Google TEMASEK BAIN & COMPANY

e-Conomy SEA 2021

Roaring 20s: The SEA Digital Decade

Reference

e-Conomy SEA is a multi-year research programme launched by Google and Temasek in 2016. Bain & Company joined the programme as lead research partner in 2019. The research leverages primary research, Temasek insights, Bain analysis, Google Trends, expert interviews and industry sources to shed light on the internet economy in Southeast Asia. The information included in this report is sourced as "Google, Temasek and Bain, e-Conomy SEA 2021", unless otherwise specified.

Disclaimer

The information in this report is provided on an "as is" basis. This document was produced by Google, Temasek, Bain and other third parties involved as of the date of writing and is subject to change. It has been prepared solely for information purposes over a limited period of time to provide a perspective on the market. It is not intended for investment purposes. Google internal data was not used in the development of this report. Google does not endorse any of the financial analysis in this report. Projected market and financial information, analyses, and conclusions contained herein should not be construed as definitive forecasts or guarantees of future performance or results. Google, Temasek, Bain, or any of their affiliates or any third party involved makes no representation or warranty, either expressed or implied, as to the accuracy or completeness of the information in the report and shall not be liable for any loss arising from the use hereof.

6th edition of e-Conomy SEA by Google, Temasek, Bain - Southeast Asia's internet economy research programme

2016

e-Conomy SEA

"Unlocking the $200B digital opportunity in Southeast Asia"

2017

e-Conomy SEA Spotlight 2017

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

2018

e-Conomy SEA 2018

"Southeast Asia's internet economy hits an inflection point"

2019

e-Conomy SEA 2019

"Swipe up and to the right: Southeast Asia's $100B internet economy"

2020

e-Conomy SEA 2020

"At full velocity: Resilient and racing ahead"

2021

e-Conomy SEA 2021

"Roaring 20s: The SEA Digital Decade"

e-Conomy SEA research methodology

Primary research*

Temasek insights

Bain analysis

Google Trends

Expert interviews & industry sources

In partnership with

East Ventures, Golden Gate Ventures, Monk's Hill Ventures, Openspace Ventures, SoftBank Ventures Asia, Vertex Ventures, Wavemaker Partners

Note: All dollar amounts in this report are in USD.
*Google commissioned Dynata to run a SEA-6 Digital Merchant Survey, and Kantar to run the e-Conomy SEA consumer survey. Both research studies were conducted in Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam. Fieldwork for the consumer research ran from 16/07/2021 - 16/08/2021 online via a 25-minute Computer Assisted Web Interview survey with a total of 9,402 respondents interviewed. Fieldwork for the merchant research ran from 04/08/2021 - 16/08/2021 online with a total of 3,036 respondents surveyed. The 2020 GMV numbers have also been updated with more up-to-date estimates.

e-Conomy SEA covers **6 countries** in Southeast Asia

589M

total population
across the countries

Vietnam
97M

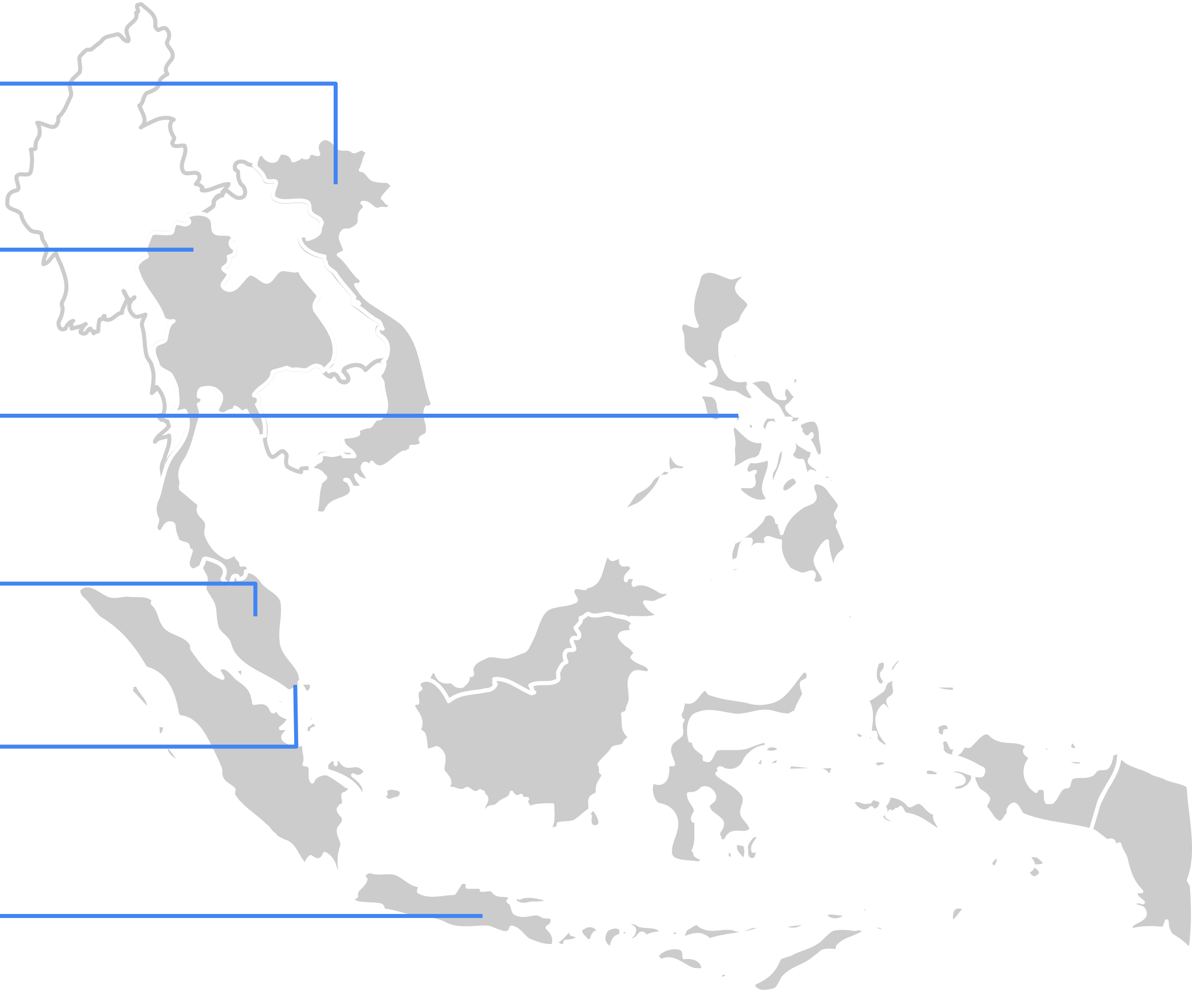
Thailand
70M

Philippines
110M

Malaysia
32M

Singapore
6M

Indonesia
274M



Source: World Bank.

Market coverage:
5 leading and 2 nascent sectors in the internet economy

Two nascent sectors that have accelerated rapidly due to COVID-19

Healthtech

Edtech

e-Commerce

Marketplaces
Malls/resellers
Direct-to-consumer

Transport & food

Transport
Food delivery

Online travel

Flights
Hotels
Vacation rentals

Online media

Advertising
Gaming
Video-on-demand
Music-on-demand

Financial services

Payment
Remittance
Lending
Insurance
Investing

Note: e-Commerce does not include informal commerce due to lack of reliable data; healthtech and edtech not included in analysis because the sectors are still nascent.

Content

From resilience to resurgence:
On the road towards a $1T GMV economy by 2030

Consumers cruise into a new way of life

Digital consumption is now ingrained as a way of life in Southeast Asia (SEA). Early adopters have deepened usage - pre-pandemic users are consuming four more digital services than they did before 2020 - and the 60M consumers who joined since the pandemic started are here to stay, with 9 in 10 consumers who tried a new digital service in 2020 continuing to use the service in 2021.

Digital merchants take off

The extraordinary shift in consumer behaviour has led to the rise of the digital merchant: native digital SMEs and early adopters who have embraced digital services end-to-end. 1 in 3 believe they would not have survived COVID-19 without digital platforms, and while most have a positive view of digital platforms, profitability remains a top concern.

Resilience gives way to resurgence

While SEA's internet economy was resilient in 2020, a resurgence in 2021 has propelled the region upwards to $170B GMV. e-Commerce, food delivery and digital financial services remain primary growth drivers and we expect the internet economy to reach ~$360B by 2025.

Funding on track to reach new heights

Strong growth fundamentals, successful exits and supportive regulations have sparked an inpouring of global capital into SEA at an unprecedented scale. Deal activity has been at a record high, clocking $11.5B in H1 2021 alone, putting it on par with 2020's full year value. e-Commerce and digital financial services have remained centre stage and are likely to continue attracting more investments.

The twenties roar towards a trillion

Continued shifts in consumer and merchant behaviour, matched with strong investor confidence, have ushered SEA into its 'Digital Decade' - and the region is on its way towards $1T GMV by 2030.

Consumers cruise into a new way of life

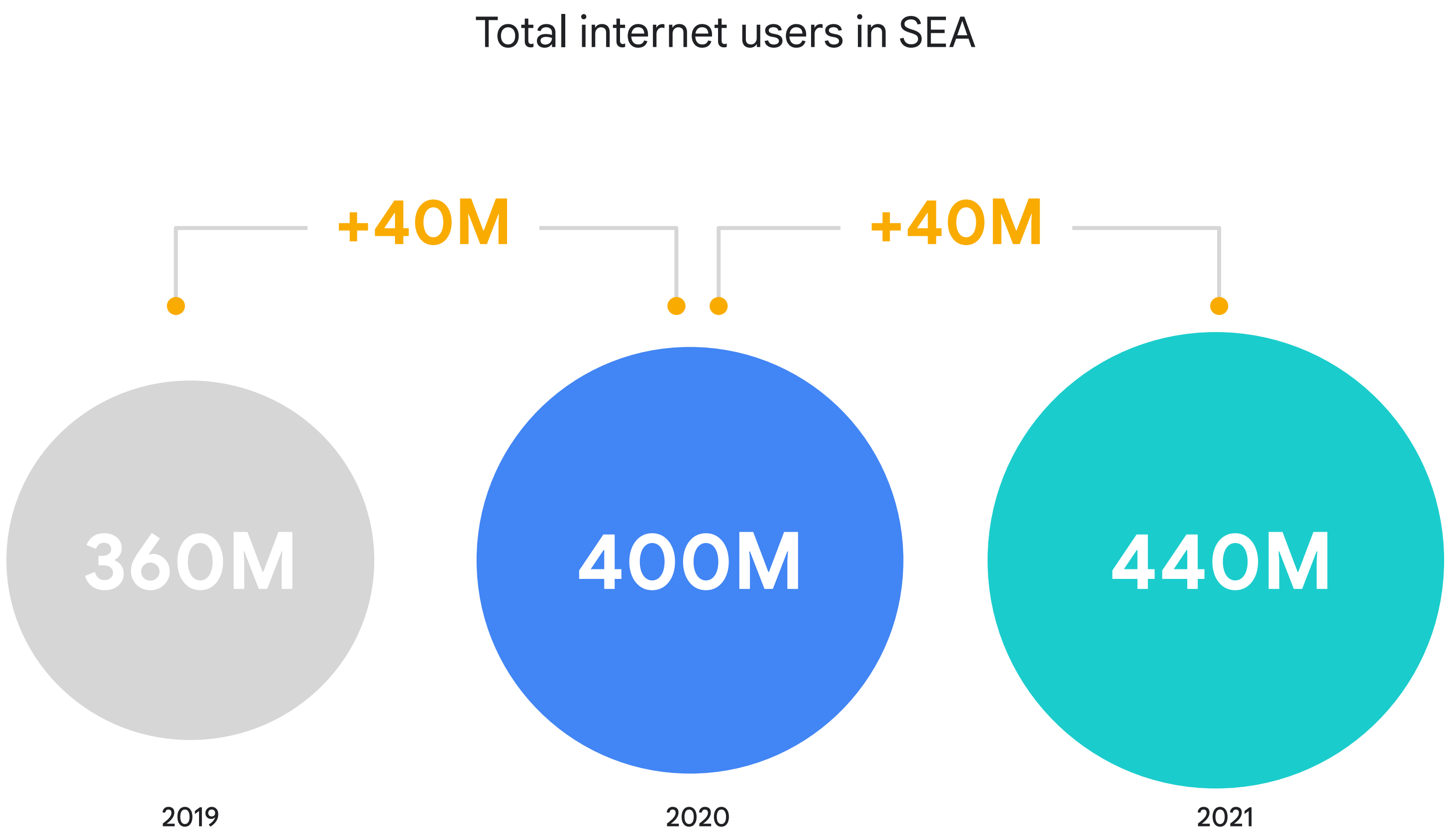
Google TEMASEK BAIN & COMPANY

40M new internet users came online in 2021, bringing the **internet penetration in SEA to 75%.**

8 in 10 of these users have purchased something online at least once.

Source: Statista; Google, Temasek and Bain, e-Conomy SEA 2020; Google-commissioned Kantar SEA e-Conomy Research 2021.

SEA now has a total of **440M internet users**



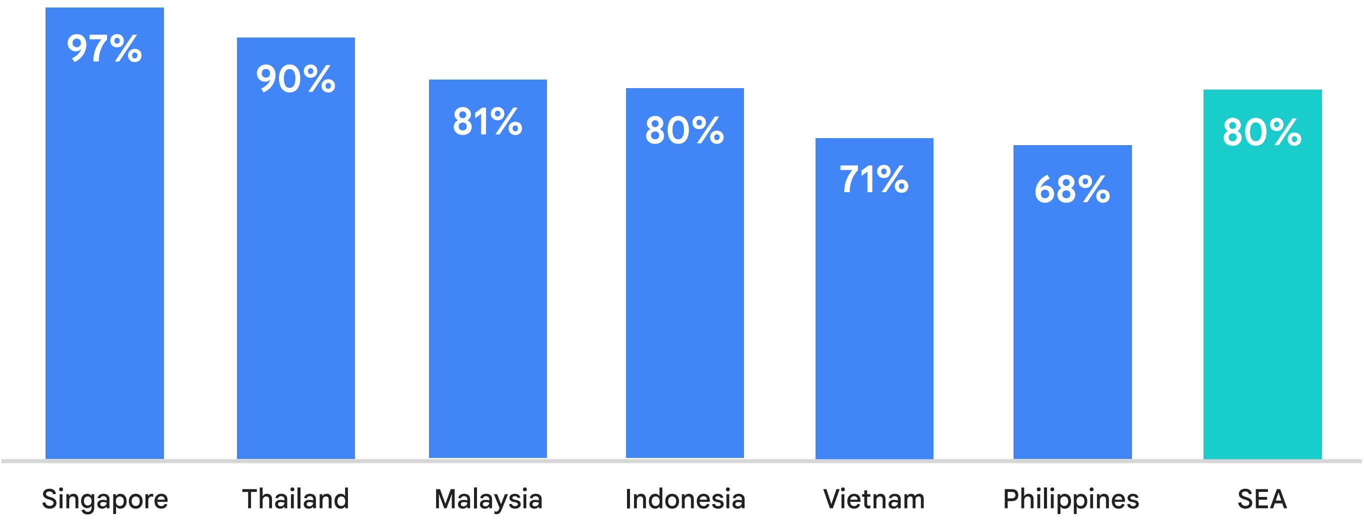
Source: Google, Temasek and Bain, e-Conomy SEA 2019 and 2020; Statista for 2021.

Amongst SEA's internet users, **8 out of 10 are digital consumers**

350M

SEA digital consumers who made at least one purchase online

% of internet users who have made at least one purchase online



Source: Google-commissioned Kantar SEA e-Conomy Research 2021.
S4. Which of the following online activities have you done before and when did you first start doing them?
Base: SEA internet users n=17,839. Population source from Statista.
Note: A 'digital consumer' is defined as any internet user who has paid for an online service in any vertical before or after the pandemic.

Consumption of digital services remains strong more than a year after the pandemic started - a trend that will likely continue

Top 3 drivers of digital service consumption

Continued adoption

The internet economy continues to attract new consumers even a year after the pandemic began

Deeper usage

The internet economy has seen increased spend and frequency of use amongst existing consumers

New way of life

New consumer behaviour is not a one-off phenomenon - users are highly satisfied and intend to continue going forward

Source: Statista; Google-commissioned Kantar SEA e-Conomy Research 2021.
Note: A 'digital consumer' is defined as any internet user who has paid for an online service in any vertical before or after the pandemic.

SEA is charging ahead at full steam, having added **60M new digital consumers** to the internet economy since the pandemic started.

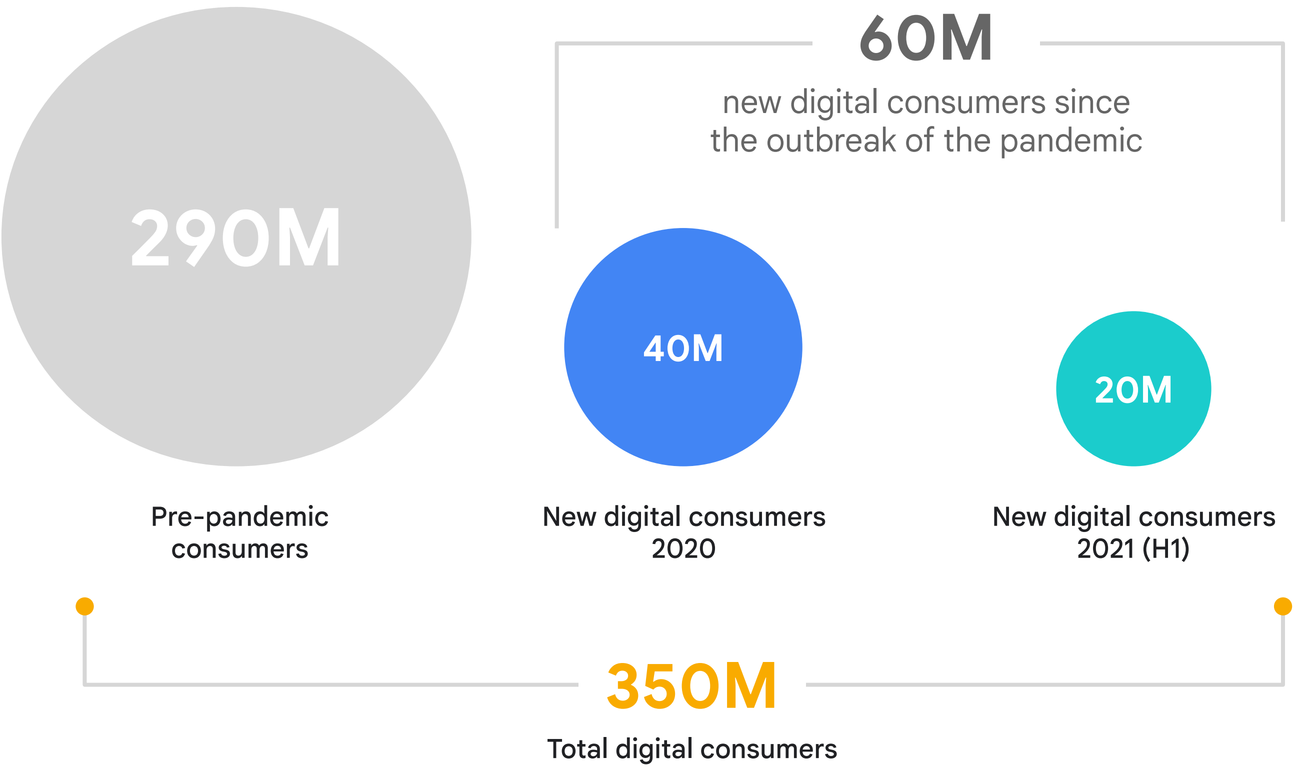
20M of them joined in H1 2021 alone.

Source: Statista; Google, Temasek and Bain, e-Conomy SEA 2020; Google-commissioned Kantar SEA e-Conomy Research 2021.
Note: A 'digital consumer' is defined as any internet user who has paid for an online service in any vertical before or after the pandemic.

More than a year into the pandemic and new consumers are still joining the internet economy rapidly

20M new consumers were added in H1 2021 alone

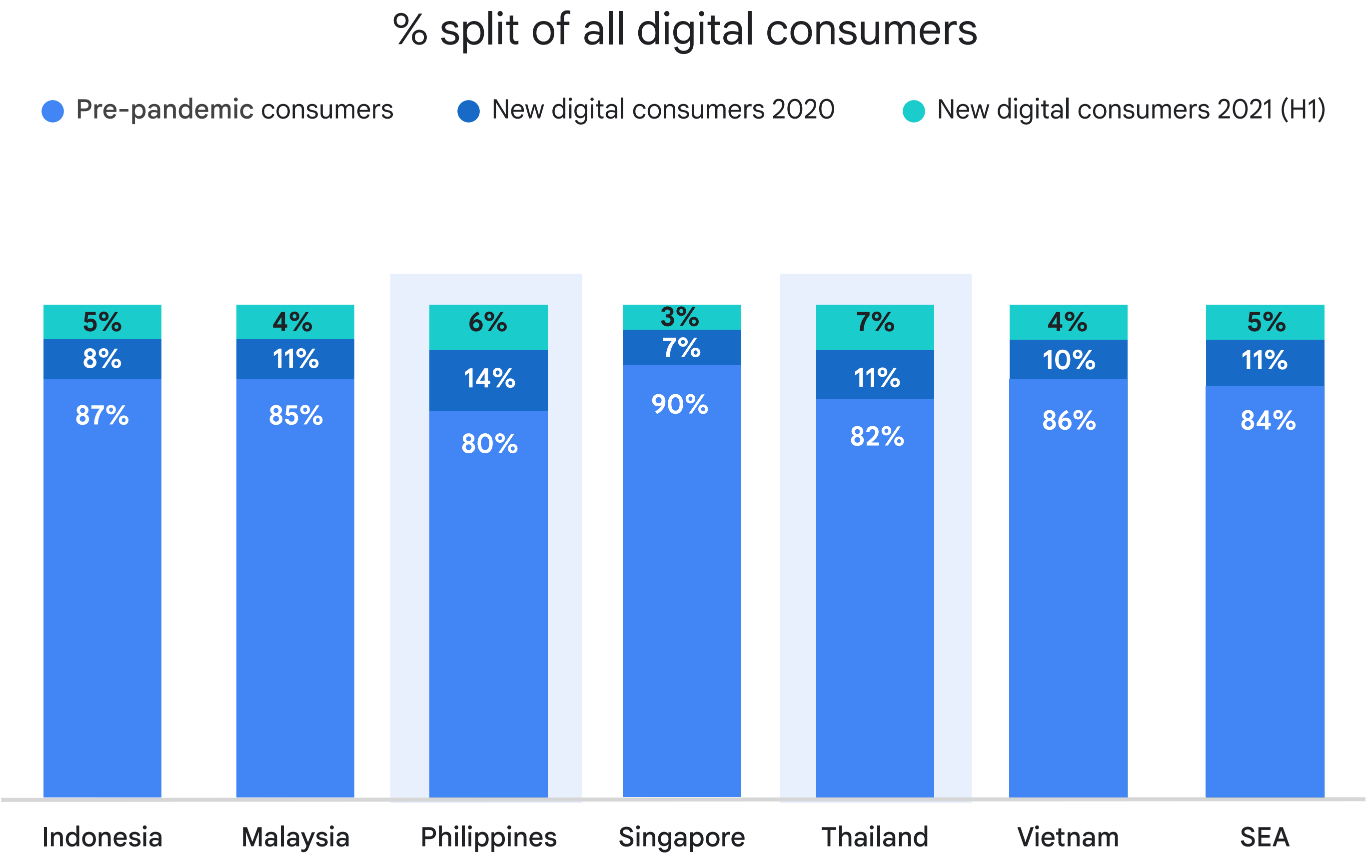
Breakdown of digital consumers



Source: Statista; Google-commissioned Kantar SEA e-Conomy Research 2021.
Note: 'Pre-pandemic consumers' are defined as digital consumers who have used a digital service before March 2020. 'New digital consumers 2020' started using any digital service from Mar to Dec 2020. 'New digital consumers 2021' started using any digital service in 2021.

Google TEMASEK BAIN & COMPANY

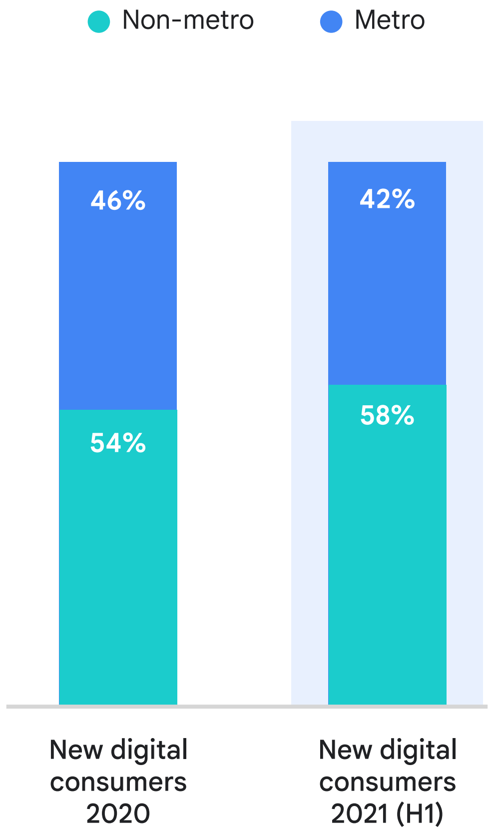
Thailand and the Philippines have had the highest proportion of new users start consuming online during the pandemic



Source: Google-commissioned Kantar SEA e-Conomy Research 2021.
S4. Which of the following online activities have you done before and when did you first start doing them?
Base: All digital consumers in SEA n=17,044, Indonesia n=2,629, Malaysia n=4,155, Philippines n=2,699, Singapore n=2,052, Thailand n=2,250, Vietnam n=3,259.
Note: 'Pre-pandemic consumers' are defined as digital consumers who have used a digital service before March 2020. 'New digital consumers 2020' started using any digital service from Mar to Dec 2020. 'New digital consumers 2021' started using any digital service in 2021.

Non-metros comprise the majority of new joiners to the internet economy, with **~60% of new digital consumers in 2021 coming from non-metro** areas

% split of metro and non-metro digital consumers

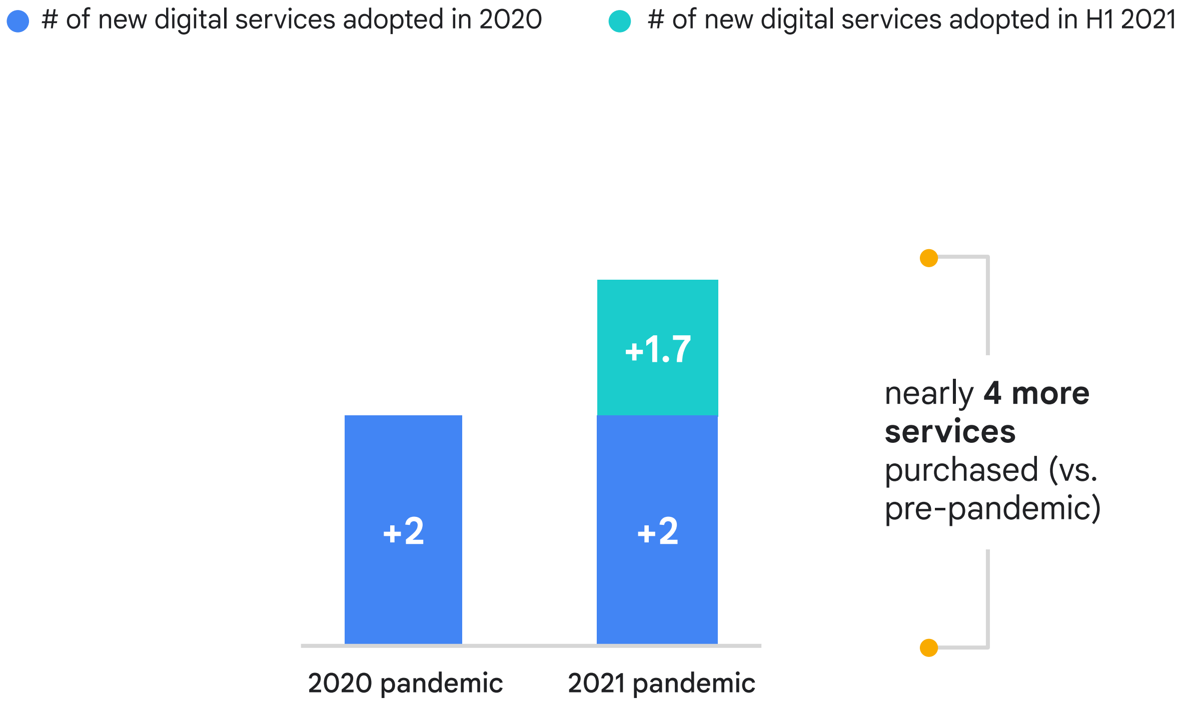


Source: Google-commissioned Kantar SEA e-Conomy Research 2021.
S4. Which of the following online activities have you done before and when did you first start doing them?
S3. In what region do you live?
Base: Pre-pandemic consumers n=14,617; New digital consumers 2020 n=1,631; New digital consumers 2021 (H1) n=796.

The pandemic has been a catalyst for existing digital users to **adopt new online services** *and* **increase their frequency of use and spend in these services**.

Existing consumers are **making purchases in 4 *more* digital services** than they did before the pandemic

Average number of new services that an existing digital consumer purchased online since the pandemic began

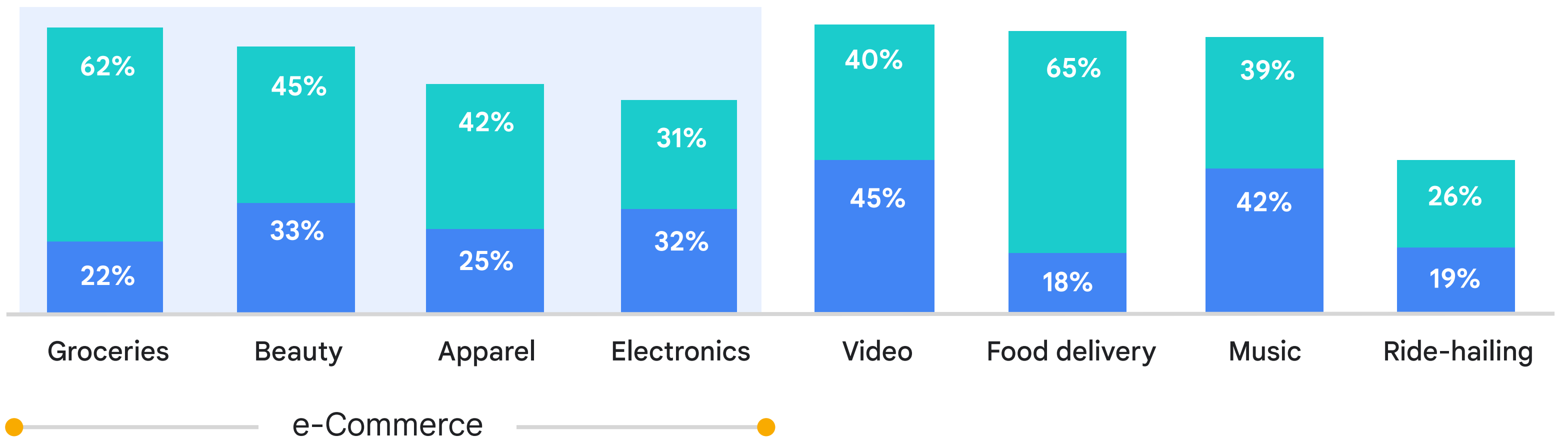


Source: Google-commissioned Kantar SEA e-Conomy Research 2021.
S4. Which of the following online activities have you done before and when did you first start doing them?
Base: SEA pre-pandemic users n=14,617.
Note: '2020 pandemic' refers to the time period between Mar 2020 - Dec 2020; '2021 pandemic' refers to the time period between Jan 2021 - Jun 2021.

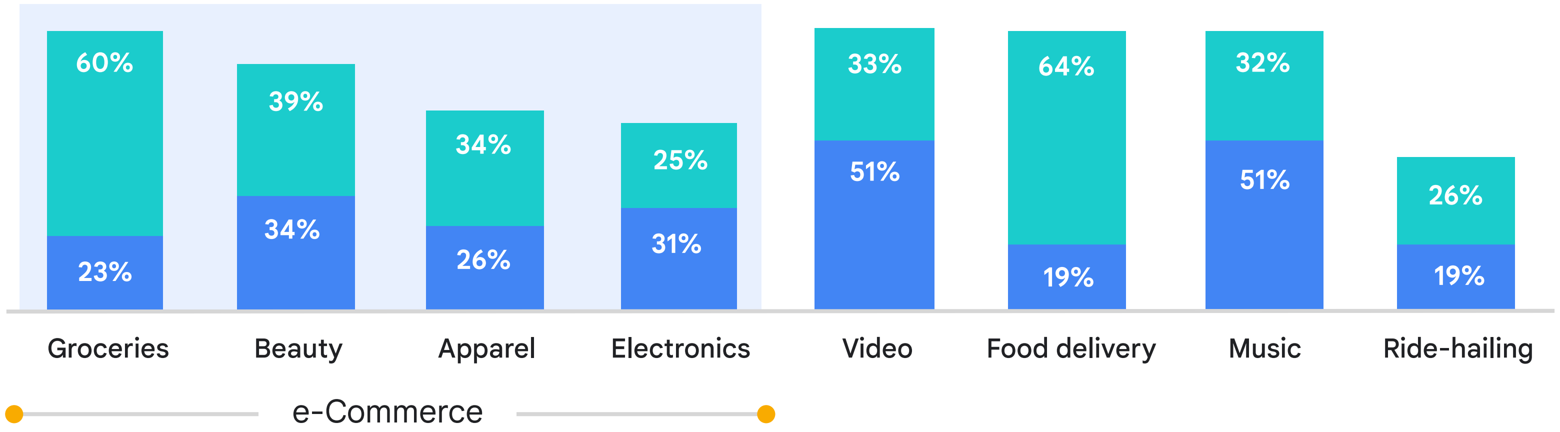
Usage frequency and spend on digital services have mostly increased, with basic essentials - groceries and food delivery - seeing the most striking surges

Remained the same · Increased

% split of users by how usage frequency has changed vs. pre-COVID



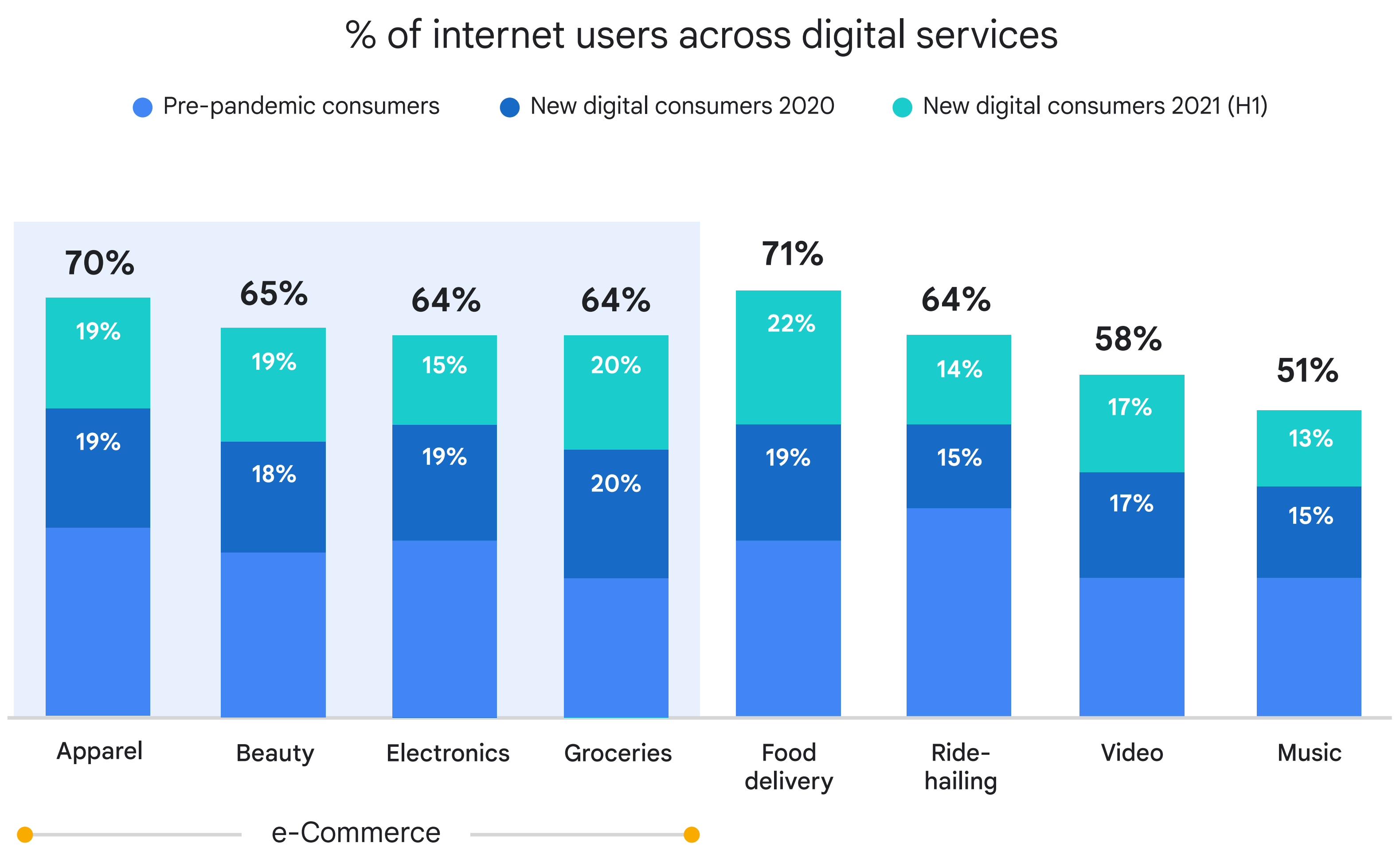
% split of users by how spend has changed vs. pre-COVID



Source: Google-commissioned Kantar SEA e-Conomy Research 2021.
Qb1a. Compared to BEFORE the COVID-19 pandemic began (Feb 2020), how frequently do you NOW do the following online activities?
QB2a. Compared to BEFORE the COVID-19 pandemic began (Feb 2020), how much money do you NOW spend on these online activities in an average transaction?
Base: Pre-pandemic users SEA, base varies by vertical from n=2,844 to n=4,539.

