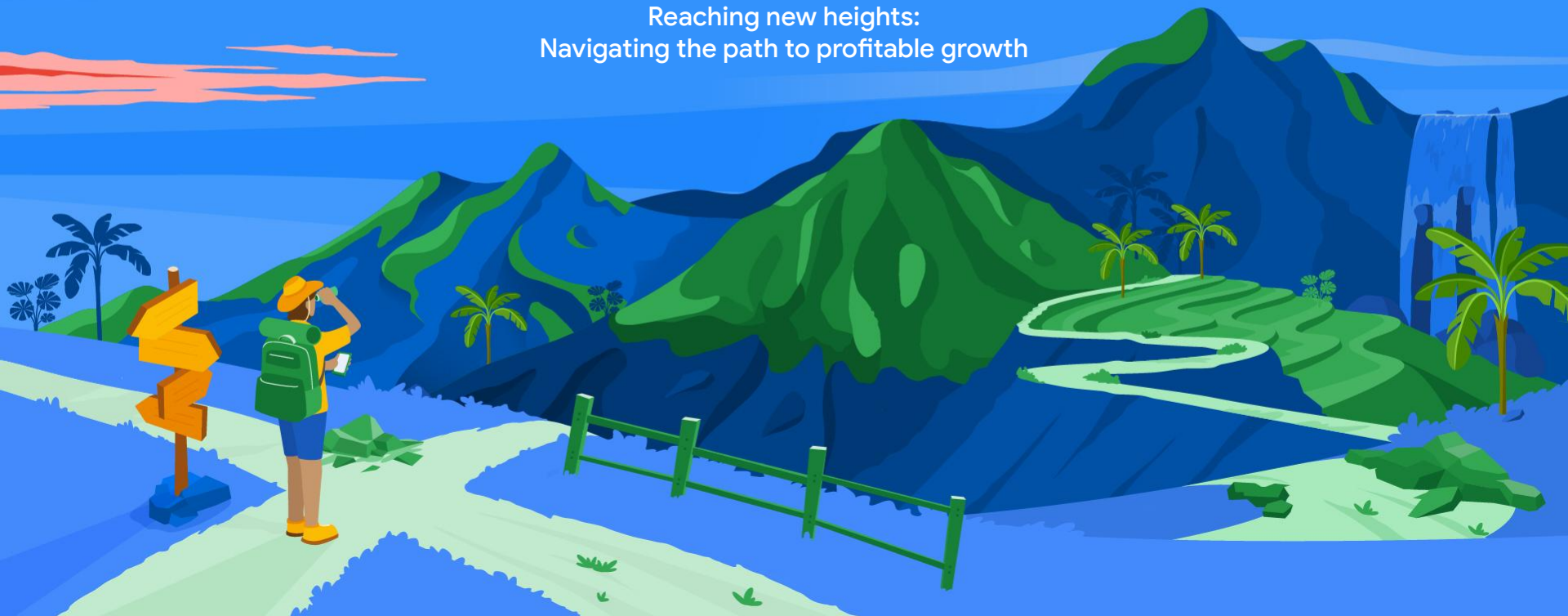


e-Conomy SEA 2023

Reaching new heights:
Navigating the path to profitable growth



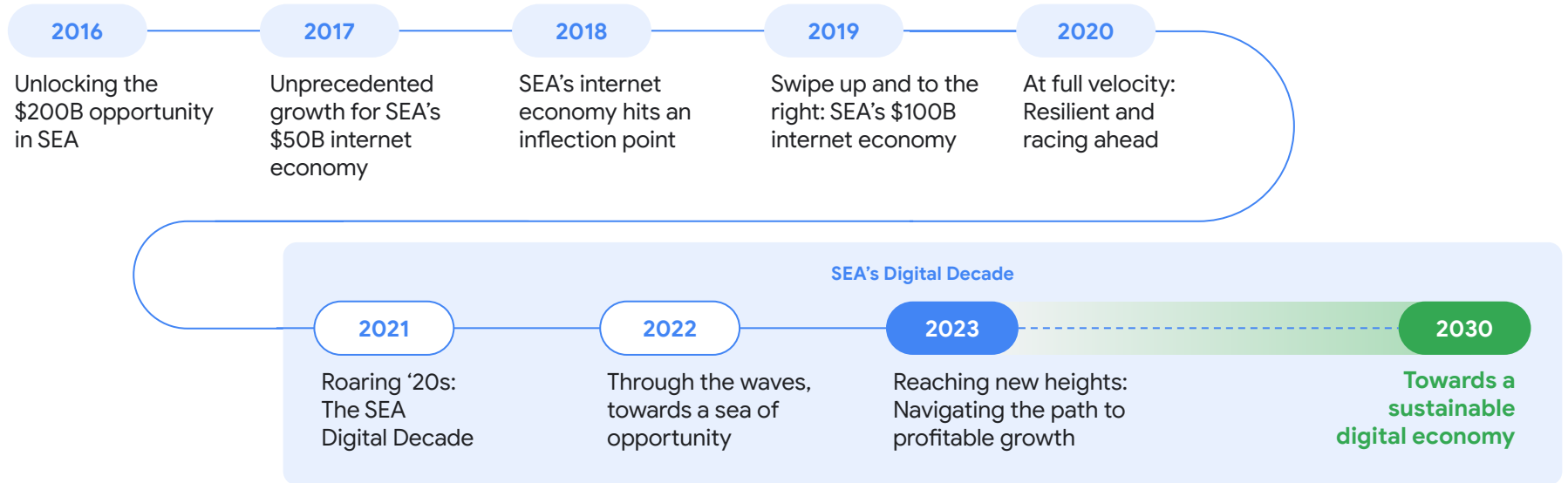
Reference

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 Temasek insights, Bain analysis, Google Trends, primary research, expert interviews, and industry sources to shed light on the digital economy in Southeast Asia (SEA). The information included in this report is sourced as 'Google, Temasek, and Bain, e-Conomy SEA 2023', unless otherwise specified.

Disclaimer

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8th edition of e-Conomy SEA by Google, Temasek, Bain: Southeast Asia's digital economy research programme

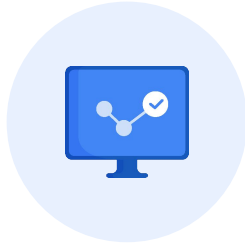


e-Conomy SEA research methodology

Temasek insights



Bain analysis



Google Trends



Primary research¹



Expert interviews²
& industry sources



With contributions from

500

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Partners

vertex
VENTURES

wavemaker
-PARTNERS-

X
A
NETWORK

Notes: All dollar amounts are in USD. Unless otherwise stated, all mentions of "Southeast Asia" or "SEA" in this report refer to these six markets: Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam. (1) Google commissioned Kantar to run the e-Conomy SEA consumer survey. The research was conducted in metro and non-metro cities across Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam. Data collection ran from 10/08/2023 to 01/09/2023 via a 25-minute online survey. The survey was conducted among a total of n=7,881 respondents aged 18-64 who had made a transaction in at least one of the verticals covered within a specified period of time. Each respondent was allocated to a maximum of two verticals, out of eight verticals covered, based on least fill quota.

(2) Bain and Temasek conducted interviews and a quantitative survey with SEA-focused venture capital investors from 06/2023 to 08/2023.

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



605M

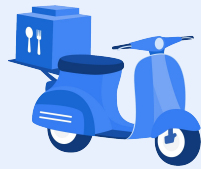
total population
across the countries

... and 5 leading sectors in the digital economy



E-commerce

- ▶ Marketplaces
- ▶ Direct-to-consumer
- ▶ Groceries



Transport & food

- ▶ Transport
- ▶ Food delivery



Online travel

- ▶ Flights
- ▶ Hotels
- ▶ Vacation rentals



Online media

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



Financial services

- ▶ Payments
- ▶ Lending
- ▶ Insurance
- ▶ Investments

Notes: E-commerce does not include informal commerce due to the lack of reliable data. Financial services are excluded from market sizing estimates due to differences in units of measurement compared to other leading sectors.

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01

Growing against global headwinds

SEA has weathered global macroeconomic headwinds with more resilience compared to other regions around the world. Gross domestic product (GDP) growth remains above 4%, while inflation has come down to 3%. Consumer confidence is starting to rebound in H2 2023 after falling to lower levels in H1 2023.

02

Investors reset expectations

Private funding in SEA has declined to its lowest level in six years, which is in line with global shifts towards higher costs of capital and issues across the funding lifecycle. Exits remain top of mind as SEA funds have returned less capital to investors than funds focused on other regions. To leave the funding winter behind, SEA will need to prove its digital companies have a clear pathway to profitability, and investors have dependable exit pathways.

03

Monetisation on the rise

Digital businesses have shifted their focus to monetisation in a bid to achieve profitability targets. In 2023, the SEA digital economy is set to deliver \$100B in revenue, growing at 27% CAGR since 2021 – 1.7X the rate of gross merchandise value (GMV) growth. E-commerce, travel, transport, and media contributed \$70B in revenue. Remarkably, the focus on monetisation has not come at the expense of consumer engagement and GMV growth. GMV is still expected to grow at 11% to \$218B in 2023. Travel and transport are on track to exceed pre-pandemic heights in 2024, while e-commerce is showing resilience.

04

Financial services at an inflection point

Consumers are adopting digital financial services (DFS) at a rapid pace. Cash is no longer king, as digital payments now make up more than 50% of the region's transactions. High interest rates are tailwinds to deposits and wealth management but pose challenges to lending. Non-performing loans remain under control. Sustainable business models are emerging among pure-play fintechs, while traditional financial companies are accelerating the process of digitalisation to retain users.

05

Engaging high value users

As businesses pursue an accelerated path to profitability, engaging high value users has become critical to achieve sustainable unit economics. The top 30% of SEA spenders account for more than 70% of digital economy spend – and they can be found everywhere. This is accentuated in gaming, travel, and transport. In the longer term, companies will need to embrace a broader set of customers to continue growing in a sustainable way and unlock the region's full monetisation potential.

06

Bridging the digital economic divide

Digital inclusion has made inroads in the region over the past years. Connectivity has increased by as much as 3X since 2015 in some rural areas. Yet, as players focus on monetisation, consumers outside of metro cities are facing a widening digital economic divide. Ecosystem investments are required to bridge the gap, which will in turn support long-term digital economic growth.

07

The path forward: profitable growth

There remains significant headroom in SEA: favourable demographics, growing wealth, and an increasingly urbanised population set the stage for future digital economic growth. Competition is also expected to become more rational in the pursuit of sustained profitability. SEA's digital economy can reach its full potential given broadened digital economy participation, the emergence of nascent sectors, physical infrastructure investments, and policy and regulation at the regional level.

Growing against global headwinds

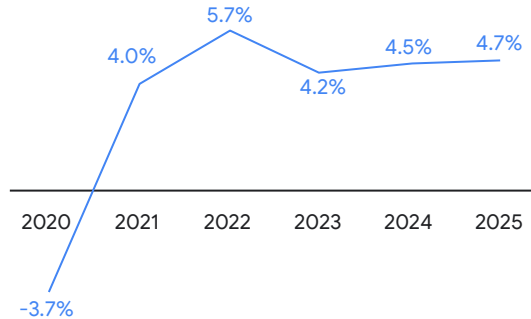


SEA has weathered global macroeconomic headwinds with more resilience compared to other regions around the world.

SEA has stood firm against global macroeconomic headwinds

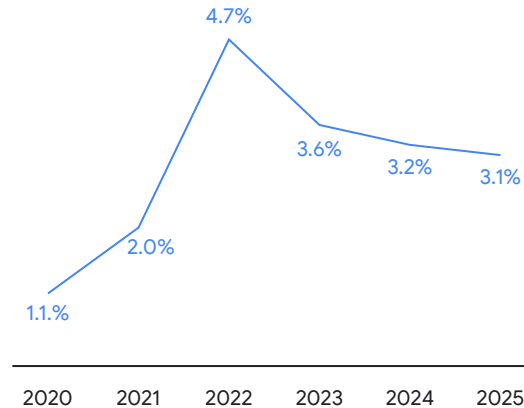
GDP growth has stayed relatively stable

SEA GDP (YoY %)



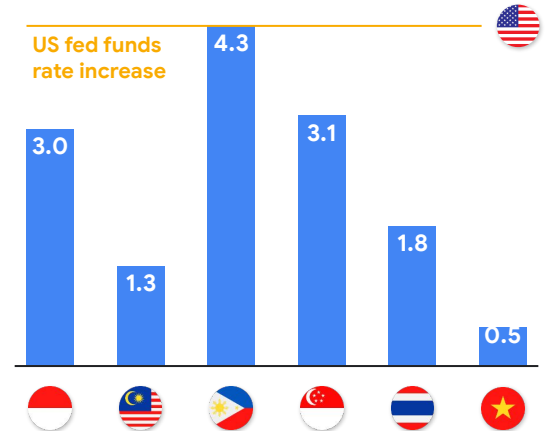
Inflation calms from post-pandemic peaks

SEA inflation (YoY %)



Interest rate increases have been relatively moderate

Change in interest rates¹
(% points, Jan '22-Jul '23)



Notes: Data is as of July 2023. (1) SORA used as a proxy for Singapore interest rates.

Sources: United Nations Population Division; S&P Global Market Intelligence; relevant central banks and monetary authorities; Bain analysis

SEA's economy sees encouraging upswings, especially in travel



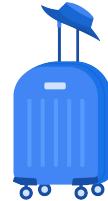
+36%

increase in regional
FDI inflow¹



+32%

increase in
regional exports¹



80%

recovery in outbound
passenger volume¹



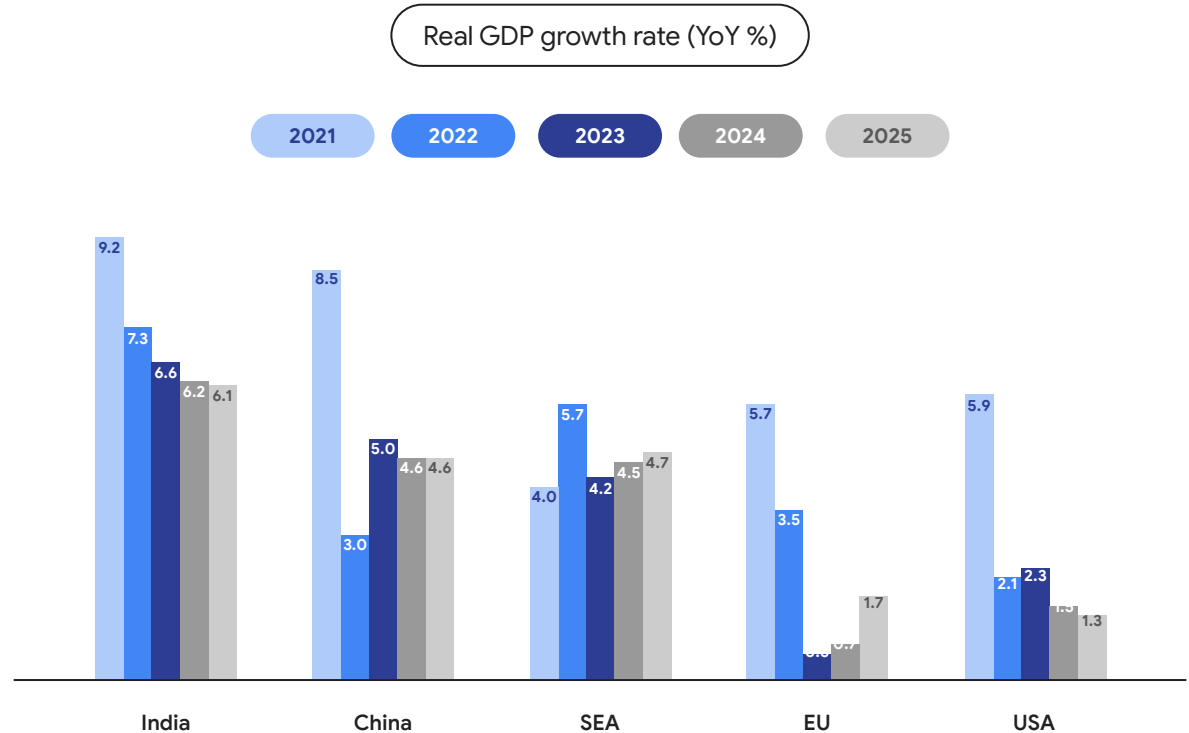
+40%

increase in travel
demand¹

Notes: FDI = foreign direct investment. (1) Compared to 2019.

