019); and
 - Nexticorn (Bali, 14-15 November 2019)
- Visit <u>www.northridgepartners.com</u> or follow us on LinkedIn
- Alternatively, connect directly with:
 - > Chris Tran, Head of Asia at ct@northridgepartners.com

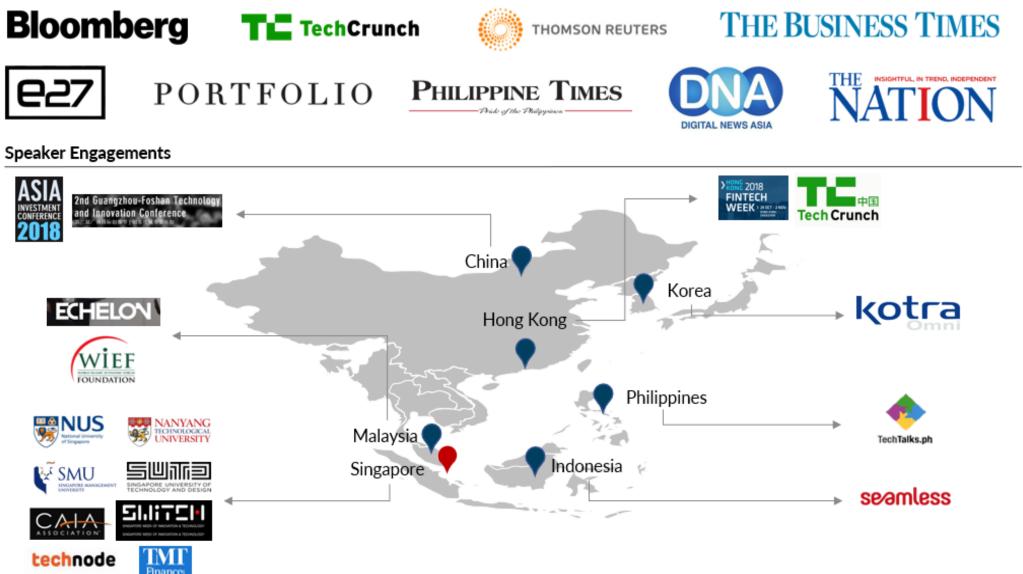


> Christin Burns, Head of Australia and New Zealand at cb@northridgepartners.com

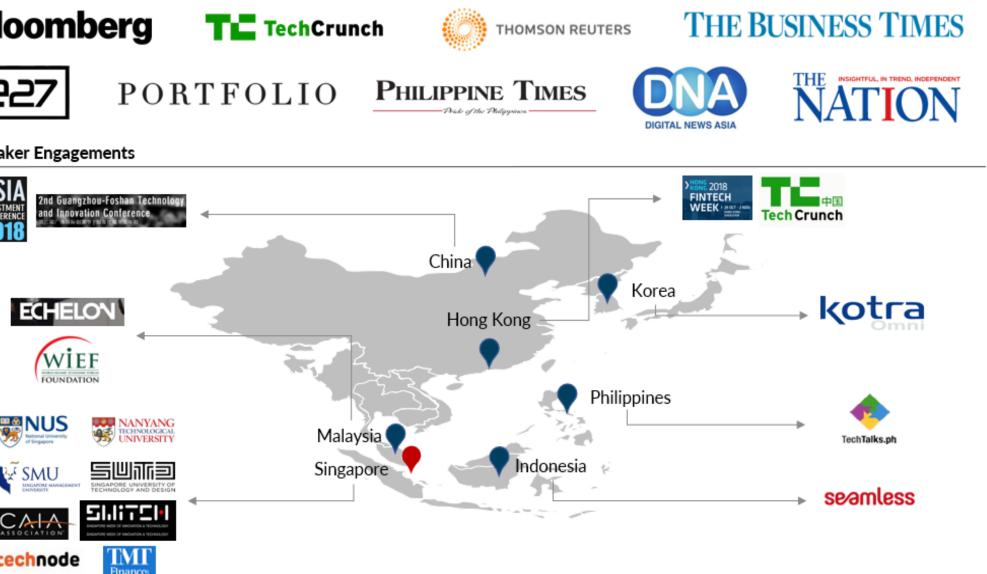


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Media	Coverage











Conclusion | 71

THANK YOU



NORTH RIDGE PARTNERS



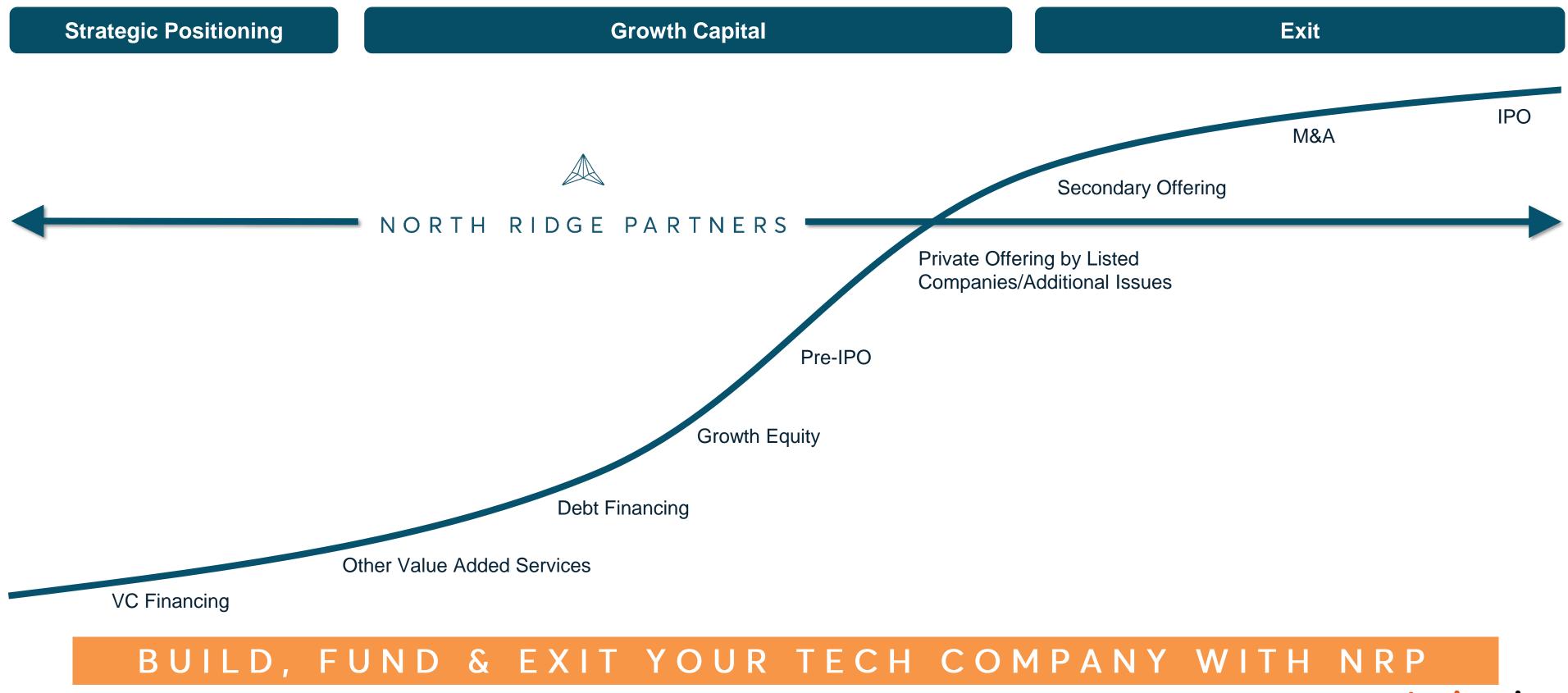
Conclusion | 72

APPENDICES A. About NRP



LIFE CYCLE SERVICE FOR ENTREPRENEURS

NRP Provides a Comprehensive Investment Banking Platform





About North Ridge Partners | 74

HOW READY IS YOUR COMPANY? Take our Test

- Two of the most important events in your company's life will be its funding rounds and exit
- NRP has developed a unique and cost-effective process to guide your company through these events with maximum success
- The starting point is NRP's Transaction-Ready Diagnostic, an online tool that scores your company's readiness for raising funds or selling
- Most companies think they're ready. In reality, most aren't.
- After we score your business, we run a series of workshops to get you Transaction Ready, which can be the difference between a great outcome and no outcome
- Click here to see how ready your company is