Adoption across digital services is as strong in 2021 as it was at the onset of the pandemic

Food delivery saw the most substantial increase in adoption and has quickly become the most penetrated service



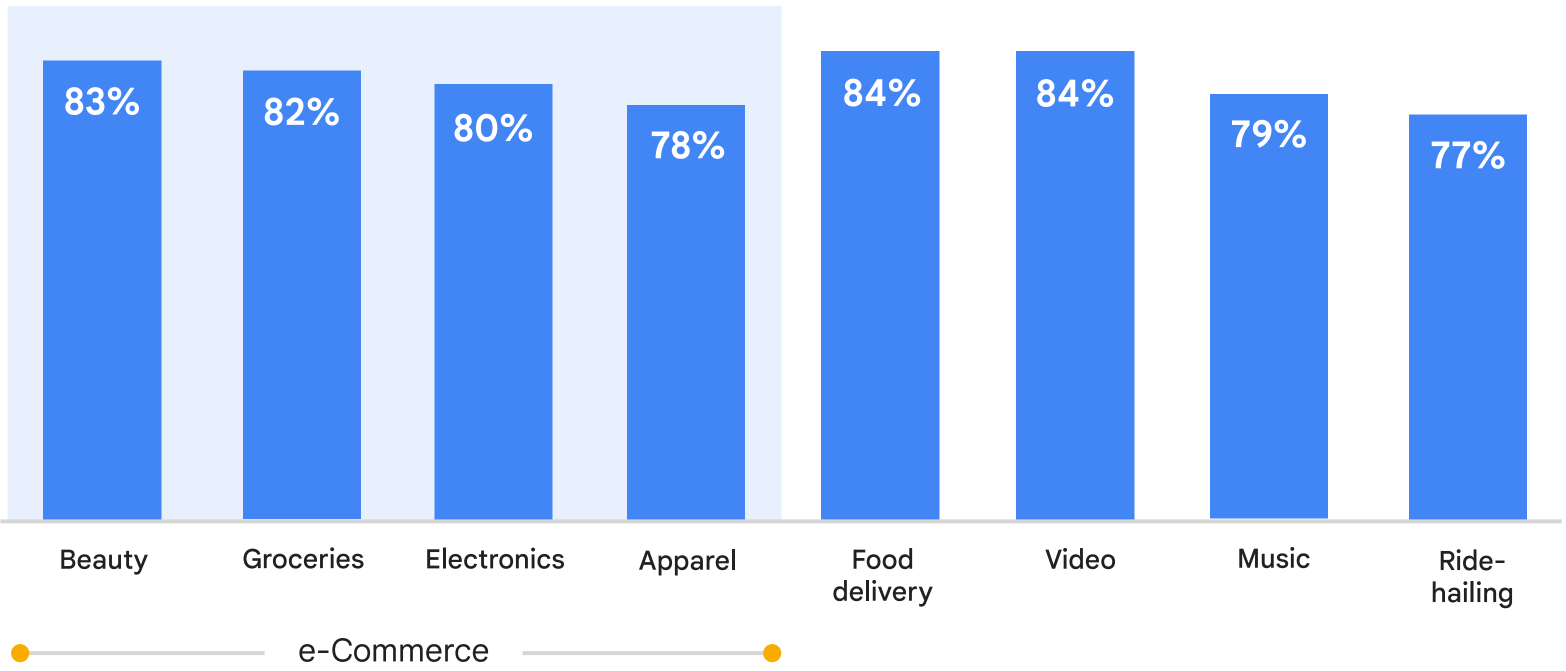
Source: Google-commissioned Kantar SEA e-Conomy Research 2021.
S4. Which of the following online activities have you done before and when did you first start doing them?
Base: SEA internet users n=17,839.

Google TEMASEK BAIN & COMPANY

While digital consumption has been accelerated by the pandemic, it is **not a one-off phenomenon** and is now **a way of life for Southeast Asians**.

8 in 10 digital consumers are satisfied with their digital services

% of digital consumers who are satisfied or very satisfied with digital services



Source: Google-commissioned Kantar SEA e-Conomy Research 2021.
SA2. How satisfied or dissatisfied were you with the following when [VERTICAL] online in 2021?
Base: All SEA users; base varies by vertical from n=1,232 to n=8,954.

Increased satisfaction has **a positive effect on willingness to spend**

Ride-hailing consumers are most likely to spend more if satisfied

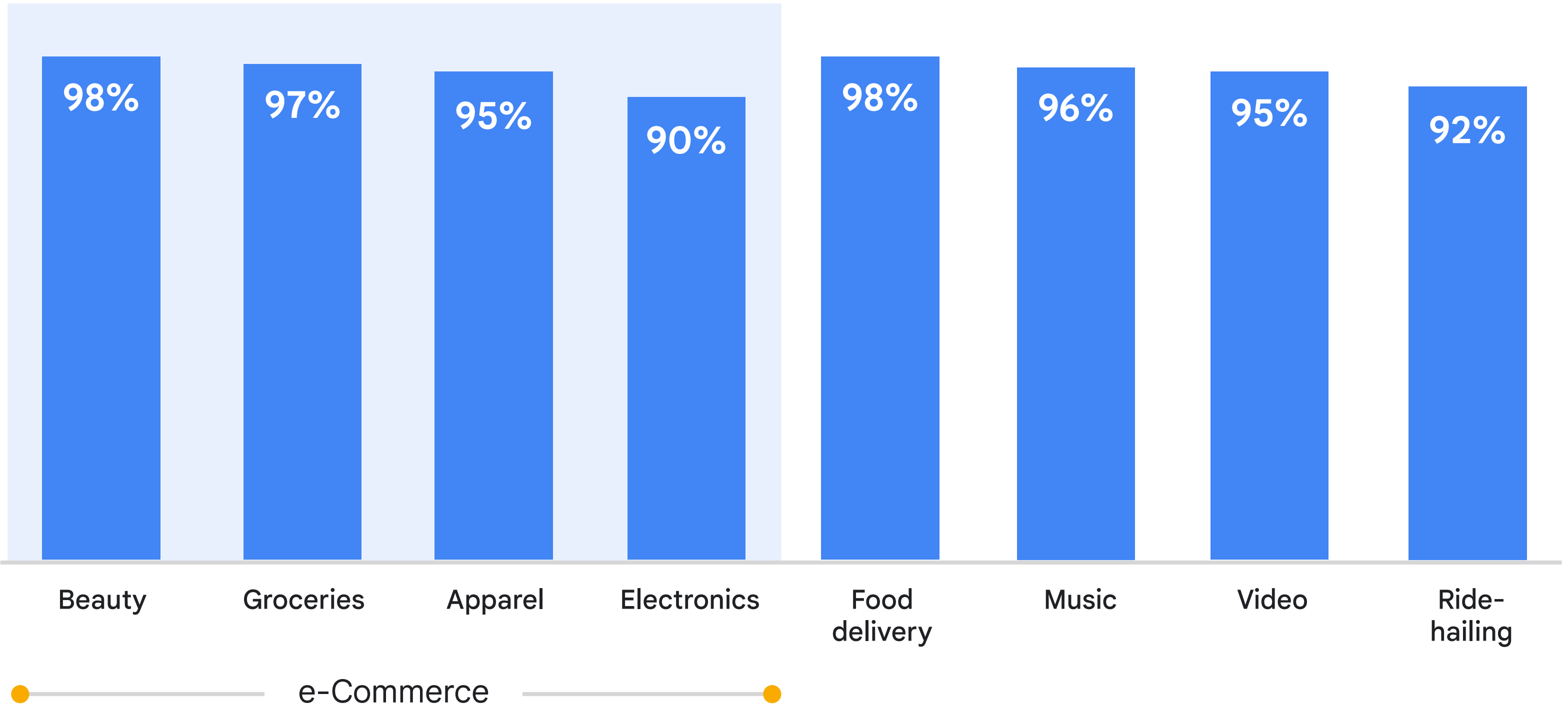
Amount spent by satisfied consumers relative to other consumers

Groceries	e-Commerce	Entertainment	Ride-hailing	Food delivery
1.3x	1.2x	1.2x	1.7x	1.4x

Source: Google-commissioned Kantar SEA e-Conomy Research 2021.
QB2b. Thinking about your current habits throughout 2021 so far, how much money do you NOW spend on the following activities in an average transaction?
SA2. How satisfied or dissatisfied were you with the following when [VERTICAL] online in 2021?
Base: SEA new users & pre-pandemic users, varies by vertical from n=4,067 to n=8,512.

Adoption of digital services has been one way, with no signs of reversal - **9 out of 10 new users in 2020 continue to use them in 2021**

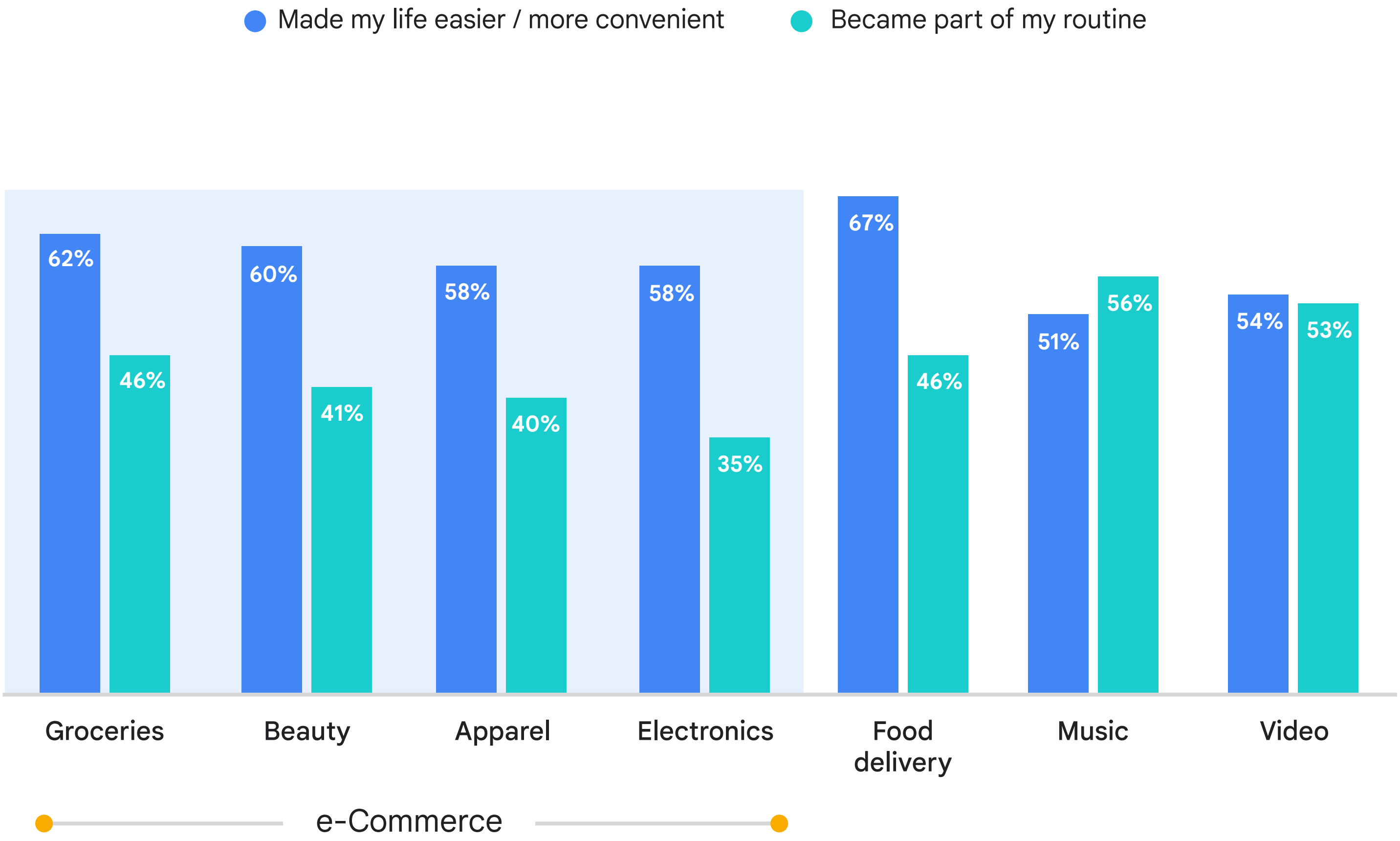
% of new consumers in 2020 who continue using the digital service in 2021



Source: Google-commissioned Kantar SEA e-Conomy Research 2021.
Qb1b. Thinking about your current habits throughout 2021 so far, how often do you typically do the following activities?
Base: SEA new users 2020, total base varies by vertical from n=1,610 to n=2,462.

SEA consumers intend to continue using digital services, **accepting them as a new way of life**

Reasons consumers continue using digital services



Source: Google-commissioned Kantar SEA e-Conomy Research 2021.
E3. You mentioned that you will continue purchasing [VERTICAL] online. Please tell us the reasons why.
Base: SEA pre-pandemic consumers and new pandemic consumers (2020 & 2021), total base varies by digital service from n=1,011 to n=3,354.

Digital services are now integral to everyday life in SEA and **merchants who want to thrive must meet the rising expectations** of consumers

Top reasons why consumers stay or switch to alternative brands

Wider **selection & assortment**[1]

Competitive **pricing & deals**

Better **purchase experience**[2]

Increased **convenience**

Comprehensive **payment options**[3]

Source: Google-commissioned Kantar SEA e-Conomy Research 2021.
SA7. Thinking of the platform you last used when purchasing [VERTICAL] online, how important are the following to whether or not you would use a different or alternative platform?
Base: Total SEA digital consumers, total base varies by vertical from n=13,011 to n=20,454.
Note: (1) Excludes ride-hailing, (2) Excludes online media streaming, (3) Excludes online media streaming and ride-hailing.

Digital merchants take off

Google TEMASEK BAIN & COMPANY

In this **inaugural feature on Southeast Asian SMEs**, we profile ~3,000 digital merchants across 6 countries

Digital merchants in our survey are

B2C-focused

Small businesses in food services, consumer services or retail that sells directly to end users

Smaller workplaces

>90% employ fewer than 100 full-time employees

Online presence

Businesses that have captured online sales in the past 12 months[1] and are currently operating online

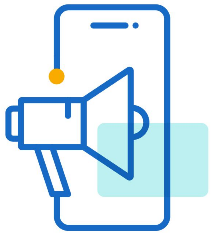
Decision-makers

Represented by primary or shared decision-makers about digital technology matters

Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021 (n=3,036).
Note: 'Consumer services' refers to merchants in beauty & spa, home repair and maintenance, laundry, etc.
[1]95% of SMEs surveyed have more than 20% of sales from online channels.

Underpinned by the extraordinary shift in consumer behaviour, **SEA's SMEs have been adopting technology with fervour**

3 focus areas of technological adoption by digital merchants



Digital platforms

Customer-facing solutions that facilitate the exchange of goods and services between merchants and customers

Financial services

Digital financial solutions that facilitate cashless transactions or enable merchants to access credit, commercial insurance, etc.

Digital tools

Non-customer-facing solutions that enhance operational and back-office productivity

Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021 (n=3,036).

1 in 3 digital merchants believe that they would not have survived COVID-19 if not for digital platforms.

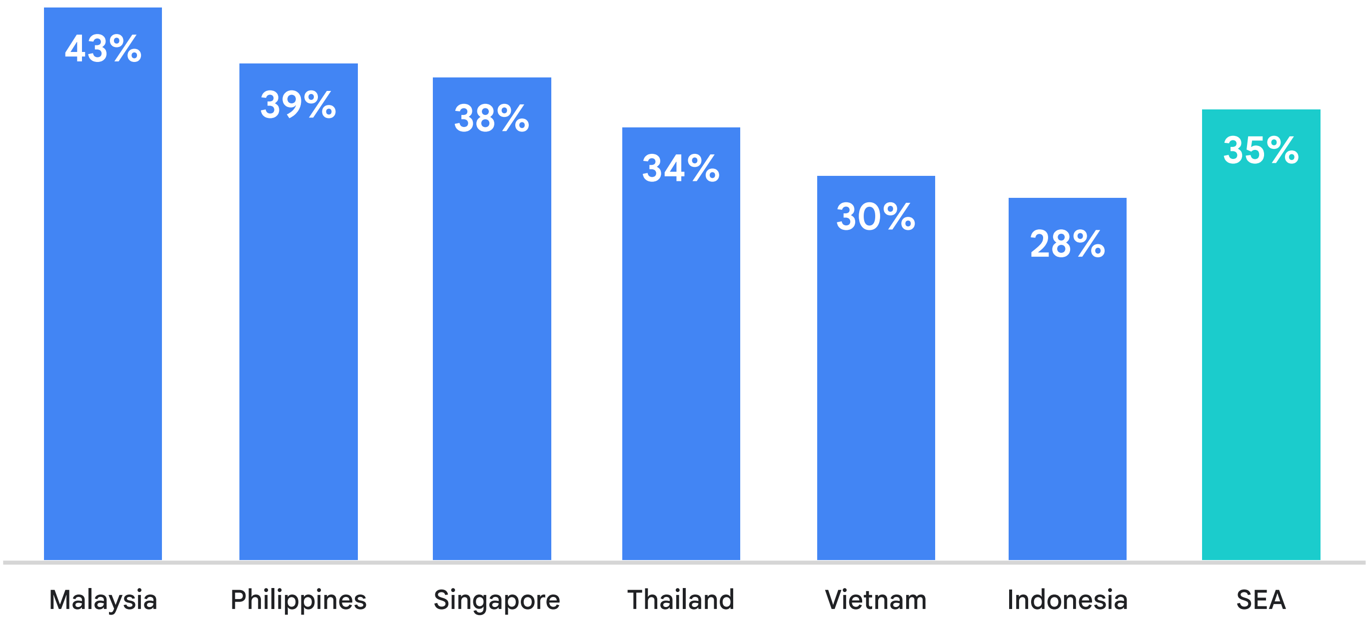
Most have a positive view of digital platforms, but **profitability remains a top concern.**

Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021 (n=3,036).
Q11. What are the biggest benefits to your company from your experience using digital platforms?
of which 35% selected "My company would not have survived the COVID-19 pandemic without selling on digital platforms".

Operating online helped ensure business continuity

The number of digital merchants who shared this sentiment is influenced by the severity of local restrictions, but ~30% of those in markets with less severe lockdowns (Indonesia and Vietnam) still felt the same

% of merchants who believe that they would not have survived COVID-19 without selling on digital platforms



Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021 (n=3,036).
Q11. What are the biggest benefits to your company from your experience using digital platforms?

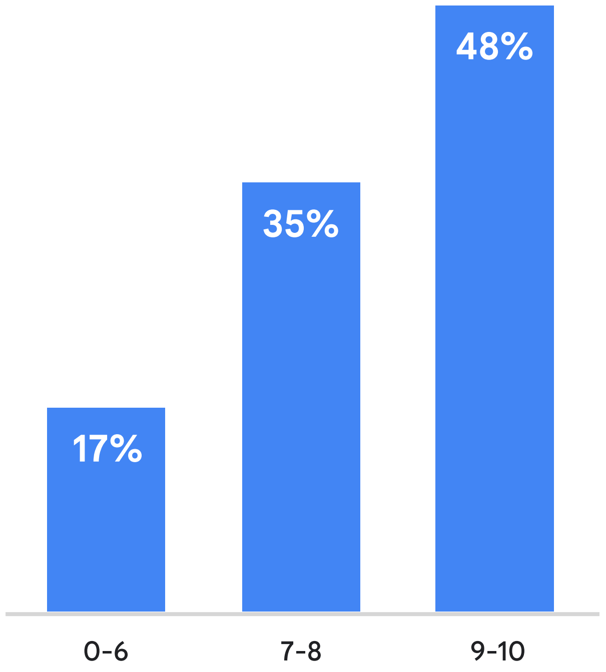
Digital merchants are **highly satisfied with the digital platforms they use**

Top reasons why merchants recommend using digital platforms to engage customers

- The **simplicity** of the platform's navigation
- The **ease of transaction** on the platform
- The **large customer base** the platform provides
- The platform is a **trusted brand** among consumers

How likely are you to recommend the digital platforms you use to a friend who also operates as a merchant?

not at all likely 0 — 10 extremely likely



Net Promoter Score® = 31

Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021 (n=3,036).
Net Promoter Score® calculated as "% Promoters (respondents with a score of 9-10) - % Detractors (respondents with a score of 0-6)".

Digital merchants believe that online platforms deliver positive impact - from job creation to business opportunities

More jobs

83%

agree digital platforms create more jobs

Improved livelihood

84%

agree digital platforms improve people's livelihood / income

Sustained revenue

87%

agree sales would have declined / there would have been no sales during COVID-19 without online platforms

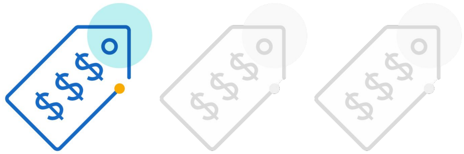
More opportunities

88%

agree digital platforms bring positive benefits and opportunities for their company

Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021 (n=3,036).
Q10. To what extent do you agree with the following? "Digital platforms [create more jobs in the economy] / [improve the livelihood / income of the people in the country] / [bring positive benefits and opportunities for my company]"
Q20. How do you think your company sales would have fared during the COVID-19 pandemic (compared to pre-COVID) if you had not used digital platforms?

Digital platforms have unlocked unprecedented scale, but there's still **room for improvement around discounts and fees**



1 in 3

digital merchants cited **"too expensive"** as the top barrier for digital platform adoption

Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021 (n=3,036).
Q18. What do you think can be improved about [digital platforms selected]?

Top improvement areas for digital platforms

#1 Platforms should offer more promotions / discounts

#2 Platforms should lower transaction fees for sellers

#3 Platforms should entice customers to spend more through better UI

#4 Platforms should help resolve issues with customers better

#5 Platforms should offer more integrated services for sellers (e.g. logistics, payment processing)

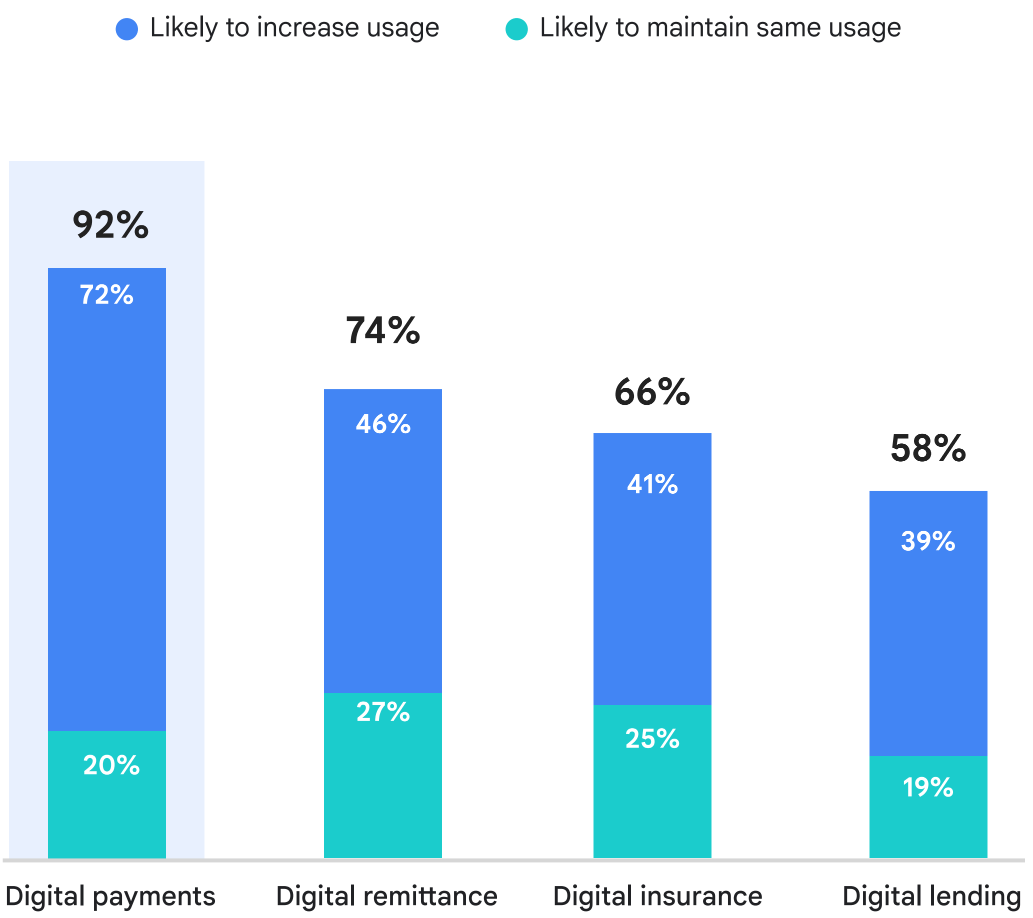
Digital financial services are critical enablers, with **9 in 10 digital merchants now accepting digital payments.**

There is **immense headroom for growth in digital lending** due to the popularisation of consumer financing options and a growing appetite for supply chain financing.

Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021 (n=3,036).

Majority of merchants who use digital financial services **intend to continue or increase usage**

% of digital merchants likely to increase or maintain usage of digital financial services in the next 1 to 2 years



Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021 (n=3,036).
Q28. How do you think your company's usage of digital financial services will change in the next 1-2 years (post COVID-19 pandemic)?

Other than increased sales and customers, **convenience and safety are the top reasons behind digital payment adoption**

75%

of digital merchants believe that it is **more convenient** to process digital payments

Top benefits of digital payments

#1 It is more convenient to process digital payments than cash payments

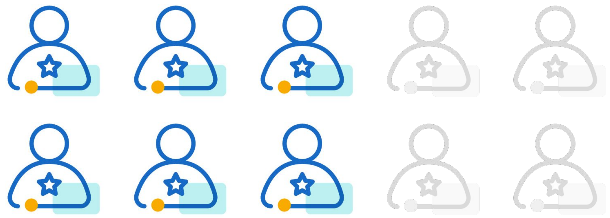
#2 It is safer to process digital payments than cash payments

#3 Customers have increased after we started accepting digital payments

#4 Sales have increased after we started accepting digital payments

#5 Compared to card payments, it is less costly to process digital payments

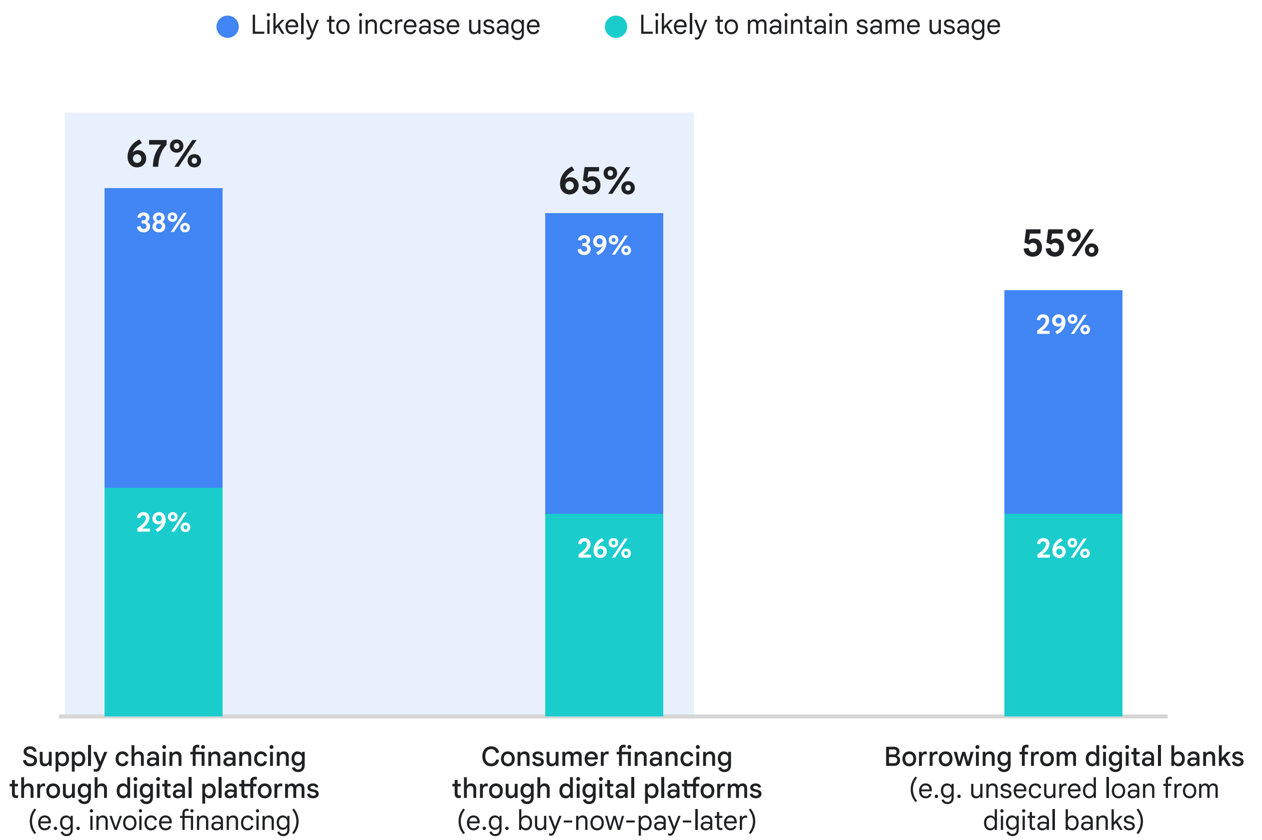
Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021 (n=3,036).
Q26. What are the biggest benefits to your company from your experience using mobile/digital payments?



6 in 10

digital merchants are likely to increase or maintain the usage of **digital supply chain financing** and **consumer financing** options in the next 1 to 2 years

% of digital merchants likely to use digital lending services in the next 1 to 2 years



Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021 (n=3,036).
Q27. How do you think your company's usage of digital lending services will change in the next 1-2 years (post COVID-19 pandemic)?

Immense headroom for growth across digital lending services **if privacy and security concerns for risk assessment purposes are addressed**

67%

of digital merchants indicated **privacy and security** concerns as key barriers to digital lending adoption

Top barriers for adopting digital lending:

- #1 Privacy and security concerns
- #2 Have better options through banks, insurers, etc.
- #3 Unable to meet minimum requirements to transact
- #4 Don't trust digital financial services
- #5 Expensive to use

Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021 (n=3,036).
Q31. What are the biggest barriers preventing your company from adopting, or increasing adoption of digital lending?

Digital merchants are **embracing end-to-end digitalisation efforts**, including front-end digital tools used to engage customers and back-end digital solutions to help enhance operations.

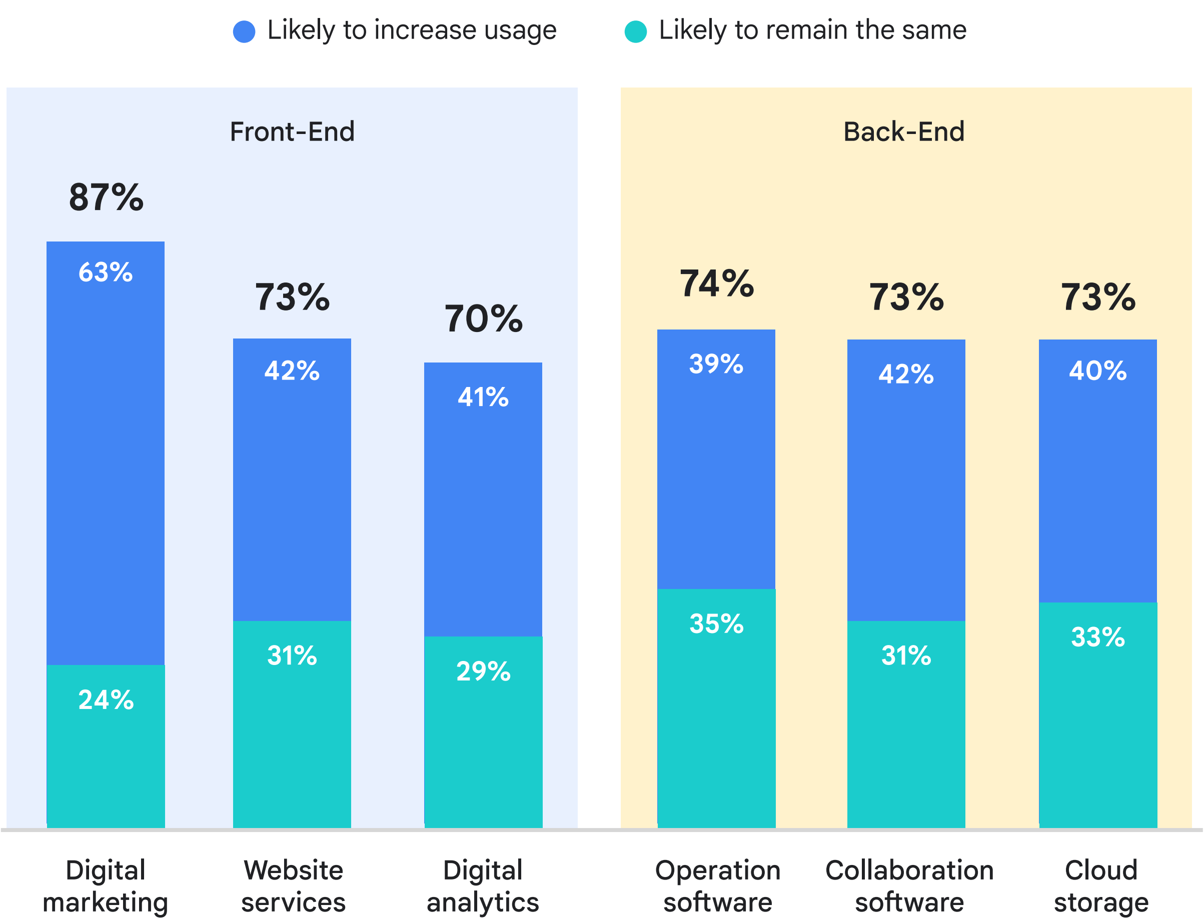
In the next 5 years, **8 in 10 merchants anticipate over half of their sales to come from online sources**.

Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021 (n=3,036).
Note: Front-end digital tools refer to digital marketing, website services, and digital analytics tools.
Back-end digital solutions refer to cloud storage, collaboration software, and operational software.

Merchants have accelerated digital transformation due to the pandemic

Digital marketing tools likely to see the largest increase in usage as merchants vie for consumer attention online

% of digital merchants likely to increase or maintain usage of digital tools over the next 5 years



Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021 (n=3,036).
Q21b. How do you think your company's usage of digital tools will change in the next 5 years?

Most merchants expect the majority of their sales to come from online sources in the next 5 years

Just as many believe that they will procure most of their supplies online

% of digital merchants who believe that >50% of their sales / procurement will happen online in the next 5 years

Sales

82% anticipate **more than half of their sales to come from online** sources in the next 5 years

Procurement

84% anticipate **more than half of their supply purchases to happen online** in the next 5 years

Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021 (n=3,036).
Q14. What percentage of your company's total sales do you think will come from online channels (from digital platforms) in the next 5 years?
Q23. What percentage of your company's purchasing do you think will come from digital platforms in the next 5 years?

Resilience gives way to resurgence

Google TEMASEK BAIN & COMPANY

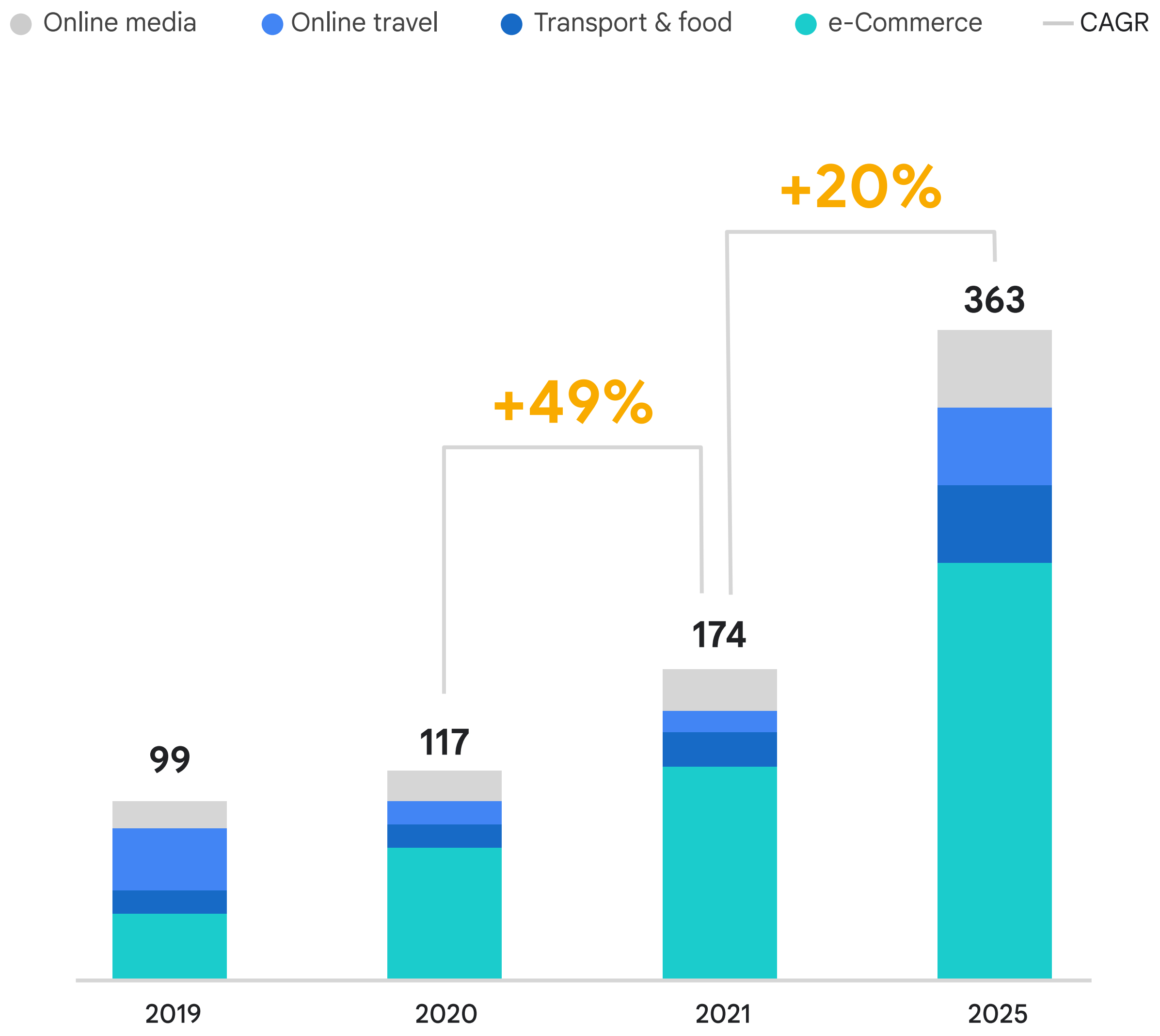
SEA's internet economy was resilient in 2020, but 2021's revitalisation has **propelled the region upwards to ~$170B GMV.**

The region is now poised to **surpass previous estimates and reach ~$360B by 2025.**

Source: Bain analysis.
Note: GMV = Gross Merchandise Value.