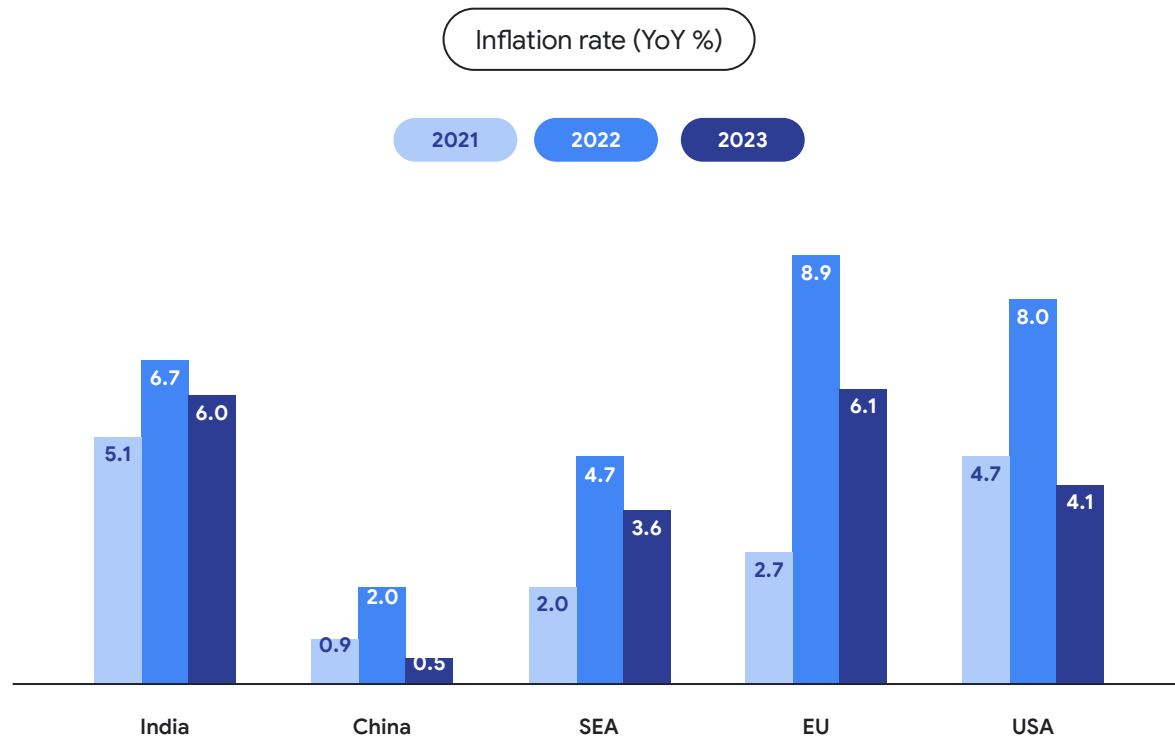
Sources: United Nations Conference on Trade and Development; Euromonitor; International Air Transport Association; Destination Insights with Google; Bain analysis

SEA's GDP growth is forecast to keep up with the world's fastest-growing economies



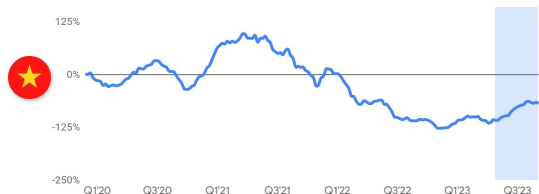
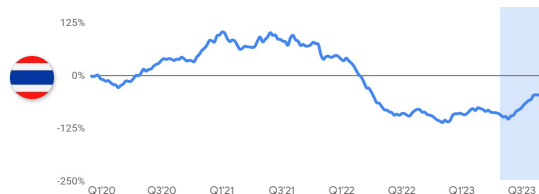
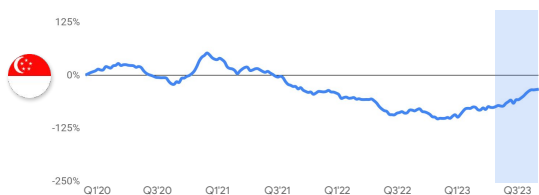
Note: Data is as of October 2023, and includes full-year estimates for 2023 and forecasts for 2024 and 2025.
Sources: S&P Global Market Intelligence; Bain analysis

Inflation remains under control compared to other regions



Note: Data is as of October 2023, and includes full-year estimates for 2023.
Sources: S&P Global Market Intelligence; Bain analysis

Consumer confidence in the economy has begun to recover in Q3 2023 across most of the region



Consumer Confidence Barometer

We used search interest data to measure consumer confidence in the economy.

Factors include:

- **Economic uncertainty searches**
(e.g. inflation, recession)
- **Commodity price searches**
(e.g. gas prices)
- **Job opportunity searches**
(e.g. new job openings)
- **Job concern searches**
(e.g. unemployment)
- **Finance and investment searches**
(e.g. investing strategies, mutual fund returns)

A higher score indicates that consumers are more confident and have a more positive outlook on the economy. A lower score indicates that consumers are more worried and have a more negative outlook on the economy.

Note: Data is as of August 2023. Data based on a three-month rolling window.

Sources: The Consumer Confidence Barometer combines search interest data based on multiple economic indication searches, both positive and negative, to estimate consumers' confidence in a country's economic outlook

Investors reset expectations

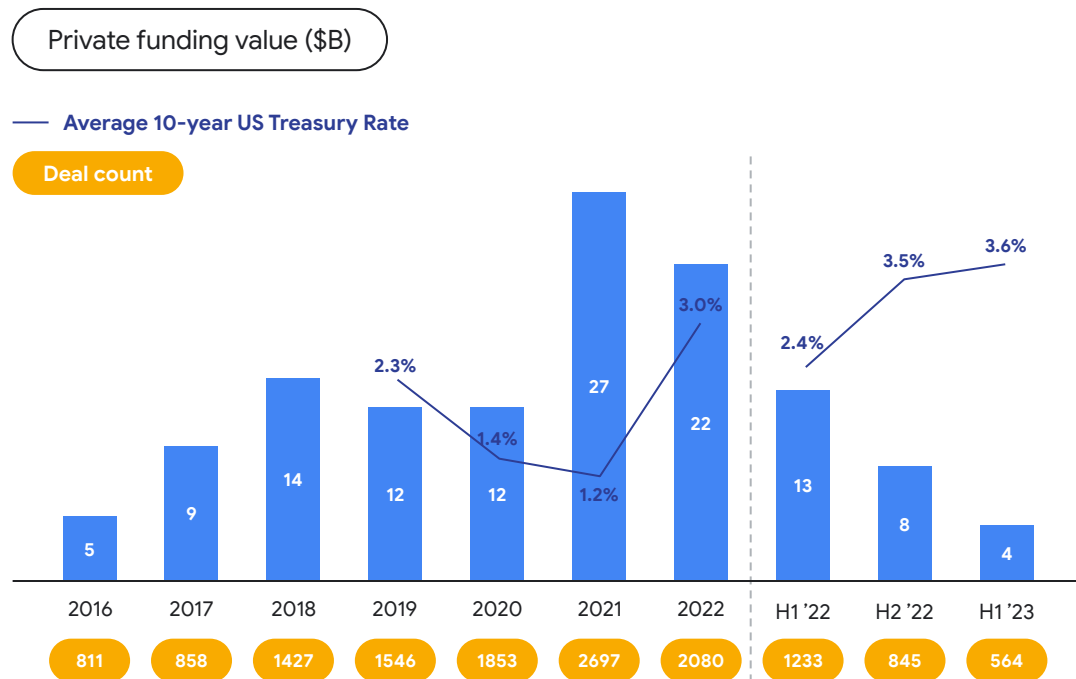




Private funding in SEA has declined to its lowest level in six years, which is in line with global shifts towards higher costs of capital and issues across the funding lifecycle.

Exits remain top of mind as SEA funds have returned less capital than funds focused on other regions.

Private funding reverts to 2017 levels



Note: Private funding value covers digital economy-related sectors, and excludes public financing deals e.g. PIPE, IPO, ICO.
Source: Bain analysis

Funding takes a dip after record highs in 2021

The pace of funding in recent years has been extraordinary: in 2016, we expected \$40B–\$50B of investments that would take GMV to \$200B in 2025. By 2022, the region had raised double that amount – \$101B – as it hit the \$200B GMV milestone three years ahead of schedule.

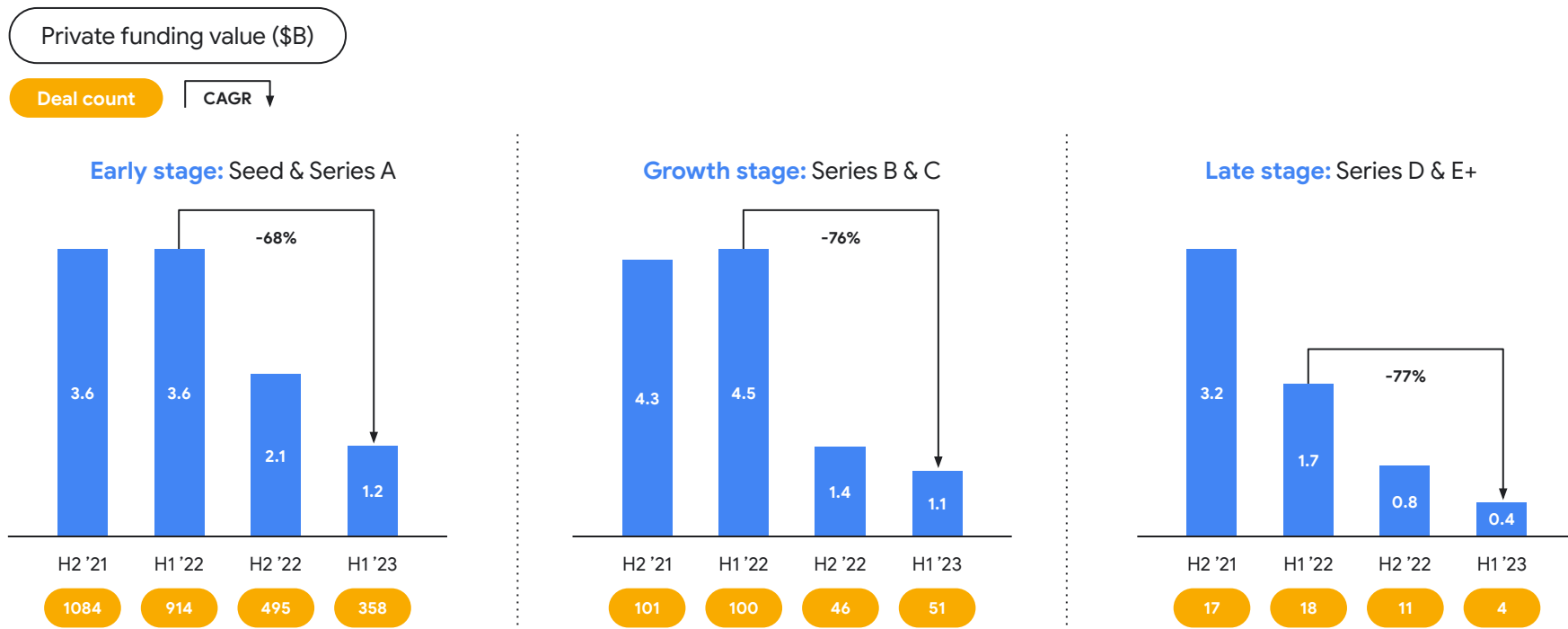
Shift towards self-sufficiency

Compared to past highs, the pace of funding has slowed to a six-year low – also due to higher costs of capital. As investors recalibrate their expectations, digital players are looking to extend their runways by spending more efficiently, in favour of healthier long-term growth.

Deal environment remains competitive

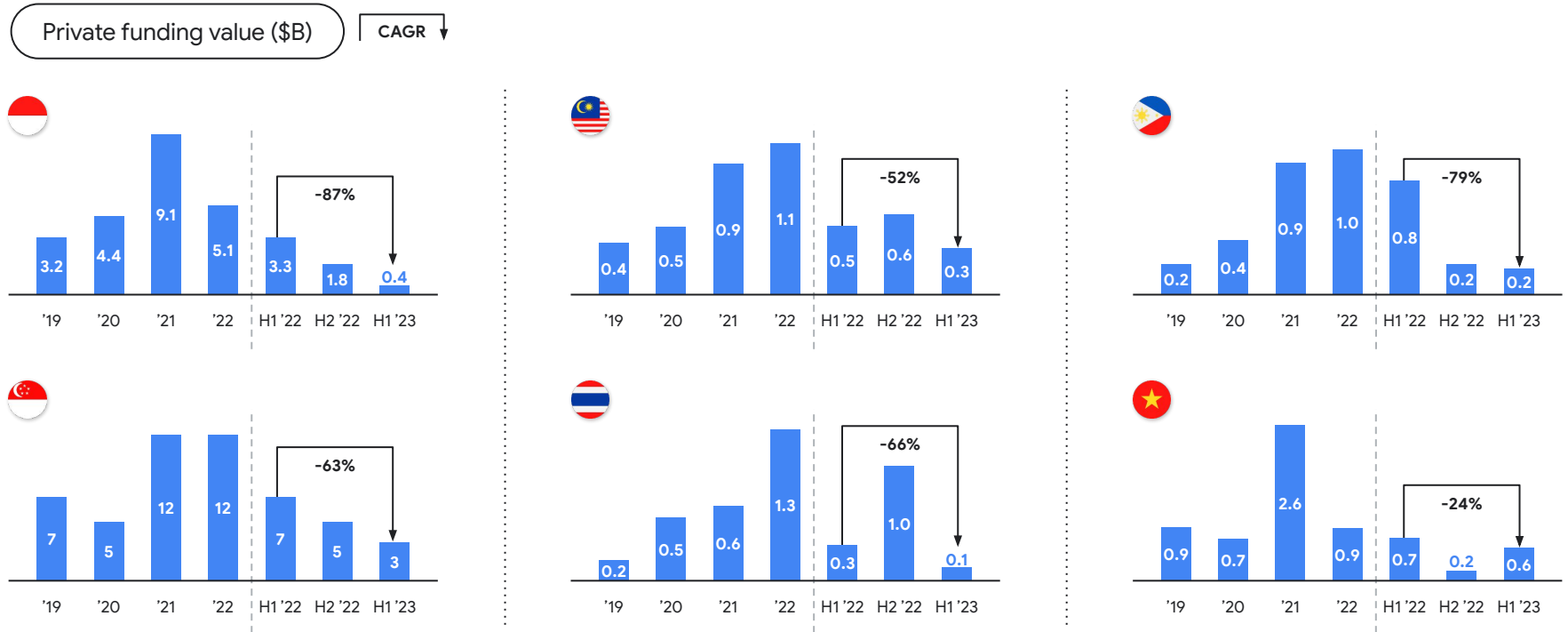
As high-quality investments are rare in this environment, the competition for high-quality deals remains robust.