TRANSACTION-READY DIAGNOSTIC

Score

WORKSHOPS

- 1. Stakeholder Alignment
- 2. Strategy & Operations
- 3. Modelling & Valuation
- 4. Transaction Process
- 5. Governance & Reporting
- 6. Collateral & Marketing

TRANSACTION READY



Company Readiness | 75

APPENDICES B. About TechNode Global



TECHNODE GLOBAL

Starting from China, Connecting Asia with the World

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The leading pan-Asia tech summit, connecting China to SEA markets with **ORIGIN** Conference



TN Global FA

Bridging global startups to fundraise from China and Asia with leading VCs from China



TN Global Inno

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TN Global Media (coming soon)

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APPENDICES

C. Acknowledgements, Methodology & Disclaimer



COUNTRY COMPARISON

Demographics ¹	Malaysia	Brunei	Myanmar	Thailand	Philippines	Vietnam	Indonesia	Singapore
Population (#, % of SEA)	31.5Mn (5.0%)	0.4Mn (0.1%)	53.7Mn (8.5%)	69.4Mn (11.0%)	106.7Mn (16.9%)	95.5Mn (15.2%)	267.7Mn (42.4%)	5.6Mn (0.9%)
Median Age	29 y/o	30 y/o	28 y/o	38 y/o	24 y/o	31 y/o	30 y/o	35 y/o
GDP per Capita	\$11,200	\$31,600	\$1,300	\$7,300	\$3,100	\$2,600	\$3,900	\$64,600
GDP Growth	4.70%	0.10%	6.20%	4.10%	6.20%	7.10%	5.20%	3.10%

Internet Economy	Malaysia	Brunei	Myanmar	Thailand	Philippines	Vietnam	Indonesia	Singapore
2019 Economy ² (% of SEA)	11% (11Bn)	-	-	16% (16Bn)	7% (7Bn)	12% (12Bn)	40% (40Bn)	12% (12Bn)
Mobile Penetration ³	96%	NA	NA	98%	89%	97%	91%	95%
Monthly Cost of Internet ⁴	\$25	\$33	\$28	\$15	\$31	\$10	\$19	\$30

Note: Internet economy covers online travel, online media, ride hailing and E-commerce. It does not include other sectors of internet economy that are in the early stages of development. NA = Not available.

Source: (1) World Bank Open Data (2) Google and Temasek (2018) & Google, Temasek and Bain SEA E-conomy (2019) (3) We Are Social & Hootsuite (4) Expatistan





Country Comparison | 79

COUNTRY COMPARISON

Investment Landscape	Malaysia	Brunei	Myanmar	Thailand	Philippines	Vietnam	Indonesia	Singapore
Funds invested in Internet Economy (% in SEA) ¹	2%	-	-	1%	2%	3%	23%	69%
2019 Deals Done ¹ (% in SEA)	10%	-	-	6%	5%	9%	20%	50%
Unicorns (#)	-	-	-	-	-	1	5	8
Ease of Doing Business Rank ²	#15	#55	#171	#27	#124	#69	#73	#2
Global Innovation Index Rank ³	#35	#71	-	#43	#54	#42	#85	#8

Note: Internet economy covers online travel, online media, ride hailing and E-commerce. It does not include other sectors of internet economy that are in the early stages of development.

Source: (1) Google and Temasek (2018) & Google, Temasek and Bain SEA E-conomy (2019) (2) Doing Business (2018) (3) Global Innovation Index





Country Comparison | 80

METHODOLOGY

This report is to be read in conjunction with the acknowledgements and disclaimer.

We are privileged to stand on the shoulders of pioneers in providing information on Southeast Asian Technology Trends, a list of which is under the acknowledgements. Our body of work reflects our opinion based on inhouse analysis, interviews with ecosystem participants and third-party sources.

Due to the diversity of data sources, it has been difficult to consistently categorise data sets. We have tried to provide more classification consistency to the greatest extent possible.

We have worked hard to validate information, recognise sources by reference, citation and provide full and due credit, however if there are any errors or omissions please provide us the opportunity to rectify.



Methodology | 81

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