Continued surge in **e-commerce is driving most of the year's market growth**

SEA internet economy GMV ($B)



Source: Bain analysis.
Note: CAGR = Compounded Annual Growth Rate.

Google TEMASEK BAIN & COMPANY

All markets are exhibiting double-digit growth in 2021, with the Philippines leading by a margin

SEA internet economies, by GMV ($B)

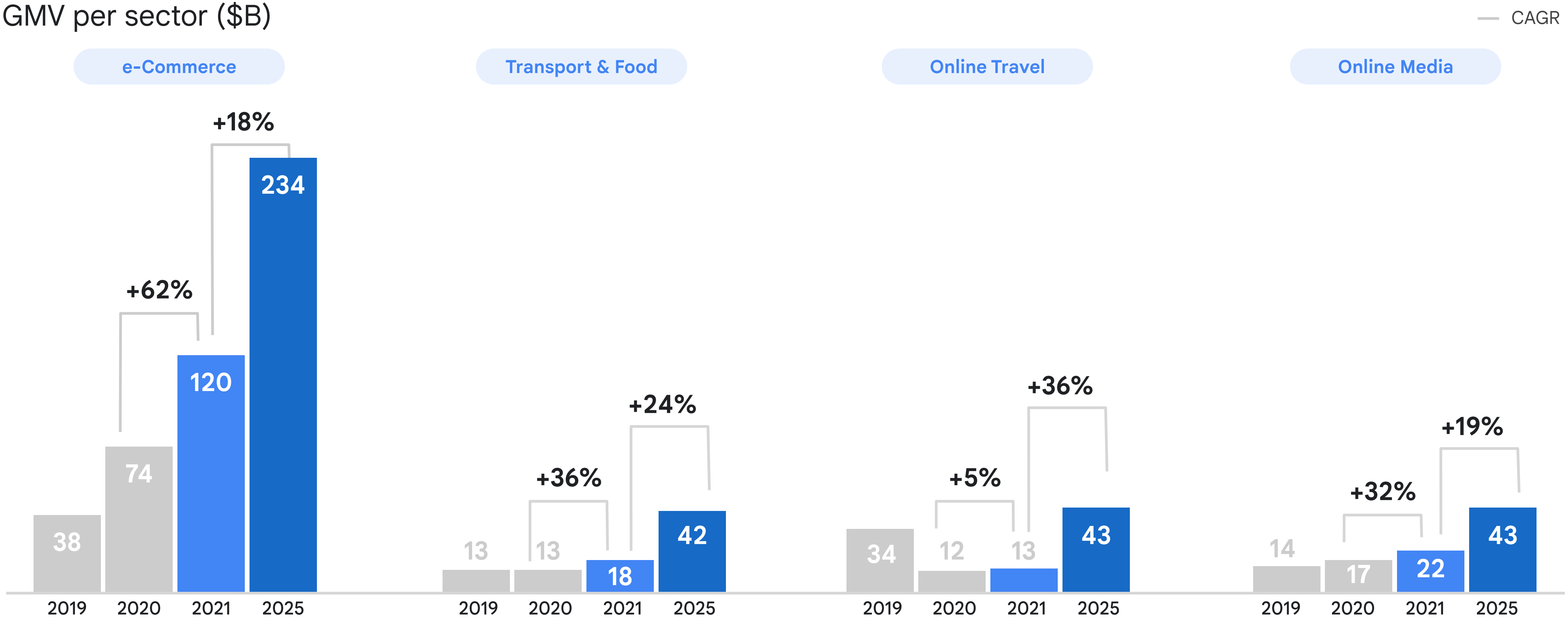
— CAGR

Source: Bain analysis.

Google TEMASEK BAIN & COMPANY

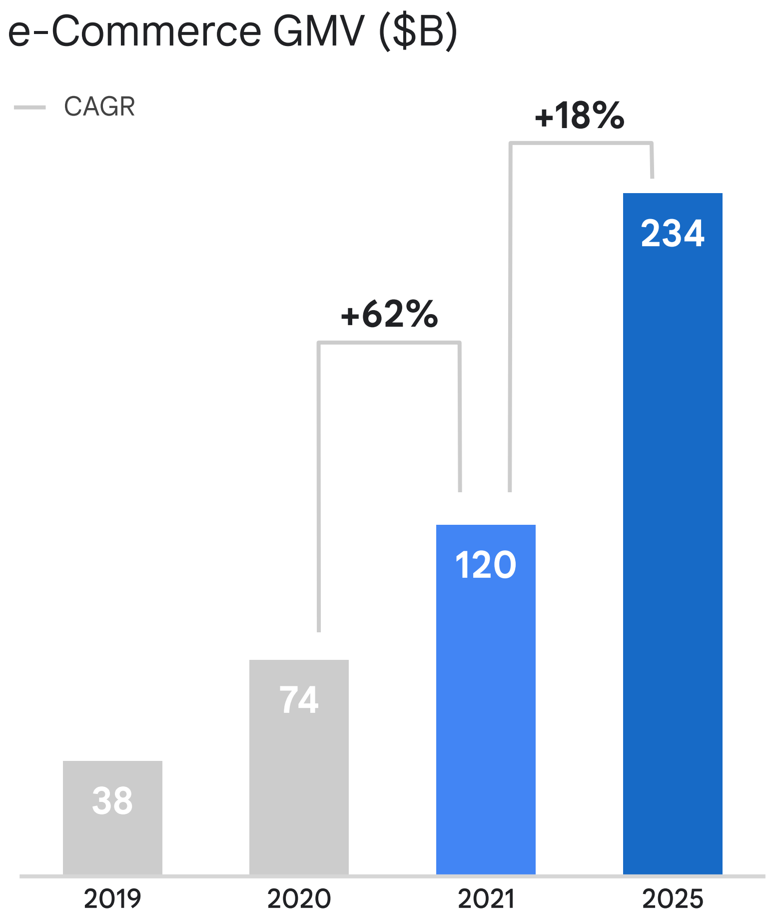
e-Commerce is the biggest growth driver and could continue to be until 2025; online travel faces a challenging recovery

GMV per sector ($B)



Source: Bain analysis.

e-Commerce GMV sprints ahead, with a host of new growth areas



Battle for depth and loyalty intensifies

One in two online shoppers in SEA indicated higher purchase frequency and spend since the pandemic started. As a result, we have also seen increased emphasis on user stickiness and order value growth as penetration increases, on top of ongoing user acquisition efforts.

Symbiosis with digital financial services (DFS)

DFS have propelled the e-commerce boom, and vice versa. The rising popularity of e-wallets and buy-now-pay-later (BNPL) options are enabling a new generation of underbanked consumers to shop online.

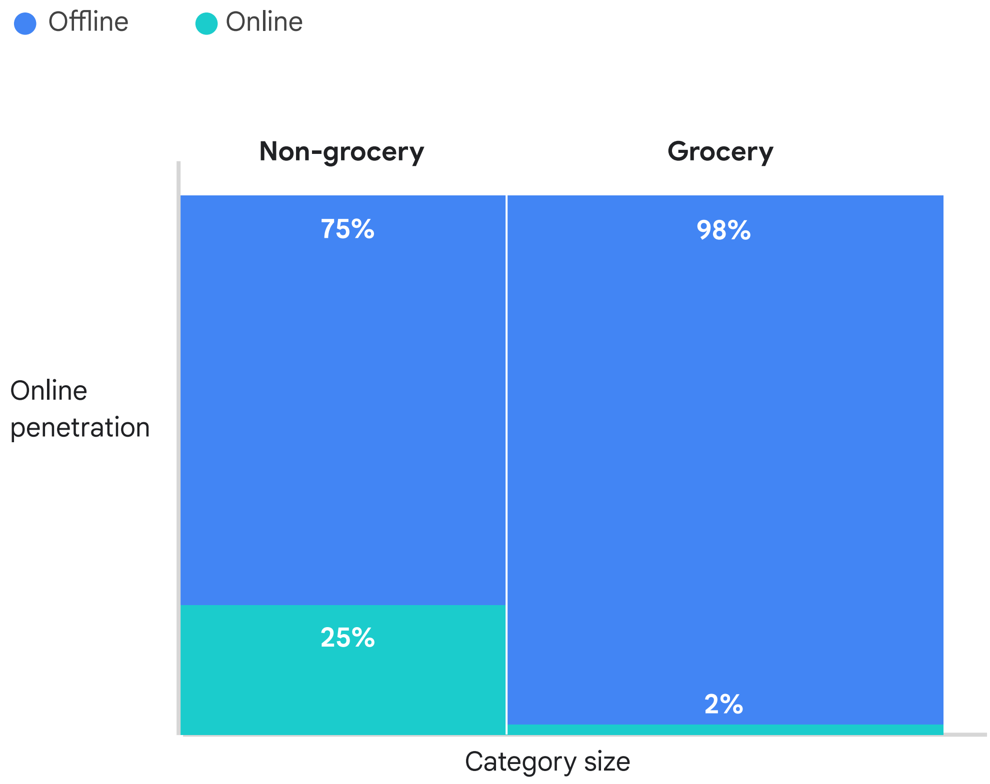
Beyond retail platforms - ‘informal e-commerce’

Formalised e-commerce, or simply ‘e-commerce’, refers to the goods and monetary transactions facilitated directly through retail platforms. In contrast, ‘informal e-commerce’ is initiated through social media and messaging apps, but the exchange is never recorded on a retail platform. Informal e-commerce exists across SEA and is particularly popular in Thailand and Vietnam. It constitutes additional volume that is by nature difficult to quantify and not included in the e-commerce GMV shown here.

Source: Bain analysis, Google-commissioned Kantar SEA e-Conomy Research 2021.
Note: ‘Informal e-commerce’ is not factored into the e-commerce GMV calculation.

Online grocery remains underpenetrated and offers significant opportunity for growth

Online penetration in the e-commerce category (H1 2021)



Grocery as e-commerce's last frontier

Grocery currently accounts for over 50% of all retail spend in SEA. Prompted by the pandemic, 64% of internet users have now purchased groceries online at least once. However, overall online share of total grocery GMV still remains low at ~2%, due to lower purchase frequency and transaction value (vs. offline). Other advanced markets (e.g. US and China) have close to ~10% penetration, signifying strong potential in this region.

Challenging unit economics remain

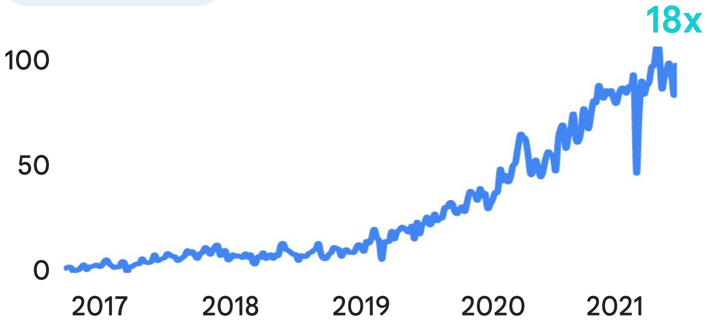
Despite clear whitespace for growth, unit economics of e-groceries remain a challenge, particularly when it comes to fulfilment and last-mile logistics. Ongoing innovations in business models and logistics infrastructure, however, may unlock substantial value in this space soon.

Source: Bain analysis.
Note: Non-grocery includes consumer electronics, apparel & footwear, home & living, beauty & personal care, and others.

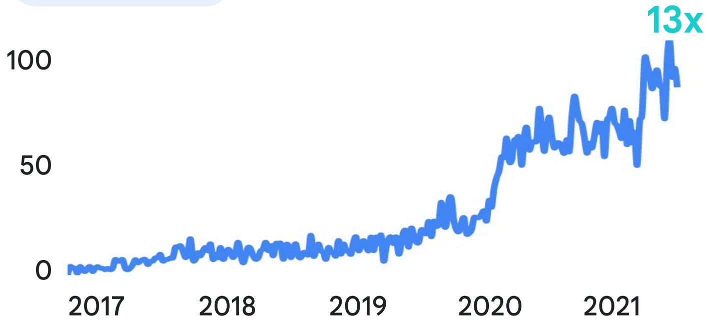
More merchants are **eager to join the e-commerce rocketship**

Search volumes for merchant- and seller-related queries, by country, indexed to 2017 levels

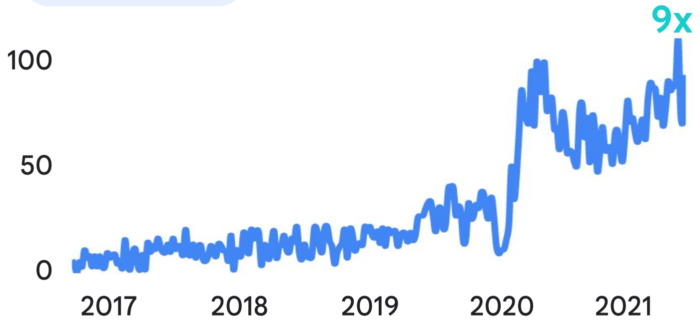
Indonesia



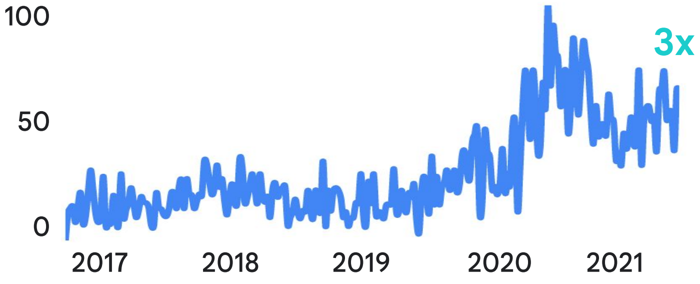
Malaysia



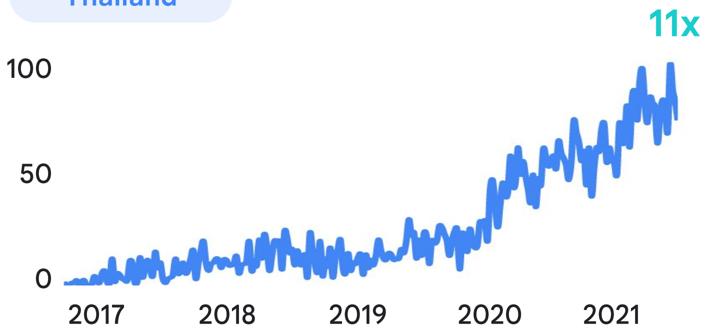
Philippines



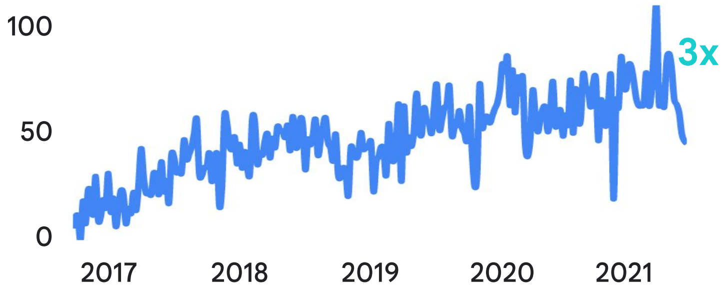
Singapore



Thailand



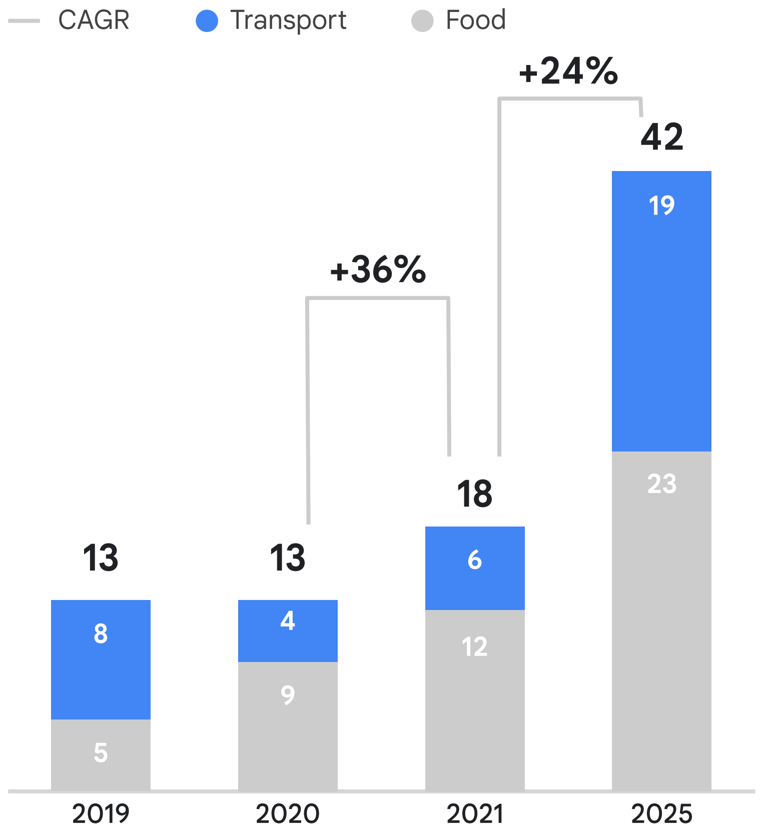
Vietnam



Source: Google Trends web searches for merchant/seller-related search terms, Jan 2017 - Aug 2021. 'x' indicates indexed search queries (2021) vs. indexed search queries (2017).
Terms included: Shopee sellers, Lazada sellers, Tokopedia sellers, Tiki sellers, Sendo sellers, etc.

Transport & food GMV hits $18B as fortunes continue to diverge

Transport & food GMV ($B)



Transport remains subdued despite slight recovery

Amidst persistent waves of lockdowns, on-demand transport remains at ~70% of pre-COVID levels. As vaccination efforts make headway across the region, a base case recovery is expected in 2022, starting with metro areas.

Food delivery continues to thrive

Throngs of new users joined food delivery services during lockdowns and it has now become the most penetrated digital service with 71% of internet users having ordered meals this way at least once. To meet consumer demand, platforms are aggressively onboarding restaurants and food stalls.

This mass adoption reiterates that 'convenience is king' and ordering meals is a habit that will likely stick for years to come.

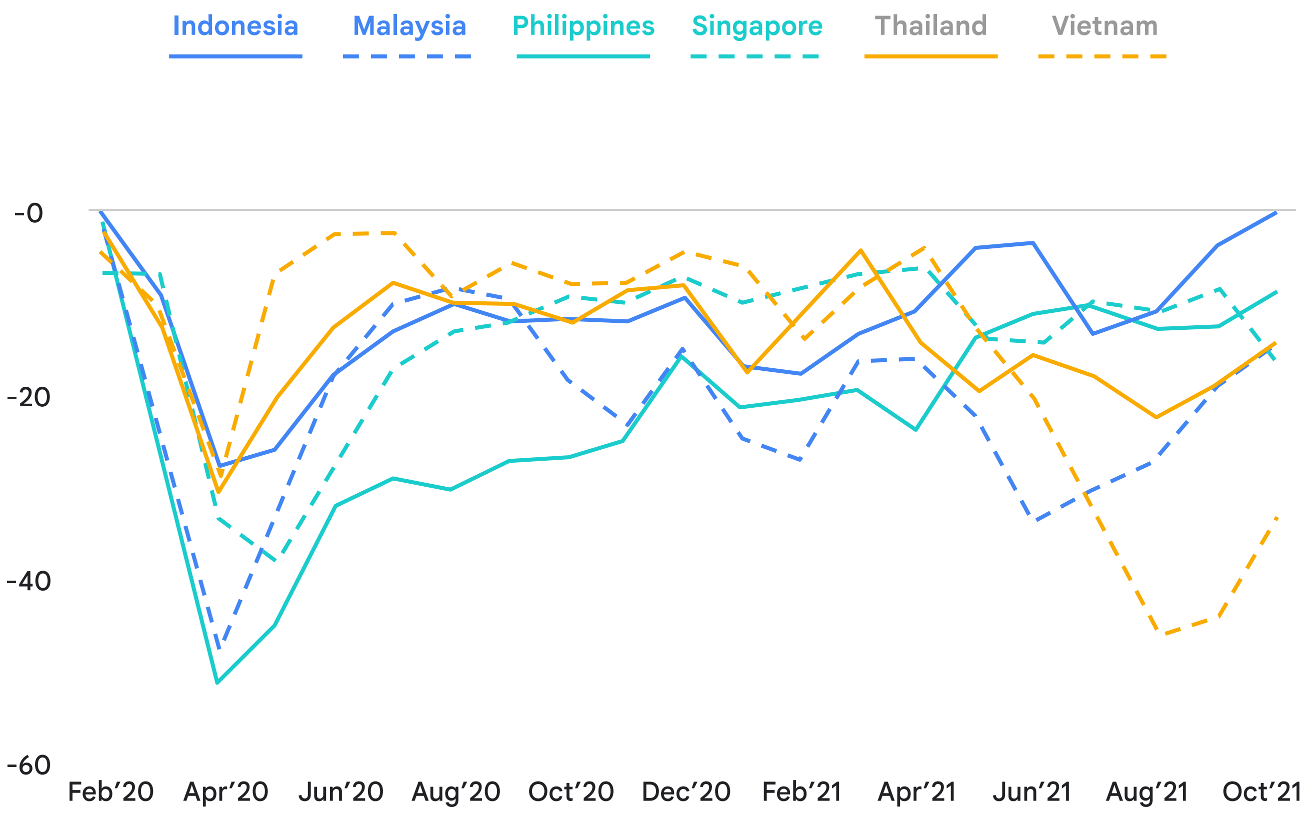
Source: Bain analysis; Google Mobility Report (as of the 1st week of Oct 2021).

Transport continues to struggle amidst persistent lockdowns

Ride-hailing is the preferred transport option

Transport may have been hampered by lockdowns, but new users (who joined since the onset of the pandemic) have reported a higher frequency of use than existing users. In 2021, 55% of new users hailed a ride weekly or more, compared to only 38% of existing users, indicating that ride-hailing offers unique advantages during this unprecedented time. For example, this mode of transport offers better contact tracing than traditional taxis and is often perceived as a safer option compared to public transport.

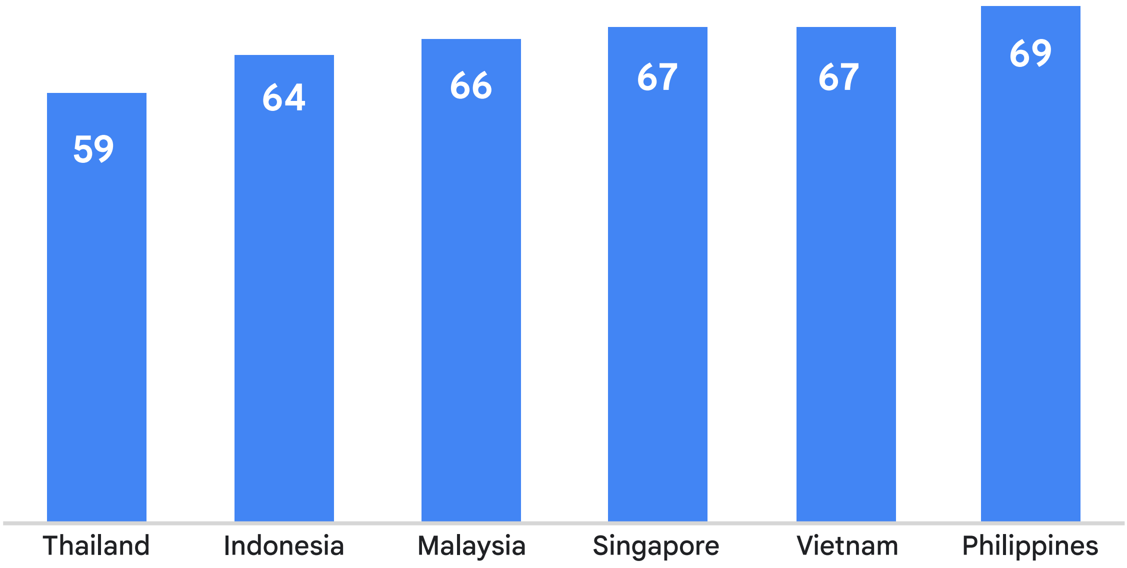
Commute volume adjustment, indexed to January 2020



Source: Google Mobility Report (as of 1st week of Oct 2021); Google-commissioned Kantar SEA e-Conomy Research 2021.
QB1b. Thinking about your current habits throughout 2021 so far, how often do you typically do the following activities?
Base: All ride-hailing users n=7,828, existing users n=4,539, new users 2020 n=1,611, new users 2021 n=1,679.

Food delivery remains sizzling hot, with incumbents expanding rapidly and new entrants rushing to join the race

% of users who increased frequency of food delivery orders (vs. pre-COVID)



Food deliveries continue to boom

Drawn-out lockdowns proved to be a boon for customer acquisition. Not surprisingly, ~22% of 2021's food delivery users are new, and ~65% of consumers have increased the frequency of their food deliveries. Food delivery platforms are drastically increasing merchant sign-ups and drivers to meet demand.

Battleground heats up with new entrants

Food delivery is now often viewed as essential when entrenching 'super-app' strategies or deepening user engagement. Relatively low barriers to entry and hyperlocal services suggest that each market will continue having multiple players.

Incumbents need to double down on loyalty

63% of users have said they are likely to switch to another provider, so food delivery services ought to reinforce brand loyalty to compete in this cutthroat race.

Source: Google-commissioned Kantar SEA e-Conomy Research 2021.
QB1a. Vertical usage - pre-COVID comparison / **QB2a.** Vertical spend - pre-COVID comparison.
Base: Pre-pandemic food delivery consumers n=1,174.

Compared to pre-COVID levels, interest in food delivery remains significantly elevated

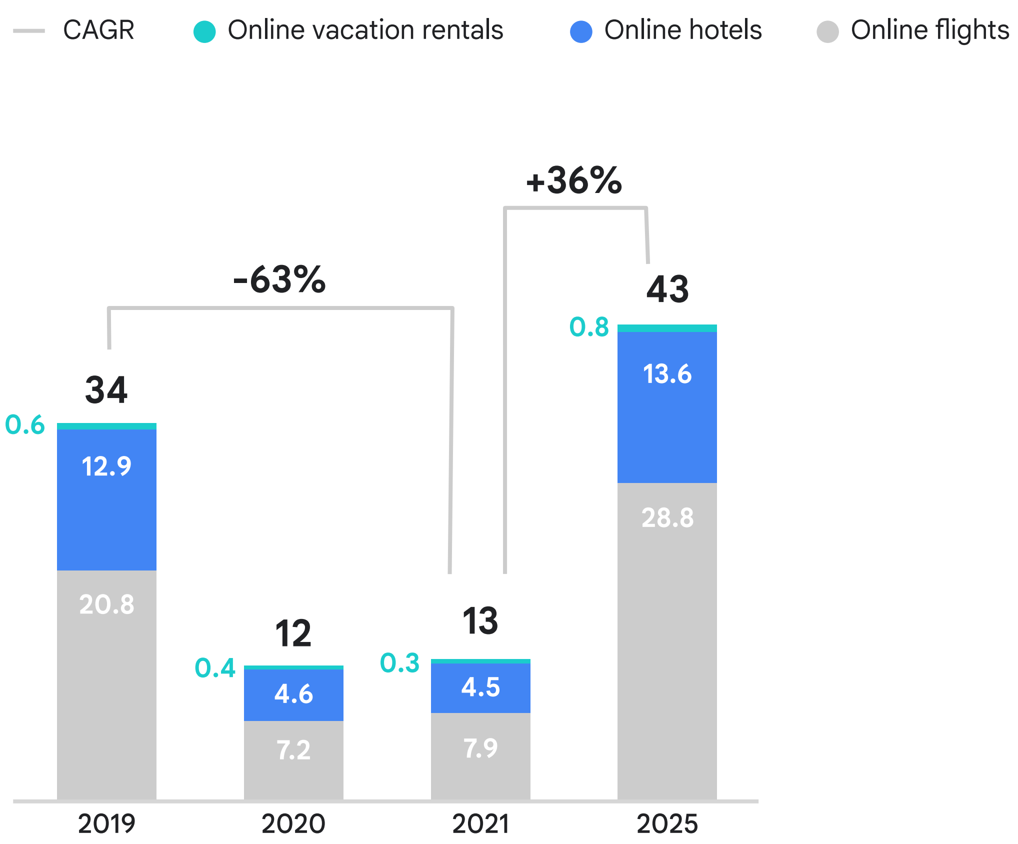
Search volumes for food delivery services, by country, indexed to 2017 levels

Source: Google Trends web searches for selected food delivery services, 1/2017 - 8/2021. "x" indicates indexed search queries (2021) vs. indexed search queries (2017).
Terms included: Shopee food, GoFood, GrabFood, Traveloka Eats, Tokopedia Nyam, foodpanda, Beepit, airasia food, Deliveroo, Oddle, WhyQ, Loship, Now.vn, LINE Man, and their variations.

Google TEMASEK BAIN & COMPANY

Travel will remain grounded for longer than expected

Online travel GMV ($B)



Source: Bain analysis.

Travel remains challenging a year on

Beset by new virus variants, travel remains beaten down. We are expecting a relatively flattish 2021 vs. 2020, and a base case recovery to pre-COVID levels by 2024. That said, the forecast is highly dependent on vaccination progress globally and cross-border travel restrictions.

Domestic tourism shines brightly

Domestic flights have recovered to ~50% of pre-COVID levels, though international flights remain ~95% down. Amid the challenging environment, domestic tourism is propping up the entire travel industry as locals book staycations within their own borders.

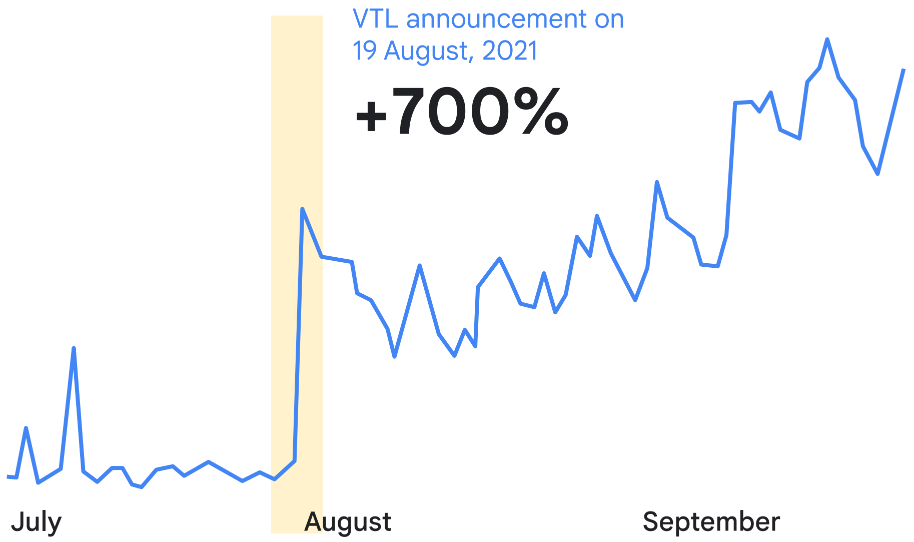
Against this backdrop, vacation rentals have benefited greatly. Many urbanites have temporarily relocated to vacation rentals in domestic holiday destinations for extended periods.

Optimistic for the long-term

Pent-up demand for international travel lingers on. Business travel around the region, however, may recover more gradually as businesses rethink their travel needs.

Travel likely to see a **swift recovery once travel restrictions ease**

Search trends for Germany spiked by +700% on the day Singapore announced the Vaccinated Travel Lane (VTL)



Rapid rebound will be driven by pent-up demand

The rebound is expected to be driven by leisure travel, with some online travel agencies (OTAs) seeing recovery to pre-COVID volumes as quickly as a week after travel restrictions were relaxed.

Consumers cannot wait to travel again, as evidenced by the sharp rise in travel searches following Singapore's announcement of the first VTL to Germany.

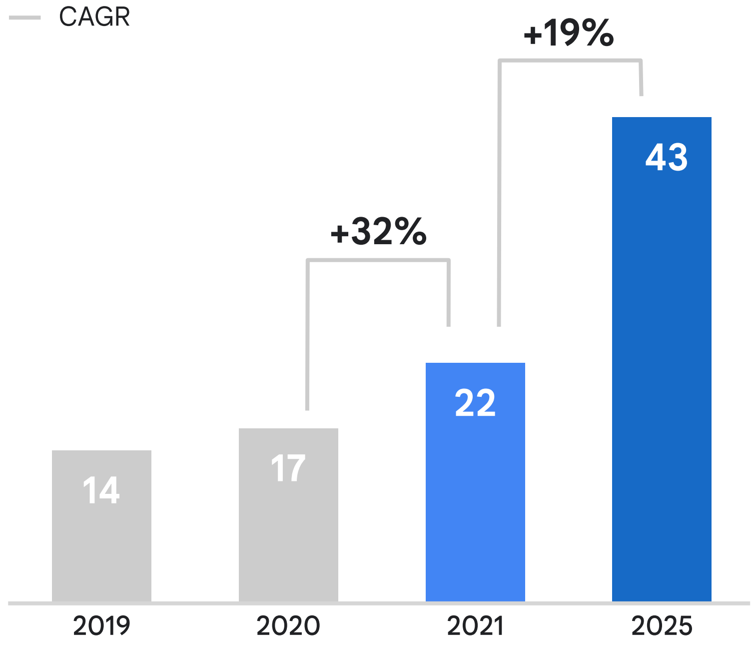
New and more discerning travel booking behaviour

OTAs have indicated new behaviour amongst those who are travelling during the pandemic. Consumers are more likely to assess accommodation hygiene via photos and reviews, scrutinise refund and cancellation policies, and purchase travel insurance. Providing flexibility and peace of mind to anxious travellers are likely to help travel providers win rebound demand over time.

Source: Google Trends web searches for "[travel] to Germany" from Jul - Oct 2021.

Users are glued to online media amidst lockdowns and travel restrictions

Online media GMV ($B)



Video:
Multiple new players leave viewers spoilt for choice

With numerous new video streaming platforms launching across the region, consumers now have a wide variety of viewing options. A strong growth trajectory lies ahead for the sector as entertainment budgets shift online - not only from a growing subscriber base, but also from revenue per subscription (e.g. when a family signs on for 'multi-home' services) or when homes subscribe to multiple over-the-top (OTT) media services.

Gaming:
The pandemic ushered in a new generation of gamers

Driven by a willingness to spend on and in games, along with a buffet of games to choose from, the average spend per user has gone up in the past year. Gaming's overall wallet share remains small, however, leaving the sector with sizable headroom for growth.

Music:
Continuous work-from-home keeps music streaming stagnant

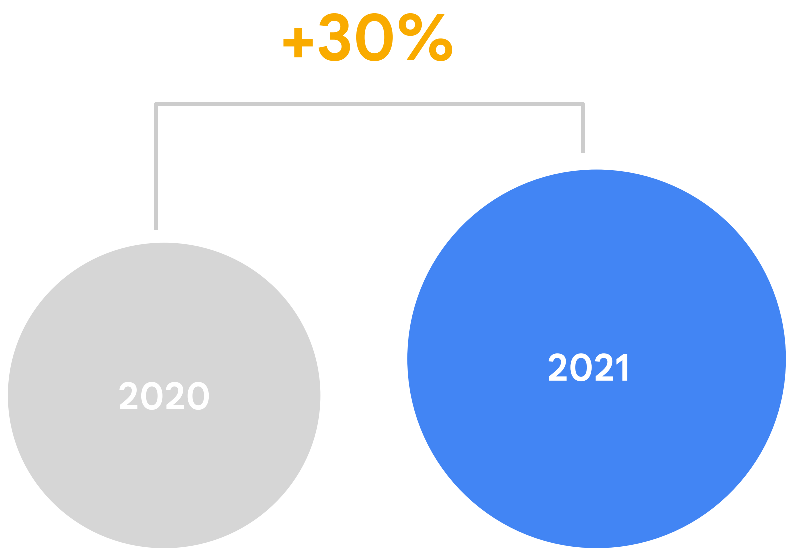
Ongoing lockdowns mean urban commutes remain infrequent and the demand for music streaming services stays low. Unsurprisingly, the monthly active users (MAU) of top platforms are growing at <10% - a notable discrepancy from the double-digit growth of previous years. Recovery to pre-pandemic growth rates is expected to coincide with the return of urban commutes.

Source: Bain analysis.
Note: Online media refers to advertising, gaming, subscription video-on-demand and subscription music-on-demand.

Online video growth **still in early stages**

Increase in SVOD subscribers

— CAGR



Opportunity lies in deepening penetration

Subscription growth has thus far has been largely driven by urban populations who have ready internet access and access to digital payment infrastructures. Further video-on-demand (VOD) growth will likely come from three primary drivers: (1) acquisition of new users beyond urban centres; (2) each user subscribing to multiple services; and (3) adjustment of subscription fees as subscription video-on-demand (SVOD) providers rely less on promotions to acquire new users.

Local content key to attracting non-metros

Content strategy is a basic but definitive differentiator and getting the right balance of local vs. international content will be crucial, especially where consumer preferences vary across locales.