Funding declines cut across all stages; late-stage deal flow slowed the most



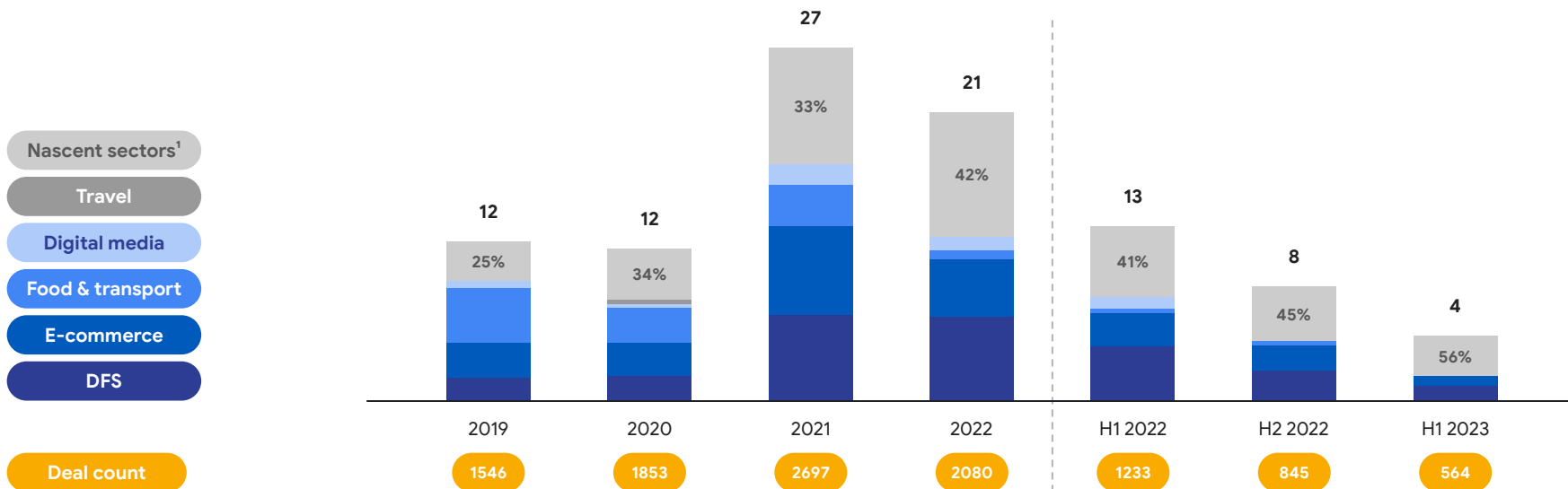
Note: Private funding value excludes public financing deals e.g. PIPE, IPO, ICO, and undisclosed, growth, secondary or private equity deals.
Source: Bain analysis

Declines from 2021–2022 peaks have been common across SEA



A growing portion of deal activity is funneled into nascent sectors, signalling that investors are diversifying

Private funding value (\$B)



Note: (1) Nascent sectors include categories that are still relatively nascent in SEA such as enterprise, healthtech, edtech, deeptech/AI, Web3/crypto, property, automotive, etc.

Source: Bain analysis

Investors are facing difficulties across all stages of the investment lifecycle, with exits and distributions being top of mind

Investors have been grappling with dim prospects over the past 12 months

87%

of investors find that **fundraising has become more challenging**

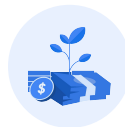
64%

of investors have seen a drop in **diligence and top-of-funnel** activity

88%

of investors feel they are facing a more **difficult exit environment**

Investors have been increasingly urged to realise exits, deliver returns, and distribute capital



Funds that started in the mid-2010s are now in the **late stages of harvesting**, putting pressure on delivering returns



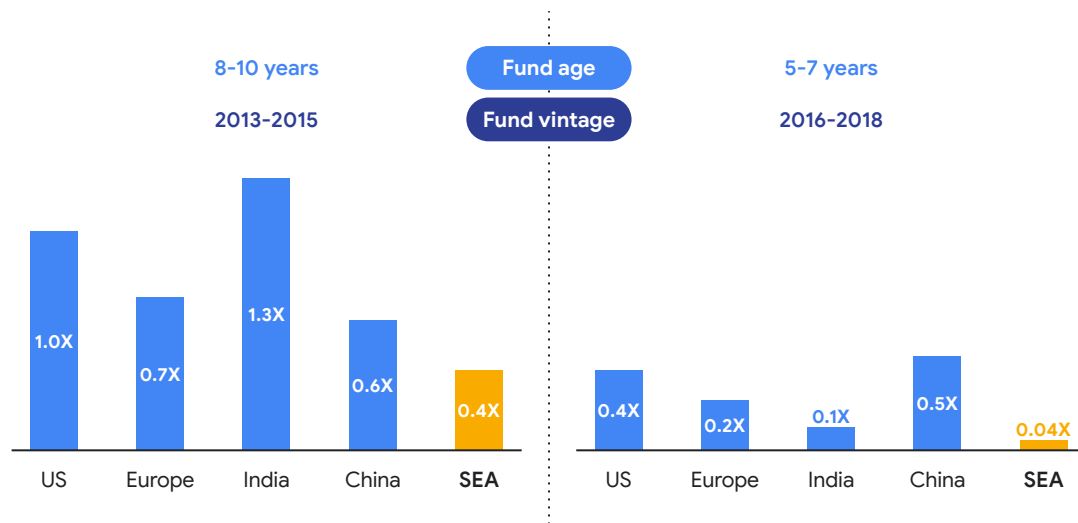
50% of investors **partially met or did not meet their divestment targets**



Realising returns and distributions are a key fundraising challenge

Funds face challenges in returning capital to investors

Median distribution to paid-in capital (X of paid-in capital)¹



Note: (1) Includes VC and growth funds only.
Source: Bain analysis

SEA has lagged other regions in investor returns

SEA-focused funds have seen significantly lower distributions to paid-in capital compared to funds that are focused on other regions, suggesting difficulty in realising returns for investors.

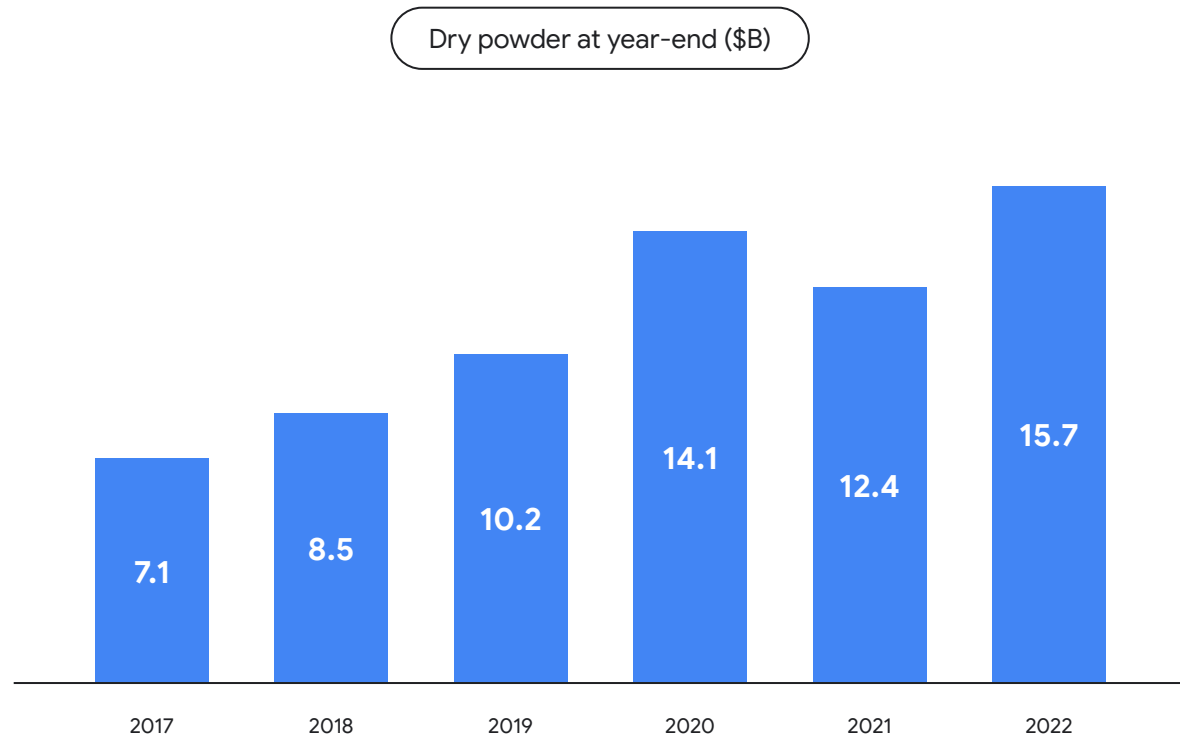
Distributions limited by scarce IPOs

Distributions have been concentrated on a few big-name listings, primarily on US exchanges. But this has been affected by interest rate hikes that have subsequently reduced IPO appetite and the number of listings on regional exchanges.

Secondaries have seen valuation impact

While valuation discounts for secondary sales have widened, the valuations of quality companies' secondaries have been comparatively more resilient.

Dry powder is still on the rise despite investors becoming increasingly cautious amidst limited opportunities



Notes: (1) Funds include both PE and VC funds. Dry powder refers to the amount of capital that has been committed minus the amount that has been called for investment.

Source: Preqin

To exit this funding winter, digital businesses in SEA need to prove that quality deals with dependable exit pathways are readily available



Realistic entry valuations

Digital companies should prove rational valuation multiples that are built on business and industry fundamentals, and that reflect the current macro environment



Proven monetisation model

Realisable monetisation pathways and sustainable unit economics have become key requisites for SEA's digital businesses



Clear path to profitability

Every business needs to lay out a clear, realistic path to profitability and long-term financial sustainability



Dependable exit pathways

Assurance that there are clear and feasible exit pathways for digital businesses, which could be in the form of a more conducive capital market environment and supportive regulations

Monetisation on the rise



Profitability

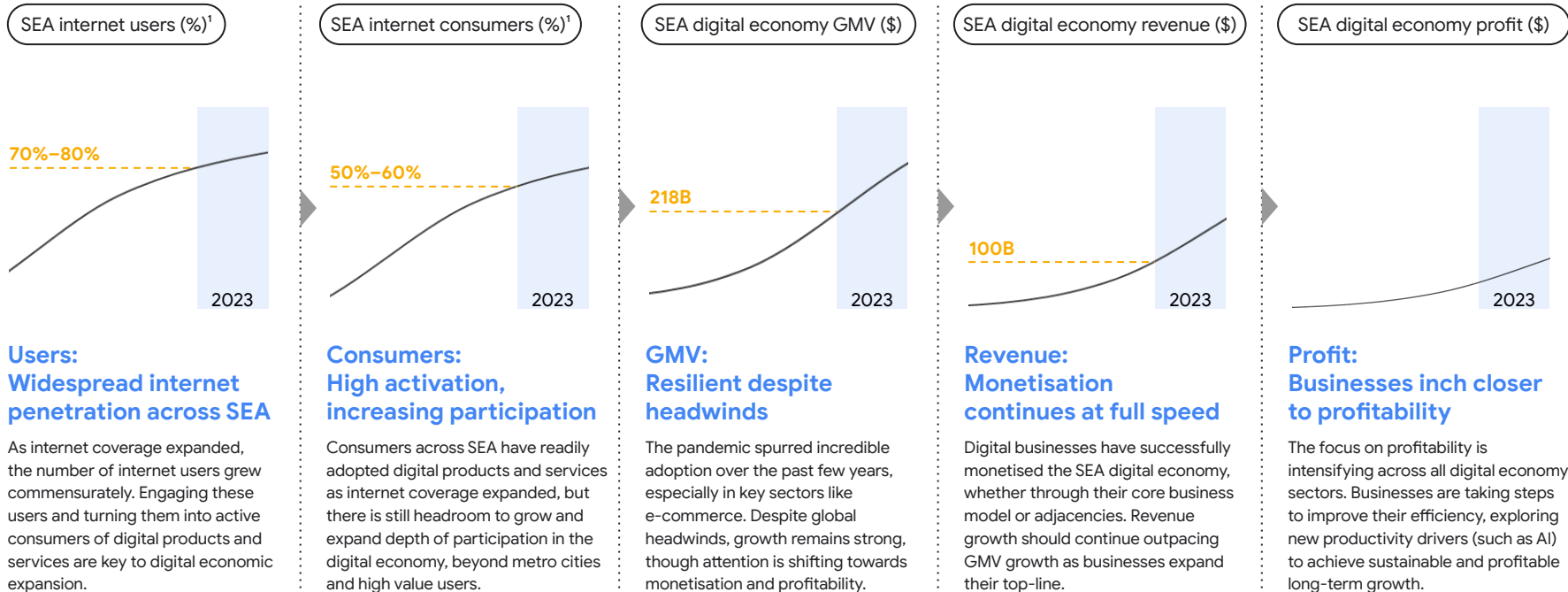
Growth



Digital businesses have shifted their focus to monetisation in a bid to achieve profitability targets, and are starting to see success.

At the same time, GMV continues its upward trajectory.

The digital economy has flourished on top of widespread adoption; monetisation is now accelerating, with visible progress



Note: (1) Refers to percentage of total adult population.

Sources: Google, Temasek, and Bain, e-Economy SEA 2016-2022; Bain analysis

As the focus shifts
from growth at all cost
to profitable growth,
new priorities are at play



Business objectives

Sustainable balance of user acquisition with monetising interactions



Core metrics

Revenue and EBITDA in addition to acquisition-focused metrics (e.g. monthly active users)



Cost optimisation

Improved unit economics through optimised spending, instead of pure revenue growth

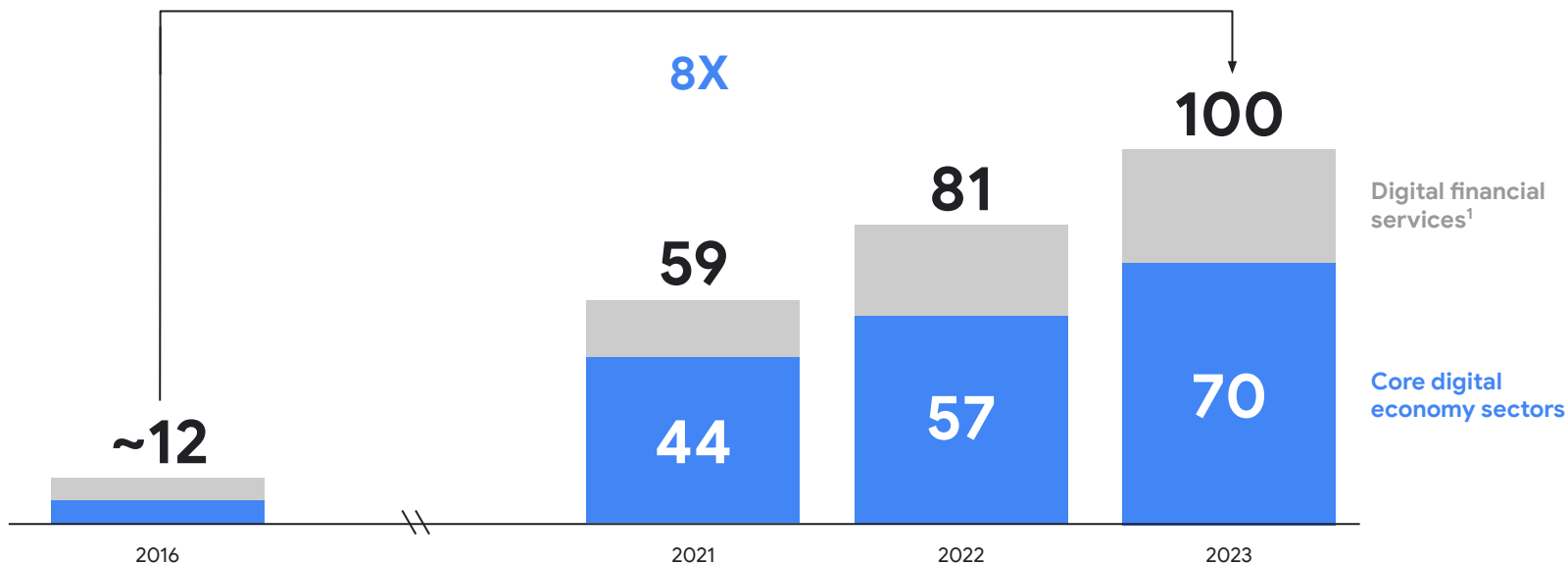


Competitive focus

More rational competition, instead of a 'win users at any cost' mindset

The region has reached a key milestone: \$100B in revenue across all digital economy sectors – or 8X over the past 8 years

SEA digital economy total revenue (\$B)



Note: (1) Includes revenue from payments (average merchant discount rates), lending (gross interest rates), insurance (annualised premium equivalent, APE, for life and gross written premiums, and GWP, for non-life insurance), and wealth (mutual funds management fees and platform fees).

