e-Conomy SEA 2018
Southeast Asia’s internet economy hits an inflection point

Google  TEMASEK
3rd edition of e-Conomy SEA by Google & Temasek, our research on Southeast Asia’s internet economy
e-Conomy SEA research methodology

- Google analysis
- Temasek analysis
- Third party sources
- Expert interviews
Research covers four sectors of the internet economy
Four new sub-sectors added in e-Conomy SEA 2018

- **e-Commerce**
  - Marketplaces (SMB2C)
  - Malls (B2C)
  - "Brand.Com"

- **Online Media**
  - Online Advertising
  - Online Gaming
  - Video on Demand
  - Music on Demand

- **Ride Hailing**
  - Online Transport
  - Online Food Delivery

- **Online Travel**
  - Online Flights
  - Online Hotels
  - Online Vacation Rentals
Sectors of the internet economy not yet covered due to lack of reliable data or nascent adoption

- Social Commerce
- Financial Services
- Healthcare
- Education
e-Conomy SEA 2018
Headlines
350M mobile-first internet users in Southeast Asia; Southeast Asians most engaged mobile users globally

SEA is mobile-first - more than 90% of users connect to the internet via mobile

Indonesia, Malaysia, Philippines, Thailand among the Top 10 most engaged countries on mobile internet globally¹

Source (1): Hootsuite “Digital in 2018”.
Southeast Asia’s internet economy reaches $72B in 2018

$50B
GMV in 2017

$72B
GMV in 2018

Note: GMV: Gross Merchandise Value.
Southeast Asia’s internet economy hits an inflection point

2015-2017
User acquisition
National players
Funding constraints
Ecosystem challenges

2018 and beyond
Lifetime Value (LTV)
Regional leaders
Funding surge
Ecosystem maturity
Internet economy on track to exceed $240B by 2025, $40B more than estimated in our previous research

$72B
GMV in 2018

$240B
GMV in 2025

Note: GMV: Gross Merchandise Value.
Booming e-Commerce sector, Online Media accelerating

SEA internet economy market size (GMV, $B)

- **2015**
  - Ride Hailing: 3B
  - Online Media: 4B
  - Online Travel: 19B
  - E-Commerce: 5B
  - Total: 32B

- **2018**
  - Ride Hailing: 8B
  - Online Media: 11B
  - Online Travel: 30B
  - E-Commerce: 23B
  - Total: 72B

- **2025**
  - Ride Hailing: 29B
  - Online Media: 31B
  - Online Travel: 78B
  - E-Commerce: 102B
  - Total: 240B

Note: GMV: Gross Merchandise Value; CAGR: Compounded Annual Growth Rate.
Indonesia largest ($27B) and fastest growing (49% CAGR), will be a $100B internet economy by 2025

Note: GMV: Gross Merchandise Value; CAGR: Compounded Annual Growth Rate.
Internet economy reaches 2.8% of GDP in 2018, will be 8% by 2025, approaching developed markets

Note: GMV: Gross Merchandise Value; GDP: Gross Domestic Product.
Source: World Bank (GDP); US Bureau of Economic Analysis (USA).
Internet economy’s contribution to GDP higher in Singapore and Vietnam, most headroom in Philippines

**Internet economy GMV as % of GDP (2018)**

- **SEA**: 2.8%
- **Indonesia**: 2.9%
- **Malaysia**: 2.7%
- **Philippines**: 1.6%
- **Singapore**: 3.2%
- **Thailand**: 2.7%
- **Vietnam**: 4.0%

Note: GMV: Gross Merchandise Value; GDP: Gross Domestic Product.
Source: World Bank (GDP).
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Key sector trends
e-Commerce: doubles up year on year to $23B in 2018, will be a $100B+ business by 2025

Note: GMV: Gross Merchandise Value; CAGR: Compounded Annual Growth Rate.
e-Commerce: Indonesia market hits $12B at 94% CAGR, accounts for more than $1 in $2 spent in the region.
e-Commerce: sector boom propelled by top 3 players

E-Commerce players growth (GMV, $B)

- Top 3 Players: 7x growth from 2015 to 2018
- Next 7 Players: 2x growth from 2015 to 2018
e-Commerce: inflection drivers

2015-2017
User acquisition
Consumer promotions
Marketing investments
Logistics networks
VC funding

2018 and beyond
Country leadership
Category leadership
Segment leadership
Lazada, Shopee, Tokopedia
Monetization
Online Media: tops $11B in 2018 driven by Ads, Gaming; emerging Subscription Music & Video on Demand

SEA Online Media market size (GMV, $B)

- 2015:
  - Subscription Music & Video: 0.1B
  - Online Gaming: 1.6B
  - Online Advertising: 2.1B
  - Total: 3.8B

- 2018:
  - Subscription Music & Video: 0.4B
  - Online Gaming: 3.8B
  - Online Advertising: 7.2B
  - Total: 11.4B

- 2025:
  - Subscription Music & Video: 2B
  - Online Gaming: 10B
  - Online Advertising: 20B
  - Total: 32B