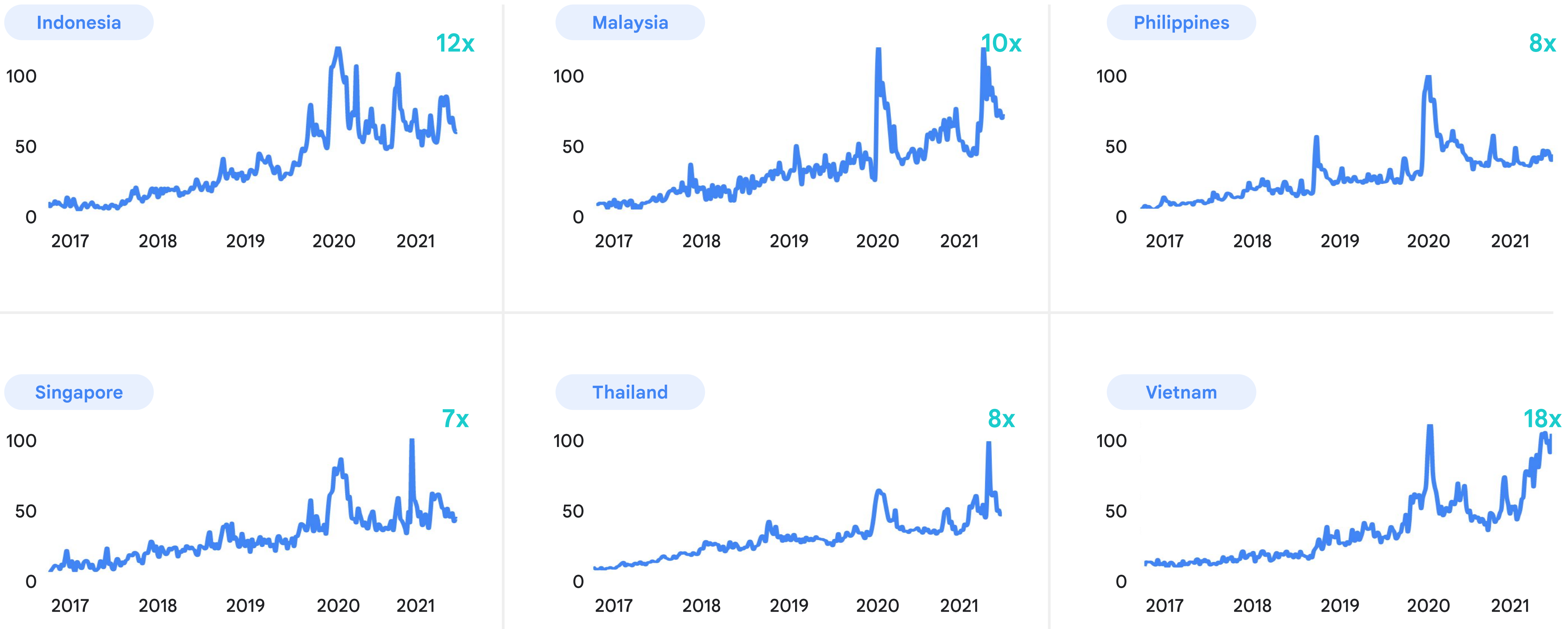
Attract more subscriptions with pricing innovations

Innovation in pricing mechanisms (e.g. sachet pricing) and payment options (e.g. top-up cards) is gaining momentum, as OTTs look to penetrate the mass market in non-metro areas where many consumers may still be underbanked.

Source: Bain analysis.

Consumer interest in video subscription services continues to soar

Search volumes for select video subscription services, by country, indexed to 2017 levels



Source: Google Trends web searches for selected video streaming services, 1/2017 - 8/2021. "x" indicates indexed search queries (2021) vs. indexed search queries (2017).
Terms included: netflix, disney, we tv, viu, iflix, iqiyi, astro on the go, and their variations.

Digital financial services are seeing strong growth across all products.

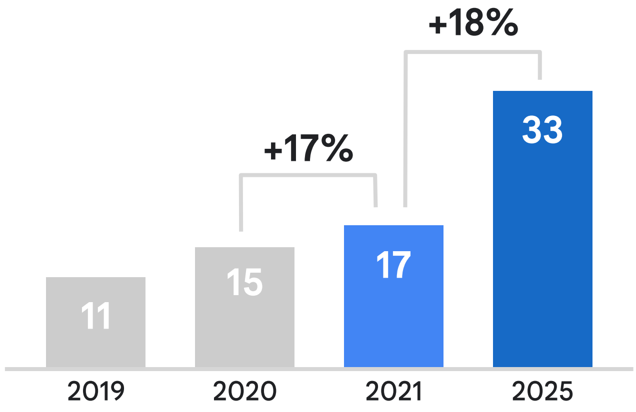
Digital lending has rebounded healthily and **digital payments, especially e-wallets, are fast becoming mainstream**, underpinned by e-commerce growth.

Source: Bain analysis.

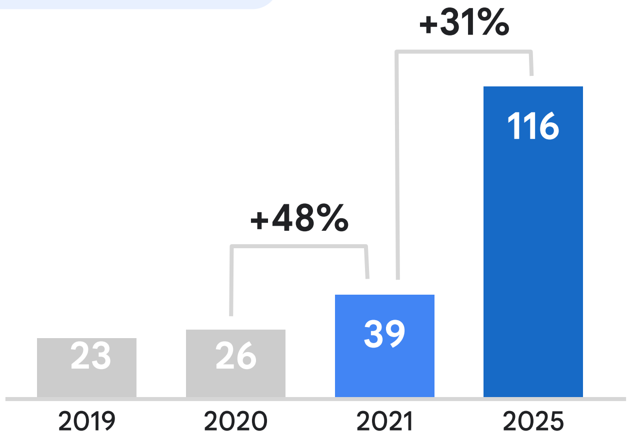
All digital financial services are flourishing, especially digital lending

($B)

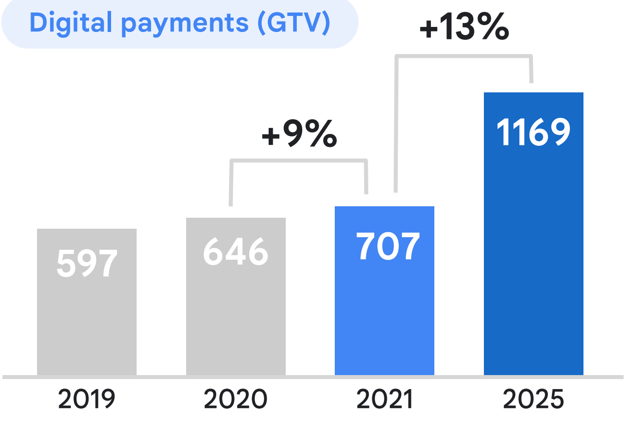
Remittance flow



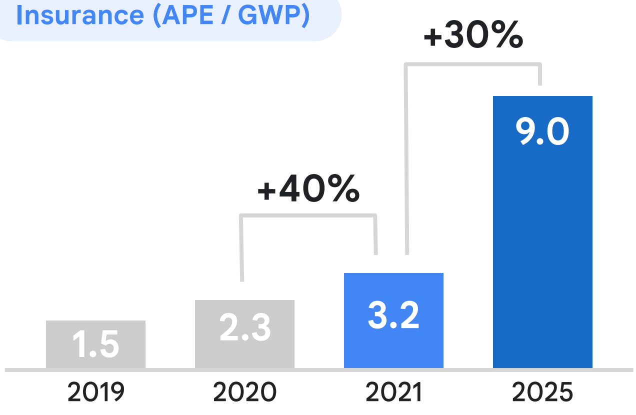
Lending loan book



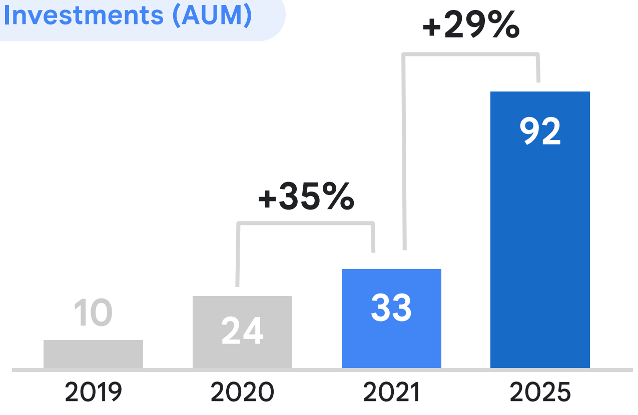
Digital payments (GTV)



Insurance (APE / GWP)



Investments (AUM)

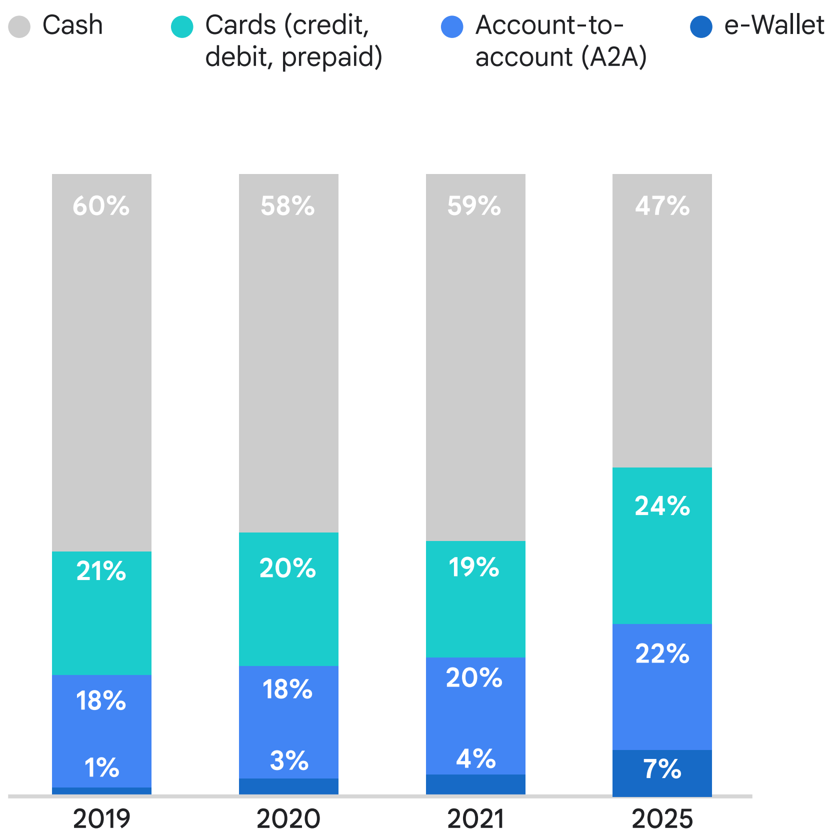


Source: Bain analysis.
Note: GTV = Gross Transaction Value; APE = Annual Premium Equivalent; GWP = Gross Written Premium; AUM = Assets Under Management.

Google TEMASEK BAIN & COMPANY

Digital payments are gaining momentum off the back of growing digital services and national payment rails

Share of GTV



Cash is slowly losing its foothold

Cash is still king, but its dominance is eroding. As digital services like e-commerce, ride-hailing and food delivery gain traction, cashless payments are increasingly becoming the go-to for a seamless experience.

Account-to-account (A2A) buoyed by real-time payment rails

Off the back of successful national rails such as FAST in Singapore and PromptPay in Thailand, A2A has become an increasingly popular form of payment amongst banked populations. PromptPay, for instance, recorded ~80% YoY transaction value growth in April 2021.

e-Wallet adoption is picking up pace

Southeast Asia is home to large underbanked and unbanked populations, for whom e-wallets can help leapfrog challenges in obtaining cards and bank accounts. For many, it is their first experience with digital payments.

Source: Bain analysis.
Note: GTV = Gross Transaction Value.

e-Wallet transaction volumes to accelerate as consumer and merchant adoption fuel one another

Consumer

Digital service platforms spur consumer e-wallet adoption…

Consumer e-wallet usage has surged 45% compared to pre-COVID times, and transaction value is expected to more than double by 2025.

Seamless integration and attractive incentives offered by digital service platforms (e.g. marketplaces) have been critical to new user acquisition and deepening usage.

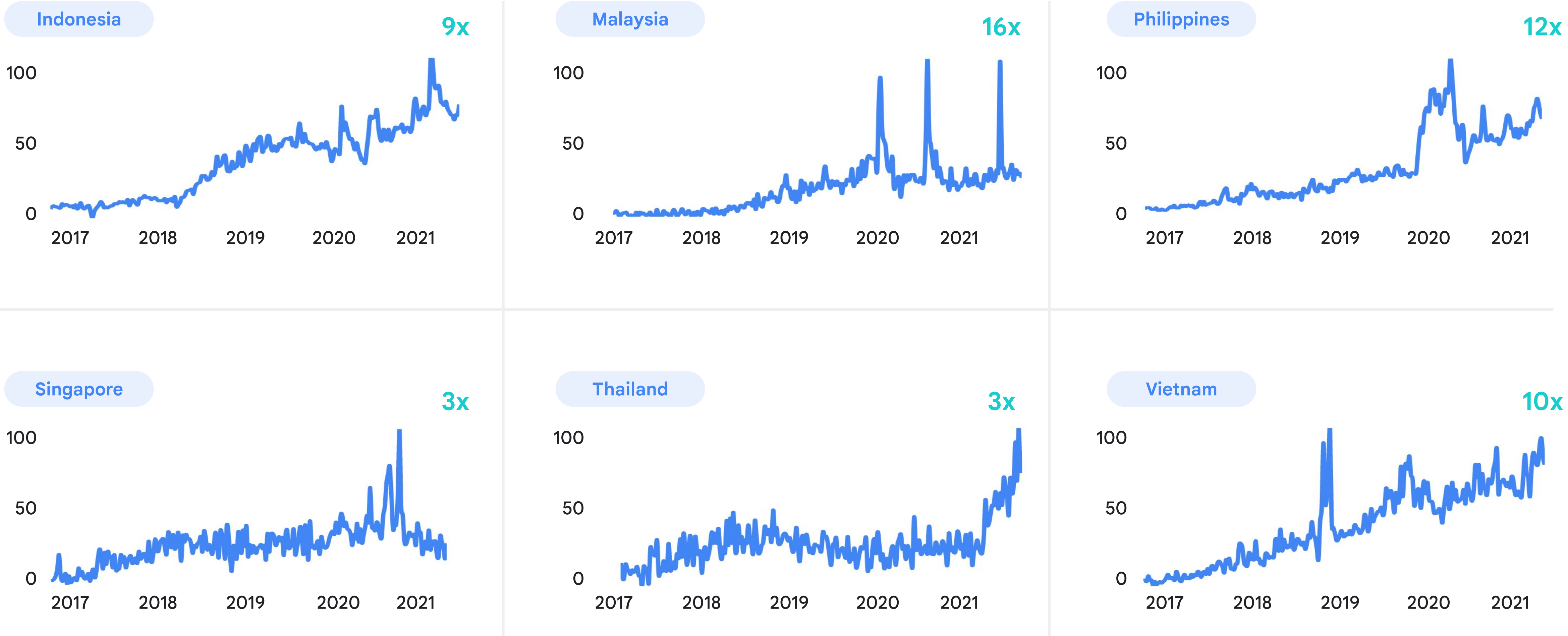
Merchant

…encouraging merchant adoption, and triggering a virtuous cycle

Usage of merchant-facing apps that feature e-wallets have grown exponentially since 2018. Driven by lower fees and customer preference, more merchants are accepting e-wallet payments, which in turn spurs further consumer adoption. Over the next one to two years, 90% of digital merchants expect to continue using or increasing their usage of digital payments, with e-wallets as their top choice.

Source: Bain analysis; App Annie (Monthly Active Users. Markets: MY, ID, TH, SG, VN, PH. Time frame: Jan 2018 to Sep 2021).
Apps included: GoBiz (merchant app for Gojek), GrabMerchant, OVO Merchant, PayPal Business and SGQR Notification.

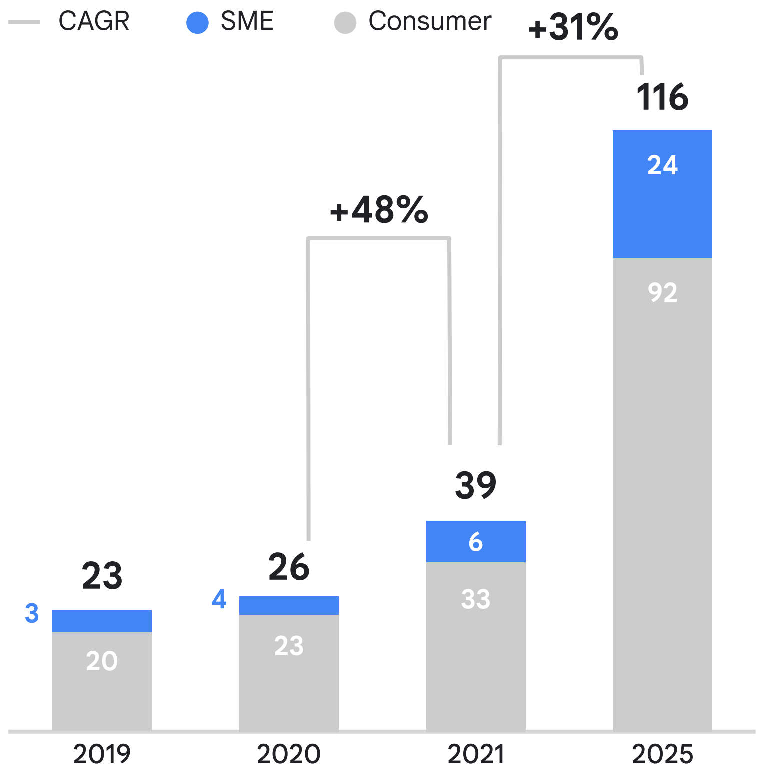
e-Wallet payments continue to gain popularity, with Malaysia and the Philippines seeing the biggest surge



Source: Google Trends web searches for select e-wallet services, Jan 2017 - Aug 2021. 'x' indicates indexed search queries (2021) vs. indexed search queries (2017).
Terms included: DANA, OVO, GoPay, LinkAja, ShopeePay, Boost, Touch 'n Go eWallet, BigPay, Google Pay, GCash, DBS Paylah, Singtel Dash, FavePay, ViettelPay, ZaloPay, MoMoPay, Air Pay, PayMaya, Coins.ph, TrueMoney, Rabbit LINE Pay and their variations.

Strong recovery in digital lending underpinned by low NPLs and economic rebound

Digital lending outstanding balance ($B)



Rebound in lending appetite

After a year of uncertainty where many digital lenders reduced disbursements amidst fears of non-performing loans (NPLs), credit providers are regaining confidence due to government interventions such as loan moratoriums and stimulus packages. Other bullish signs include the ~30% of digital merchants who said they would likely increase usage of supply chain financing and BNPL offerings in the near future. On the consumer side, searches for lending are growing, with a 14% YoY increase in lending-related queries. Digital lenders have experienced enviable growth in new user sign-ups and active users, especially in developing countries where regulators are more supportive of fintech players and have set up regulatory sandboxes to promote innovation.

Buy-now-pay-later is taking root

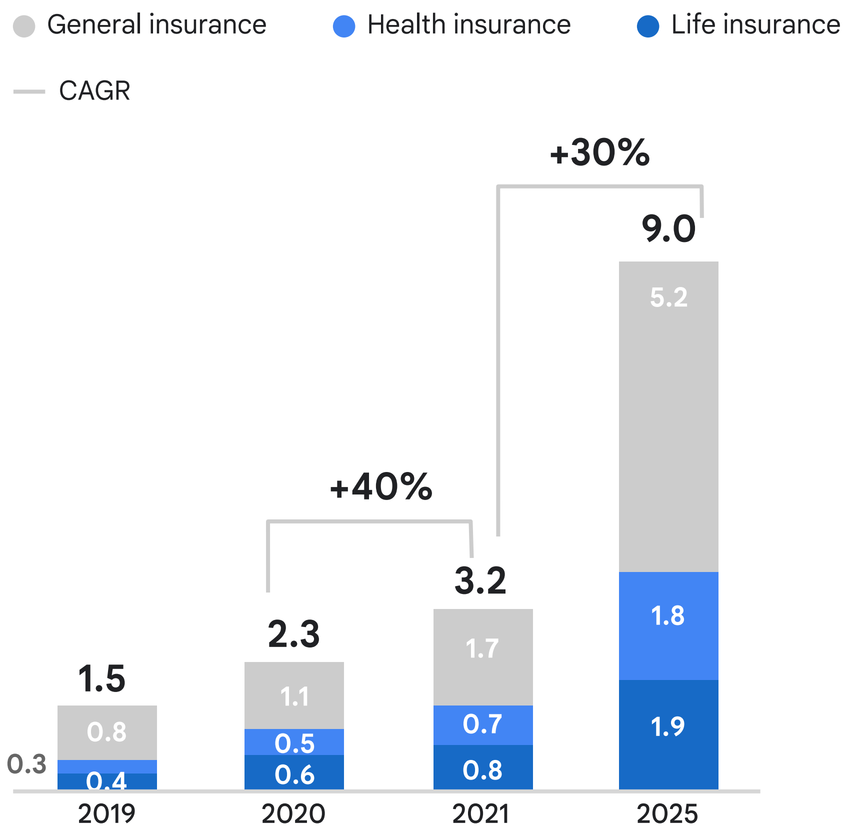
Use of buy-now-pay-later (BNPL) as a form of consumer credit has accelerated digital lending in the region. Consumer search interest for BNPL has skyrocketed 16X in the region, primarily in Indonesia. Fueled by large numbers of underbanked consumers, many of whom lack access to credit, platforms that mediate payments between merchants and consumers have found a way to lend at the point of sale.

The confluence of e-wallets, e-commerce platforms, and on-demand credit offerings has highlighted the tangible benefits of BNPL. Competition in this sector is heating up - with pure-play BNPL players, digital retail platforms, banks and even OTAs competing for the same pie.

Source: Bain analysis; Google Trends web searches for 'personal loans' between Jan - Sep 2021 vs. same year before.
Note: NPL = Non-Performing Loans; OTA = Online Travel Agencies.

Insurance purchase moves online as traditional channels get disrupted

Digital insurance (APE / GWP, $B)



Digital insurance is picking up pace

Like other sectors, general insurance has benefited from the digital push, with more consumers willing to transact online and becoming less reliant on face-to-face interactions. Growth will likely further accelerate as the travel sector recovers and super-apps continue making advancements in this space.

Likewise, health insurance remains top of mind as the pandemic endures. Distribution has increasingly gone online - via both owned digital platforms as well as strategic tie-ups with healthtech players.

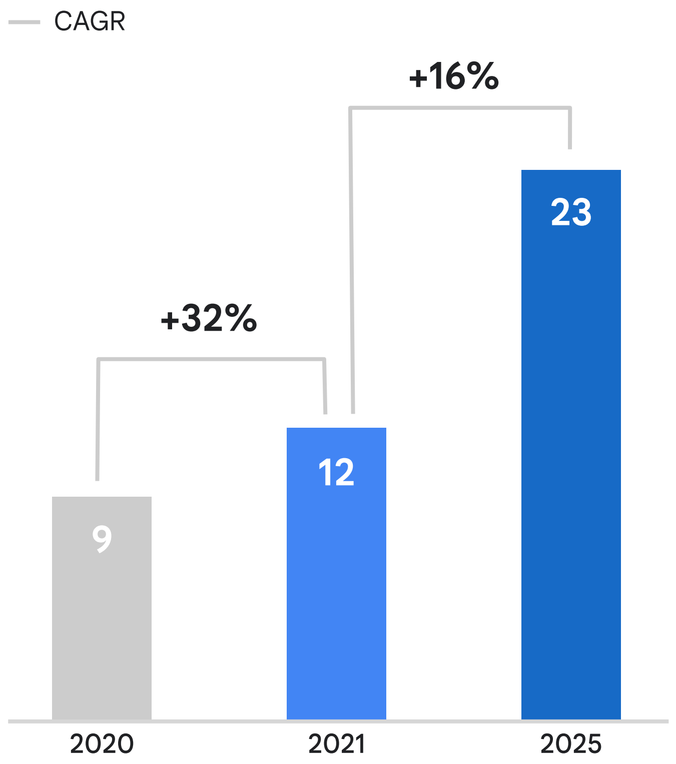
Continuous innovation in insurance products

Against the backdrop of the financial inclusion agenda, micro-insurance products have taken steps to build safety nets for underserved populations at affordable prices. Innovative products such as fractionalisation of insurance premiums paid by per-ride incentives have been developed specifically for digital platform use cases.

Source: Bain analysis.
Note: GWP = Gross Written Premium; APE = Annual Premium Equivalent.

Digital investment continues to intensify with a host of benefits

Number of users on robo-advisory platforms (M users)



Source: Statista.

New users are flocking to online investment platforms

When traditional offline wealth management channels became inconvenient, robo-advisory platforms saw a giant surge in adoption. Online investment platforms are capitalising on the opportunity to democratise access, with some platforms reaching the $1B assets under management (AUM) milestone.

Beyond fintech platforms, most banks and traditional wealth management services have also shifted their client engagements online, further lifting the adoption of digital investment tools.

Penetration extends across segments

Growth is happening not only in the mass-market segment but amongst the high-net-worth individuals (HNWIs) category as well. As they hunt for their investment alphas, the significantly lower fees from digital channels are particularly attractive.

Additionally, digital investment platforms that automate investment allocation decisions at much lower transaction costs have also widened access to consumers, especially to those who are typically unable to meet the minimum investment threshold of more traditional channels.

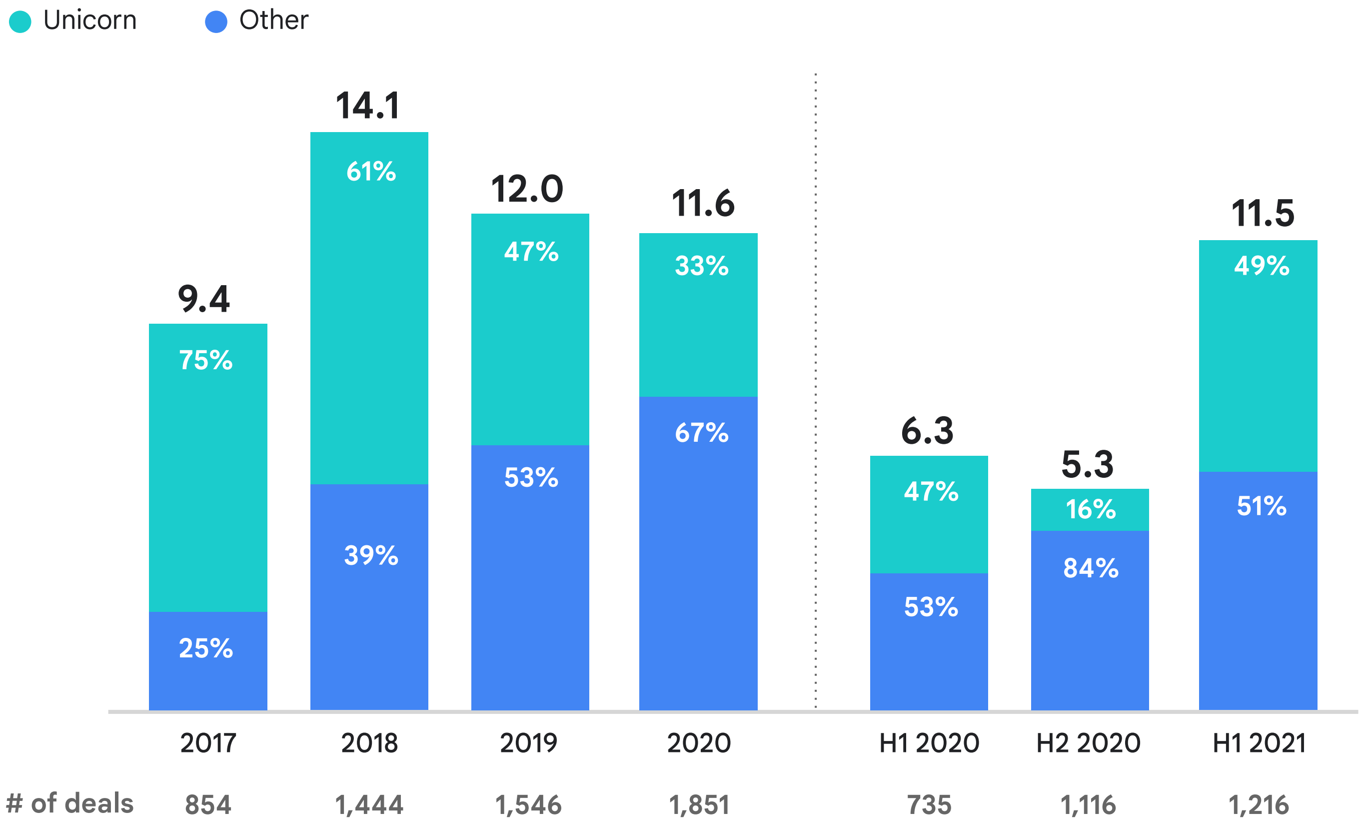
Funding on track to reach new heights

In 2021, **investments in SEA's internet economy hit an all-time high** despite the pandemic.

The race to public markets is heating up but remains fraught with questions like 'SPAC vs. IPO?' or 'local vs. foreign listing?'

2021 on track to be SEA's busiest deal year in recent times

Deal value ($B)



SEA's deal landscape is thriving

The H1 2021 deal value is already on track to surpass the 2020 full year value - a phenomenon largely driven by big-ticket deals like J&T Express ($2B) and Carro ($360M). The number of transactions has also increased by 65% YoY.

Global capital filters into the region in a meaningful manner

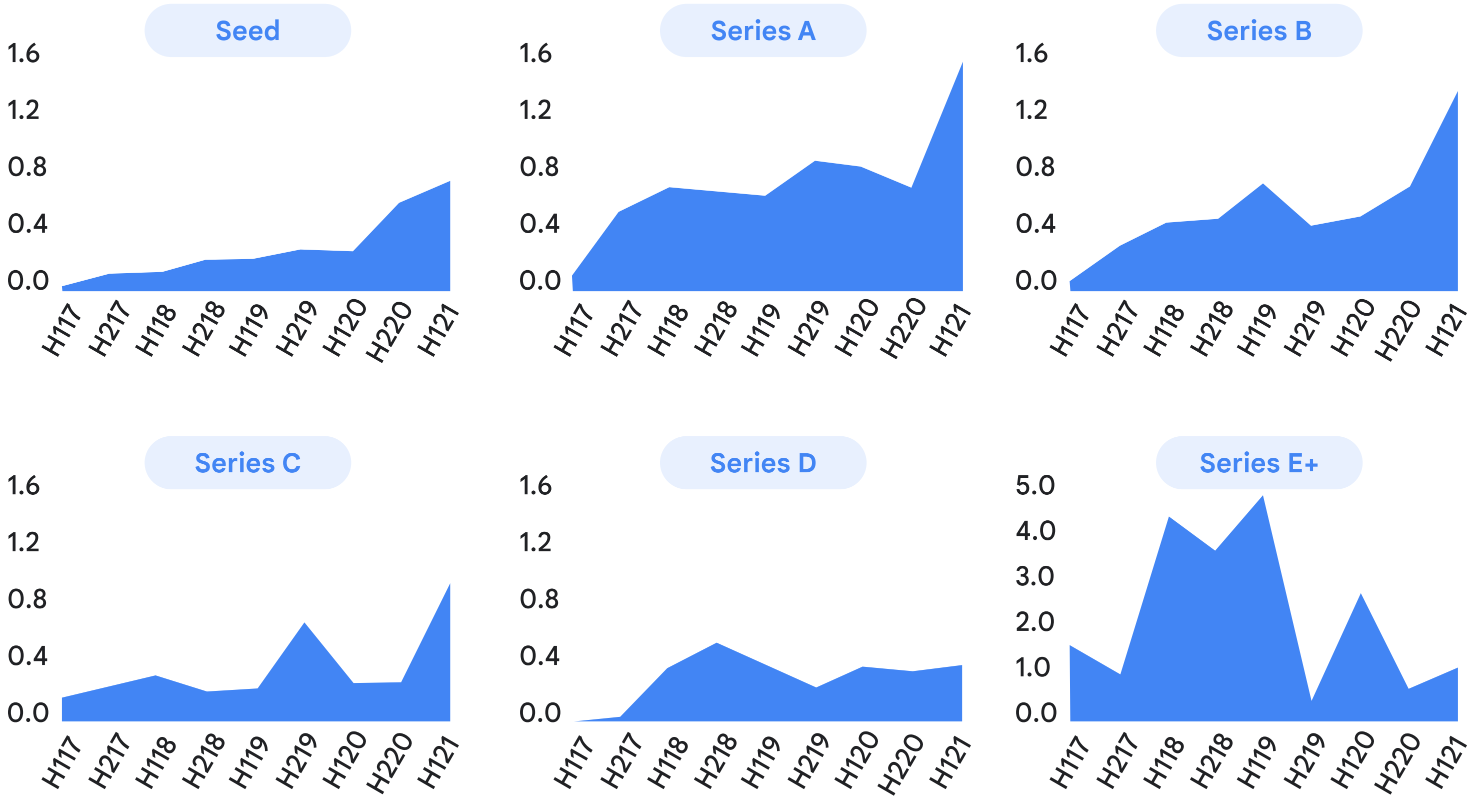
Global capital may have a long-standing on-off relationship with SEA, but industry participants are confident that the dynamics are different this time, with much more commitment and long-term interest from potential investors.

SEA's tech champions are helping to shine a bright light on the region, further strengthening global investor confidence.

Source: Industry reports; VC partners; Bain analysis.
Note: Deals include investments by venture capital, private equity and strategic investors.

Strong acceleration in early-stage deals boosts confidence in SEA's ecosystem

Funding ($B)



Planting seeds for future growth

After the slowdown in 2020, seed and Series A-B-C rounds all hit an all-time high in H1 2021, boding well for SEA's long-term prospects.

Bigger early-stage deals

Deal sizes across seed to Series C have been increasing across the board. Average seed and Series A funding were 6X larger in 2021 than in 2017, Series B up by 4X over the same period and Series C also saw an increase despite fluctuations.

Series D-E+ have plateaued while waiting to IPO

Series D-E+ megarounds have plateaued and are now worth a fraction of the 2018-2019 peaks - both in value and average deal size. Pre-IPO fundraising by regional unicorns may bring $1B+ deals back soon.

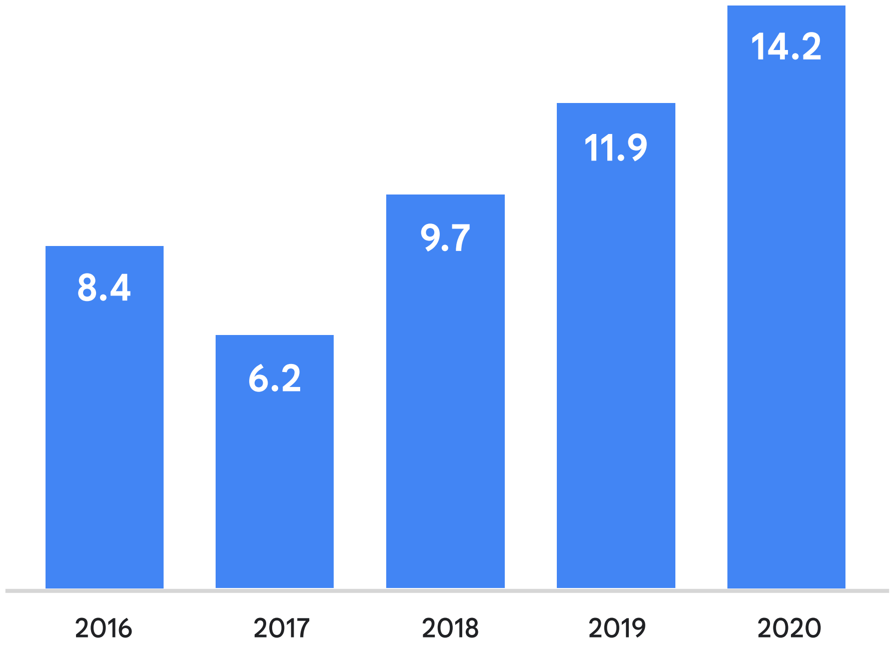
Source: Industry reports; VC partners; Bain analysis.

Record-high dry powder poised to spur more deal activity in 2021 and beyond

Dry powder in the region remains elevated at $14B

As SEA-based funds continue raising capital, they are setting a new dry powder record. Coupled with investors' renewed optimism in deal-making and a maturing bench of start-ups, the deal landscape is expected to remain bustling over the next few years.

SEA-based dry powder funds ($B)



Source: Preqin; VC partners.
Note: Non-exhaustive - only includes dry powder funds that are headquartered in SEA. Funds include both private equity and venture capital funds. 'Dry powder' refers to the amount of capital that has been committed to a fund minus the amount that has been called by the fund for investment.

SEA now home to **23 $1B+ consumer technology companies**

Number of consumer technology companies with $1B+ valuation

12
in 2020

23
in 2021

More $1B+ consumer technology companies in SEA in 2021 than in all years prior

Eleven companies hit the $1B milestone in 2021 alone, leading to a total of 23 such companies in SEA now. The new companies rose from the development of the e-commerce ecosystem and from financial services.

All 12 of 2020's $1B+ companies showing continued momentum

None of the 12 companies minted in 2020 dipped below the $1B+ valuation threshold as a result of the pandemic. Instead, accelerated digital adoption has added 11 more companies to their ranks. Many investors continue to have confidence in post-pandemic recovery and in long-term ecosystem development.