Source: Bain analysis

Digital businesses derive revenue through direct sales, or by functioning as an intermediary platform

Two key revenue models in the digital economy

Direct revenue model

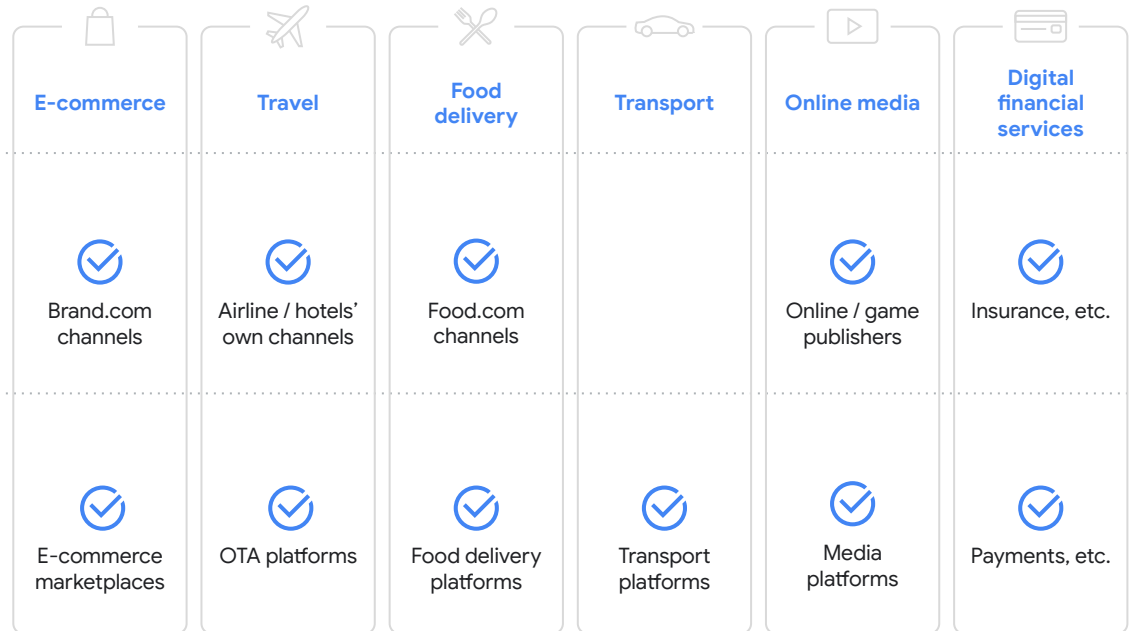


Revenue is the price of the goods or services sold, or the underlying instrument

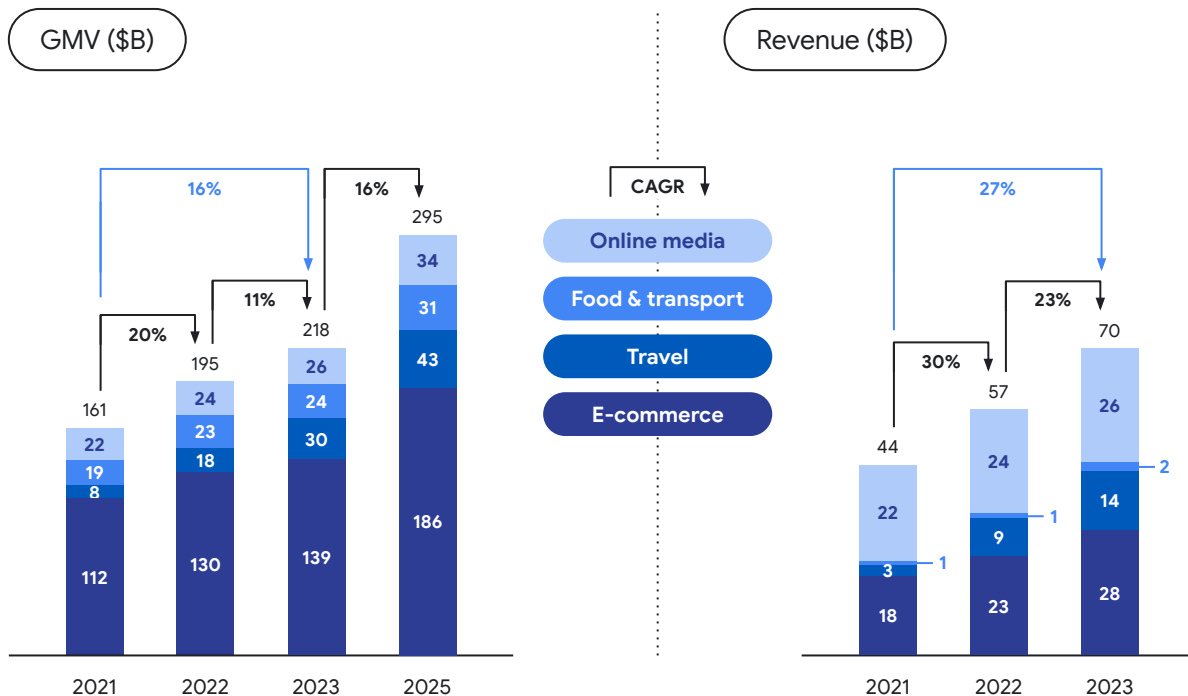
Third party platform model



Revenue to these third party (3P) intermediary platforms is a portion of the price of goods or services sold, or the underlying instrument



SEA consistently delivers on both GMV growth and revenue growth – a remarkable feat



Notes: GMV = gross merchandise value; CAGR = compound annual growth rate.
Source: Bain analysis

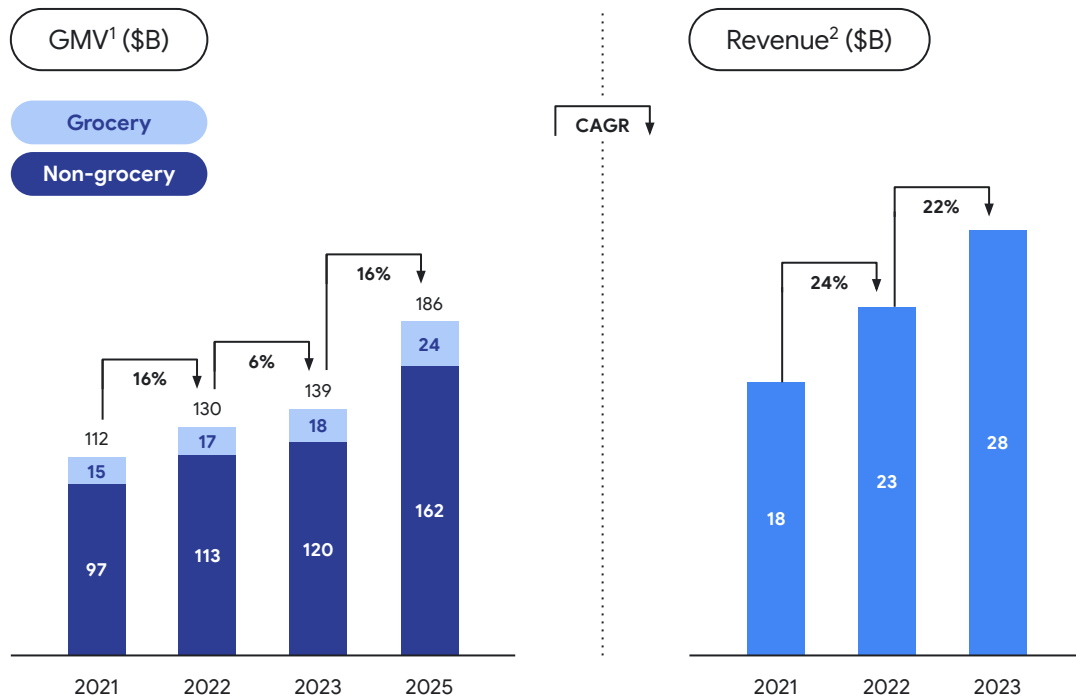
Double-digit GMV and revenue growth

Both GMV and revenue have grown at impressive double-digit rates for the past two years, suggesting that monetisation and overall market growth are not at odds.

Revenue growth outpaced GMV growth

As monetisation accelerated around the region over the past two years, revenue is set to grow at 1.7X the rate of GMV. This focus on monetisation has been driven by the pursuit of financial sustainability and better unit economics across sectors.

There is a trade-off between growth and profitability as new entrants gain ground



Notes: (1) Gross merchandise value: total value of physical goods sold to consumers through organised e-commerce platforms, including the value of goods sold by merchants from their own inventories (first-party) or goods sold through the platform by independent sellers (third-party); (2) Revenue spans first-party and third-party sales.

Monetisation has increased with further headroom

Revenue has grown faster than GMV as players increase take rates and expand to adjacent revenue streams (e.g. logistics, advertising, etc.). This trend is expected to continue into the medium term.

Despite the focus on monetisation, GMV continues to grow

GMV continues to grow even as players reduce discounts and promotions to increase net take rates. Market leaders have expressed willingness to begin re-investing profits to defend their market share. This is expected to drive high GMV growth in the medium term.

New entrants driving some GMV growth

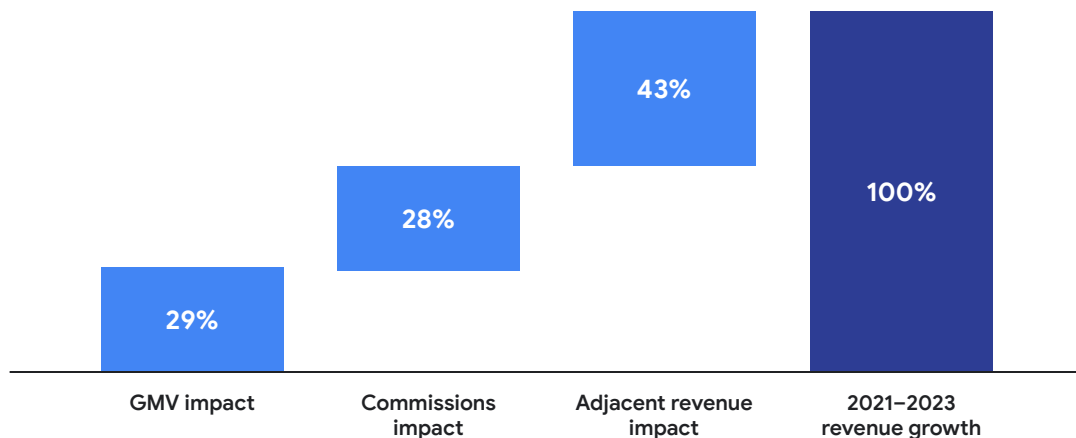
New entrants have grown rapidly, gaining market share at an incredible rate. They have also driven some overall market growth through shifting informal and unorganised forms of e-commerce towards organised e-commerce platforms.

Grocery e-commerce has potential upside

The grocery category shows potential for growth given the sizable headroom and the efforts put into overcoming logistical and economic challenges.

Marketplace revenues have accelerated through higher commissions, ad sales, and logistics fees

E-commerce marketplace platform¹ revenue growth drivers (% of growth)



Notes: AI = artificial intelligence. (1) Also referred to as third-party platforms, or online platforms where sellers can set up stores to sell goods to buyers.

Sources: We Are Social; Bain analysis

Commission rates have reached China's high-water marks

Market leaders have spearheaded ~3.0% to ~4.5% commission hikes in recent years, almost reaching China's high benchmarks. Given regional purchasing power, commissions are unlikely to increase further.

Adjacent revenue streams serve as a long-term growth engine

Selling additional services (e.g. advertising, delivery services, insurance, etc.) has become an increasingly common way to bump up revenue per order and overall revenue growth. Advertising, specifically seller-funded in-app ads to raise brand awareness and drive orders, has proven successful and is expected to be core to future monetisation.

Expanding width and depth of user base is key to continued growth

Players need to look beyond the high value segment and increase both the size and purchase frequency of their customer base to drive long-term growth and profitability. AI-driven recommendations can help increase customer basket size, which can drive improved unit economics and economies of scale.

Search interest surpasses pre-pandemic levels, pointing to continued growth as capacity increases

SEA travel demand recovery (vs 2019 levels)

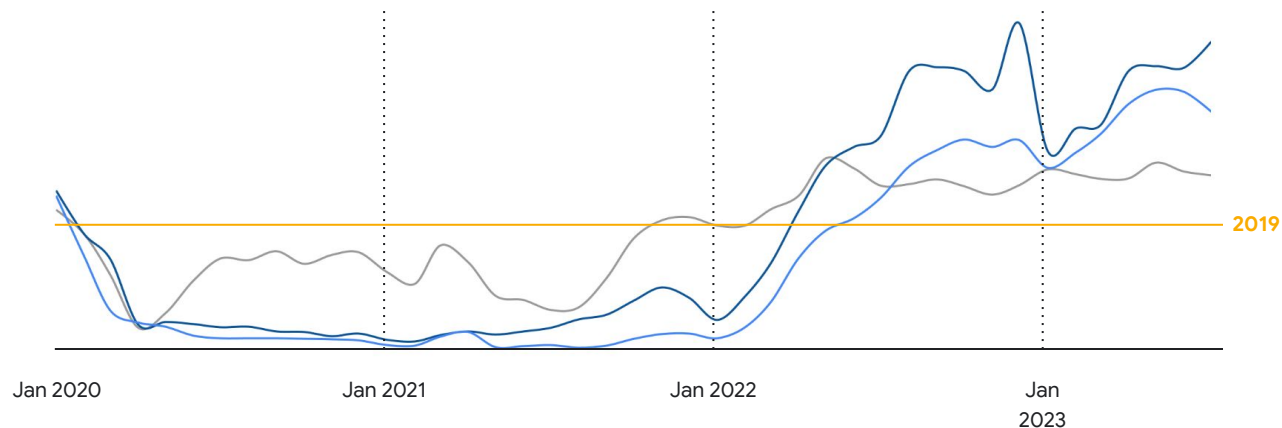
Outbound - Air

Inbound - Accommodation

Domestic - Air and accommodation

Demand is a leading indicator for bookings

Interest in international travel has revived to surpass interest in domestic travel over the past year, suggesting that there is latent demand waiting to be unlocked as international flight capacity opens up.