Note: GMV: Gross Merchandise Value; CAGR: Compounded Annual Growth Rate.
Online Media: Indonesia, Thailand, Vietnam all over $2B

SEA Online Media market size (GMV, $B)

- Indonesia: 2015 - 0.6B, 2018 - 2.7B, 2025 - 8B, CAGR - 66%
- Malaysia: 2015 - 0.6B, 2018 - 1.6B, 2025 - 3B, CAGR - 35%
- Philippines: 2015 - 0.4B, 2018 - 1.3B, 2025 - 4B, CAGR - 45%
- Singapore: 2015 - 0.8B, 2018 - 1.3B, 2025 - 3B, CAGR - 17%
- Thailand: 2015 - 0.8B, 2018 - 2.4B, 2025 - 7B, CAGR - 44%
- Vietnam: 2015 - 0.6B, 2018 - 2.2B, 2025 - 6B, CAGR - 57%

Note: GMV: Gross Merchandise Value; CAGR: Compounded Annual Growth Rate.
Online Media: inflection drivers

2015-2017
- Internet users growth
- Mobile engagement
- Free music & video
- Global games & content
- Online Ads by digital natives

2018 and beyond
- Internet users growth
- Video streaming
- Paid music & video
- Local developers & creators
- Online Ads by millions of SMBs
Online Travel: $30B Flights and Hotels booked online, Online Vacation Rentals also gaining popularity

SEA Online Travel market size (GMV, $B)

2015
- Online Vacation Rentals: 0.3B
- Online Hotels: 6.6B
- Online Flights: 12.5B
Total: 19.4B

2018
- Online Vacation Rentals: 0.6B
- Online Hotels: 10.7B
- Online Flights: 18.4B
Total: 29.7B

2025
- Online Vacation Rentals: 2B
- Online Hotels: 36B
- Online Flights: 40B
Total: 78B

CAGR '15-'18  CAGR '15-'25
- Online Vacation Rentals: 23%  19%
- Online Hotels: 18%  19%
- Online Flights: 14%  12%
- Total: 15%  15%

Note: GMV: Gross Merchandise Value; CAGR: Compounded Annual Growth Rate.
Online Travel: headroom for growth as bookings go online

Online travel bookings as % of total travel bookings

- 2015: 34%
- 2018: 41%
- 2025: 57%
Online Travel: Indonesia, Singapore, Thailand largest; Online Travel Aggregators driving growth across region

SEA Online Travel market size (GMV, $B)

- Philippines: 5B (16%), 2015: 1.1B, 2018: 1.8B, 2025: 5B
- Singapore: 11B (16%), 2015: 4.1B, 2018: 5.5B, 2025: 11B
- Thailand: 20B (18%), 2015: 3.9B, 2018: 6.1B, 2025: 20B
- Vietnam: 9B (15%), 2015: 2.3B, 2018: 3.5B, 2025: 9B

Note: GMV: Gross Merchandise Value; CAGR: Compounded Annual Growth Rate
Online Travel: inflection drivers

2015-2017
Online Travel Aggregators
  Airlines
  Hotel chains
  Mobile

2018 and beyond
Online Travel Aggregators
  Vacation rentals
  “Long tail” hotels
  Experiences
Ride Hailing: Online Transport grows close to $6B, Online Food Delivery hits $2B, to exceed $8B by 2025

SEA Ride Hailing market size (GMV, $B)

<table>
<thead>
<tr>
<th>Year</th>
<th>Online Food Delivery</th>
<th>Online Transport</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>0.4B</td>
<td>2.5B</td>
<td>2.9B</td>
</tr>
<tr>
<td>2018</td>
<td>2.0B</td>
<td>5.7B</td>
<td>7.7B</td>
</tr>
<tr>
<td>2025</td>
<td>8B</td>
<td>20B</td>
<td>28B</td>
</tr>
</tbody>
</table>

CAGR ‘15-’18 CAGR ‘15-’25

- Online Food Delivery: 73% 36%
- Online Transport: 32% 23%
- Total: 39% 26%

Note: GMV: Gross Merchandise Value; CAGR: Compounded Annual Growth Rate.
Ride Hailing: continuous increase in service adoption, 35M active riders take 8M rides on an average day
Ride Hailing: Indonesia large ($3.7B) and fastest growing; sizable Singapore market ($1.8B) driven by higher fares

SEA Online Transport & Food Delivery market size (GMV, $B)

Indonesia: 31% 14B
Malaysia: 21% 2B
Philippines: 27% 3B
Singapore: 16% 4B
Thailand: 25% 4B
Vietnam: 29% 2B

Note: GMV: Gross Merchandise Value; CAGR: Compounded Annual Growth Rate.
Ride Hailing: inflection drivers

2015-2017
- Transport
- Geo expansion
- Riders promotions
- Drivers incentives
- VC funding

2018 and beyond
- Consolidation
- Food delivery
- Financial services
- “Everyday apps”
- Profitability
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Funding
Record year for internet economy fundraising in SEA, $9.1B raised in the first half of 2018, $24B since 2015

Note: H1 2018 fundraising figures include Grab Series H.
Most funding went to SEA’s 9 unicorns ($16B since 2016); Grab 1st decacorn ($10B+ valuation), less than 20 globally.