The race to public markets is heating up

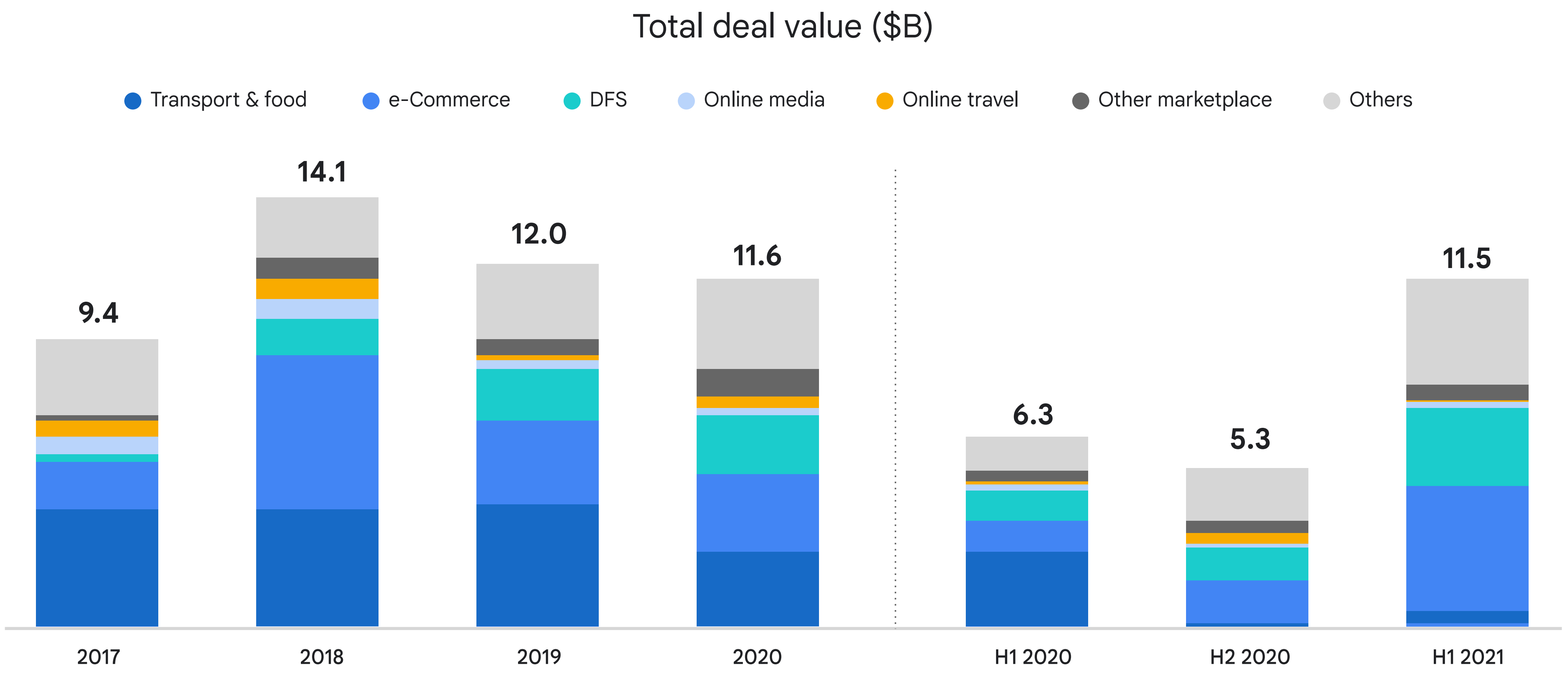
Strong valuations and novel listing approaches like SPACs have catalysed many of the region's technology companies (like Grab, finAccel, Bukalapak and PropertyGuru) to seek public listings as a way to raise capital. Investor interest is also running high, fuelled by institutional and retail investors chasing after the region's fastest-growing sectors.

Source: Temasek; Bain analysis.

e-Commerce and digital financial services continue to attract the lion's share of investment dollars in SEA.

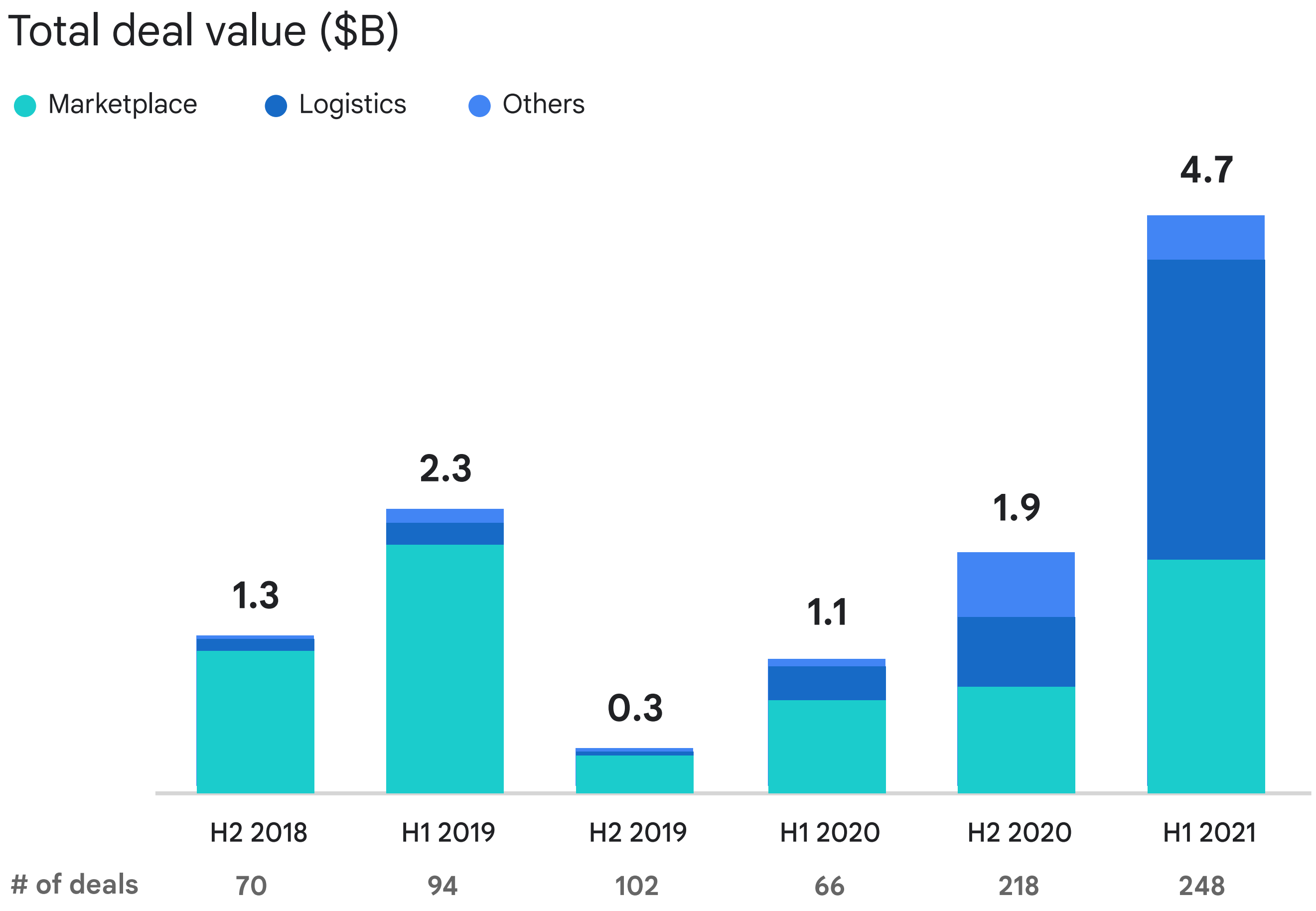
These two sectors are well-poised to continue generating investment opportunities, given **innovative new business models and infrastructure enablers**.

e-Commerce and digital financial services deals **remain centre stage**



Source: Industry reports; VC partners; Bain analysis.

Rocketing deal values in e-commerce **mainly driven by logistics**



Logistics now the most attractive investment in e-commerce

e-Commerce deal values surged in H1 2021, mainly driven by a few large deals including J&T Express. Investor interest in logistics remains high given the correlation with e-commerce's growth.

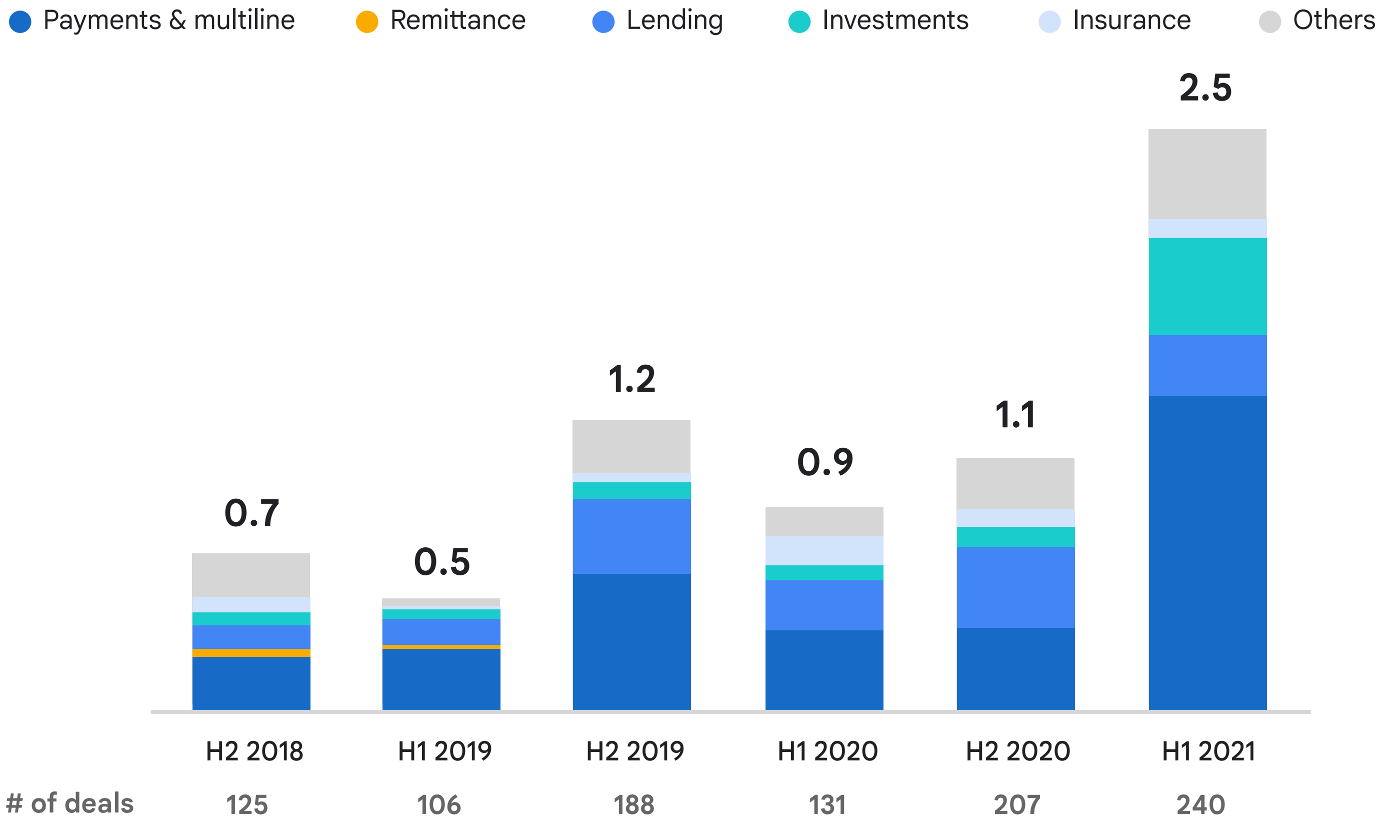
Non-marketplace investment opportunities an emerging trend

Marketplaces, as a proportion of total investments in e-commerce, have started to decline. As leading marketplaces in the region mature, investors have turned towards adjacent businesses (e.g. online health and beauty specialists and direct-to-consumer (D2C) brands).

Source: Industry reports, VC partners, Bain analysis.
Note: Companies with business in more than one category are classified under 'Others', unless they have a main service in another category.

Digital financial services steam ahead; H1 2021 deal values alone have surpassed those of full year 2020

Total deal value ($B)



2021 is the year of payments and investments

Payments and investments deal values expanded by 150% and 400% YoY respectively, mainly driven by several large-scale deals like payment apps VNLife and Mynt, and investment apps Ajaib and Bibit.

Fintech infrastructure emerges as a theme

Consumer-facing fintechs such as e-wallets are starting to consolidate around a handful of late-stage champions. Moving forward, focus will shift towards critical 'backstage' enablers, such as payment gateways and APIs in the payments sector and credit scoring in the lending and investments sector. Regulatory tech such as e-KYC will continue to garner interest as companies seek to comply with ever-changing regulatory requirements.

Source: Industry reports; VC partners; Bain analysis.
Note: Companies with business in more than one category are classified under 'Others', unless they have a main service in another category; API = Application Programming Interface. KYC = Know Your Customer.

Watch out for

Healthtech

continues its upward trajectory against the backdrop of an enduring COVID-19. Consumer willingness to pay for healthtech services follows an initial surge in user adoption, suggesting that unit economics will improve going forward. Investor appetite in the sector is also increasingly bullish, with a record-high $1.1B funding in H1 2021 alone (vs. ~$800M in 2020).

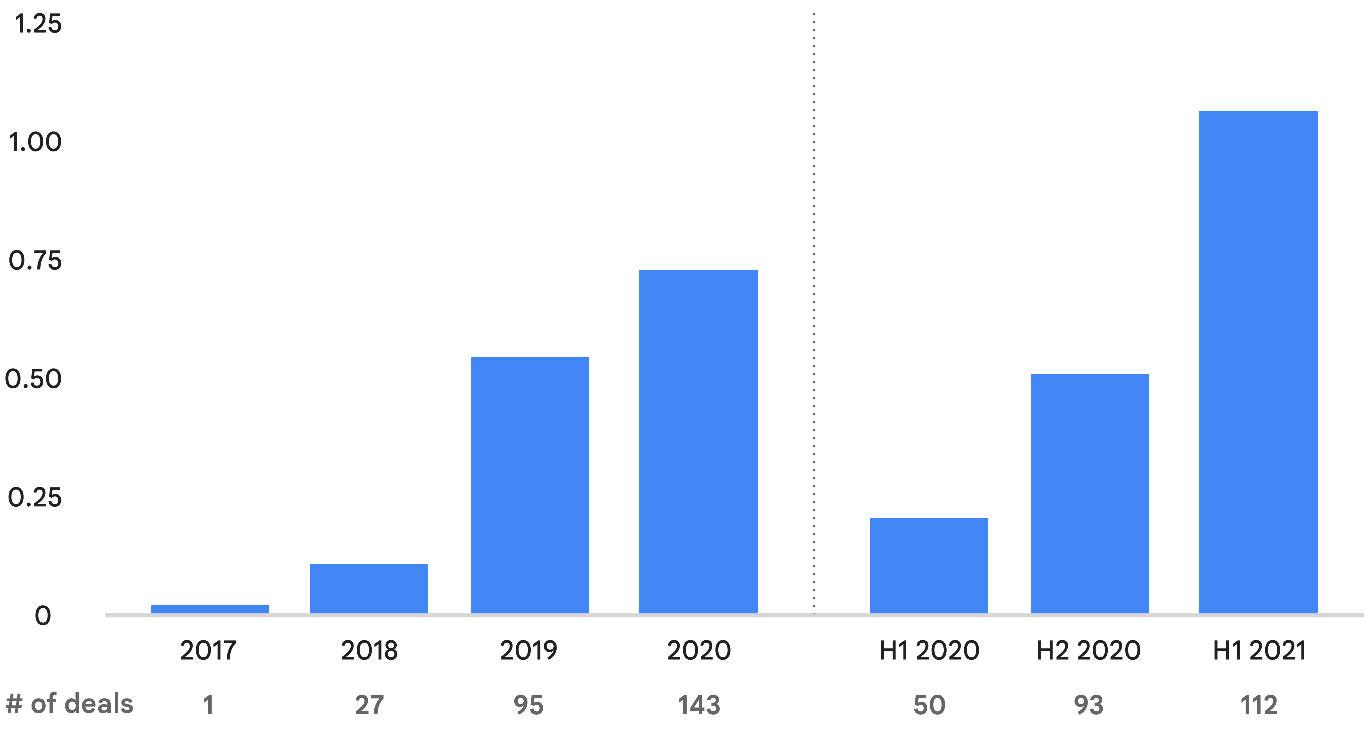
Edtech

still demonstrates healthy growth potential, but investors are taking a ‘wait & see’ stance as the path to scale remains unclear. Funding interest remains intact, with ~$200M in H1 2021 (vs. ~$250M in 2020).

Source: Bain analysis.

Healthtech outperforms landmark year, with further upside ahead

Total deal value ($B)



Healthtech deal activity is here to stay

The sector picked up pace throughout the pandemic. Deal value in H1 2021 alone has surpassed that of the whole 2020. Of these deals, early stage (seed to Series B) start-ups accounted for ~75% of total deal count, with half (~$500M out of $1.1B) of the funding taking place in H1 2021.

Accelerated consumer 'leap of faith'

Limited access to traditional face-to-face appointments has spurred quick adoption of digital healthcare tools. Consumers are increasingly embracing convenience and accessibility, along with a growing willingness to pay, though security and privacy remain key concerns.

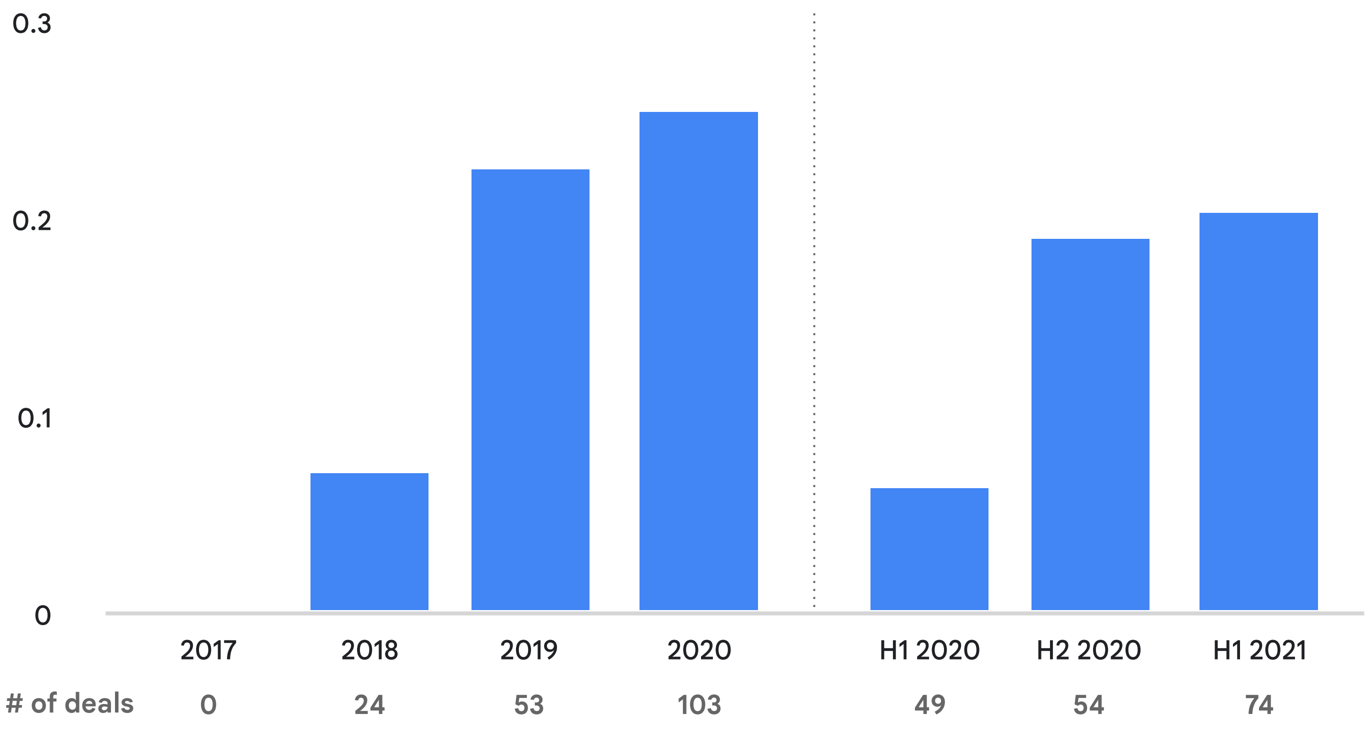
Investors bullish on disruptive potential

The pandemic-induced secular shift in digital behaviour extends into healthcare, and investors are setting sights on the next wave of companies as they emerge with innovative ways to deliver healthcare.

Source: VC partners; Bain analysis.

Growth and investor interest in edtech continues, but path to scale still unclear

Total deal value ($B)



Most edtech deals are in early stages

Early-stage (seed to Series B) deals formed 43% of the funding between 2018 and H1 2021 ($330M out of $770M); by deal count, early-stages represent 83% of total deals. However, deal sizes in edtech remain significantly smaller with an average deal size of $0.8M in seed, $3.2M in Series A and $5.5M in Series B.

Scaling remains a core challenge

Despite the initial buzz, scalability is a key challenge for edtech platforms. The spectrum of educational needs range from basic foundational learning to higher education, with significant differences across markets. This suggests that edtech may need to be country-driven since there is no one-size-fits-all approach that can be easily scaled across the region.

Source: Industry reports; VC partners; Bain analysis.

The twenties roar towards a trillion

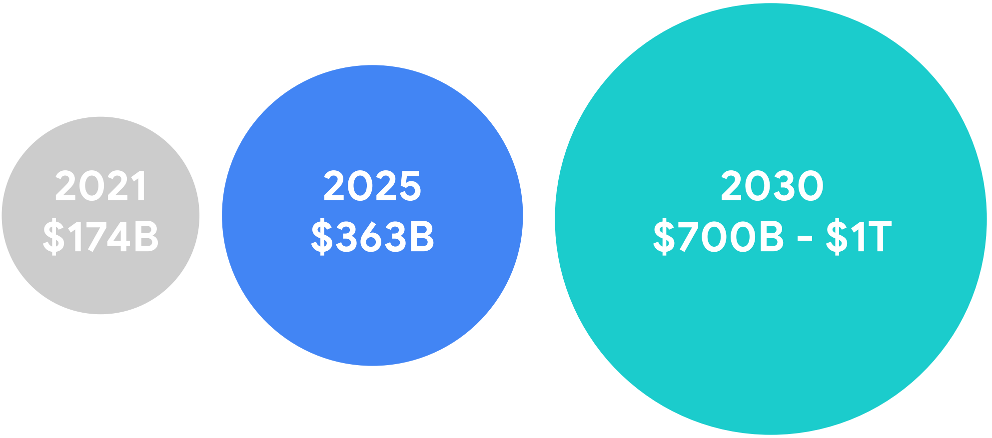
Google TEMASEK BAIN & COMPANY

SEA is entering the **'Digital Decade'** and seismic shifts in consumer and merchant behaviour mean its internet economy could **reach $1T GMV by 2030**.

Talent remains critical to success, along with new enablers around **data regulation, infrastructure, and equitable development of the internet economy**.

The 'Digital Decade': by 2030, the **SEA internet economy could reach $1T GMV**

SEA internet economy GMV



e-Commerce continues to propel the economy forward

As online shopping becomes the norm for consumers of all ages, in both urban and rural areas, e-commerce could comprise >2/3 of 2030's GMV.

Online grocery takes root

e-Grocery could potentially grow to the size of the entire e-commerce market today ($50-100B GMV) if penetration reaches ~10 to ~20%.

Transport & food, online media to unlock next wave of growth

These two sectors could reach the same contribution as e-commerce has today if penetration and share of wallet continue increasing in underpenetrated segments, such as beyond metro areas.

Source: Bain analysis.

2030's internet economy will look **drastically different**

2030 internet economy GMV ($B)

- Indonesia alone could be 2X SEA's GMV today
- Vietnam could be 3X Indonesia's GMV today
- Philippines and Thailand could each reach 2X Indonesia's GMV today

Source: Bain analysis.

What a $1T GMV SEA looks like: **Proliferation of digital merchants**, with 'being digital' as table stakes

Norms of a digital merchant in 2030

1.

Merchants are **accustomed to procuring supplies through digital channels**, including researching multiple cross-border and domestic suppliers to source the best deals

2.

Selling online is the norm, even for offline merchants, with **many listing their products on four to five platforms** other than their own websites to maximise reach

3.

Digital payment adoption becomes table stakes, even for offline channels, with merchants **accepting a full range of digital payment rails and BNPL offerings**

4.

Digital tools are integral to everyday operations and merchants are running their businesses using a suite of inventory management tools and analytics and productivity software, amongst others

Source: Bain analysis.

What a $1T GMV SEA could look like:
Consumers live and breathe digital

e-Commerce
The new way of life
~50% of all retail spending is online (vs. ~10% today)

Online groceries
24/7 access to essentials
1 in 4 grocery dollars are spent online

Transport & food
Transport transformed
Technology assisted interactions (e.g. AV, drones, robotics)

Global players
SEA brands scale up
Home-grown digital champions win beyond SEA

Healthtech
The modern patient
Revolutionised by AI-based diagnostics, telemedicine and remote patient care

Digital payments
Embedded digital finance
70-80% of transaction value is fully digital (vs. ~40% today)

Brunei, Laos, Cambodia and Myanmar
Extending beyond
+200M new consumers integrated across SEA, including frontier markets

Source: Bain analysis.
Note: AV = Autonomous Vehicles, OTT = Over-The-Top.

Most momentum drivers have seen **continued progress**; new enablers are emerging

Existing momentum drivers

Significant progress   Limited progress

Payments

Funding

Logistics

Internet access

Consumer trust

Talent

Emerging enablers rising for the 'Digital Decade'

ESG and sustainability

Digital inclusion

Data infrastructure & regulation

Marked upswing in key growth drivers, but talent continues to be a challenge

● Significant progress ● Limited progress

Payments

This year, payments GTV is expected to grow 9% to reach $700B, mainly led by e-wallets and A2A. e-Wallet's share of GTV, specifically, is expected to double from 4% in 2021 to 7% in 2025. This is mostly fueled by a mass increase in merchant adoption, with 9 in 10 digital merchants expecting to maintain or increase their usage of digital payments over the next couple of years.

Funding

Strong rebound in SEA's deal activity from $6.3B in H1 2020 to $11.5B in H1 2021 with record-high dry powder of $14B in the region. Most deals are anchored around e-commerce and fintech, where enabler technologies are at the forefront (e.g. logistics, e-KYC).

Consumer trust

20M consumers used a digital service for the first time in H1 2021, bringing the total number of digital consumers to 350M.

These users are likely to stay, since 9 in 10 new users in 2020 have remained consumers in 2021. To ensure retention, digital services need to prioritise online safety and data privacy, and ensure information is of consistently high quality.

Logistics

Huge investments were made in logistics infrastructure to support the e-commerce boom ($2.5B in H1 2021 alone). 28% of the region's population is estimated to now have same-day delivery coverage.

Internet access

40M new internet users were added in H1 2021, bringing the total number of internet users in SEA to 440M.

5G connectivity is being rolled out over the next few years, raising the total number of connections from today's <1% to >10% in 2025.

Talent

Talent, especially the shortage of technical talent, remains a challenge, reiterating the need to invest in a reliable pipeline of talent and encourage continuous learning.

Companies are currently plugging gaps via outsourcing, and ensuring smooth future employment transition options through micro-certification.

Organisations are also ensuring equitable benefits for workers while scaling the gig economy.

Source: Google-commissioned Kantar SEA e-Conomy Research 2021; Bain analysis; VC partners; industry reports.

Additional future enablers require **multilateral solutions between consumers, merchants, platforms, and regulators**

ESG and sustainability

Common standards and a reliable methodology for Environment, Social and Governance (ESG) measurement and certification are needed to ensure sustainable development across the internet economy.

Development of environmentally-conscious products and business models (especially for O2O businesses) as well as clean energy for digital and logistics infrastructure are critical to ensure that the internet economy is working towards a net-zero future.

Social responsibility is paramount especially for the largest players in the internet economy to deliver positive impact to consumers and gig workers, and green job opportunities for employees.

Digital inclusion

While 440M SEA users are already online, expensive or poor internet connections and access to affordable digital devices continue to be barriers to digitalisation. Fast, reliable connectivity and increased accessibility are needed to ensure that we are not leaving anyone behind.

Digital literacy and education also remain critical to ensure that the internet economy works effectively for all. The internet economy must integrate the unserved and underserved customers, providing them the benefits of new digital services, while protecting them from fraud and cyberthreats.

Data infrastructure & regulation

Foundational data infrastructure needs to be built for the rapidly growing internet economy to support cross-border data flows, strengthen data protection and cybersecurity, as well as enable data-sharing partnerships.

Local and regional data regulations have to be strengthened - in alignment with international standards of privacy, data-sharing, interoperability, and AI - in order to increase consumer confidence.

Digital trade agreements that connect internet economies and reduce regulatory fragmentation must be established so that regional businesses can grow and scale in the internet economy.

Country spotlights

Country Highlights 2021

Indonesia

Food delivery and e-commerce going strong, growth across all sectors

e-Commerce remains the main growth driver at 52% YoY ($35B to $53B), while transport & food and online media grew by 36% and 48% YoY respectively.

Philippines

e-Commerce and food delivery skyrocketed

Explosive 132% YoY growth in e-commerce and double-digit growth across all other sectors are propelling the internet economy to new levels.

Thailand

e-Commerce remains key growth driver, travel takes a hit

Strong growth of 68% and 37% YoY in e-commerce and transport & food make up for travel's delayed recovery of 8% YoY growth.

Malaysia

e-Commerce drives the economy

Superb growth of 68% YoY in e-commerce and 35% YoY in food delivery has led to a $7B increase in overall GMV.

Singapore

Strong rebounds after a challenging year

Strong e-commerce growth of 45% YoY and a 28% recovery in travel are slowly but surely bringing the economy back on track.

Vietnam

Growth weighed down by travel

Travel saw a -45% YoY decline as Vietnam felt the delayed impact of the pandemic. This was mitigated by e-commerce and transport & food, which grew by 53% and 35% YoY respectively.

Source: Bain analysis.

Indonesia

Main takeaways

Consumers cruise into a new way of life

Indonesia has seen 21M new digital consumers since the start of the pandemic (up to H1 2021). **Of these new users, 72% are from non-metro areas** - a highly positive sign of growing penetration in the region's largest market. These users are here to stay, given **96% of them are still using the services** and **99% intend to continue going forward**. Pre-pandemic users - those who used the services before the pandemic - have **consumed an average of 3.6 *more* services** since the pandemic began, and amongst all users, satisfaction with the services sit at 87% across verticals.

Resilience gives way to resurgence

Overall, all internet sectors rebounded strongly with double-digit YoY growth. **Indonesia's GMV is expected to reach a total value of $70B in 2021** - a 49% YoY surge. This steep increase is underpinned by a **52% growth in e-commerce**. Looking at 2025, the overall **internet economy will likely reach $146B in value**, growing at 20% CAGR. Indonesia continues to be one of the most vibrant digital financial services markets due to its relatively open regulatory framework, and is showing rapid growth across fintechs and digital platforms.

Digital merchants take off

In Indonesia, **28% of digital merchants believe that they would not have survived the pandemic if not for digital platforms**. While digital merchants utilise an **average of two digital platforms**, profitability remains a top concern. Digital financial services are also becoming critical enablers, with **98% of digital merchants now accepting digital payments** and **59% of digital merchants now adopting digital lending solutions**. Many are also embracing digital tools to engage with their customers, with **69% expecting to increase usage of digital marketing tools** in the next five years.

Funding on track to reach new heights

Deal activity rebounded strongly in the first half of 2021, making **Indonesia the hottest investment destination** in the region (surpassing Singapore), with record deal value compared to recent years. Despite market uncertainty, **global capital continues to pour into the market** given its strong growth fundamentals, especially where there was increased usage as a result of COVID-19, like in e-commerce, fintech, healthtech and edtech. **Public exits are also heating up**, with the **Indonesia Stock Exchange leading the way** with notable listings of regional tech giants.

Source: Google-commissioned Kantar SEA e-Conomy Research 2021; Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021; Bain analysis; VC partners; industry reports.

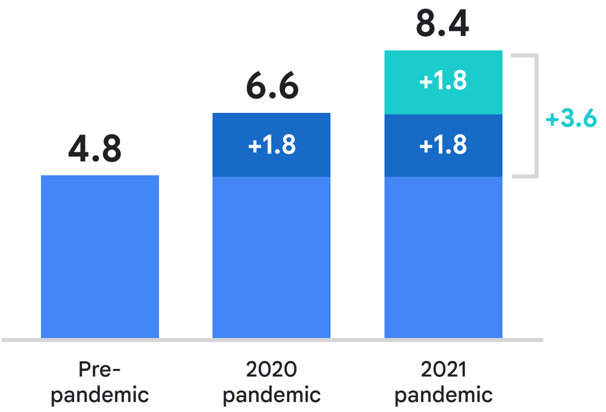
Indonesia

Exponential growth in digital consumers
(who intend to continue using digital services)

Penetration

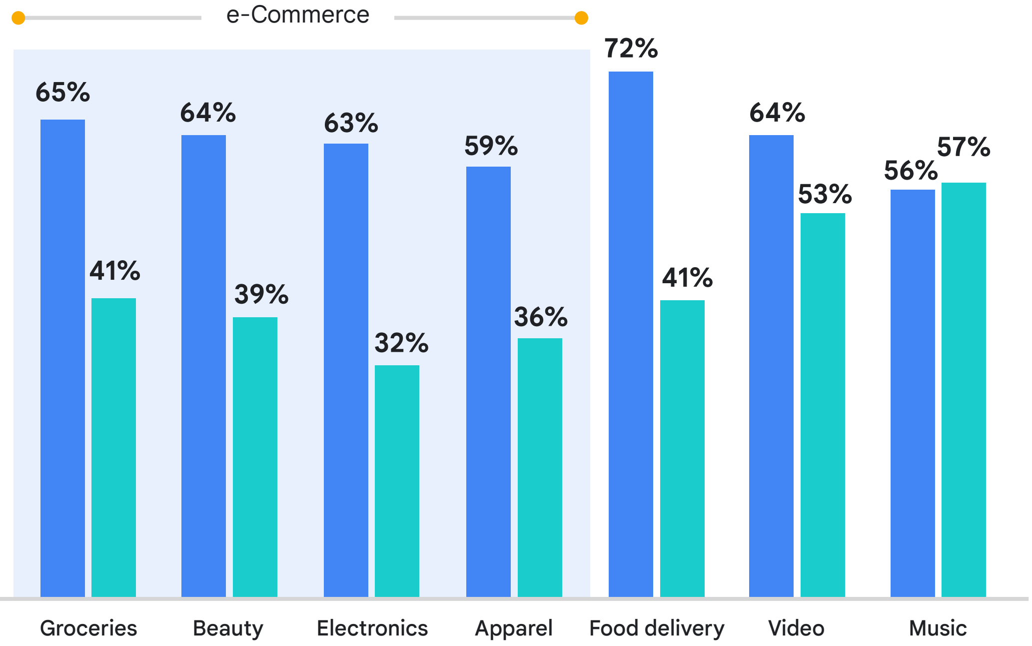
- Pre-pandemic consumers: **69.5%**
- New digital consumers 2020: **6.2%**
- New digital consumers 2021 (H1): **4.0%**
- Non users: **20.2%**

Average number of new digital services consumed by a pre-pandemic user over time



Reasons consumers continue using digital services

- Made my life easier / more convenient
- Became part of my routine



Source: Google-commissioned Kantar SEA e-Conomy Research 2021.
Note: 'Pre-pandemic consumers' are defined as internet users who were already paying for one or more online services via digital channels in a vertical before Mar 2020. 'New digital consumers 2020' first started paying for one or more online services on digital channels in any vertical for the first time between Mar to Dec 2020. 'New digital consumers 2021 (H1)' first started paying for one or more online services on digital channels from Jan 2021 onwards.