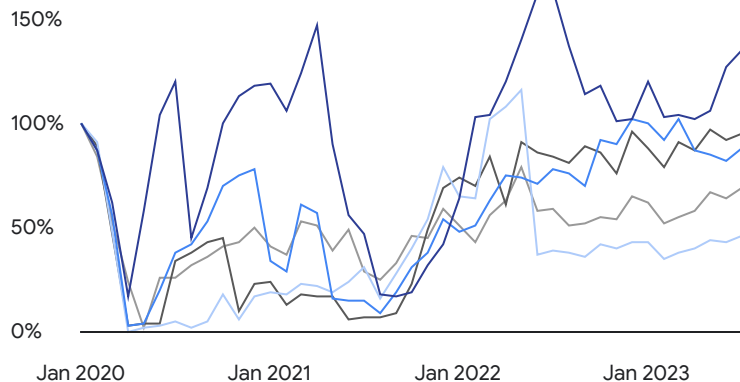


Notes: Search volume is used as a proxy for travel demand; SEA average is a simple average across the six markets.
Source: Destination Insights with Google

Flight passenger volume is progressing towards pre-pandemic levels

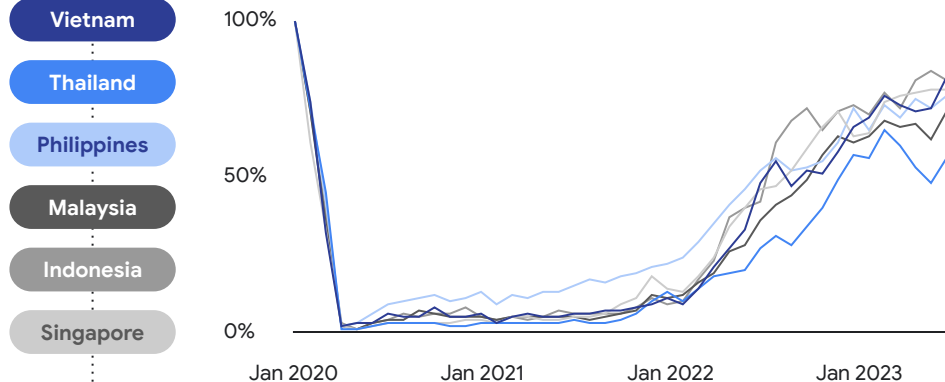
Domestic flights have recovered in some countries

Domestic RPK (indexed to Jan 2020)



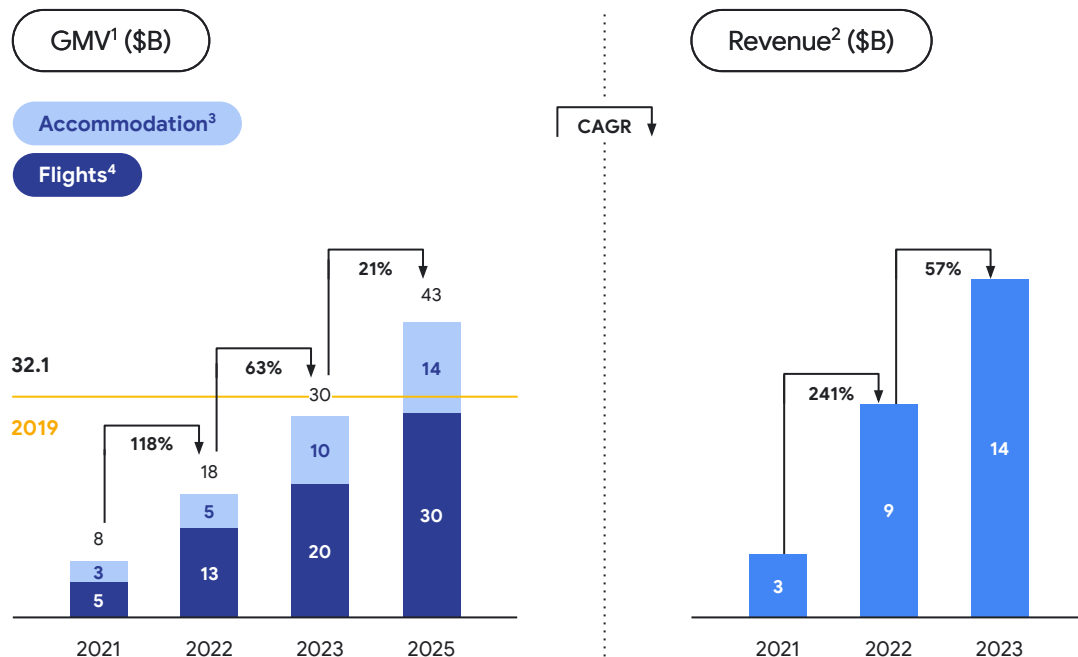
International flights have recovered by ~80%

International RPK (indexed to Jan 2020)



Note: RPK = revenue passenger kilometres, a measure of total distance travelled by passengers who provide revenue.
Source: IATA

Full travel recovery is expected in 2024, with further headroom for growth



Travel expected to fully recover by 2024

Despite fervent 'revenge travel' and increased domestic demand, overall travel GMV has yet to return to pre-pandemic levels. Ongoing tourism recovery should see travel exceed pre-pandemic levels sometime next year.

Inflation accelerates revenue growth

Flight ticket prices and room rates have been rising post-pandemic due to supply constraints. This has driven up revenue despite lower flight volumes and occupancy rates.

Further growth headroom available

International tourism, including from China, remains well below pre-pandemic levels, indicating significant headroom for growth as the broader market continues to recover. Increasing flight and accommodation capacity will also contribute to growth going forward.

Notes: (1) Travel GMV consists of flights, hotels, and vacation rental bookings; (2) Revenue consists of both direct sales (first-party sales) and OTA sales (third-party sales); (3) Accommodation includes online hotel and vacation rental bookings made for in-country stays; (4) Flights are all outbound flights booked online, both international and domestic.

Source: Bain analysis

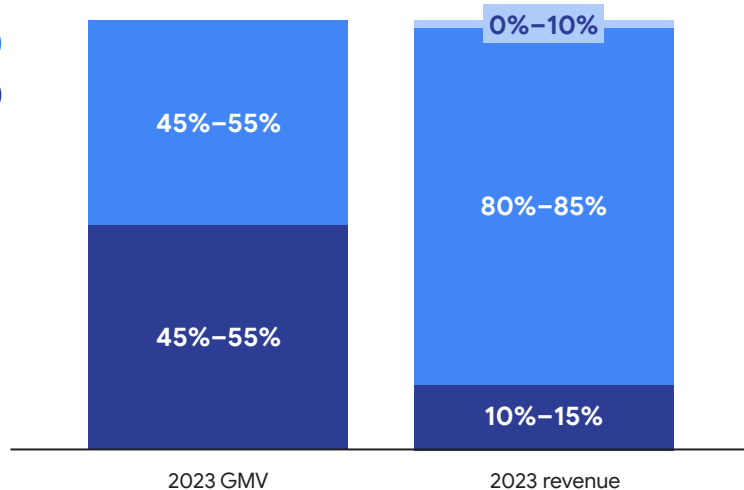
OTA revenues are primarily driven by hotel commissions

2023 OTA GMV and revenue (\$B)

Adjacent revenue streams

Accommodation

Flights



Flights serve as traffic driver for OTAs

Despite flights representing about half of travel GMV, they account for only 10-15% of revenues. OTAs are only able to apply a small commission (2-5%) due to a consolidated airline market, and competition between OTAs and airlines' direct sales channels.

Accommodation is the largest OTA revenue contributor

In a market where hotels fight for travellers' attention, OTAs are able to charge high commissions to give them an edge over their competitors. OTAs are shifting from a broker-style model (handing over reservations) to a merchant model (managing transactions) to increase their hold on hotel commissions. Vacation rentals are a small but growing segment, with hosts willing to pay high commissions to be featured on relevant platforms.

Adjacent revenue streams provide long-term upside for OTAs

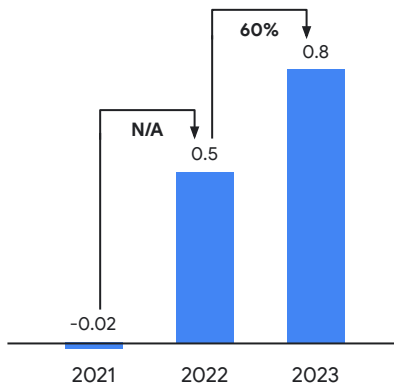
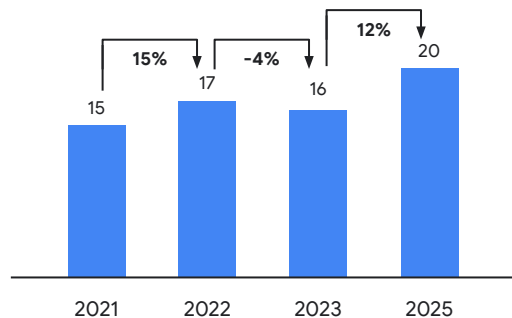
Platforms are increasingly offering a wide range of adjacent services, such as car rentals, airport transportation, and activity bookings. There are also add-on services, such as travel insurance and no-penalty flight cancellations, which saw increased uptake during the pandemic and remain elevated today. In addition, they also offer advertising as a service to suppliers. This broad range of services is well-positioned to drive future growth for OTAs.

Consumer demand holds steady despite the return to in-person dining and increasing monetisation efforts

GMV (\$B)

Revenue (\$B)

CAGR ↓



Note: Revenue is net of partner incentives and consumer promotions.
Source: Bain analysis

Consumer demand remains sticky

Despite a return to in-person dining, higher food prices, and a pullback in promotions, GMV remains relatively stable as ordering habits remain sticky post-pandemic.

Inflation driving up order values

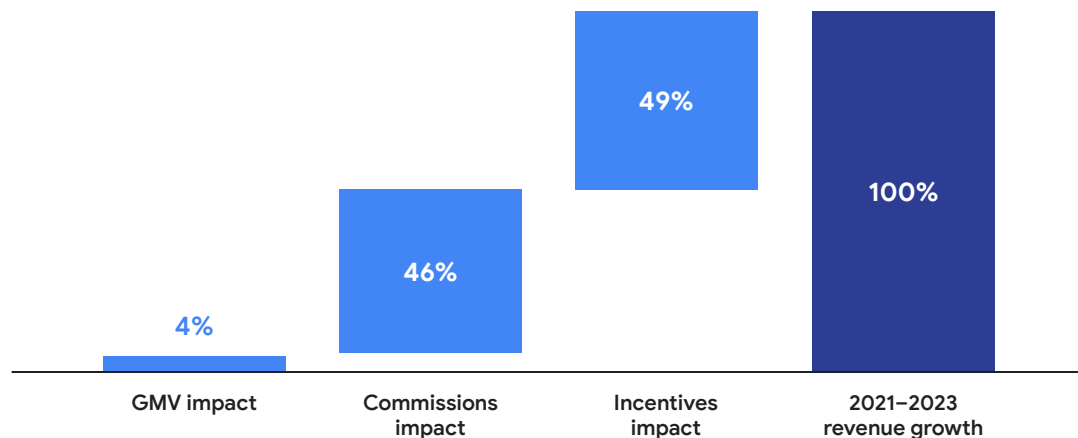
Increases in food and fuel costs are driving up the cost of meals as well as the cost of delivery per order. This may impact demand in the longer term if higher costs persist.

Headroom to grow beyond metro cities

At the same time, players will need to scale their customer base. SEA remains underpenetrated, with food delivery as a percentage of total food service transactions at about half the level in China. Unlocking this opportunity will require pushing beyond core high value users in metro cities.

Revenue growth is driven by increased take rates in the short term, and growth of users and orders in the long term

Food delivery revenue drivers (% of total growth)



Notes: ARR = annual recurring revenue. Revenue is net of partner incentives and consumer promotions.
Source: Bain analysis

Improving unit economics towards profitability

After years of focusing on user acquisition, players have turned to improving unit economics, and are now generating positive net revenue by optimising commissions and promotion spend – the first step towards sustainable long-term profitability. Consolidation is also under way, favouring the largest players with the clearest paths to profitability.

Limited headroom from commissions and incentives

Commissions and incentives have now stabilised at levels on par with global benchmarks (take rates of 15%-20%) as competition rationalises. As such, these rates are unlikely to increase further, given the potential impact on partner supply and consumer demand.

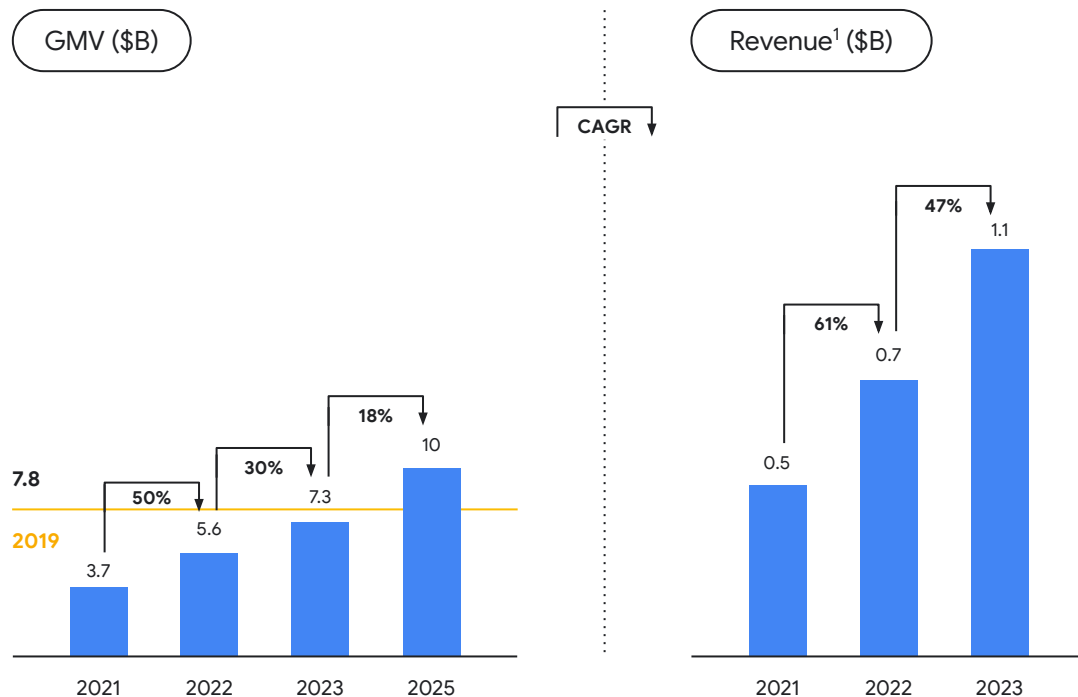
Focus on profitability and other revenue streams...

As overall take rates stabilise, players are increasingly exploring adjacent revenue streams (e.g. dine-in bookings, loyalty and subscription programs, etc.) to increase monetisation. Advertising is also a huge revenue pool, potentially reaching \$100M ARR for some large players. In addition, players are increasing delivery productivity through AI-optimised order batching and route planning, and by optimising back-office costs.

... leads to a broader customer base

Cost efficiencies allow players to provide differentiated and more affordable offerings (e.g., economy delivery option with longer wait times) while maintaining margins. This enables them to profitably scale up their customer base and drive future revenue growth.

Strong transport recovery with successful monetisation



Note: Revenue is net of partner incentives and consumer promotions.
Source: Bain analysis

Full recovery expected by early 2024

Commuter demand has returned to pre-pandemic levels and beyond in most capital cities. There is also rising demand for airport rides and transport to tourist destinations.

Inflationary pressures drive increased ride prices

Increased vehicle and fuel costs have driven up average ride prices as platforms try to maintain drivers' earnings. These increased costs have reduced driver supply, putting additional upward pressure on prices.