Note: H1 2018 fundraising figures include Grab Series H; unicorn refers to a privately-held company valued over $1 billion; decacorn refers to a privately-held company valued over $10 billion.
Rest of ecosystem attracted strong investors’ interest; $7 billion raised in 3 years, record $2.6B in first half 2018

Note: H1 2018 fundraising figures include Grab Series H.
Ride Hailing ($10B) and e-Commerce ($8B) attracted $3 out of $4 dollars invested in the region

Note: H1 2018 fundraising figures include Grab Series H.
Fintech investments have surged in the 1st half of 2018, as in other nascent sectors; planting seeds for future growth.
Most funds ($16B) raised by Singapore-HQ companies, $6B raised by Indonesian companies, $2B in rest of SEA

Note: H1 2018 fundraising figures include Grab Series H.
Healthy deal flow also in rest of SEA, 800 deals since 2016; similar deal size across the region, excluding unicorns

Excluding unicorns rounds, comparable average deal size in Singapore, Indonesia, RoSEA

- **$6M / deal** in Singapore
- **$5M / deal** in Indonesia
- **$4M / deal** in rest of SEA
Seed-Series A-B-C deal flow climbs 2x year on year, investors planting seeds for future ecosystem growth
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Ecosystem challenges
Visible progress towards solving the ecosystem challenges identified in our previous research

- Funding
- Internet
- Consumer Trust
- Talent
- Logistics
- Payments
Internet: mobile internet becoming more affordable, 1GB of mobile data costs less than 1% of monthly income

Note: GNI: Gross National Income.
Source: carriers websites (internet data cost), World Bank (GNI).
Consumer trust: rapidly increasing across sectors

<table>
<thead>
<tr>
<th>Sector</th>
<th>2015</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>e-Commerce (Active Users)</td>
<td>49M</td>
<td>120M</td>
</tr>
<tr>
<td>Gamers (Active Users)</td>
<td>130M</td>
<td>164M</td>
</tr>
<tr>
<td>Ride Hailing (Active Users)</td>
<td>8M</td>
<td>35M</td>
</tr>
<tr>
<td>Online Travel (Bookings)</td>
<td>34%</td>
<td>41%</td>
</tr>
</tbody>
</table>
**Talent:** internet economy employs 100k professionals, 200k by 2025; skilled jobs & employment growth

**Highly skilled jobs**
Internet economy jobs have salaries 3X to 5X higher vs. median wages

**Employment growth**
Internet economy 10% CAGR
Traditional economy <3% CAGR

Note: Direct Jobs = Internet economy companies employees + Internet economy roles in traditional companies (e.g. digital marketing, app/website developers).
Note: Includes direct jobs in e-Commerce, Ride Hailing, Online Media, Online Travel, Other Sectors (Financial Services, Education, Healthcare).
Talent: Internet economy engages millions of partners, with flexible jobs & income opportunities

Internet economy partner jobs

- **Flexible job**
  - Full Time, Part Time
  - Personalized schedules

- **Income opportunities**
  - 20-30% higher wages vs. alternative opportunities

Note: Partners Jobs = Ride Hailing drivers jobs (Online Transport, Online Food Delivery) + e-Commerce delivery jobs.
Note: FTE: Full Time Equivalent; Part Time jobs converted to Full Time Equivalent basis standard working hours per week in each country.
Logistics: e-commerce players, logistic giants & startups all tackling huge growth in e-Commerce deliveries

E-Commerce deliveries (daily)

- **2015**: 0.8M
- **2018**: 3M

**e-Commerce players**
Lazada Express, Redmart

**Established logistics**
SingPost, JNE, DHL

**Logistics startups**
J&T, NinjaVan
Payments: adoption of digital payments increasing, yet usage remains low; lack of widely accepted solutions.

Digital payment services adoption

- **Indonesia**: 46%
- **Malaysia**: 45%
- **Philippines**: 21%
- **Singapore**: 52%
- **Thailand**: 39%
- **Vietnam**: 25%

Multiple players offering digital payment services:

**Ride Hailing**
- Go-Pay (ID)
- GrabPay (SEA)
- Ovo (ID)
- Kudo (ID)

**Tech**
- Apple Pay
- Google Pay
- PayPal

**e-Commerce**
- AirPay (SEA)

**Telecom**
- Telkomsel t-cash (ID)
- Globe GCASH (PH)
- TrueMoney (TH)

**Banks**
- DBS PayLah! (SG)
- Mandiri e-Money (ID)

Source: Google Surveys (Q2 2018).
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Key takeaways
Key takeaways

- $72 billion internet economy hits an inflection point
- Record year for fundraising, $24 billion since 2015
- Visible progress solving ecosystem challenges
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