Indonesia

Digital merchants are getting **tech-savvy and expect to become even more** so in the future

Digital platforms

28%

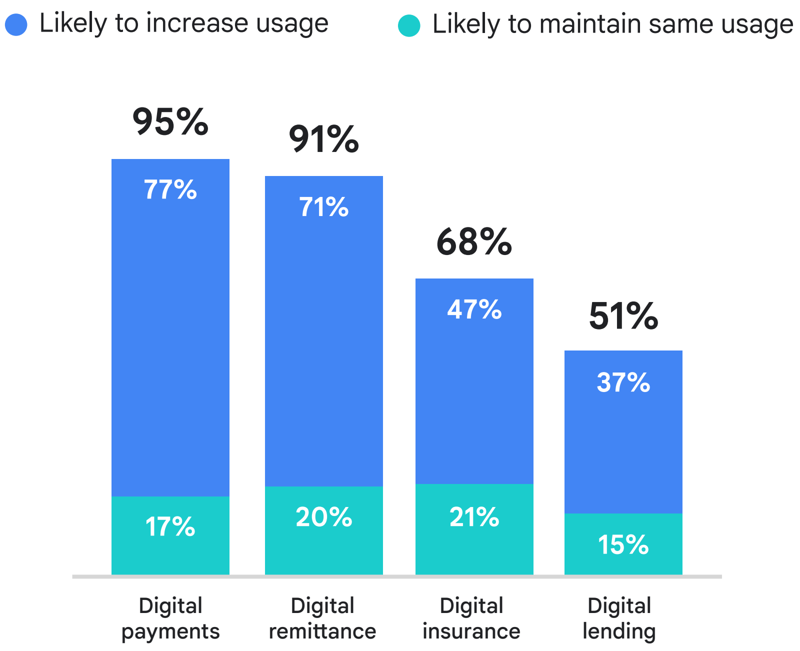
believe that they would **not have survived the pandemic** if not for digital platforms

~2

average number of digital platforms used to access consumer demand online

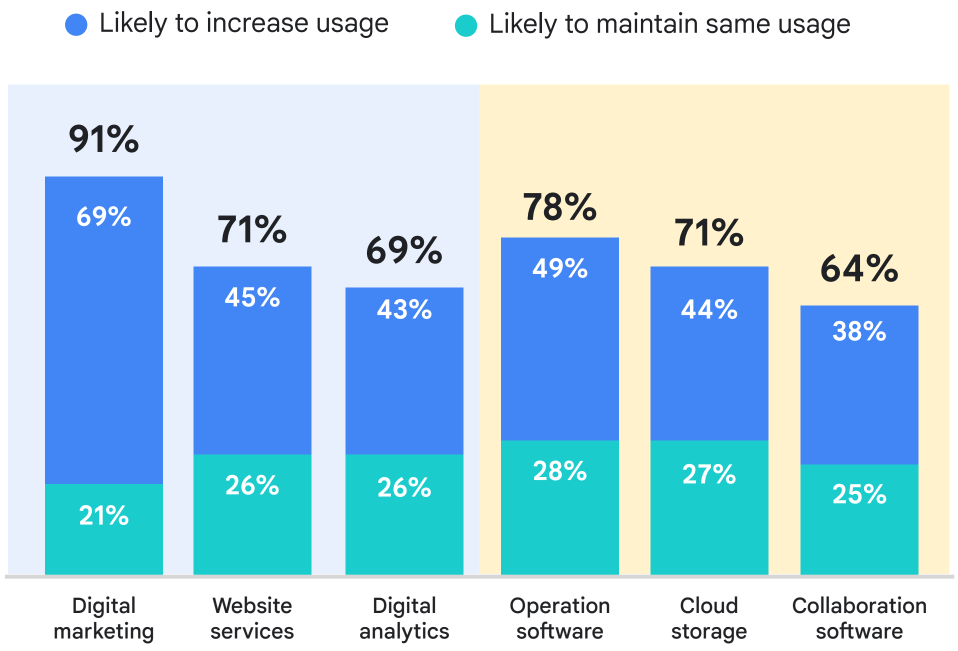
Digital financial services

% of digital merchants likely to increase or maintain usage of digital financial services in the next 1 to 2 years



Digital tools

% of digital merchants likely to increase or maintain usage of digital tools over the next 5 years

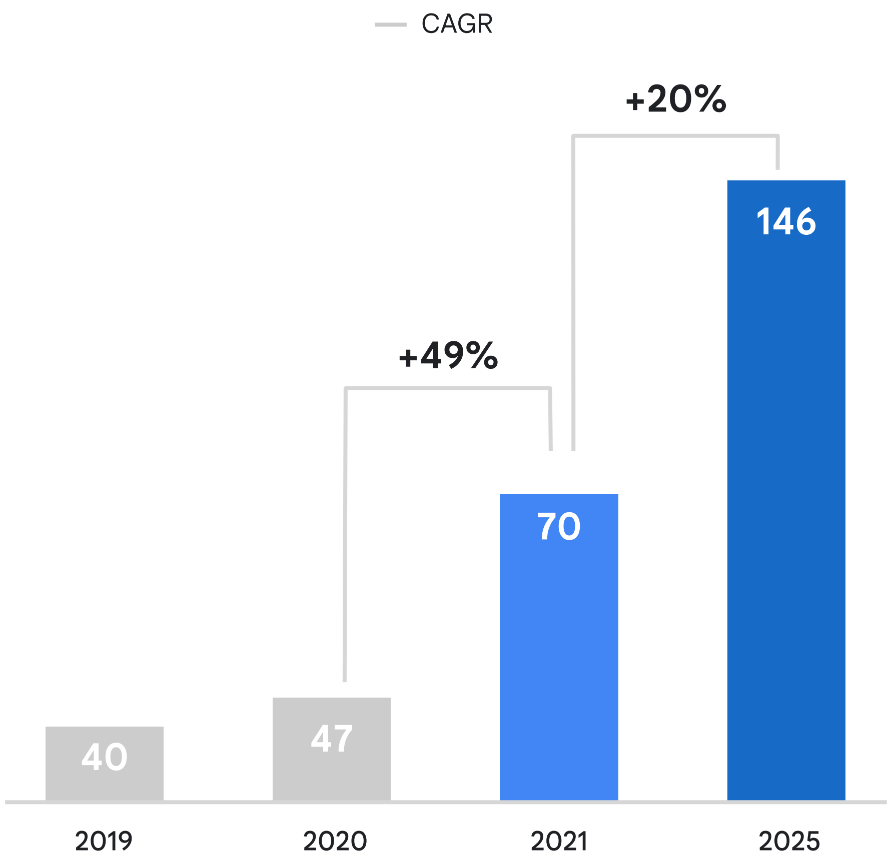


Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021.

Indonesia

Internet economy **reaches $70B, signifying an optimistic outlook** for the populous nation

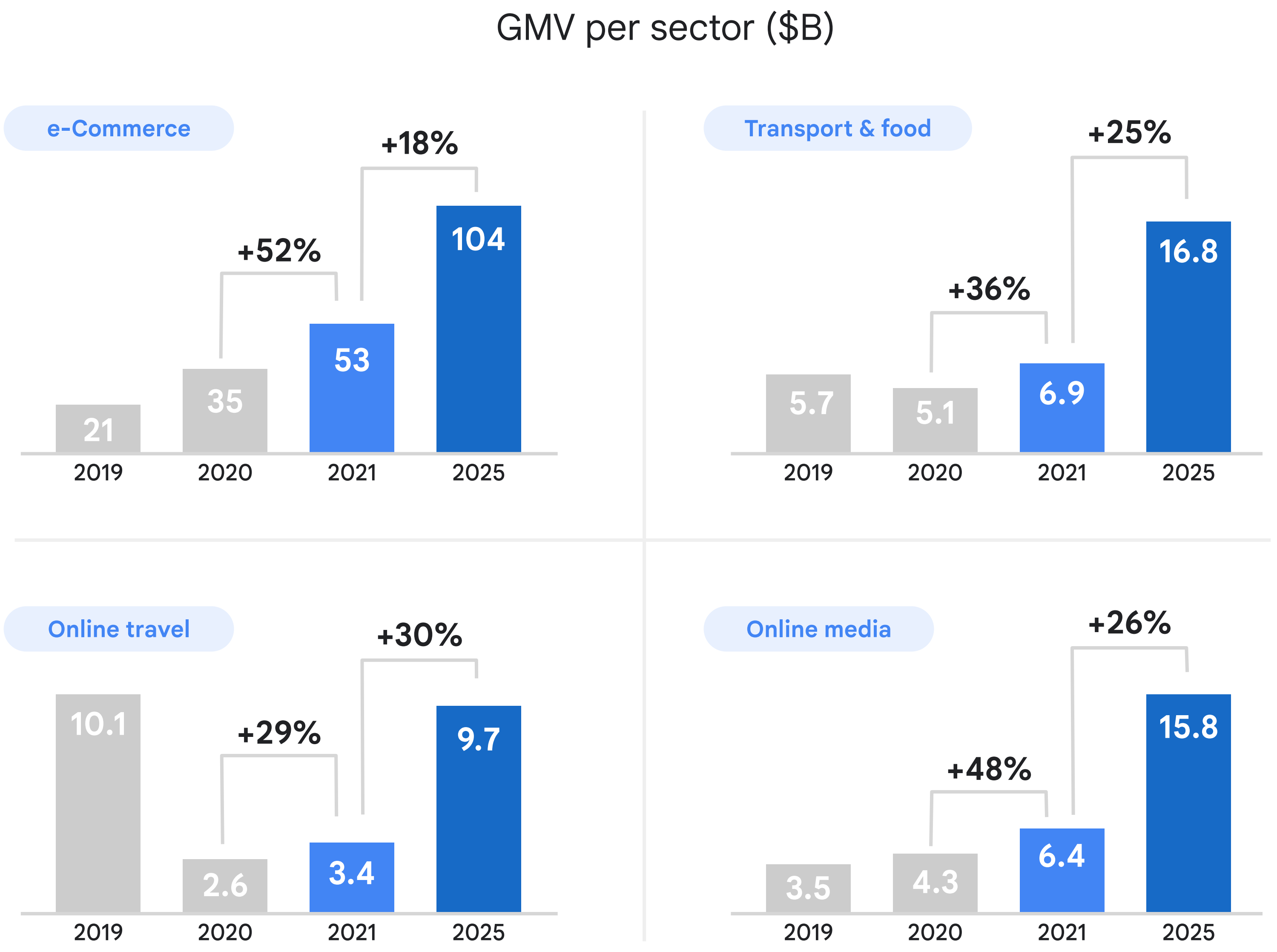
Internet economy by GMV ($B)



Source: Bain analysis.

Indonesia

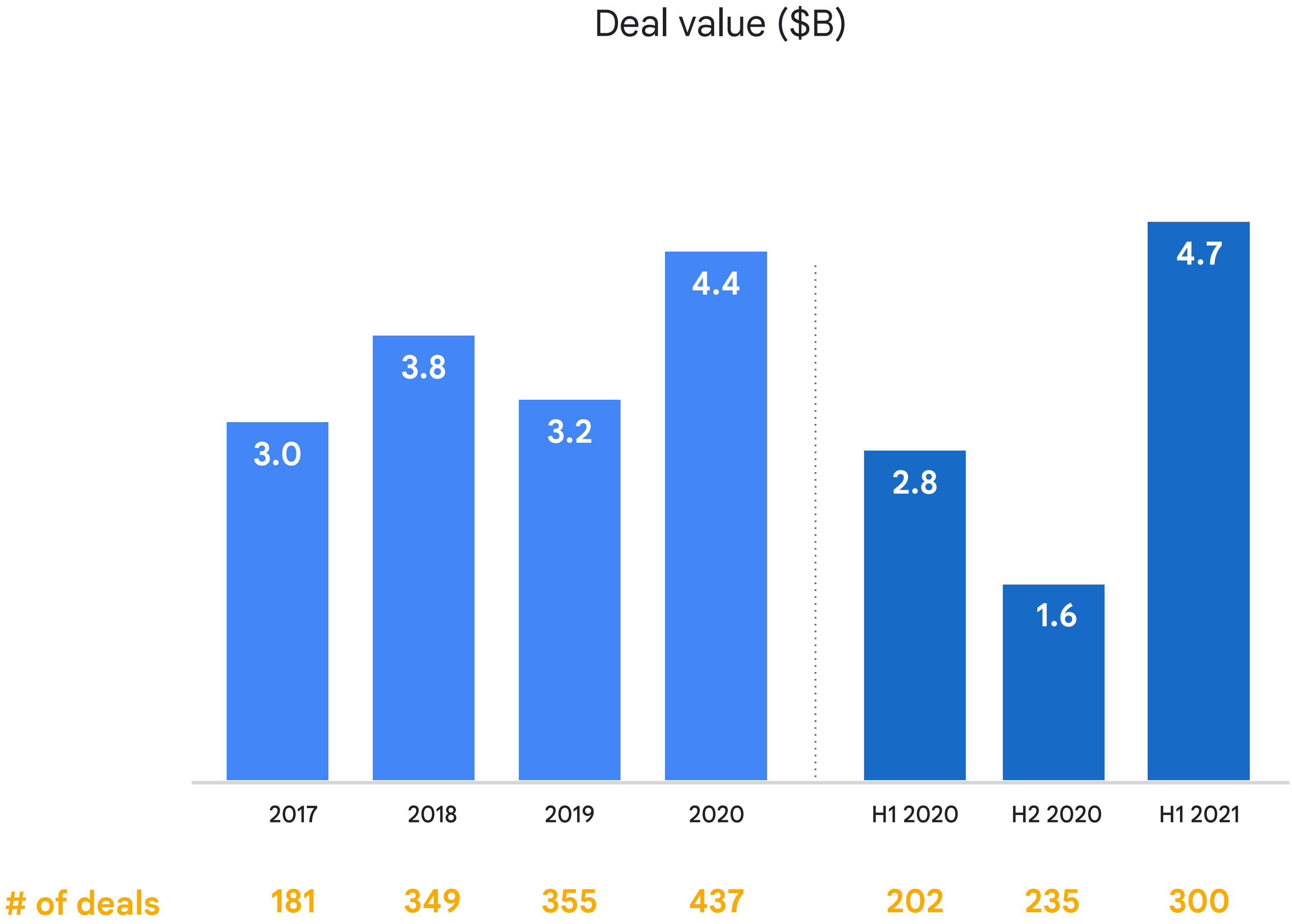
All sectors experienced double-digit growth in 2021, with e-commerce leading the pack



Source: Bain analysis.

Indonesia

H1 2021 alone has already **surpassed the deal values of each of the last four years**



Source: Industry reports; VC partners; Bain analysis.
Note: Deals include investments by venture capital, private equity and strategic investors.

Malaysia
Main takeaways

Consumers cruise into a new way of life

Malaysia has seen 3M new digital consumers since the start of the pandemic in 2020 (up to H1 2021), with **81% of all internet users now consuming digital services**. The pandemic has led to a permanent shift in digital adoption in Malaysia - **94% of pandemic consumers are still using the services till today** and **98% intend to continue going forward**. Pre-pandemic users - those who used the services before the pandemic - have **used an average of 4.2 *more* services since the pandemic began**, and amongst all users, satisfaction with the services sit at 76% across verticals.

Resilience gives way to resurgence

Overall, all internet sectors rebounded strongly with double-digit YoY growth. **Malaysia's 2021 GMV is expected to reach a total value of $21B - a 47% YoY surge.** The steep increase is underpinned by a **68% growth in e-commerce**. Looking at **2025, the overall internet economy will likely reach $35B in value**, growing at 14% CAGR. Digital financial services were in focus this year as the race for new digital banking licences from Bank Negara heated up.

Digital merchants take off

In Malaysia, **43% of digital merchants believe that they would not have survived the pandemic if not for digital platforms** - the highest in the region given the strict lockdowns in the past year. This, however, has accelerated digital adoption by merchants, with **98% now accepting digital payments** and **72% now using digital lending solutions**. Many are also embracing digital tools to engage with their customers, with **70% expecting to increase usage of digital marketing tools** in the next five years.

Funding on track to reach new heights

As investors become accustomed to the 'new normal' in dealmaking, deal activity rebounded strongly in the first half of 2021 and is **on track to hit the highest record in recent years**. **Investment appetite remains strong in the digital services that surged as a result of COVID-19**, such as in e-commerce, fintech, healthtech and edtech. With the emergence of **Malaysia's first unicorn** this year, the outlook for continued funding growth is optimistic.

Source: Google-commissioned Kantar SEA e-Conomy Research 2021; Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021; Bain analysis; VC partners; industry reports.

Malaysia

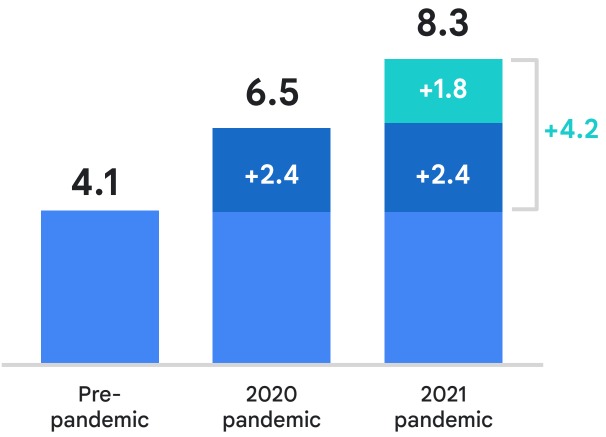
Exponential growth in digital consumers

(who intend to continue using digital services)

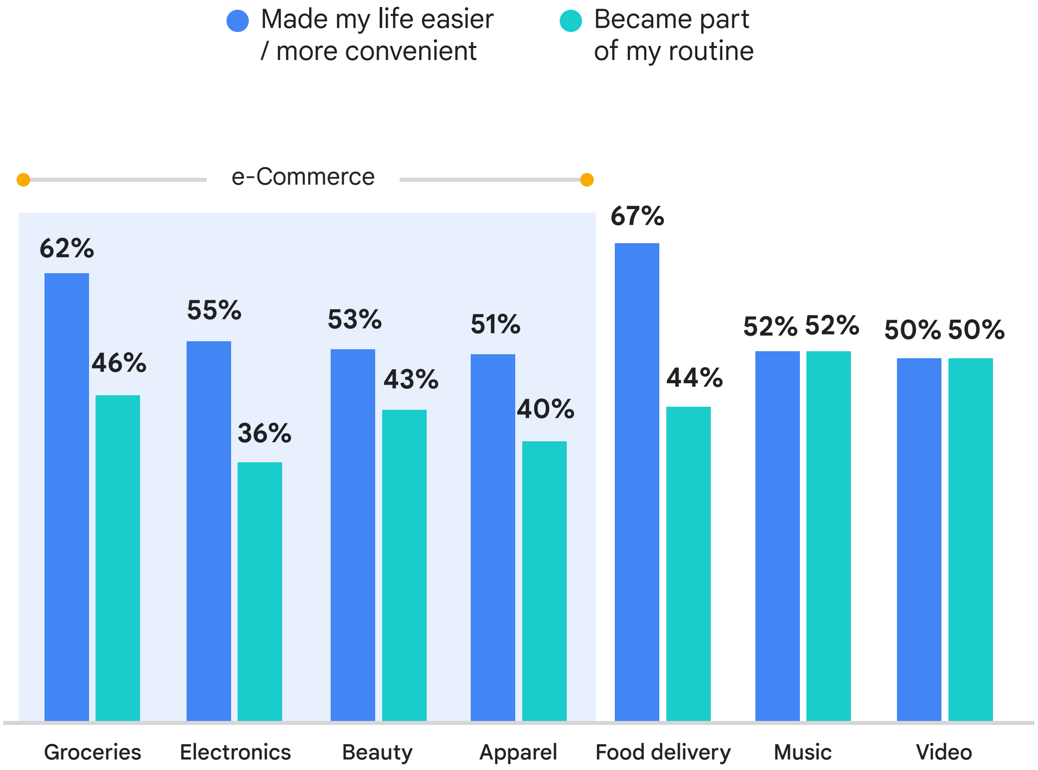
Penetration

- Pre-pandemic consumers: **69.1%**
- New digital consumers 2020: **8.5%**
- New digital consumers 2021 (H1): **3.2%**
- Non users: **18.8%**

Average number of new digital services consumed by a pre-pandemic user over time



Reasons consumers continue using digital services



Source: Google-commissioned Kantar SEA e-Conomy Research 2021.
Note: 'Pre-pandemic consumers' are defined as internet users who were already paying for one or more online services via digital channels in a vertical before Mar 2020. 'New digital consumers 2020' first started paying for one or more online services on digital channels in any vertical for the first time between Mar to Dec 2020. 'New digital consumers 2021 (H1)' first started paying for one or more online services on digital channels from Jan 2021 onwards.

Google TEMASEK BAIN & COMPANY

Malaysia

Digital merchants are getting **tech-savvy and expect to become even more so** in the future

Digital platforms

43%

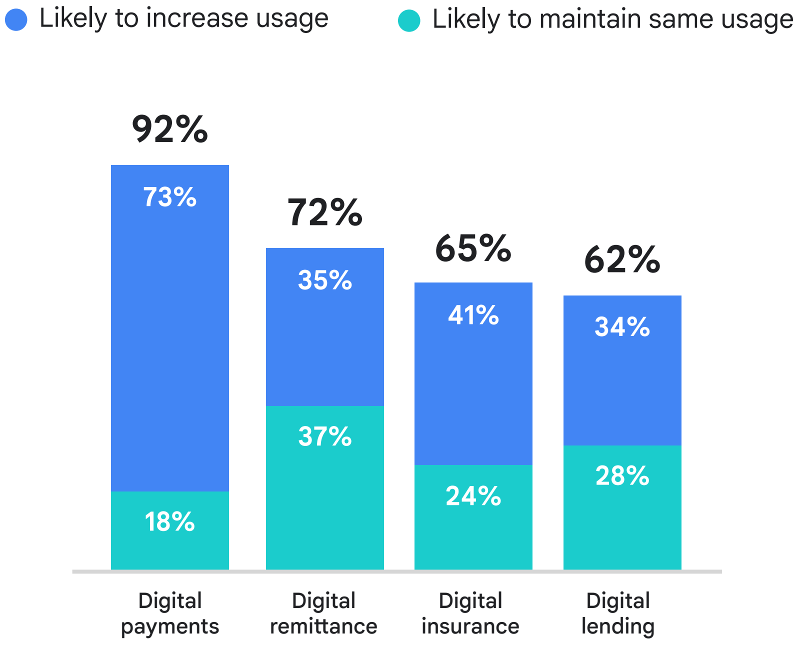
believe that they would **not have survived the pandemic** if not for digital platforms

~2

average number of digital platforms used to access consumer demand online

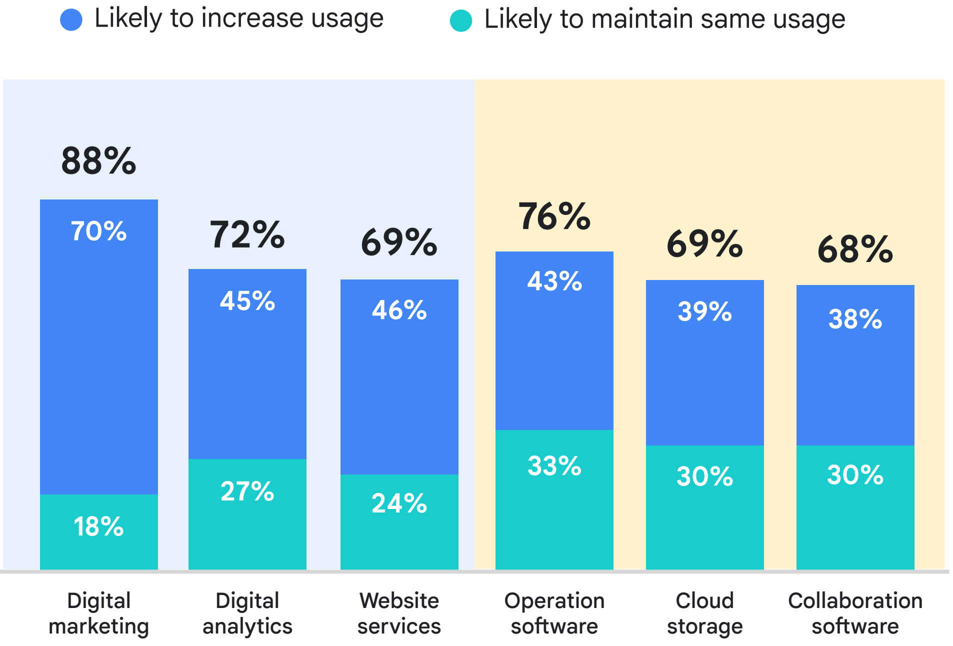
Digital financial services

% of digital merchants likely to increase or maintain usage of digital financial services in the next 1 to 2 years



Digital tools

% of digital merchants likely to increase or maintain usage of digital tools over the next 5 years

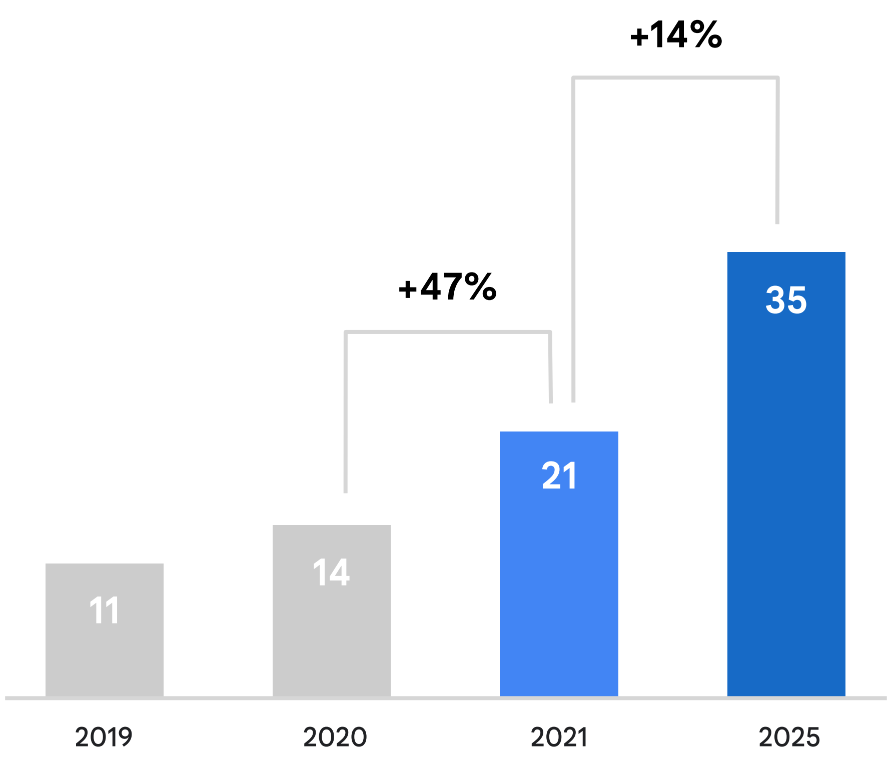


Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021.

Malaysia

Internet economy is rising at $21B, despite lengthy lockdowns

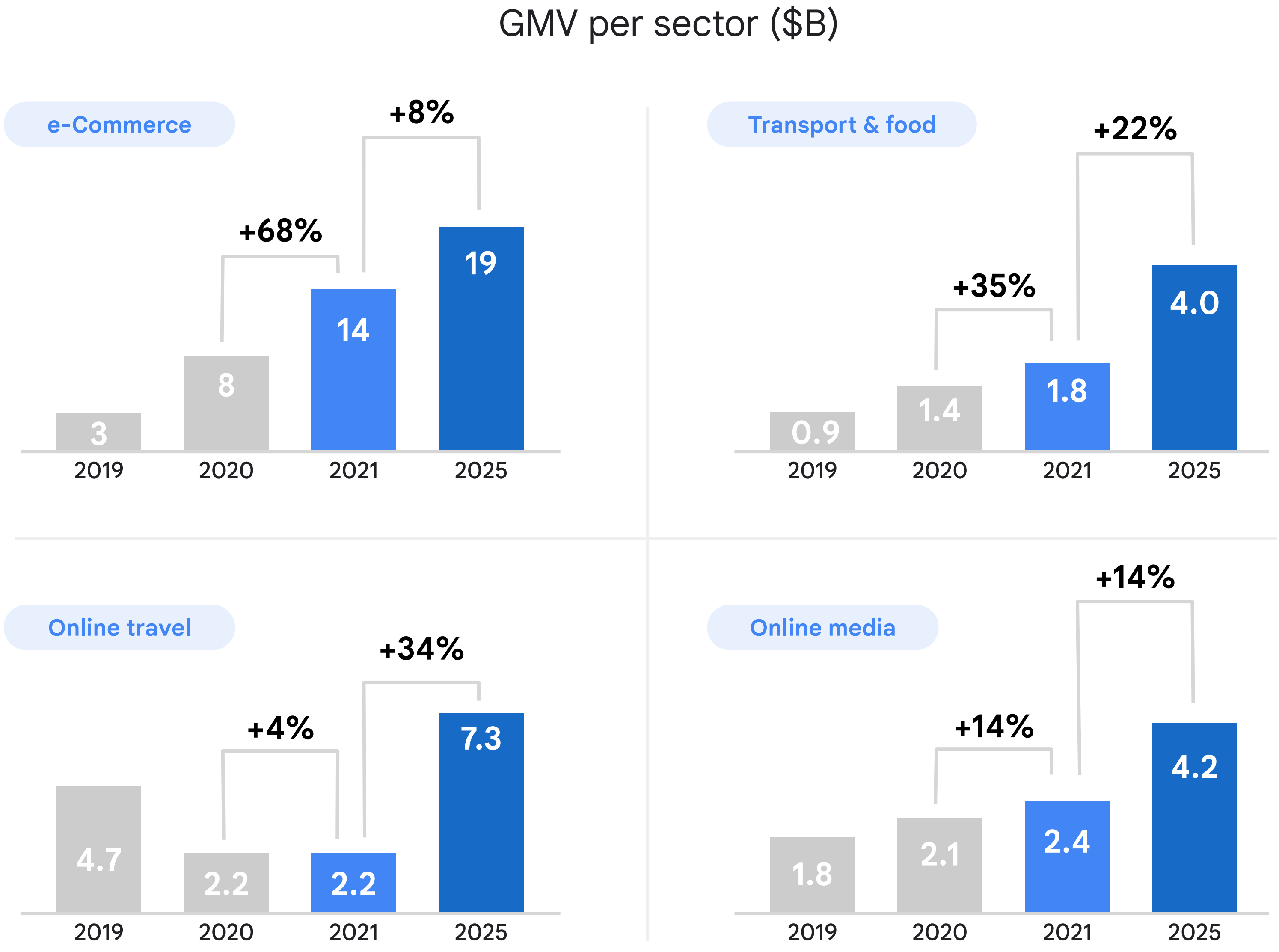
Internet economy by GMV ($B)



Source: Bain analysis.

Malaysia

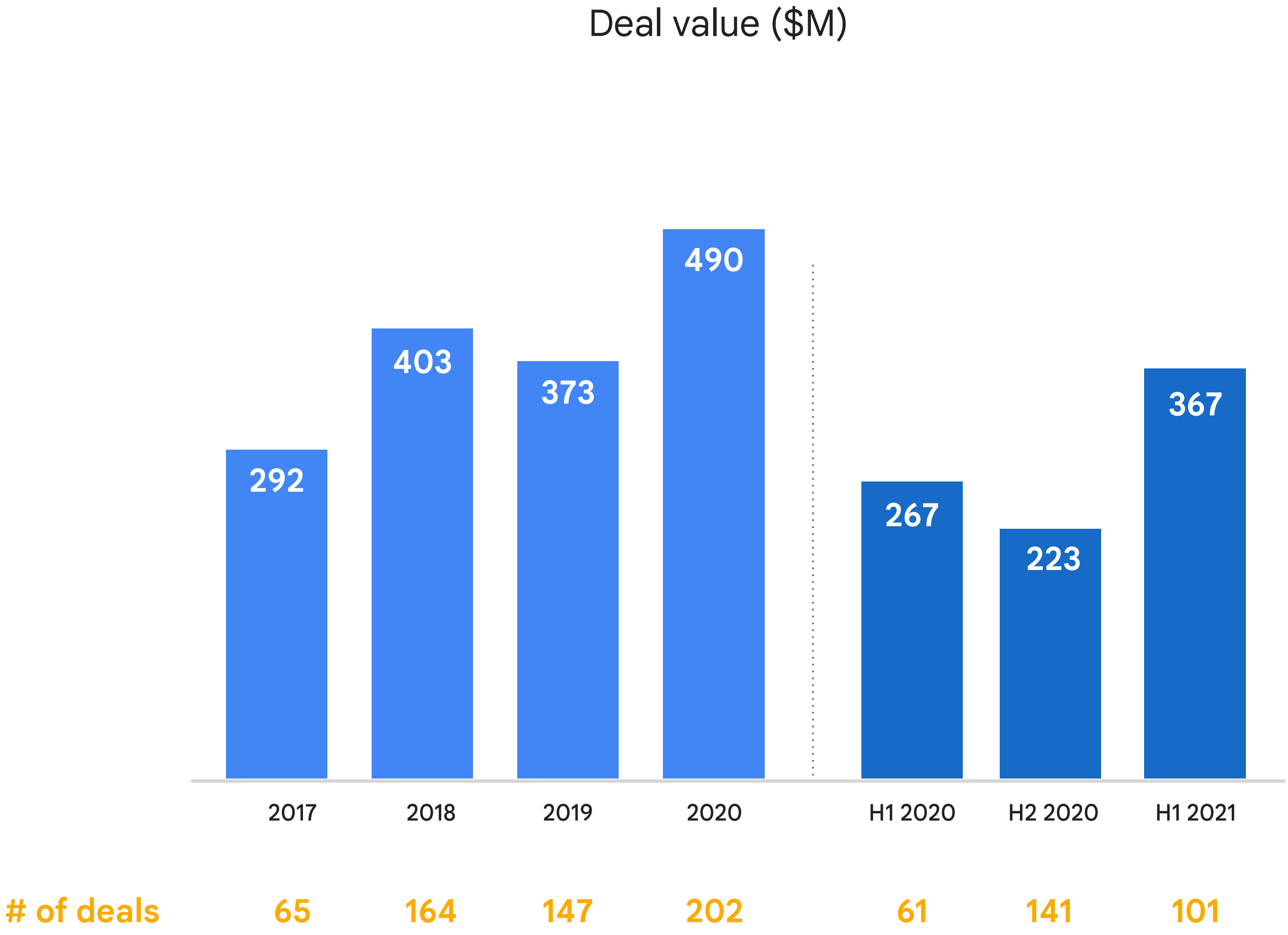
Significant surge in e-commerce and transport & food; media and travel enjoy subtle growth



Source: Bain analysis.

Malaysia

H1 2021 deal value is on track to **surpass the deal values of each of the last four years**



Source: Industry reports; VC partners; Bain analysis.
Note: Deals include investments by venture capital, private equity and strategic investors.

Philippines

Main takeaways

Consumers cruise into a new way of life

The Philippines has seen **12M new digital consumers** since the start of the pandemic (up to H1 2021), of which **63% are from non-metro areas** and **99% say that they intend to continue** using these services going forward. Pre-pandemic users - those who used the services before the pandemic - have **consumed an average of 4.3 *more* services** since the pandemic began and **95% of pandemic consumers are still consumers today**. Despite rapid growth in the last 18 months, there remains significant headroom since the Philippines has the **lowest digital consumer penetration in the region**, with only 68% of internet users consuming online services.

Resilience gives way to resurgence

Overall, **the Philippines was the fastest growing market in the region**, driven by strict lockdowns as well as a tipping point on the adoption of certain digital services. **The Philippines' 2021 GMV is expected to reach a total value of $17B - a notable 93% YoY surge.** This steep increase is underpinned by a **132% growth in e-commerce**. Looking at **2025, the overall internet economy will likely reach $40B in value**, growing at 24% CAGR.

Digital merchants take off

In the Philippines, 39% of digital merchants believe they would not have survived the pandemic if not for digital platforms. Digital merchants now use an average of 2 digital platforms, but profitability remains a top concern. Digital financial services saw very rapid growth this year, not only from e-wallets but also from the national payment rail. **Of the digital merchants surveyed, 97% now accept digital payments, while 67% have adopted digital lending solutions.** Many are also embracing digital tools to engage with their customers, with **68% expecting to increase usage of digital marketing tools in the next five years**.

Funding on track to reach new heights

As investors become accustomed to the 'new normal' in dealmaking, **deal activity rebounded strongly in the first half of 2021** and is **on track to hit the highest record in recent years**. Investment appetite remains strong in digital services that surged as a result of COVID-19, such as e-commerce and fintech. In addition, **healthtech and edtech also saw significant funding activity in the Philippines** as players turn towards the second largest market in the region for future growth.

Source: Google-commissioned Kantar SEA e-Conomy Research 2021; Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021; Bain analysis; VC partners; industry reports.

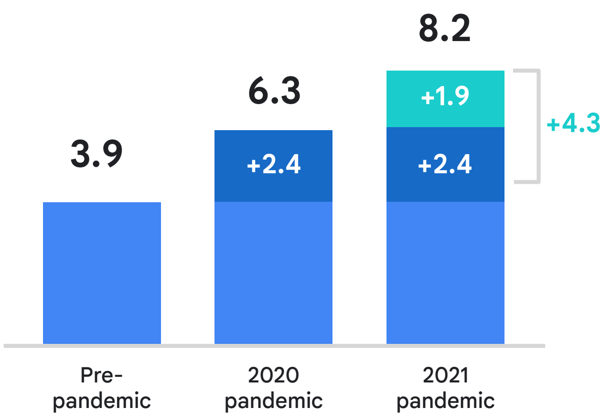
Philippines

Exponential growth in digital consumers
(who intend to continue using digital services)

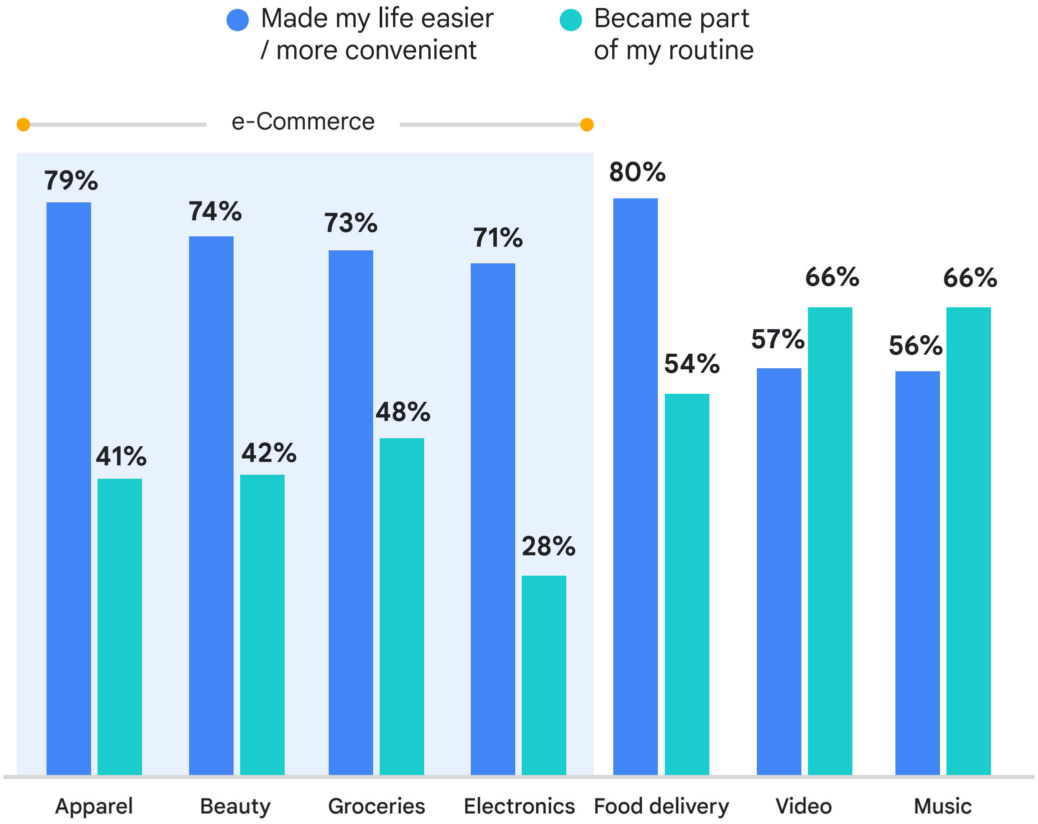
Penetration

- Pre-pandemic consumers: **54.4%**
- New digital consumers 2020: **9.1%**
- New digital consumers 2021 (H1): **4.2%**
- Non users: **32.3%**

Average number of new digital services consumed by a pre-pandemic user over time



Reasons consumers continue using digital services



Source: Google-commissioned Kantar SEA e-Conomy Research 2021.
Note: 'Pre-pandemic consumers' are defined as internet users who were already paying for one or more online services via digital channels in a vertical before Mar 2020. 'New digital consumers 2020' first started paying for one or more online services on digital channels in any vertical for the first time between Mar to Dec 2020. 'New digital consumers 2021 (H1)' first started paying for one or more online services on digital channels from Jan 2021 onwards.