Monetisation successful and continues to stabilise

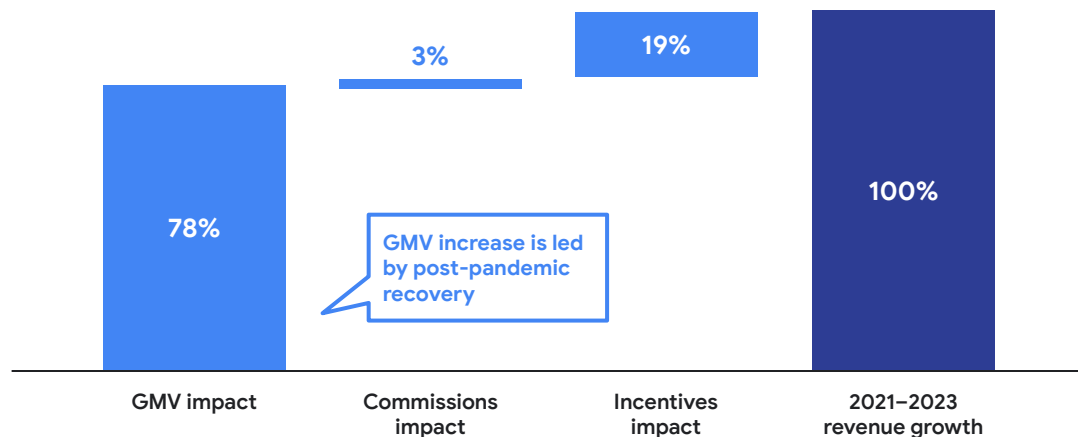
Revenue growth has outpaced GMV growth as players optimise incentive spend. As take rates reach a steady state, this gap will begin to close.

Immediate and future headroom for growth remains

Rising income levels will support longer-term growth trends. The introduction of electric vehicles and autonomous driving will spur additional growth for this sector in the much longer term.

Monetisation model has stabilised; affordability will unlock profitable expansion and long-term growth

Transport revenue growth drivers



Note: Revenue is net of partner incentives and consumer promotions.
Source: Bain analysis

Monetisation reaching a stable point

The transport business model is reaching an equilibrium in terms of take rates. Despite some recent increases from service fees, commissions are already at a ceiling, with current rates comparable to global benchmarks (20%–25%). Incentives have also been optimised to a point at which further reductions will negatively impact driver supply and consumer demand.

Optimising the value proposition for users

As the margin structure stabilises, the next test is whether players can scale up their customer base while maintaining profitability. Carpooling, affordable fleets, AI-powered routing and surge pricing, and proprietary mapping are being introduced to increase driver productivity and improve unit economics. These improvements will help make transport services more accessible to a larger market.

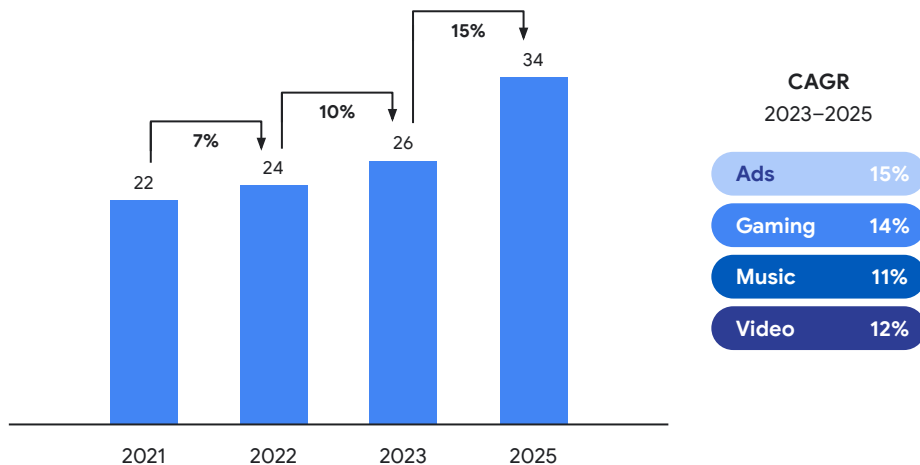
Establishing profitable expansion beyond metro cities

As a result, players will be able to move into regions beyond capital cities, where lower density of demand and price points have traditionally made it difficult to grow sustainably. This will help drive longer-term growth for the industry as a whole.

Advertising and streaming will drive market growth in the long term

Online media GMV¹ (\$B)

CAGR ↓



Note: (1) For media, GMV is equal to revenue.
Source: Bain analysis

Ads Resilience amidst advertiser caution

Ads continue to grow, even as brands spend cautiously while making profitability optimisations. Short-form videos and marketplace ads are key growth drivers. AI continues to help enhance targeting and personalisation.

Gaming New growth areas emerging

The return to offline activities and lower disposable incomes have softened in-app purchases in the short term. Casual games are emerging as a new pocket of growth as developers explore optimal monetisation models.

Music Growth driven by adjacent trends

The halo effect of live music events and the return of office commutes are driving growth in music-streaming despite price increases. A growing focus on wellness is also expected to have a positive impact on mood genre listening.

Video Competition increases for watch time

Global streaming platforms compete with long- and short-form social media videos for users' attention. They are balancing user acquisition through more affordable plans with increased monetisation through crackdowns on account sharing.

Financial services at an inflection point



Consumers are adopting digital financial services (DFS) at a rapid pace; cash is no longer king.

High interest rates are affecting DFS subsectors differently. Digital natives and traditional finance are engaged in heated competition.



DFS adoption continues to grow healthily in SEA

DFS **app usage** continues to grow at a rapid pace...

SEA user growth¹

H1 2019–H1 2023 CAGR

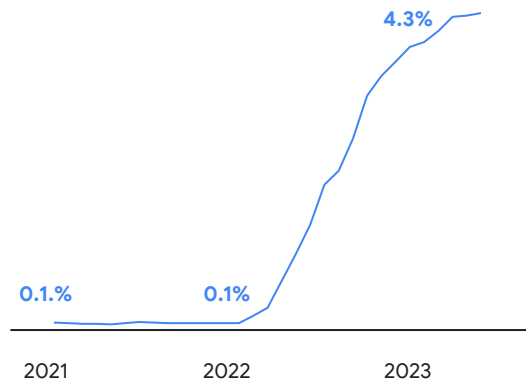
+40% Traditional banks

+61% Digital banks

+50% Pure-play fintechs

... while a once-in-a-decade **Fed interest rate increase** ...

Effective US fed funds rate



... impacted underlying **financial services sectors** differently



Deposits grew due to attractive rates. Asset values rebounded as the stock market picked up.



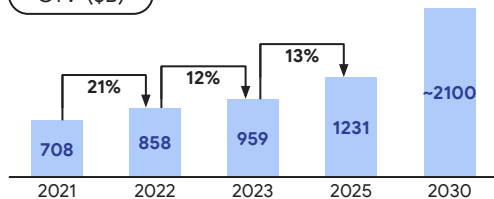
Growth in underlying lending and life insurance markets was muted due to rising interest rates.

Irreversible offline-to-online behaviour shifts are driving continued growth in DFS adoption

CAGR ↓

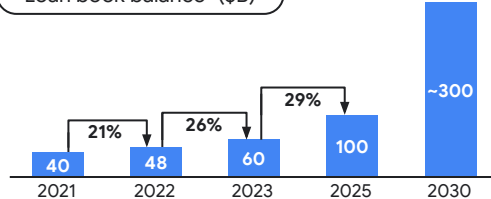
Digital payments

GTV¹ (\$B)



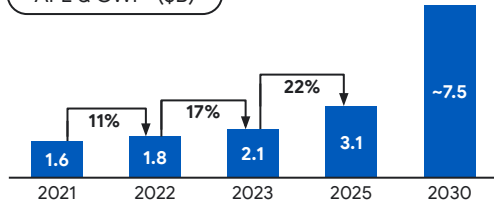
Digital lending

Loan book balance² (\$B)



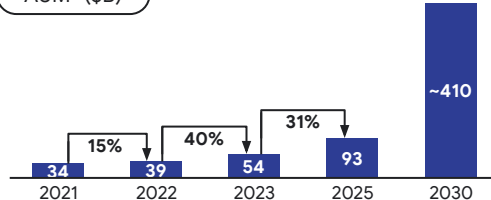
Digital insurance

APE & GWP³ (\$B)



Digital wealth

AUM⁴ (\$B)



Notes: (1) Gross transaction value (GTV) for digital payments includes the value of credit, debit, prepaid card, account-to-account (A2A), and e-wallet transactions; (2) Loan book balance for digital lending includes end-of-year balance for consumer loans (excluding credit card and mortgage) and SME loans; (3) APE & GWP for digital insurance includes APE for life insurance and health under life insurance policies and GWP for non-life insurance; (4) Assets under management (AUM) for digital wealth includes end-of-year mutual fund AUM balance.

Source: Bain analysis

Payments

The shift to digital has proven irreversible: offline, digital payments via QR codes are now widely accepted, while online, more payment methods have been integrated into the checkout flows of popular apps.

Lending

There is tremendous growth despite the high interest rate environment. Non-performing loans (NPLs) have remained under control as fintech players continue to focus on credit management capabilities.

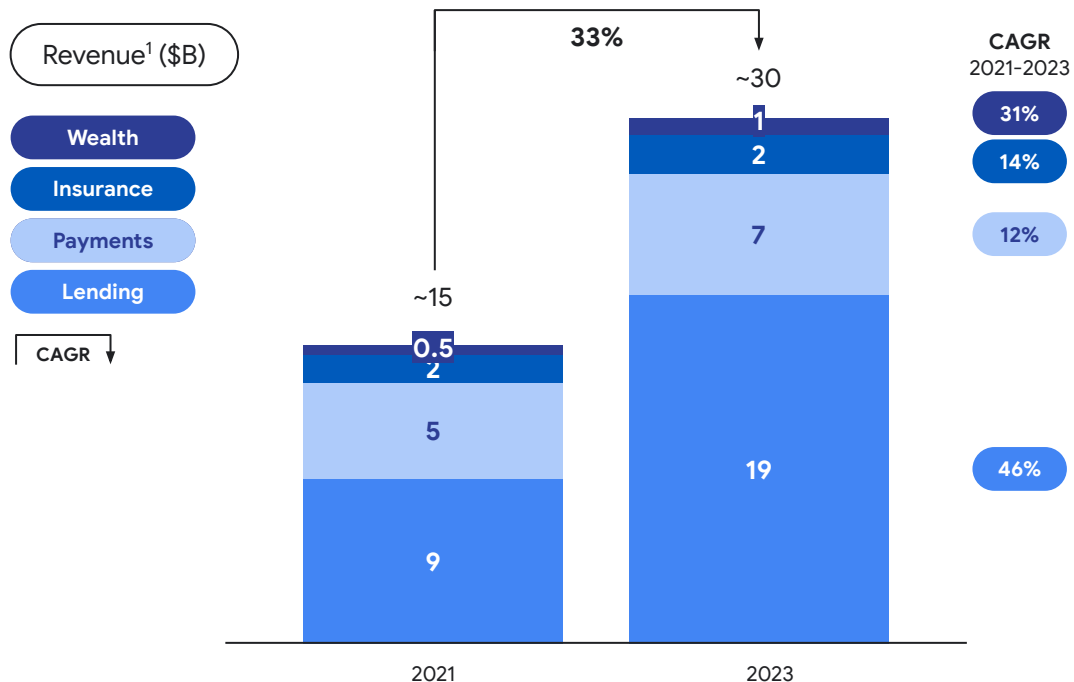
Insurance

Strong overall growth is driven primarily by non-life insurance, with support from country-specific government policies, such as subsidised personal accident and health insurance.

Wealth

Growth is strong due to the increase in digital offerings from traditional banks and adoption of new fintech and digital banking platforms.

Lending is the single biggest driver of DFS revenue



Notes: (1) Revenue is measured using different metrics for each DFS sector. Lending: average effective interest rates plus servicing fees; Payment: merchant fees (based on merchant discount rates); Insurance: annual premium equivalent for life insurance and gross written premium for non-life insurance; Wealth: annual management fees and platform fees.

Source: Bain analysis

Wealth

Revenue growth is largely driven by underlying volume growth. Still in its early stages, the sector has seen some fee upside from mix shifts given the faster rate of growth in emerging markets. However, monetisation has remained nominal as platforms are still in a user acquisition phase.

Insurance

The insurance market remains relatively underpenetrated, but digital distribution channels are gaining momentum and growth can be expected, particularly in the non-life insurance space.

Payments

Merchant discount rates (MDRs) have been on the decline – and are expected to continue – causing revenue growth to trail gross transaction value. This is driven by a combination of merchants moving towards channels with lower MDRs, and governments capping rates on some channels.

Lending

Lending is the largest contributor to DFS revenue, and gross revenue (primarily from interest income and fees) has risen sharply due to high lending rates. On the flip side, the cost of funds has surged, while NPLs remain under control.

Cash is no longer king; digital payment adoption drives GTV and revenue growth

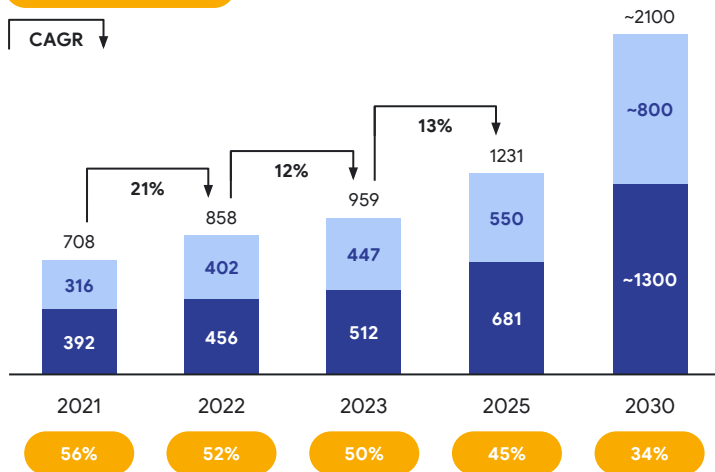
GTV (\$B)

Cards¹

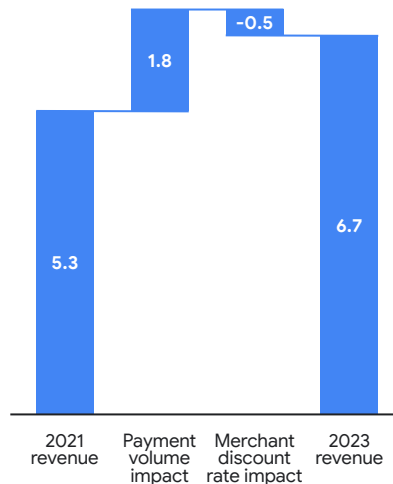
Account-to-account & e-wallet

Cash to total GTV

CAGR ↓



Revenue (\$B)



Digital payments have crossed the halfway mark

Cash is no longer king, as digital payments now make up 50% of total transaction value. The shift away from cash is expected to continue as digital channels become the dominant means of payment across SEA.

MDR is in tight focus

Merchants and platforms are increasingly looking for ways to reduce costs, and are incentivising users towards account-to-account (A2A) or e-wallet payments with lower MDRs (e.g. discounts for the use of A2A payments).

A2A is gaining traction, with strong long-term outlook

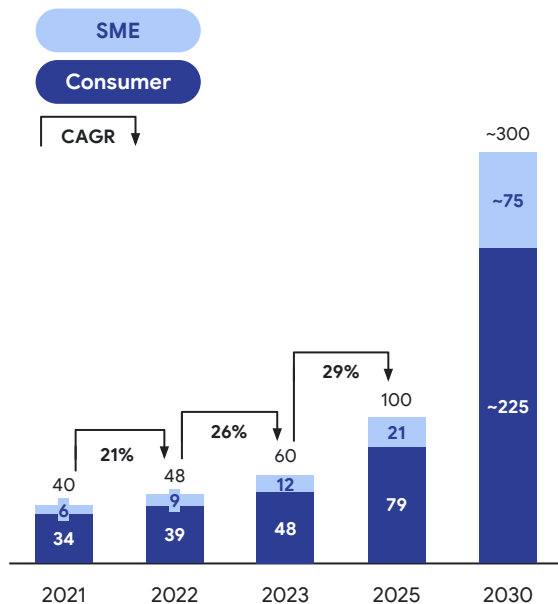
A2A and e-wallet channels are gaining traction off the back of government regulations encouraging the adoption of these payment channels (e.g. QRIS).

Note: (1) Cards include credit cards, debit cards, and prepaid cards.

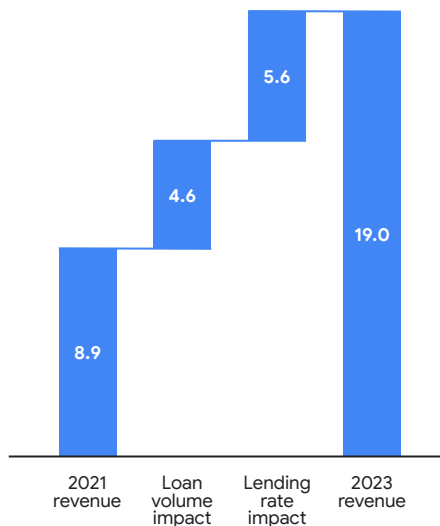
Source: Bain analysis

Digital loans grew rapidly despite the sharp increase in lending rates

Digital loan book balance¹ (\$B)



Revenue (\$B)



Growing preference for digital channels

While high interest rates are keeping the overall loan book relatively flat, digital lending is growing as consumers shift online. Shifting consumer preferences are also prompting the rapid popularisation of buy-now-pay-later (BNPL) services, the digitalisation of traditional financial services players, the rise of digital banks, and governments to push for digital innovation in the lending space, such as Vietnam's fintech sandboxes.

Strong lending rates help drive revenue growth

Digital lenders are taking advantage of higher lending rates, leading to revenue growth. Meanwhile, consumer demand remains high as underbanked consumers and small businesses are participating more meaningfully in the digital economy.

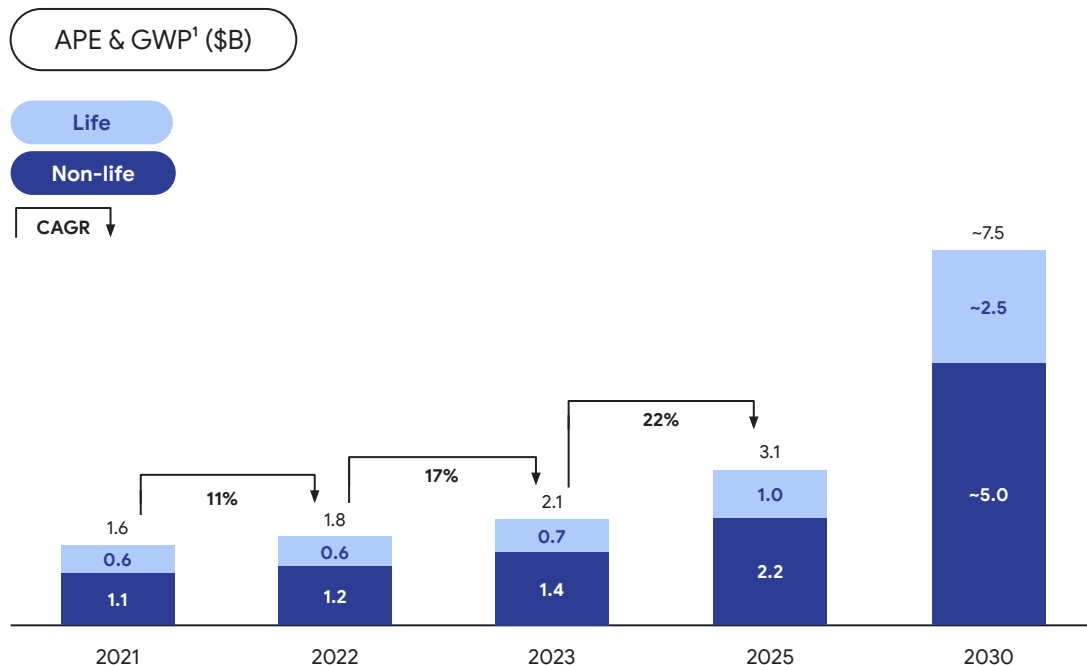
Regulatory oversight is tightening

High lending rates come with a higher cost of risk. With NPLs under control, fintech players are working on strengthening their credit capabilities, though questionable collection practices are also on the rise. Governments are putting more robust measures in place to protect consumers, most notably in Indonesia. The country has introduced new capital and equity regulations, in parallel with an ongoing revamp of licensing requirements and lending limits.

Notes: (1) Digital loan book excludes credit card and mortgage. SME = small-and-medium enterprises.

Source: Bain analysis

Adoption of digital insurance continues, but market penetration remains low



Notes: APE = annualised premium equivalent; GWP = gross written premium; OTA = online travel agency; (1) APE for life insurance and GWP for non-life insurance; different approach to last year's split of life (APE), health (GWP), and general (GWP) to life (APE) and non-life (GWP) where health premium is consolidated into life insurance premium (APE instead of GWP). We are assuming APE and GWP are equivalent to revenue for this sector.

Source: Bain analysis

Digital penetration is picking up with micro-insurance

Digital insurance accounts for a small portion of the overall insurance market. Insurtech companies are offering cheaper, pay-as-you-use insurance products to lower-income segments of the population. AI-driven premium calculations help optimise prices for consumers. These products are also more accessible and convenient for the user (e.g. users can pay premiums via mobile bills) and can be purchased on mobile devices. Life and property insurance are least digitalised, offering long-term headroom for growth.

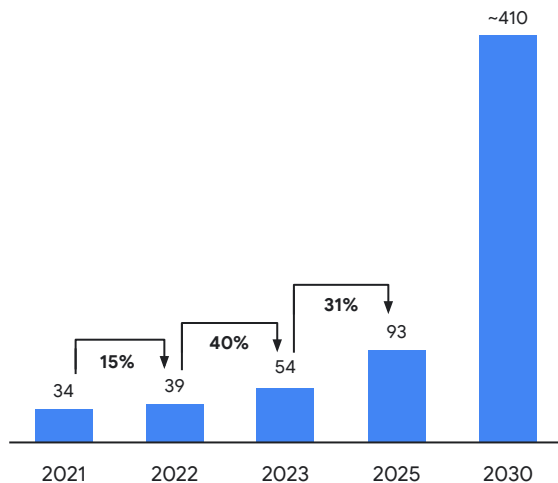
Embedded products expand across platforms

Traditional issuers are forming partnerships with consumer platforms to offer insurance products embedded with partner offerings. For example, transport platforms are offering trip insurance to users and auto insurance to drivers. Travel insurance has become ubiquitous among OTAs and airline apps, and second-hand auto marketplaces now offer vehicle insurance.

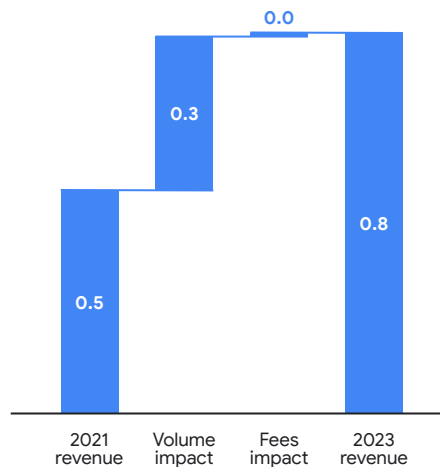
Digital AUM is expected to increase alongside digital openness

Digital AUM¹ (\$B)

CAGR ↓



Revenue (\$B)



Increasing openness to digital across segments

Customers across the wealth spectrum are becoming increasingly open to using digital self-services to manage their portfolios. Adoption growth is not limited to the masses, but also among high-net-worth customers. In the long run, digital adoption should continue growing as young, digitally-savvy users build up their wealth.

Traditional financial institutions are moving towards digital engagement

Beyond fintech platforms, traditional financial institutions are investing in simplified digital wealth offerings, and most have shifted client engagements online or adopted a hybrid model of offline advisory with online self-service. Some are also integrating AI into investment planning tools to improve the customer journey.

Continued digital adoption to fuel future AUM and revenue growth

Revenue growth has stayed relatively in line with volume growth and will likely remain so, as fees are expected to remain stagnant.

Note: AUM = assets under management; (1) AUM represents wealth of all online mutual funds in the region.
Source: Bain analysis

Survival of the fittest among pure-play fintechs, while traditional banks accelerate digitalisation efforts to retain high value users

 Stronger
  Stable
  Weaker
  Just launching



Pure-play fintechs

Strong traction, particularly in digital wealth and digital lending

Pure-play fintechs have seen success in lending to the underbanked segment and establishing a strong foothold via BNPL, with stronger credit scoring and underwriting capabilities. Robo-advisory players have also seen strong traction, attracting customers through simplified offerings. The decline in funding has led to a 'survival of the fittest' situation, as players are compelled to focus on profitability. Those that are unable to compete for investor funding risk mergers or closure.



Established financial services institutions

Rapid digitalisation driving momentum in digital payments and wealth

Established financial services institutions have been successful and quick to transition their large existing customer bases to digitalised services. They have benefited from countries adopting national real-time payment rails and mobile banking. Digital lending sees more traction in developed markets compared to emerging markets. Digital wealth is gaining traction as user engagement increases, and there is significant headroom for future adoption.



Consumer tech platforms

Strong payments traction but limited success expanding to other DFS

E-wallets have been a traditional stronghold due to their existing user base, but the space is seeing increasing competition from national real-time payment rails. There has been limited success in cross-selling other financial products. Embedded insurance is a potential growth avenue for these players, with most establishing partnerships to sell insurance products alongside their regular products and services.



Established consumer players

Limited traction in payments; little activity to enter other DFS

Traditional consumer companies (e.g. telcos, consumer retail) have found limited success in digital financial services. They are leveraging their customer base to drive digital payments but have not been as successful compared to consumer tech platforms, with more limited activity in expanding into other financial services offerings. These traditional consumer companies are choosing to refocus on their core businesses.



Digital banks

Still nascent, but with significant potential

Pure-play digital banks have significant potential to capture digital natives and the underbanked population. Adoption has generally been strong across new digital banks. Most players are taking a cautious approach to growth as regulatory constraints have introduced some friction.

Engaging high value users



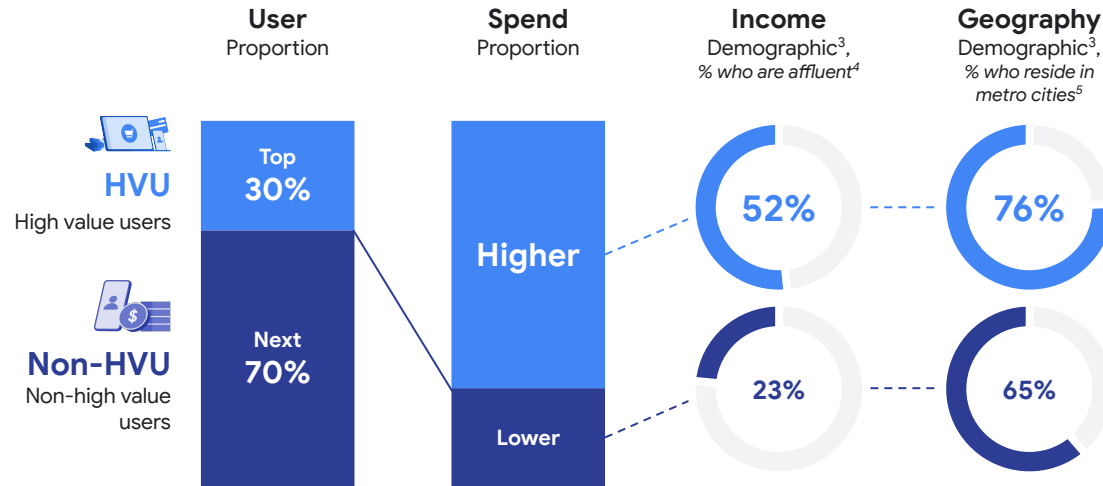


As businesses pursue an accelerated path to profitability, engaging high value users has become critical to achieve sustainable unit economics. Over the long term, significant growth headroom lies in onboarding all Southeast Asians onto the digital economy.

High value users (HVUs) are defined as the top 30% of online spenders¹ with an outsized contribution to digital economy spend

Digital economy spenders¹ in SEA

Based on total online spend across 7 verticals²



What we discovered...

HVUs can be found anywhere

While many top online spenders or HVUs are higher-income, close to half are low- to medium-income consumers. They are also likely to be represented in both major and non-major metros, just as lower spenders are. Lastly, this report will also delve into how usage behaviour differs between HVUs and non-HVUs.

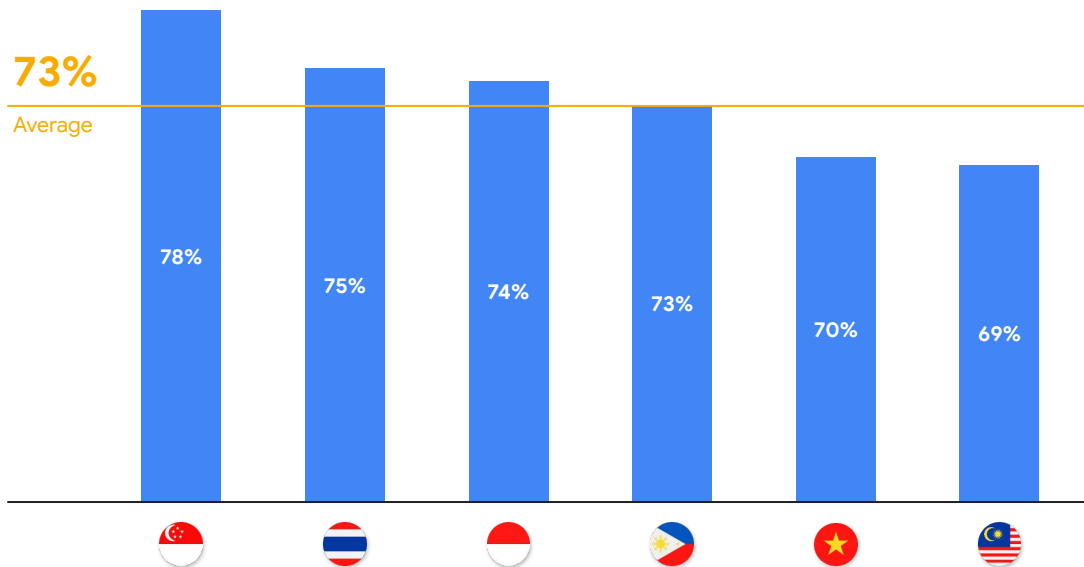
Notes: (1) Based on absolute online spend on digital services from the Google-commissioned Kantar e-Economy SEA consumer survey, excluding digital financial services (DFS); (2) Includes e-commerce, groceries, transport, food delivery, gaming, streaming, and travel; (3) Average composition across SEA; (4) Affluent = high income; (5) Includes 35 metro locations surveyed out of 196 locations surveyed across SEA.

Source: Google-commissioned Kantar e-Economy SEA consumer survey, ID, MY, PH, SG, TH, VN, 2023, online survey among 18-64 internet users and digital economy spenders, 10/08/2023- 01/09/2023 (n=2,368 HVU, n=5,513 non-HVU). Question A2, S3, S7: "Please estimate how much you think you spend online in an average month across the below digital activities." "In what region / area do you live?" "Which of the following best describes your regular monthly household income situation before tax?"