Philippines

Digital merchants are getting **tech-savvy and expect to become even more so** in the future

Digital platforms

39%

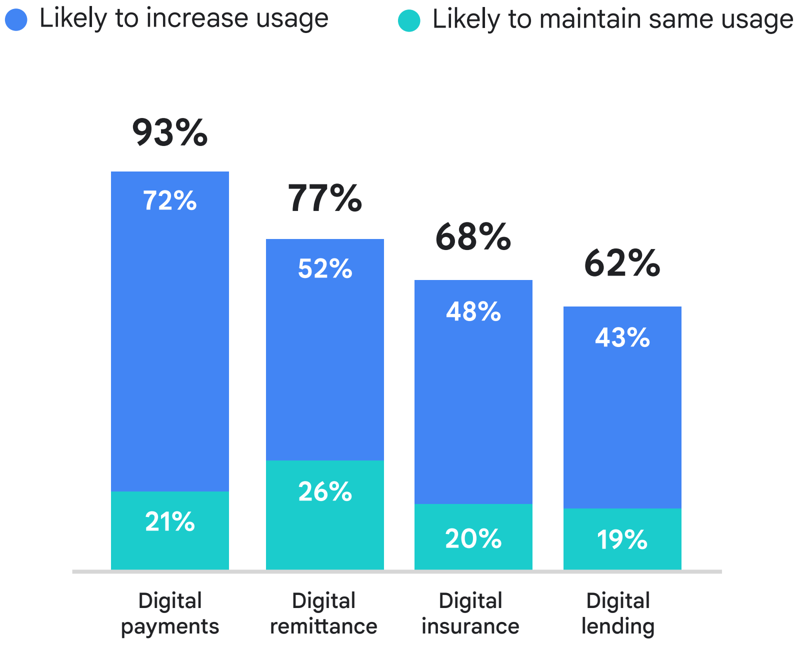
believe that they would **not have survived the pandemic** if not for digital platforms

~2

average number of digital platforms used to access consumer demand online

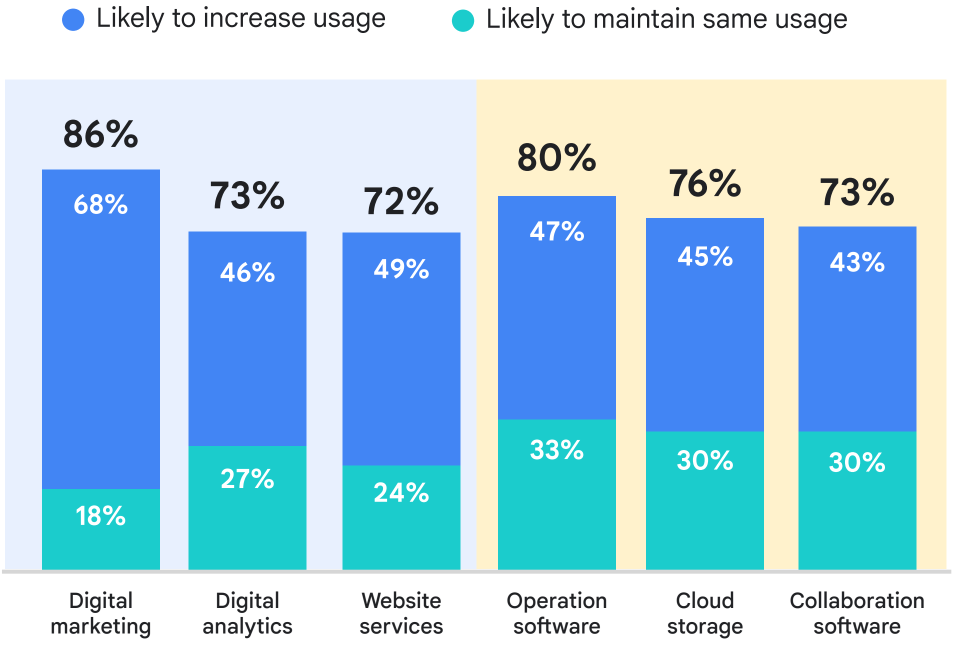
Digital financial services

% of digital merchants likely to increase or maintain usage of digital financial services in the next 1 to 2 years



Digital tools

% of digital merchants likely to increase or maintain usage of digital tools over the next 5 years

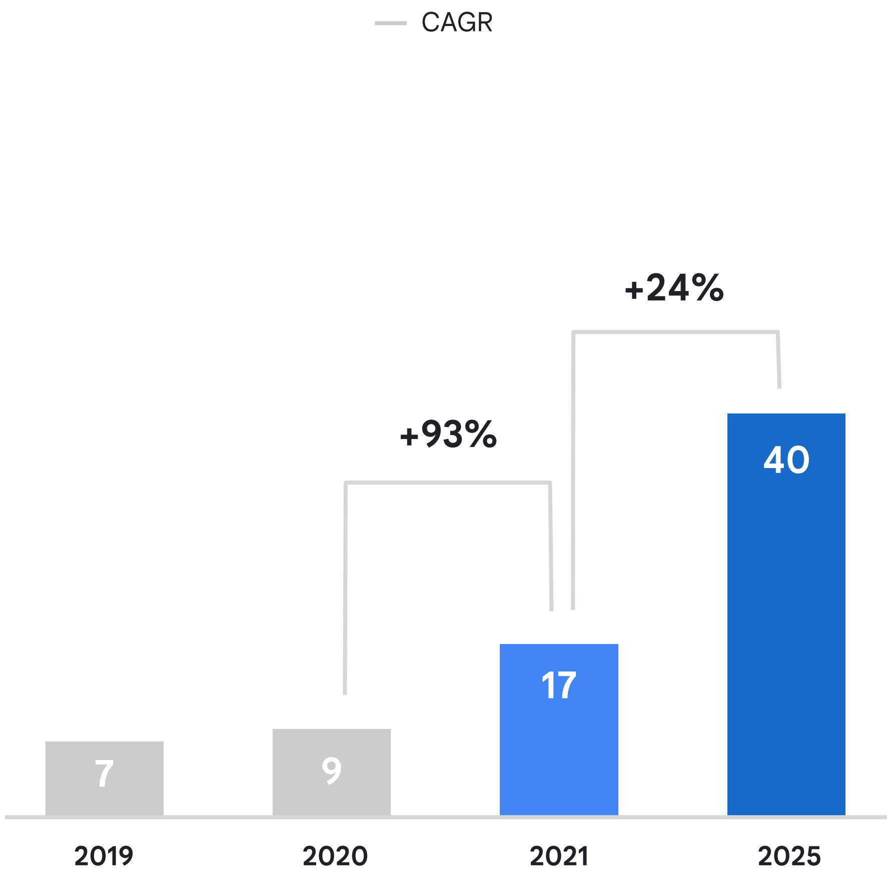


Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021.

Philippines

2021 internet economy doubles to $17B, driven by government initiatives and mass digital adoption due to the pandemic

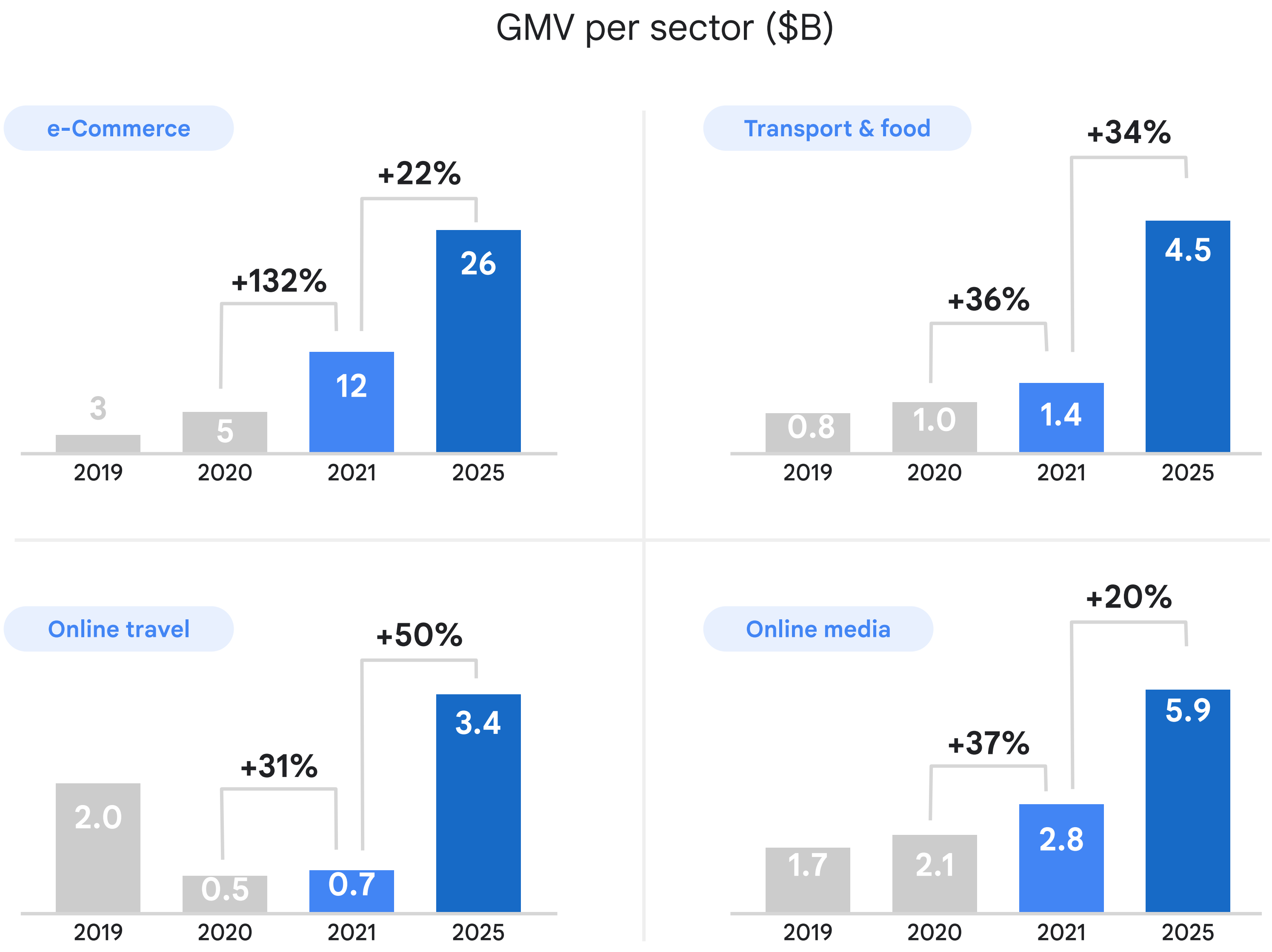
Internet economy by GMV ($B)



Source: Bain analysis.

Philippines

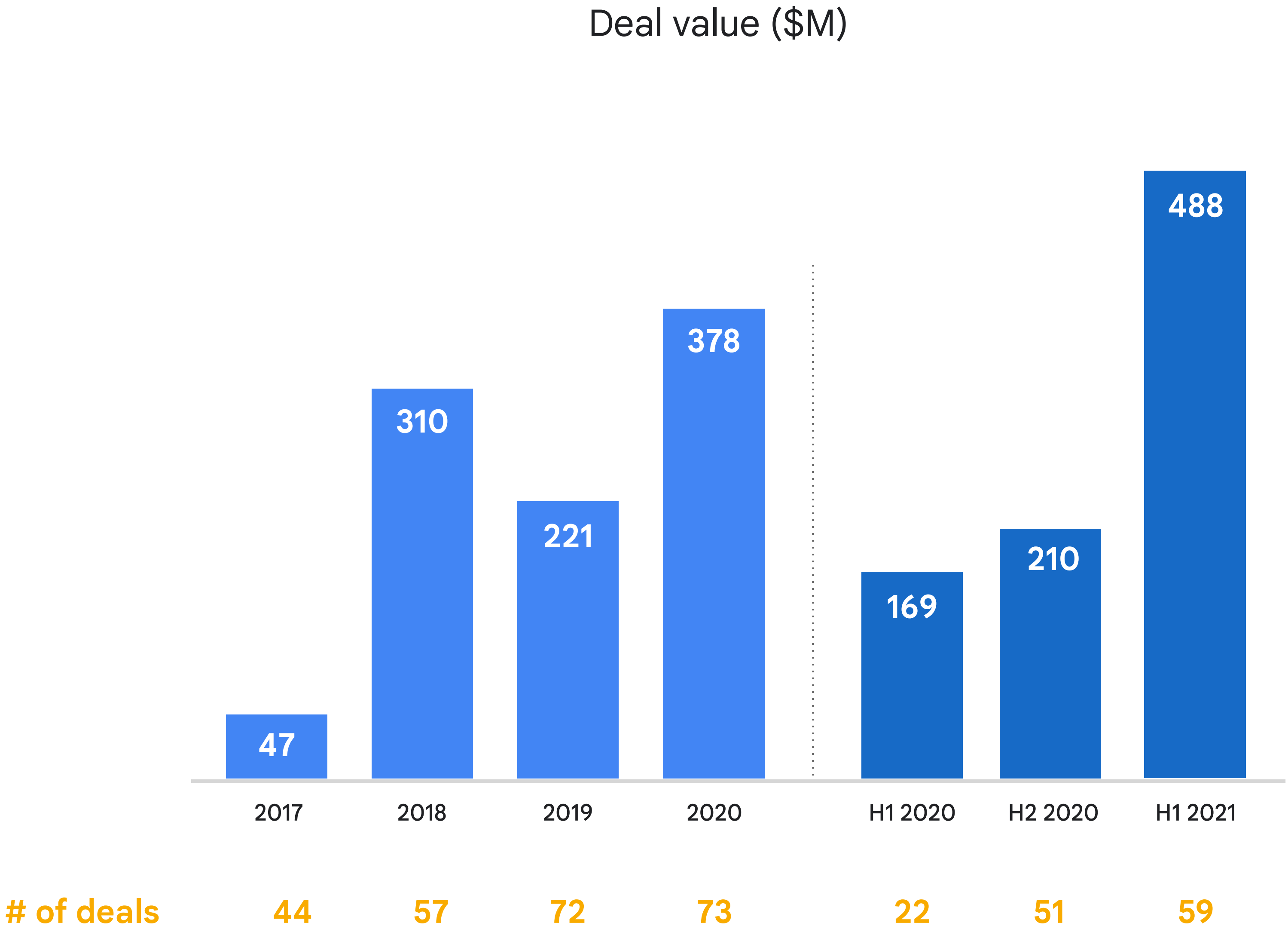
All sectors are booming, led by e-commerce which grew 2X



Source: Bain analysis.

Philippines

H1 2021 alone has **surpassed the deal values of each of the last four years** - by a stretch



Source: Industry reports; VC partners; Bain analysis.
Note: Deals include investments by venture capital, private equity and strategic investors.

Google TEMASEK BAIN & COMPANY

Singapore

Main takeaways

Consumers cruise into a new way of life

Singapore has seen 0.5M new digital consumers since the start of the pandemic (up to H1 2021). With **97% of internet users also being digital service consumers**, penetration remains highest in the region. Breadth of usage is growing - **pre-pandemic users have consumed an average of 2.9 more services since the pandemic began** - while **93% of pandemic consumers have remained users** and **99% intend to continue using the services going forward**.

Resilience gives way to resurgence

Overall, after a decline in 2020, all internet sectors rebounded strongly in 2021. **Singapore's 2021 GMV is expected to reach $15B - a 35% YoY surge.** This increase is underpinned by a **45% growth in e-commerce**, with significant innovation in e-grocery. Digital financial services also remained in focus, with four digibank licences awarded by the Monetary Authority of Singapore (MAS) and significant investments in the financial market infrastructure. Looking at **2025, the overall internet economy will likely reach $27B in value**, growing at 16% CAGR.

Digital merchants take off

In Singapore, **38% of digital merchants believe that they would not have survived the pandemic if not for digital platforms**. While digital merchants use an average of two digital platforms, profitability remains a top concern. Digital financial services are also becoming critical enablers, with **89% of digital merchants now accepting digital payments** and **37% of digital merchants now adopting digital lending solutions**. Many are also embracing digital tools to engage with their customers, with **43% expecting to increase usage of digital marketing tools** in the next five years.

Funding on track to reach new heights

Deal activity rebounded strongly in the first half of 2021 and is on track to outpace the activity of recent years as investors become accustomed to the 'new normal' of dealmaking. **Singapore added the most new unicorns this year**, and continues to be an attractive hub for the regional digital economy. **Investment appetite remains strong** in digital services that surged as a result of COVID-19, such as e-commerce, e-commerce enablers, and fintech.

Source: Google-commissioned Kantar SEA e-Conomy Research 2021; Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021; Bain analysis; VC partners; industry reports.

Singapore

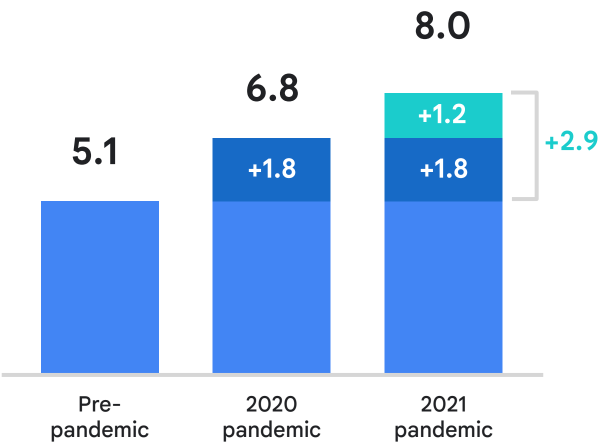
Exponential growth in digital consumers

(who intend to continue using digital services)

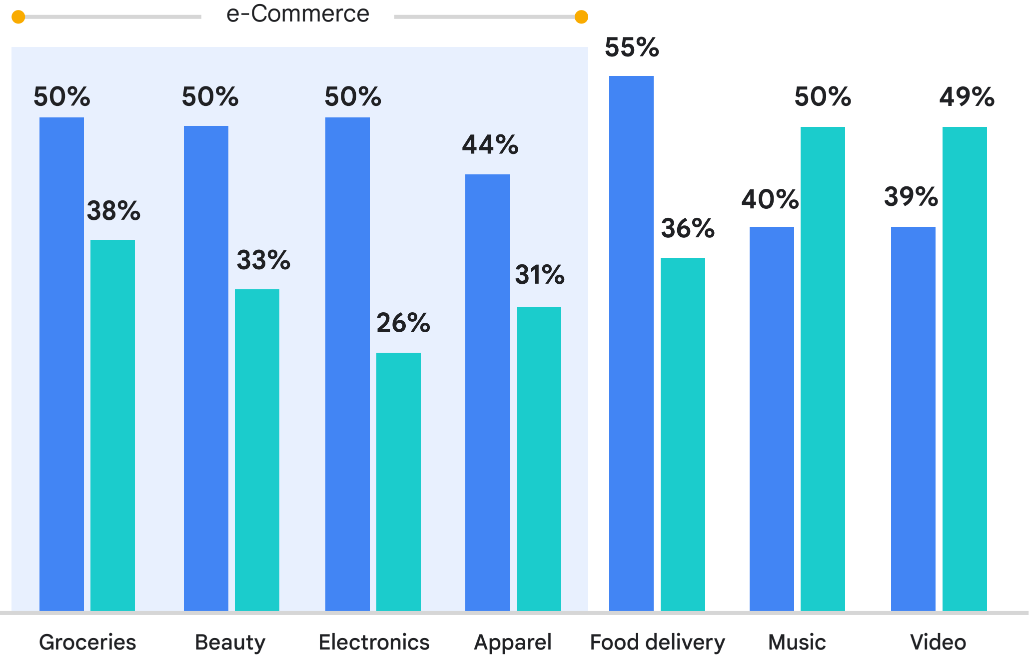
Penetration

- Pre-pandemic consumers: **87.2%**
- New digital consumers 2020: **6.4%**
- New digital consumers 2021 (H1): **3.3%**
- Non users: **2.9%**

Average number of new digital services consumed by a pre-pandemic user over time



Reasons consumers continue using digital services



Source: Google-commissioned Kantar SEA e-Conomy Research 2021.
Note: 'Pre-pandemic consumers' are defined as internet users who were already paying for one or more online services via digital channels in a vertical before Mar 2020. 'New digital consumers 2020' first started paying for one or more online services on digital channels in any vertical for the first time between Mar to Dec 2020. 'New digital consumers 2021 (H1)' first started paying for one or more online services on digital channels from Jan 2021 onwards.

Google TEMASEK BAIN & COMPANY

Singapore

Digital merchants are getting **tech-savvy and expect to become even more so** in the future

Digital platforms

38%

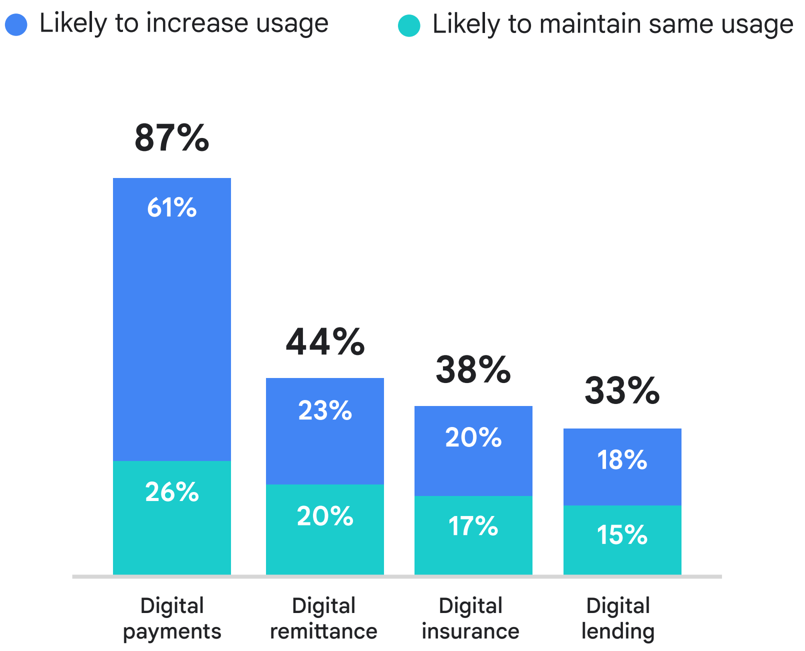
believe that they would **not have survived the pandemic** if not for digital platforms

~2

average number of digital platforms used to access consumer demand online

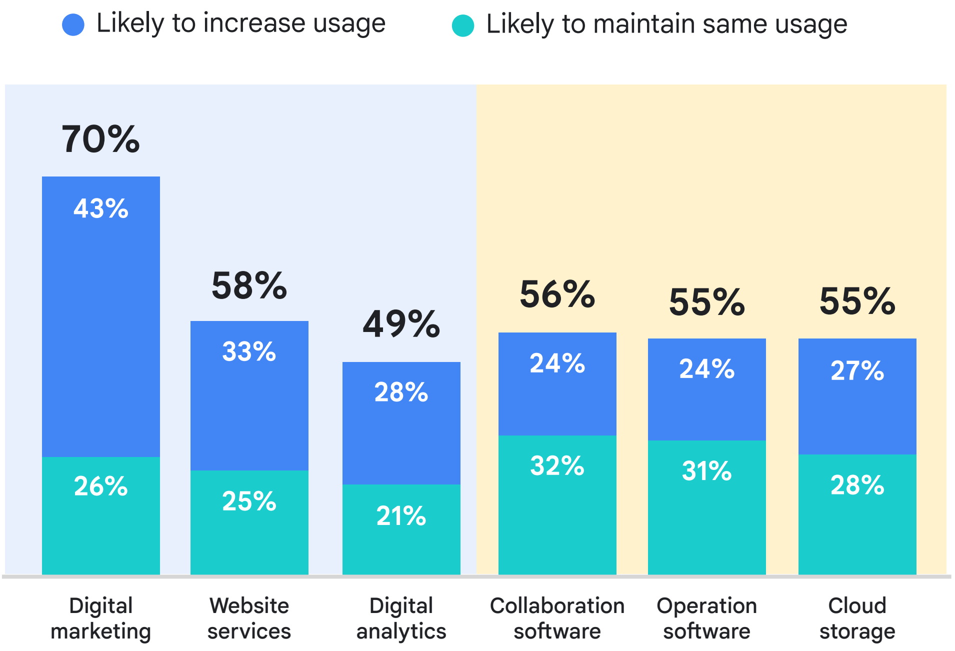
Digital financial services

% of digital merchants likely to increase or maintain usage of digital financial services in the next 1 to 2 years



Digital tools

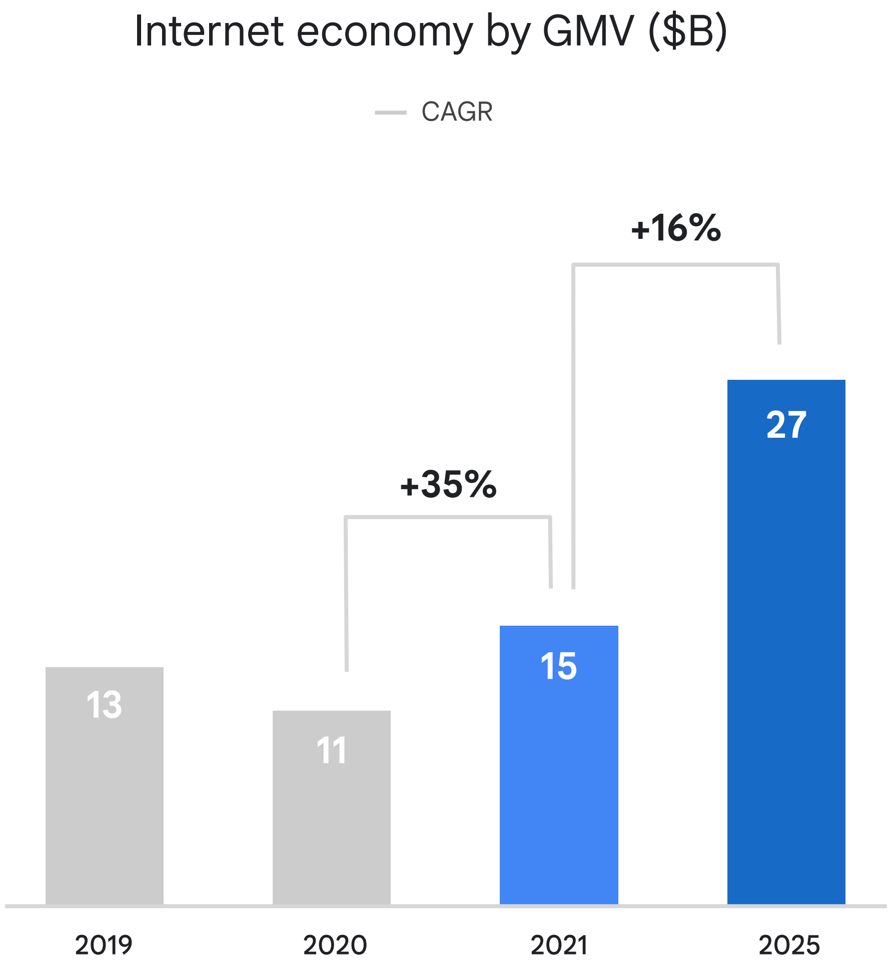
% of digital merchants likely to increase or maintain usage of digital tools over the next 5 years



Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021.

Singapore

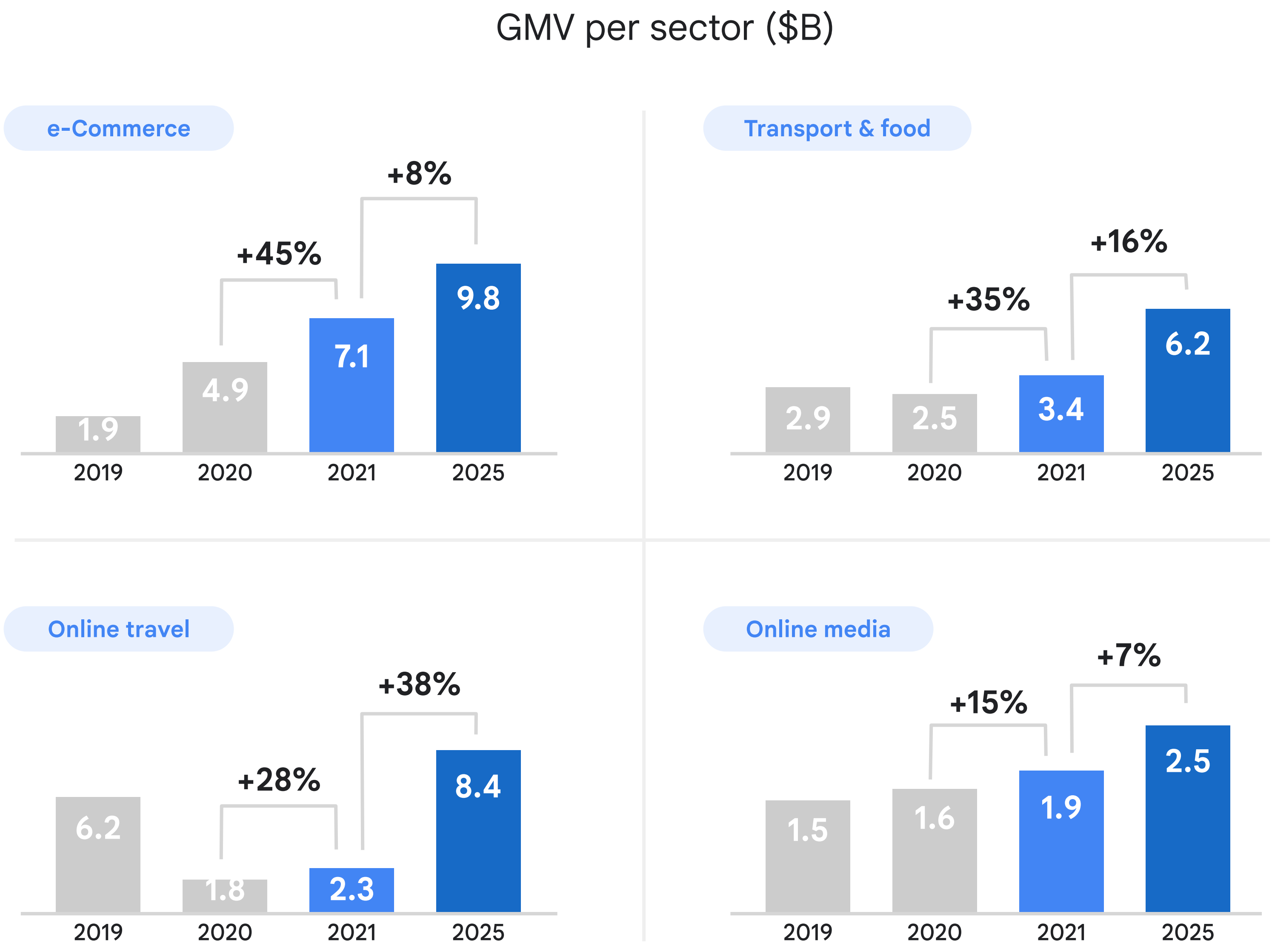
Internet economy **reaches $15B despite significant challenges** due to lockdowns



Source: Bain analysis.

Singapore

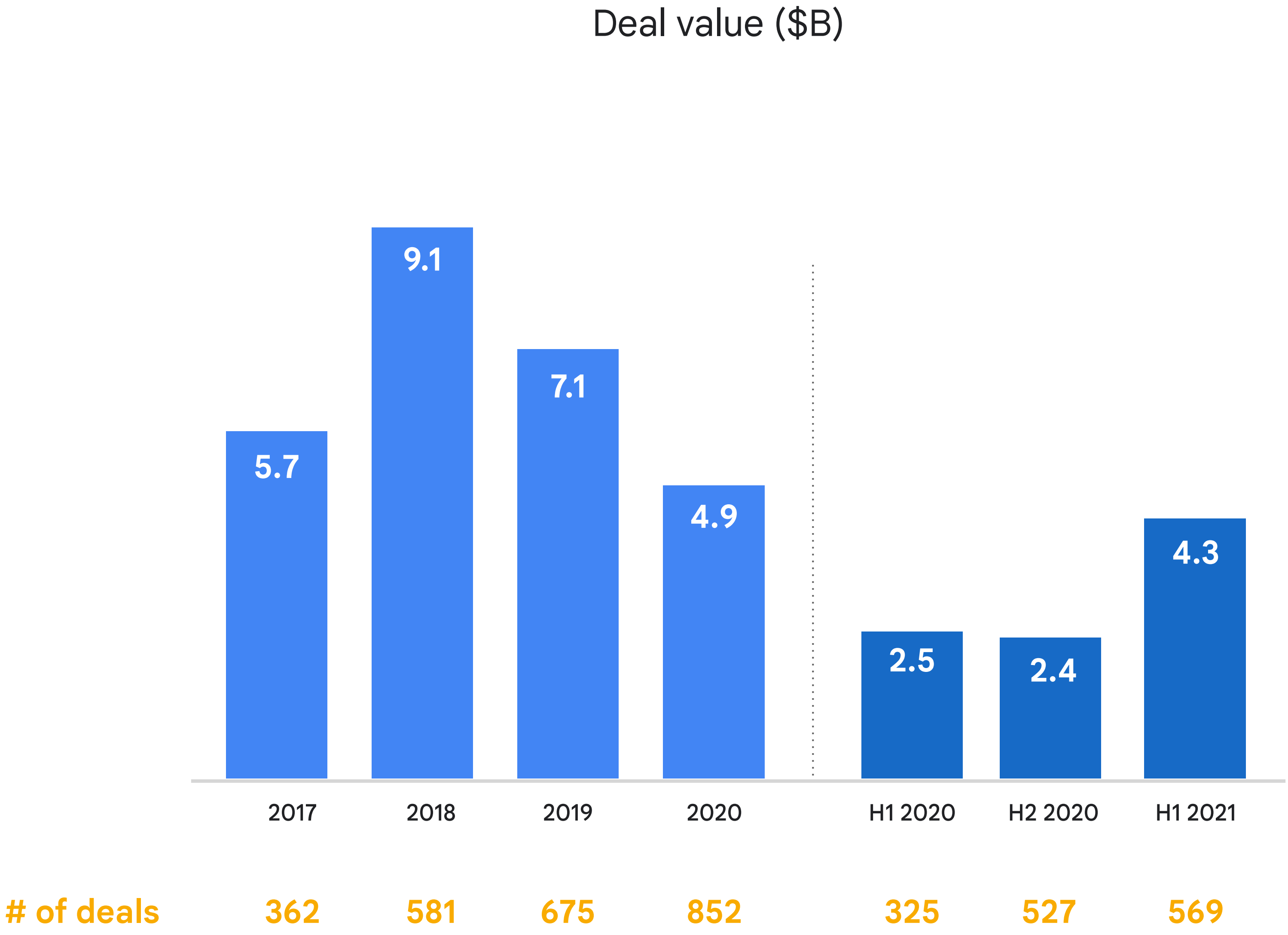
Healthy surge in all sectors after a difficult 2020



Source: Bain analysis.

Singapore

2021 on track to **catch up to 2018 - Singapore's busiest deal year** so far



Source: Industry reports; VC partners; Bain analysis.
Note: Deals include investments by venture capital, private equity and strategic investors.

Thailand

Main takeaways

Consumers cruise into a new way of life

Thailand has seen 9M new digital consumers since the start of the pandemic in 2020 (up to H1 2021), **67% of whom are in non-metro** areas. **Consumption penetration is the second highest** in the region, with 90% of internet users consuming digital services. These users are here to stay, given **96% of pandemic consumers are still using the services** and **98% intend to continue** going forward. Pre-pandemic users - those who used the services before the pandemic - have **consumed an average of 3.9 *more* services** since the pandemic began, and amongst all users, satisfaction with the services sit at 87% across verticals.

Resilience gives way to resurgence

Overall, growth across internet sectors accelerated with double-digit YoY growth. **Thailand's 2021 GMV is expected to reach a total value of $30B - a 51% YoY surge.** This steep increase is underpinned by a **68% growth in e-commerce**. Looking at **2025, the overall internet economy will likely reach $57B in value**, growing at 17% CAGR.

Digital merchants take off

In Thailand, **34% of digital merchants believe that they would not have survived the pandemic if not for digital platforms**. While digital merchants use an average of 2 digital platforms, profitability remains a top concern. Digital financial services are also becoming critical enablers, with **96% of digital merchants now accepting digital payments** and **82% now adopting digital lending solutions**. Many are also embracing digital tools to engage with their customers, with **58% expecting to increase usage of digital marketing tools** in the next five years.

Funding on track to reach new heights

Deal activity in H1 2021 is at pace with last year, and 2021 is poised to match the record investments of 2020. Despite market uncertainty, global capital continues to pour into the country given its strong growth fundamentals. **With the emergence of Thailand's first unicorns, investment appetite remains strong** in digital services that surged as a result of COVID-19, including e-commerce, fintech, healthtech, and edtech.

Source: Google-commissioned Kantar SEA e-Conomy Research 2021; Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021; Bain analysis; VC partners; industry reports.

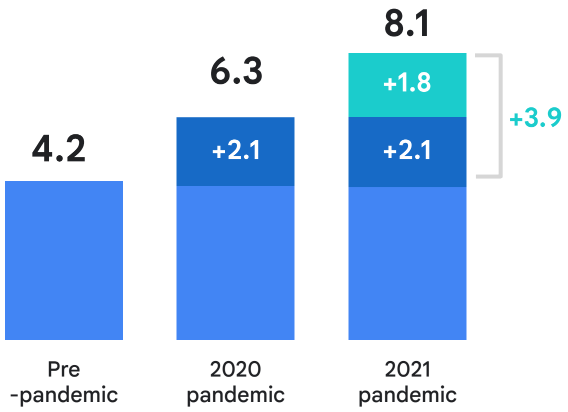
Thailand

Exponential growth in digital consumers
(who intend to continue using digital services)

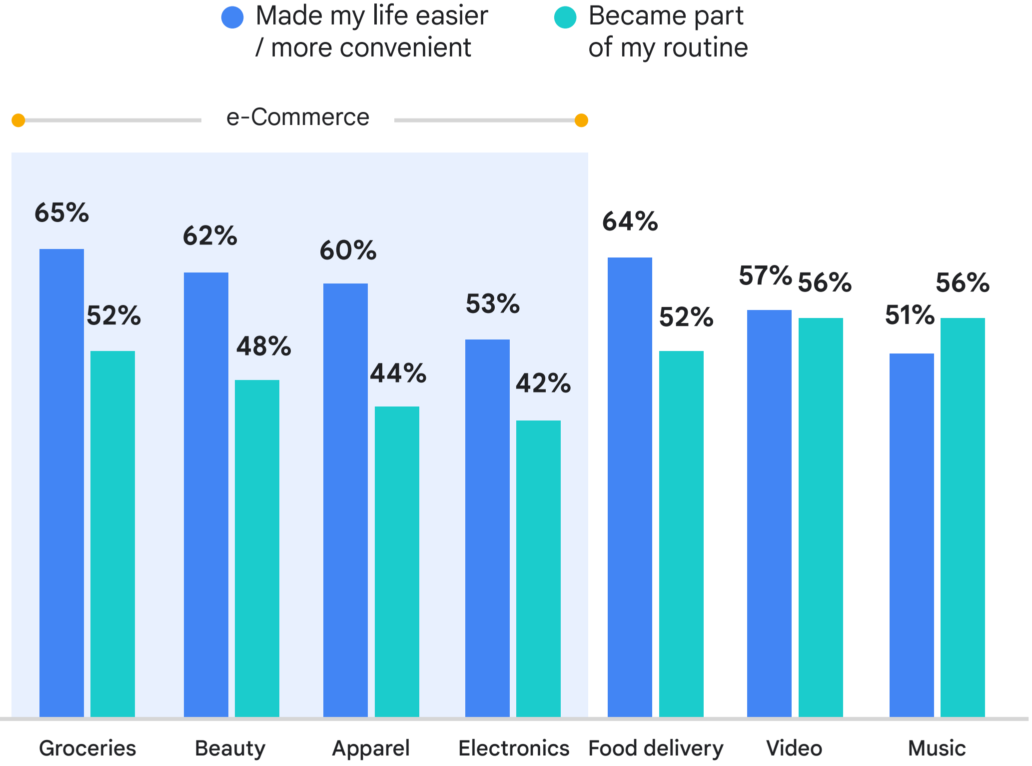
Penetration

- Pre-pandemic consumers: **73.7%**
- New digital consumers 2020: **9.8%**
- New digital consumers 2021 (H1): **6.3%**
- Non users: **10.1%**

Average number of new digital services consumed by a pre-pandemic consumer over time



Reasons consumers continue using digital services



Source: Google-commissioned Kantar SEA e-Conomy Research 2021.
Note: 'Pre-pandemic consumers' are defined as internet users who were already paying for one or more online services via digital channels in a vertical before Mar 2020. 'New digital consumers 2020' first started paying for one or more online services on digital channels in any vertical for the first time between Mar to Dec 2020. 'New digital consumers 2021 (H1)' first started paying for one or more online services on digital channels from Jan 2021 onwards.

Google TEMASEK BAIN & COMPANY

Thailand

Digital merchants are getting **tech-savvy and expect to become even more so** in the future

Digital platforms

34%

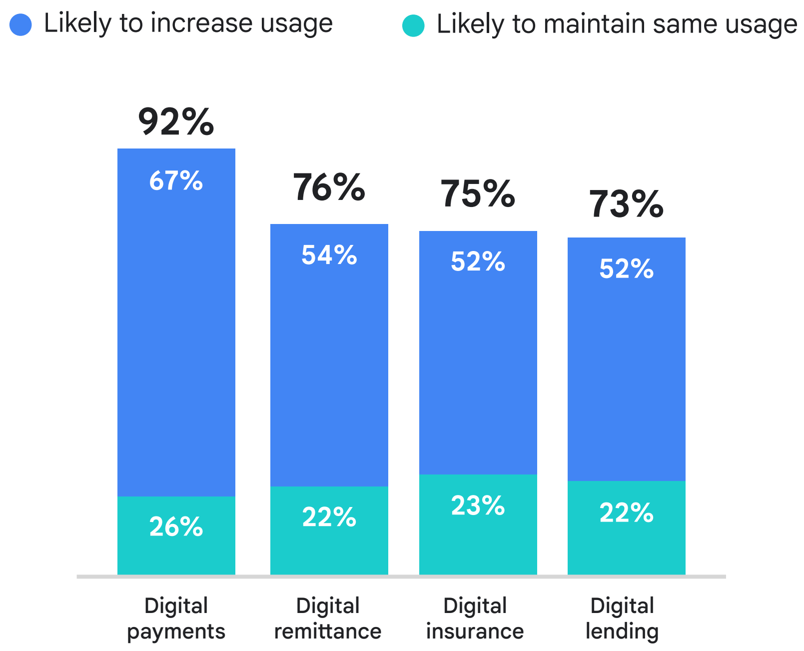
believe that they would **not have survived the pandemic** if not for digital platforms

~2

average number of digital platforms used to access consumer demand online

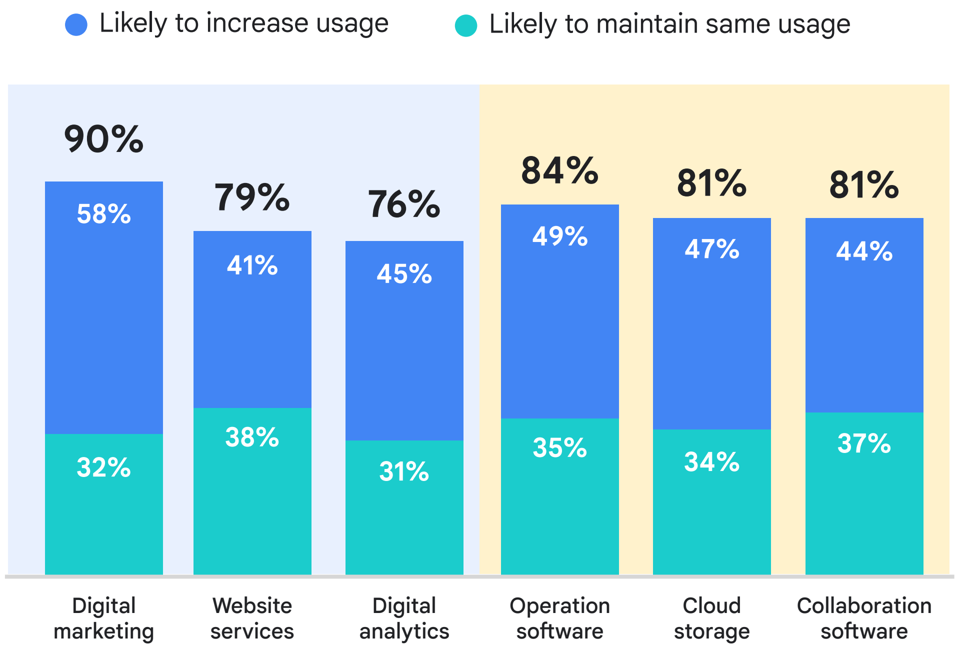
Digital financial services

% of digital merchants likely to increase or maintain usage of digital financial services in the next 1 to 2 years



Digital tools

% of digital merchants likely to increase or maintain usage of digital tools over the next 5 years

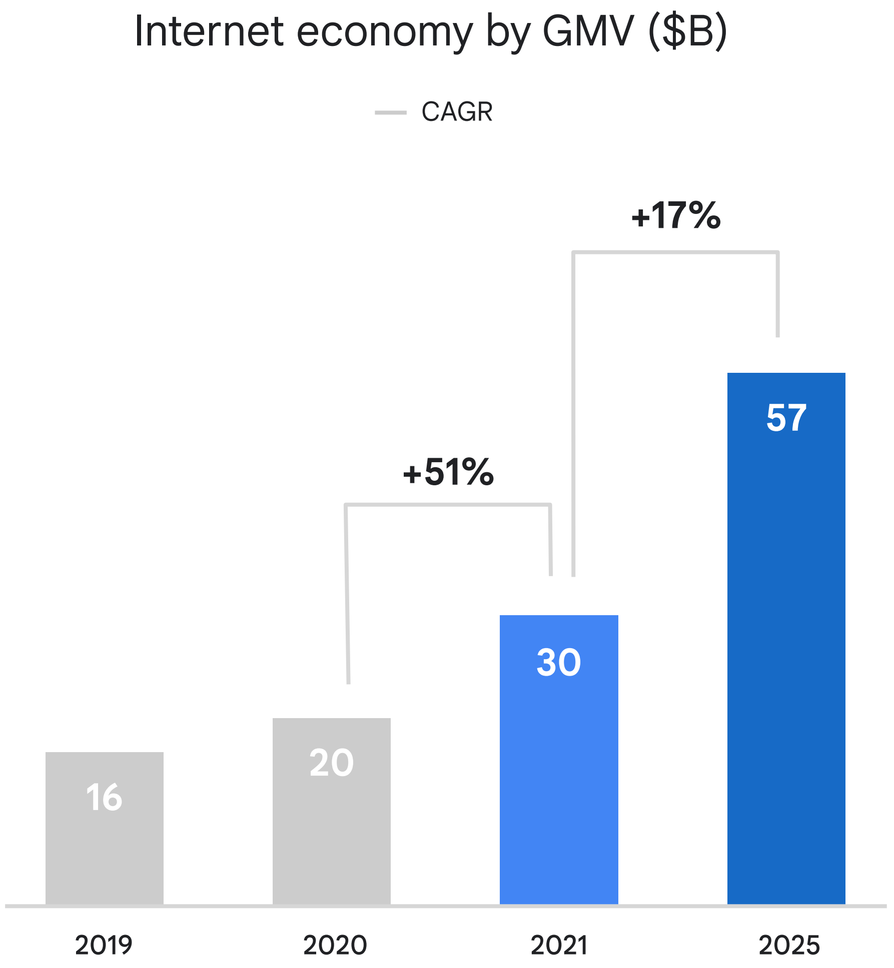


Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021.

Google TEMASEK BAIN & COMPANY

Thailand

Internet economy **lunges ahead to $30B, despite the ongoing pandemic and political unrest**

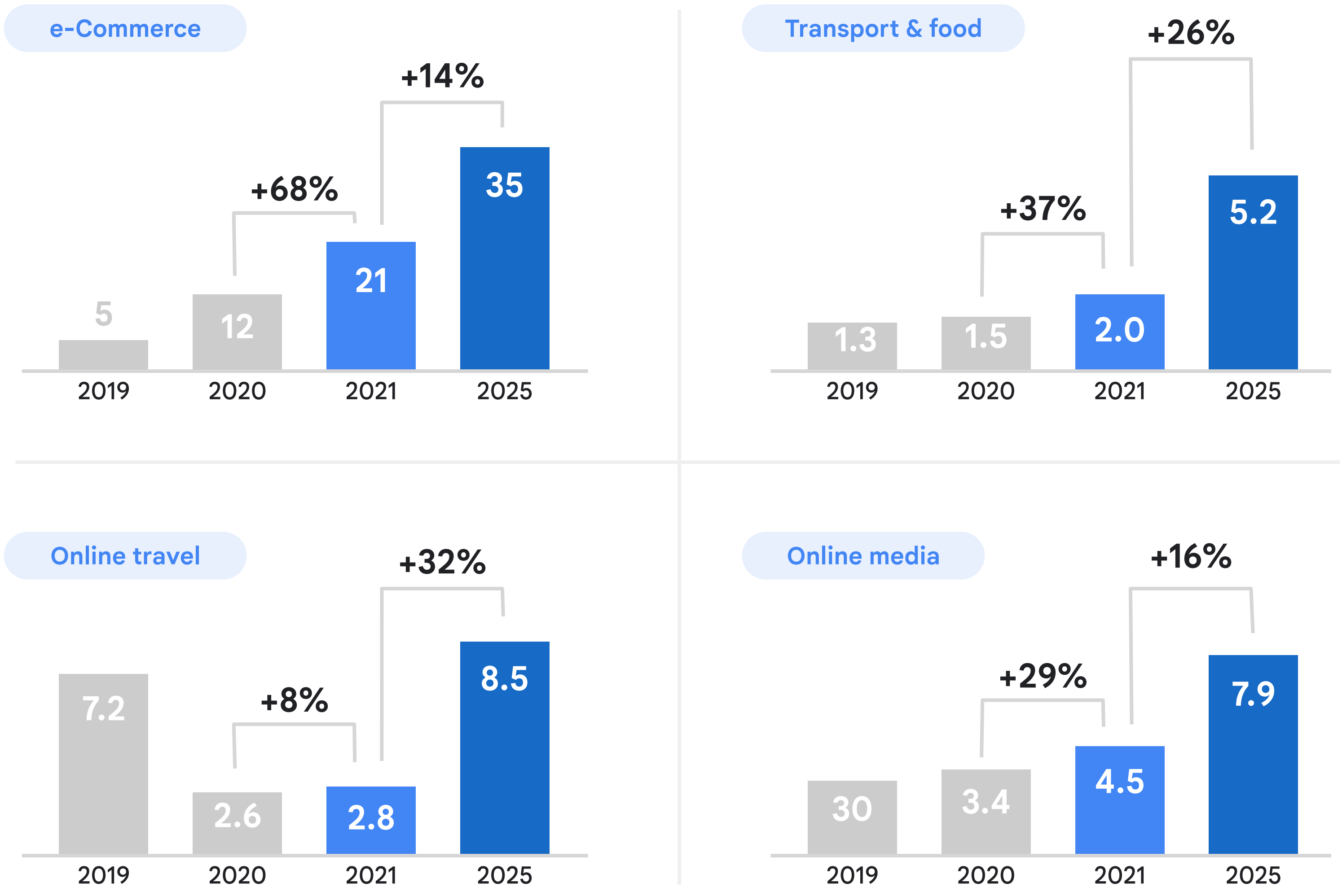


Source: Bain analysis.

Thailand

Sizeable surge in e-commerce makes up for delayed recovery in travel

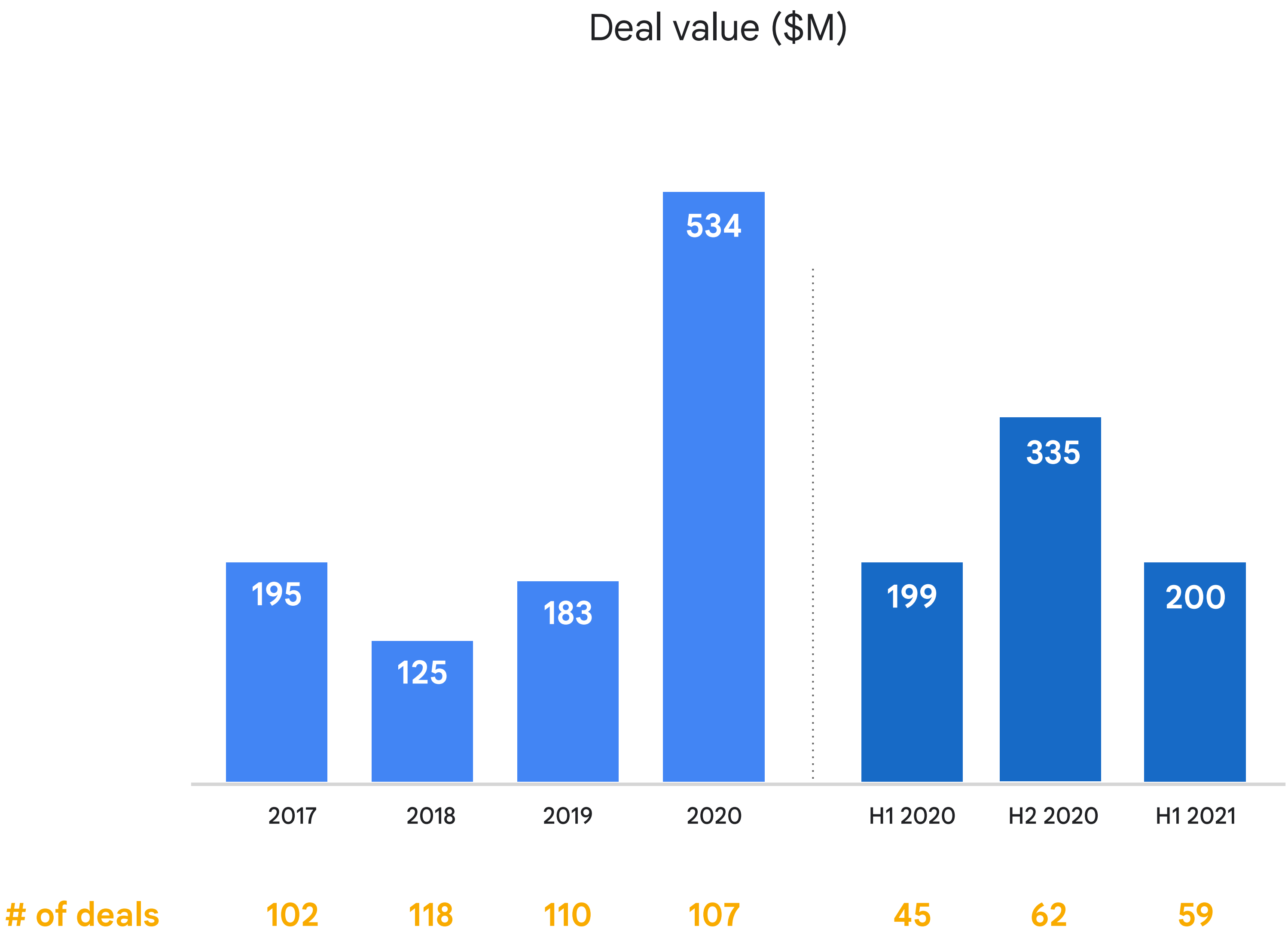
GMV per sector ($B)



Source: Bain analysis.

Thailand

Deal values of H1 2021 and H1 2020 are neck and neck, poising 2021 to be another record-breaking year



Source: Industry reports; VC partners; Bain analysis.
Note: Deals include investments by venture capital, private equity and strategic investors.

Vietnam

Main takeaways

Consumers cruise into a new way of life

Vietnam has seen 8M new digital consumers since the start of the pandemic (up to H1 2021), with **55% of them coming from non-metro areas. Stickiness of adoption remains high** as digital consumption has become a way of life - **97% of the new consumers are still using the services** and **99% intend to continue** going forward. Pre-pandemic users - those who used the services before the pandemic - have **consumed an average of 4 *more* services** since the pandemic, and amongst all users, satisfaction with the services sit at 83% across verticals.

Resilience gives way to resurgence

Overall, most internet sectors continued to grow strongly with double-digit YoY growth. **Vietnam's 2021 GMV is expected to reach a total value of $21B** - a 31% YoY surge. This increase is underpinned by a **53% growth in e-commerce**, despite the shrinking online travel market due to ongoing travel restrictions. Looking at **2025, the overall internet economy will likely reach $57B in value**, growing at 29% CAGR.

Digital merchants take off

In Vietnam, **30% of digital merchants believe that they would not have survived the pandemic if not for digital platforms**. While digital merchants use an average of two digital platforms, profitability remains a top concern. Digital financial services are also becoming critical enablers, with **99% of digital merchants now accepting digital payments** and **72% having adopted digital lending solutions**. Many are also embracing digital tools to engage with their customers, with **72% expecting to increase usage of digital marketing tools in the next five years.**

Funding on track to reach new heights

Deal activity skyrocketed in the first half of 2021, **already surpassing full year investments of recent years**. Vietnam remains a very attractive innovation hub with more incubators, accelerators and innovation labs than most other markets in the region. Despite market uncertainty, **global capital continues to pour into the country** given its strong growth fundamentals and growing digital ecosystem. **Investment appetite remains strong in digital services that surged as a result of COVID-19**, such as e-commerce, fintech, healthtech and edtech.

Source: Google-commissioned Kantar SEA e-Conomy Research 2021; Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021; Bain analysis; VC partners; industry reports.

Vietnam

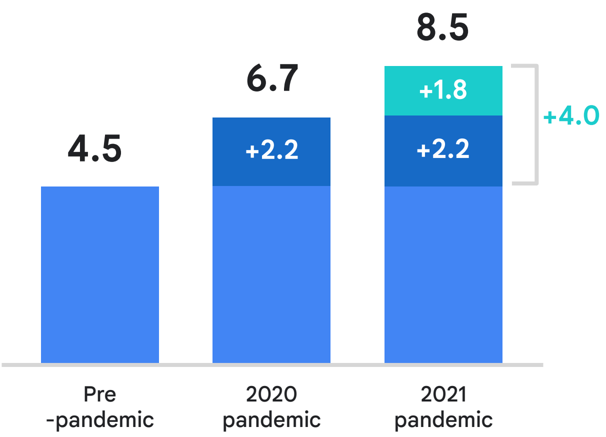
Exponential growth in digital consumers

(who intend to continue using digital services)

Penetration

- Pre-pandemic consumers: **60.5%**
- New digital consumers 2020: **7.4%**
- New digital consumers 2021 (H1): **2.9%**
- Non users: **29.3%**

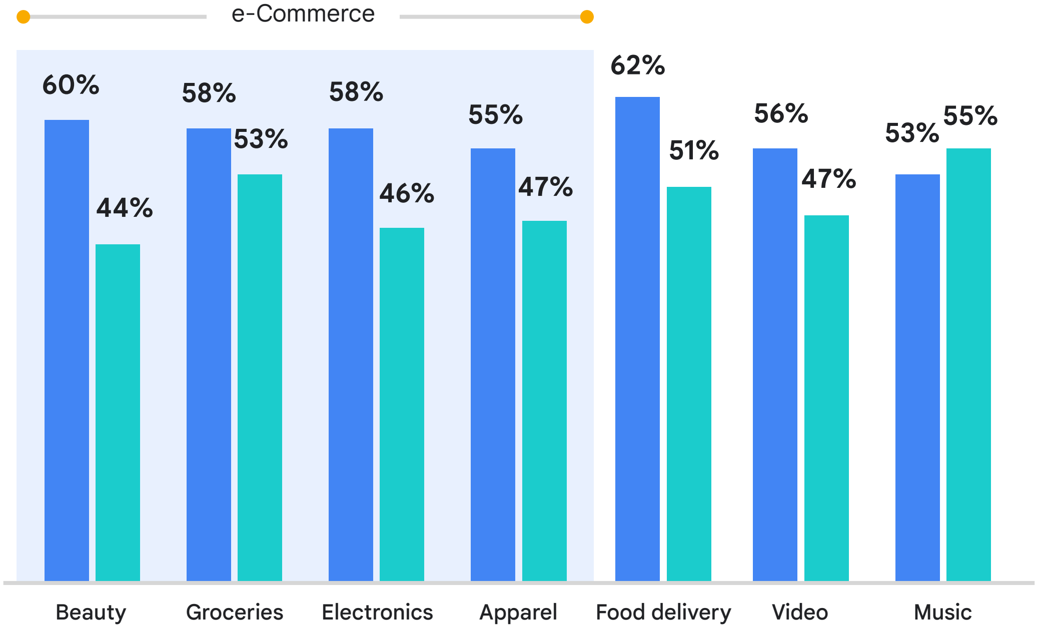
Average number of new digital services consumed by a pre-pandemic consumer over time



Reasons consumers continue using digital services

Made my life easier / more convenient

Became part of my routine



Source: Google-commissioned Kantar SEA e-Conomy Research 2021.
Note: 'Pre-pandemic consumers' are defined as internet users who were already paying for one or more online services via digital channels in a vertical before Mar 2020. 'New digital consumers 2020' first started paying for one or more online services on digital channels in any vertical for the first time between Mar to Dec 2020. 'New digital consumers 2021 (H1)' first started paying for one or more online services on digital channels from Jan 2021 onwards.

Google TEMASEK BAIN & COMPANY

Vietnam

Digital merchants are getting **tech-savvy and expect to become even more so** in the future

Digital platforms

30%

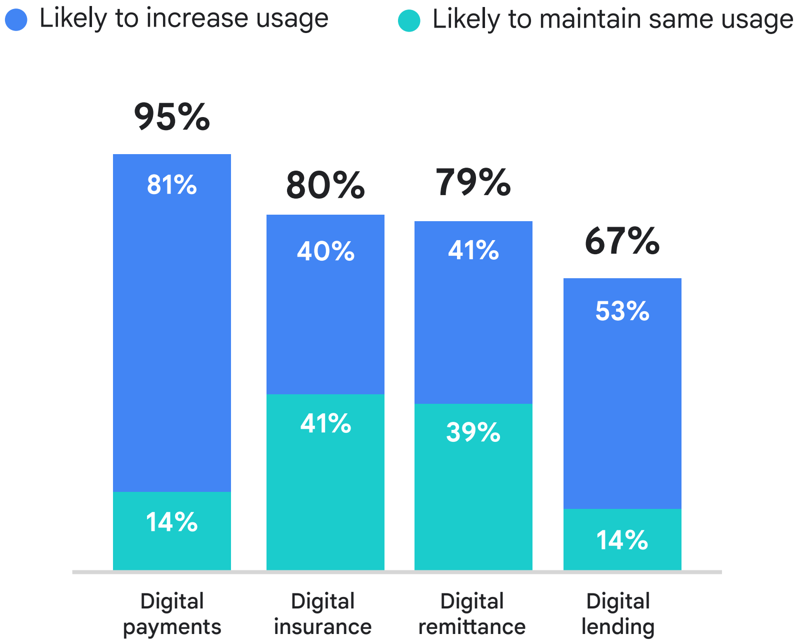
believe that they would **not have survived the pandemic** if not for digital platforms

~2

average number of digital platforms used to access consumer demand online

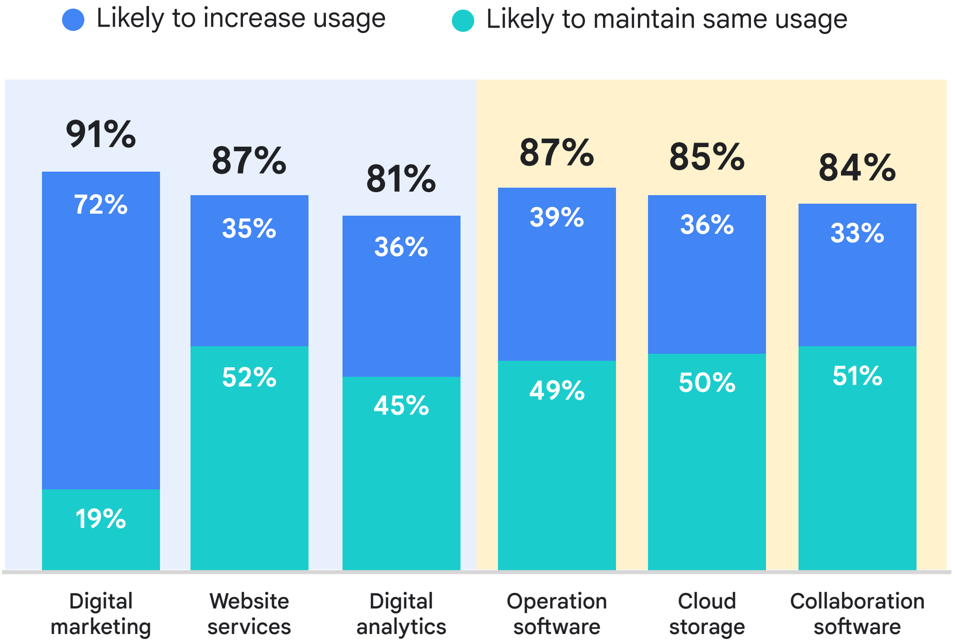
Digital financial services

% of digital merchants likely to increase or maintain usage of digital financial services in the next 1 to 2 years



Digital tools

% of digital merchants likely to increase or maintain usage of digital tools over the next 5 years

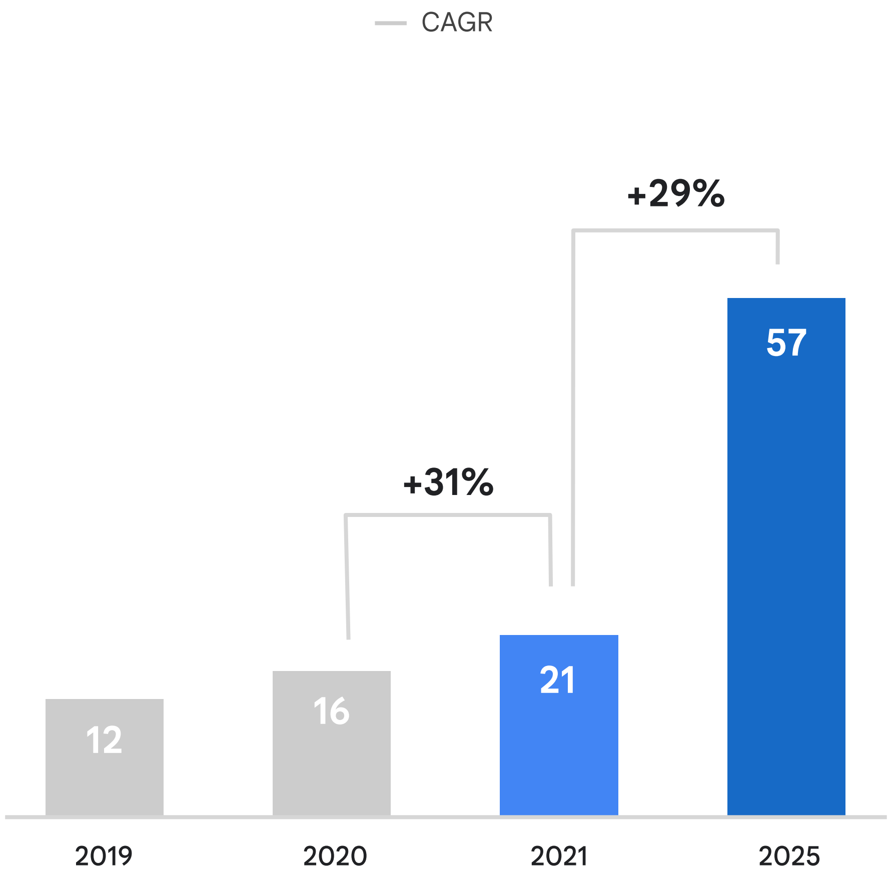


Source: Google-commissioned Dynata SEA-6 Digital Merchant Survey 2021.

Vietnam

Internet economy reaches $21B, demonstrating that both government and economy remain resilient

Internet economy by GMV ($B)

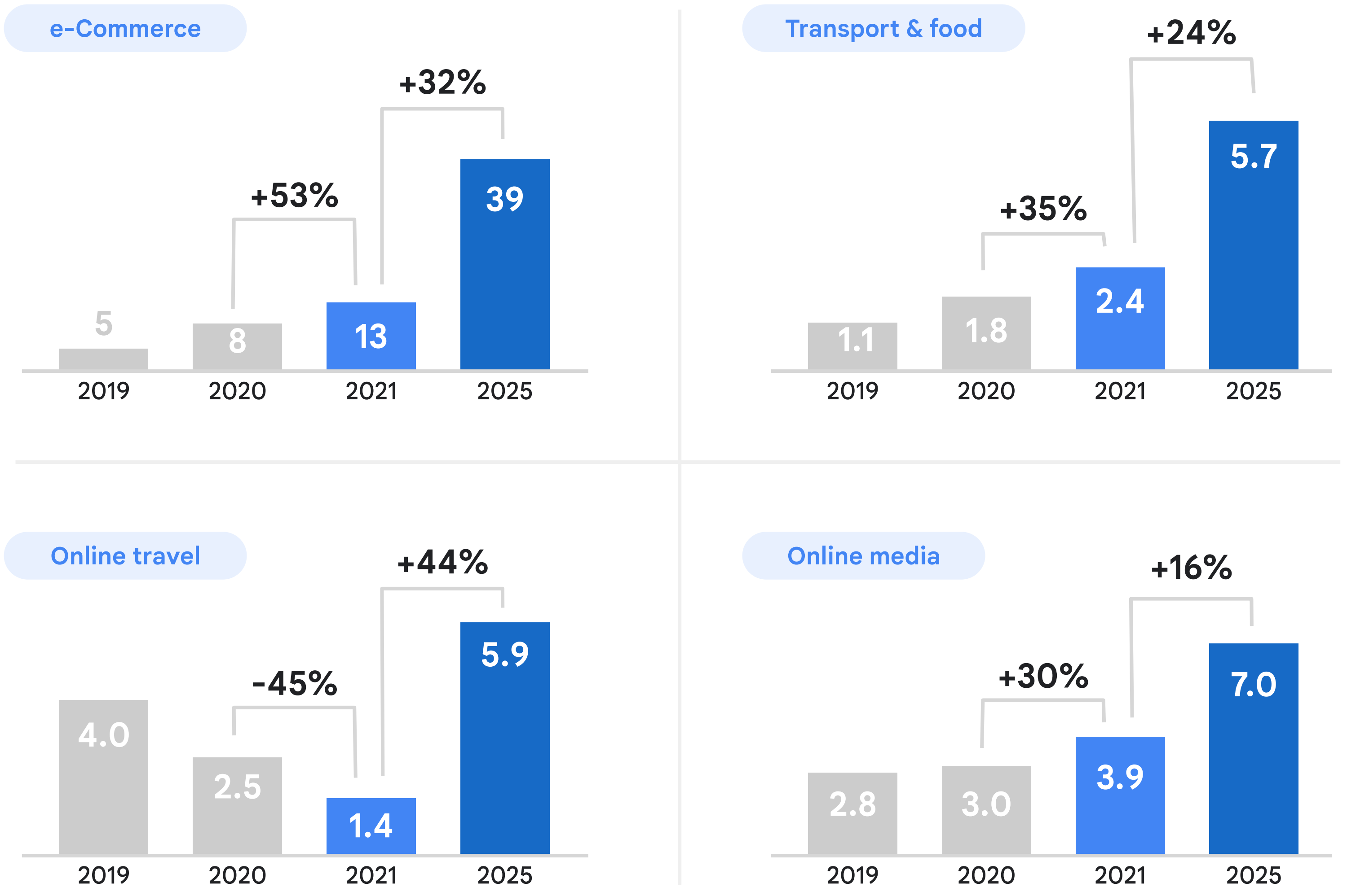


Source: Bain analysis.

Vietnam

Large contraction in online travel **offset by double-digit growth everywhere else**

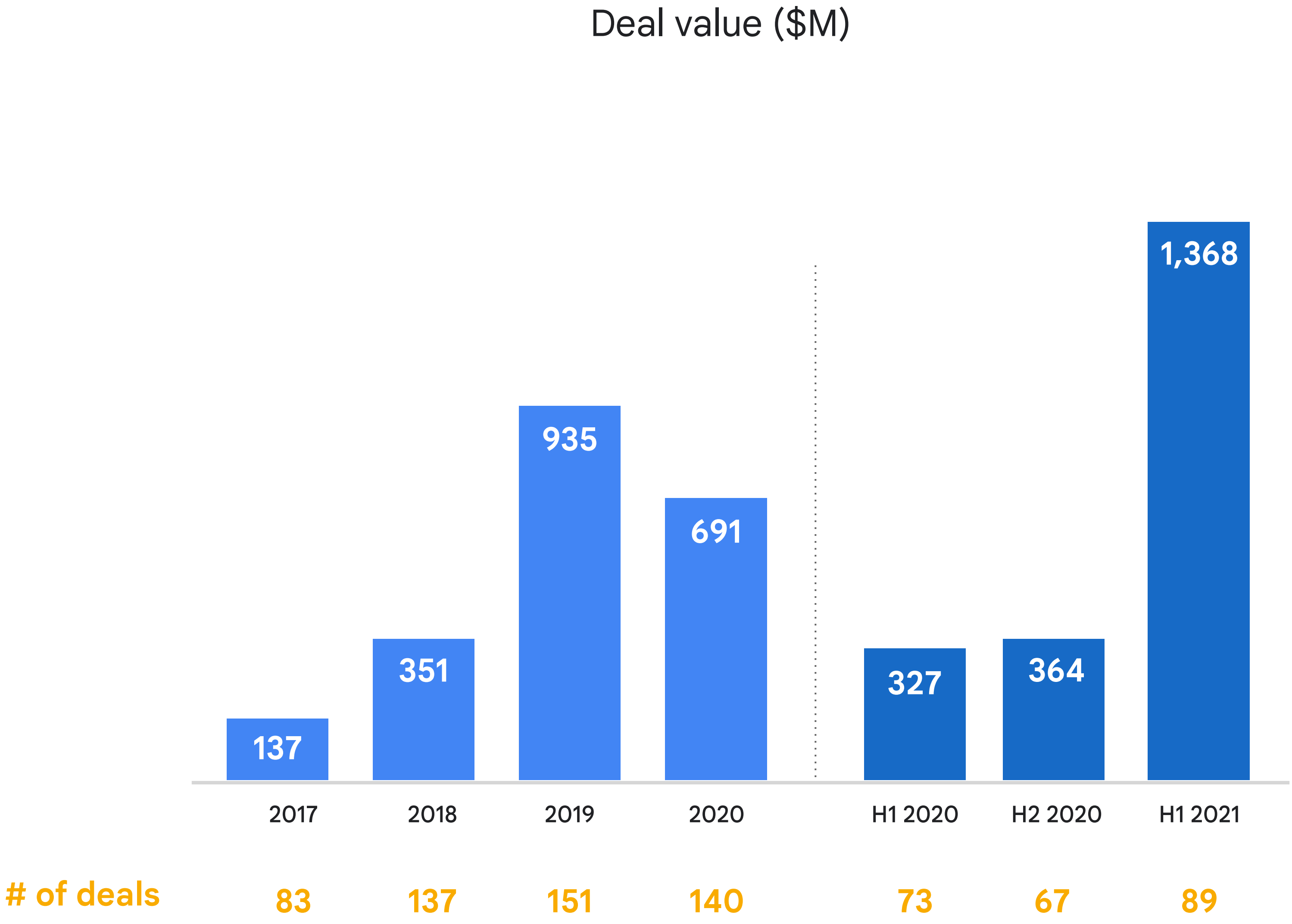
GMV per sector ($B)



Source: Bain analysis.

Vietnam

2021 deal value has skyrocketed, mainly fueled by foreign and domestic investment and government incentives



Source: Industry reports; VC partners; Bain analysis.
Note: Deals include investments by venture capital, private equity and strategic investors.

Google TEMASEK BAIN & COMPANY

e-Conomy SEA 2021

Roaring 20s: The SEA Digital Decade