HVUs account for nearly three-quarters of digital economy spend¹

Proportion of digital economy spend by HVUs

Based on total online spend² per user

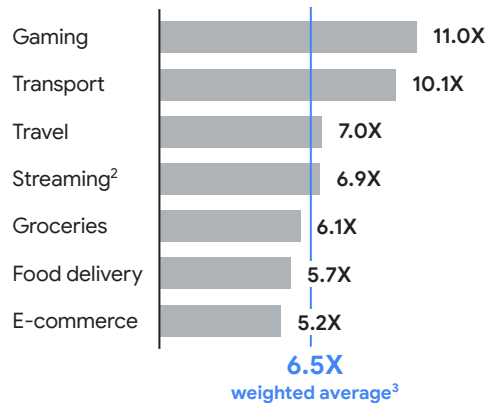


Notes: (1) Based on absolute online spend on digital services from the Google-commissioned Kantar e-Economy SEA consumer survey; (2) Excludes digital financial services.
 Source: Google-commissioned Kantar e-Economy SEA consumer survey, ID, MY, PH, SG, TH, VN, 2023, online survey among 18-64 internet users and digital economy spenders, 10/08/2023- 01/09/2023 (n >= 1,300 per country, n = 7,881 in total; HVU per country at least n >= 390, n=2,368 HVU in total).
 Question A2: "Please estimate how much you think you spend online in an average month across the below digital activities."

HVUs spend more than 6X the amount non-HVUs spend online, and are more likely to increase spending over time

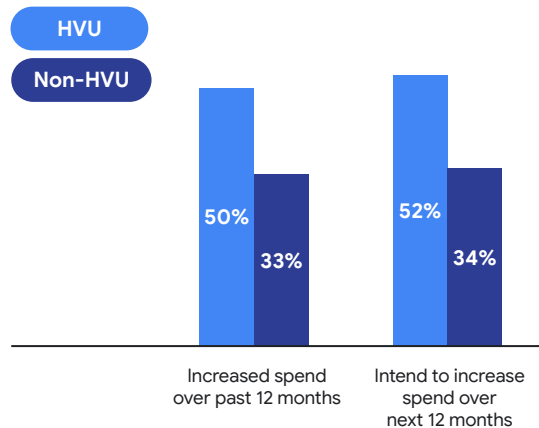
HVU spend vs non-HVU spend

Based on average online vertical spend per user



Change in spend

Averaged across verticals¹ per user



Notes: (1) Excludes digital financial services (DFS); (2) Streaming includes both video-on-demand and music-on-demand. (3) Based on aggregate HVU user spend / aggregate non-HVU user spend, across all 7 categories.

Source: Google-commissioned Kantar e-Conomy SEA consumer survey, ID, MY, PH, SG, TH, VN, 2023, online survey among 18-64 internet users and digital economy spenders, 10/08/2023-01/09/2023 (Spend ratio n=2,368 HVU, n=5,513 non-HVU; for spend change, HVU per vertical at least n >= 1,724, and non-HVU per vertical at least n >= 2,623). Question A2, A5, A7: "Please estimate how much you think you spend online in an average month across the below digital activities." "Comparing this year to the previous year, how has your spend for the following digital behaviours changed?" "Thinking about the upcoming year, how do you think your spend for the following digital behaviours will change?"

Online spend concentration is highest in discretionary spending verticals

'Essential' categories, including groceries, food delivery, and e-commerce, see HVUs outspending non-HVUs by ~5 to 6X. The ratio increases significantly for higher discretionary spend verticals, like transport and gaming.

Going forward, the spend gap between HVUs and non-HVUs will likely widen

HVUs' spend has been on the upswing, and this is likely to continue. Their spend increased the most on food delivery and groceries over the last year, but travel and e-commerce is where they expect to be spending more in the next 12 months, reflecting growing consumer optimism.

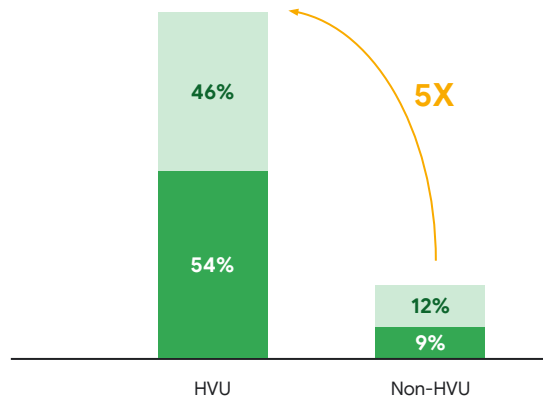
HVUs spend more across different channels and across a higher number of verticals

Online vs offline spend¹

Indexed to average HVU total spend

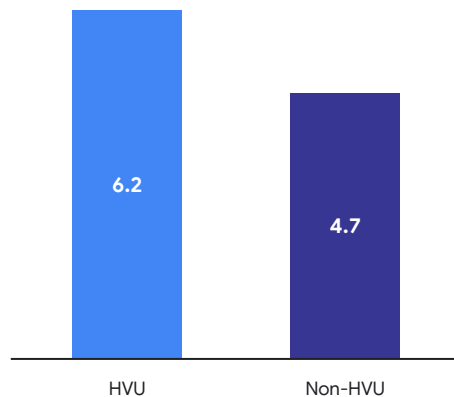
Offline

Online



Usage across verticals¹

Average number of verticals in which users spend online, 7 being the maximum



Notes: (1) Excludes digital financial services (DFS); (2) Based on non-HVU online spend (9%) / total spend (21%), indexed to average HVU total spend; (3) Streaming includes both video-on-demand and music-on-demand.

Source: Google-commissioned Kantar e-Conomy SEA consumer survey, ID, MY, PH, SG, TH, VN, 2023, online survey among 18-64 internet users and digital economy spenders, 10/08/2023- 01/09/2023 (n=2,368 HVU, n=5,513 non-HVU). Question A2, A2a: "Please estimate how much you think you spend online in an average month across the below digital activities." "Please estimate how much you think you spend offline / in-store in an average month across the below activities, please only consider times you spent in-person, in-store or over the phone."

HVU spend is significantly higher across all channels

54% of HVUs' total spend happens online, compared to 43%² for non-HVUs. Beyond online spend, HVUs also spend more offline: 4X compared to non-HVUs. Overall, HVUs spend 5X compared to non-HVUs.

HVUs spend across more verticals online

HVUs tend to spend across more verticals than non-HVUs, though their spend propensity compared to non-HVUs is highest for streaming³, travel, and transport.

HVUs tend to be high spenders across verticals, especially among related sectors

HVU spend correlation across verticals

Based on online spend in a vertical

Low correlation  High correlation

| | E-commerce | Groceries | Transport | Food delivery | Gaming | Streaming ¹ | Travel |
|------------------------|------------|-----------|-----------|---------------|--------|------------------------|--------|
| E-commerce | 100% | 63% | 55% | 56% | 50% | 52% | 50% |
| Groceries | 58% | 100% | 56% | 59% | 51% | 54% | 52% |
| Transport | 51% | 57% | 100% | 58% | 56% | 58% | 52% |
| Food delivery | 58% | 66% | 64% | 100% | 49% | 55% | 56% |
| Gaming | 44% | 49% | 52% | 42% | 100% | 62% | 44% |
| Streaming ¹ | 46% | 52% | 55% | 47% | 63% | 100% | 48% |
| Travel | 44% | 50% | 49% | 47% | 44% | 47% | 100% |

Note: (1) Streaming includes both video-on-demand and music-on-demand.

Source: Google-commissioned Kantar e-Conomy SEA consumer survey, ID, MY, PH, SG, TH, VN, 2023, online survey among 18-64 internet users and digital economy spenders, 10/08/2023- 01/09/2023 (HVU per vertical at least n >= 1,951). Question A2: "Please estimate how much you think you spend online in an average month across the below digital activities."

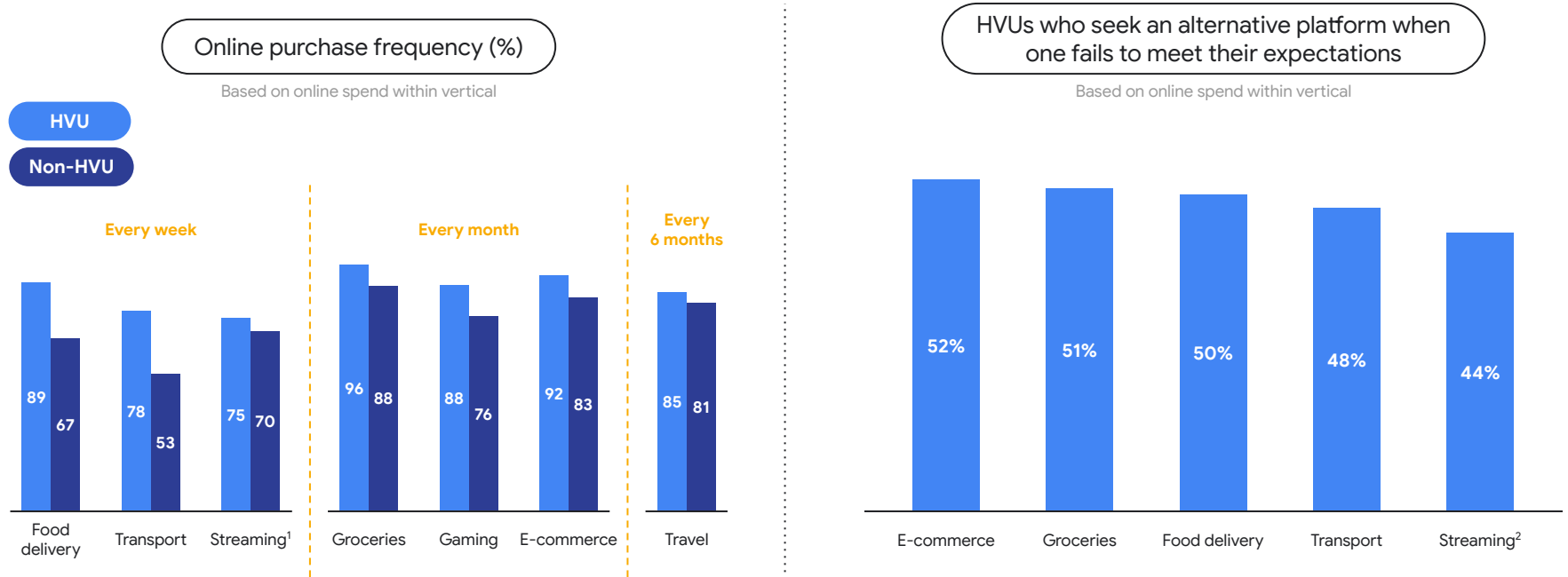
A HVU in one vertical is likely to be a HVU in others

Across the board, the likelihood that a HVU in one vertical is also a HVU in another vertical is over 40%. HVUs in food delivery are the most likely to cross verticals, whereas travel has the lowest replicability.

High cross-vertical usage is observed across related verticals

A HVU in e-commerce is quite likely to also be a HVU in groceries, and vice versa. The same goes for HVUs in gaming and streaming¹.

HVUs are frequent online purchasers, but high expectations mean 1 in 2 would switch platforms for a better experience



Notes: (1) Streaming includes both video-on-demand and music-on-demand. (2) Includes only video-on-demand.

Source: Google-commissioned Kantar e-Economy SEA consumer survey, ID, MY, PH, SG, TH, VN, 2023, online survey among 18-64 internet users and digital economy spenders, 10/08/2023- 01/09/2023 (Online purchase frequency HVU per vertical at least n >= 1,724, and non-HVU per vertical at least n >= 2,623; for alternative platform switching, HVU per vertical at least n >= 501). Question A1, V21: "Thinking about the last year, how often do you typically do the following activities online?" "When it comes to buying for the following digital activity, please select the statement most applicable to you."

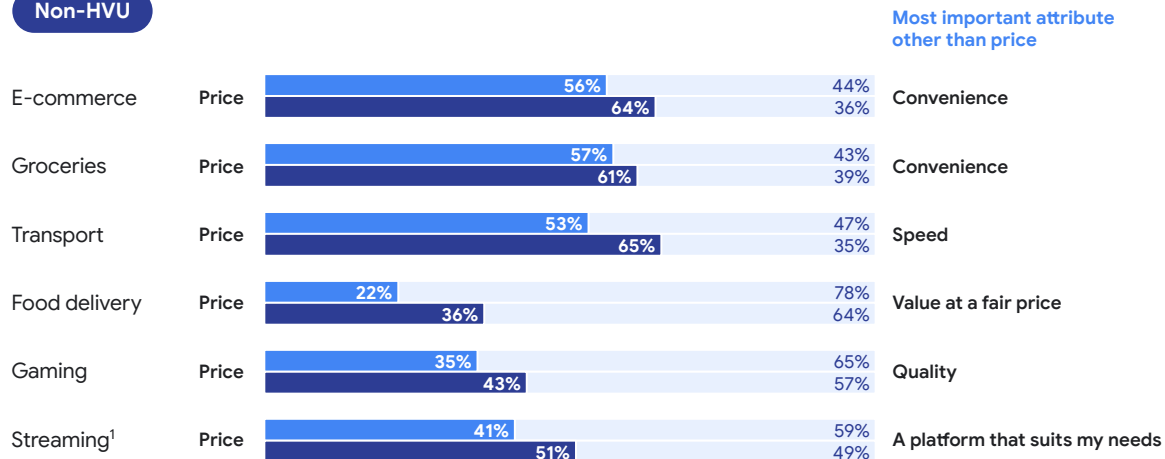
Across verticals, HVUs tend to care less about price than non-HVUs when shopping online

Importance of price against other factors when shopping online

Based on online spend within vertical

HVU

Non-HVU



HVUs are more inclined to value non-price benefits

More so than non-HVUs, many HVUs value the superior experience and convenience of purchasing digitally, which lead to higher online spending and frequency of usage.

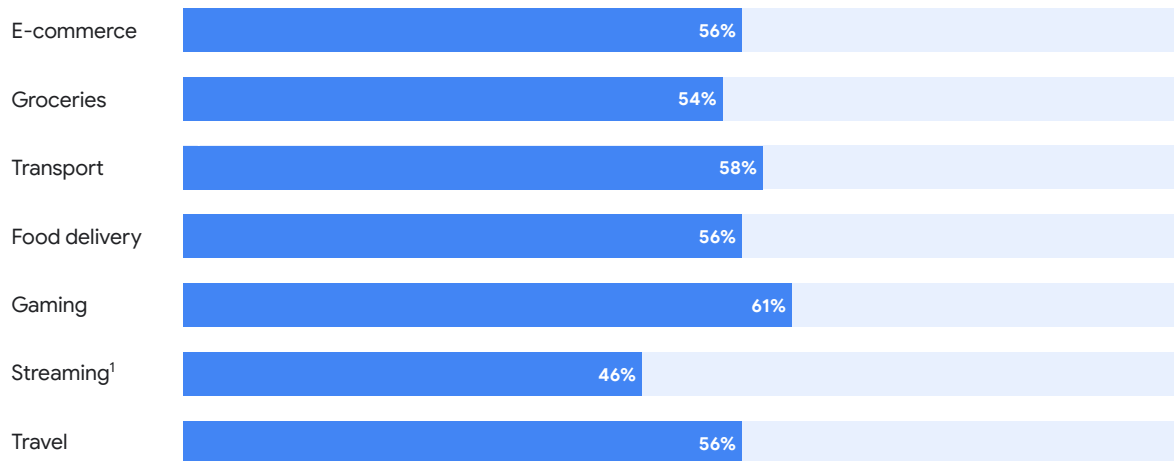
Note: (1) Streaming includes both video-on-demand and music-on-demand.

Source: Google-commissioned Kantar e-Conomy SEA consumer survey, ID, MY, PH, SG, TH, VN, 2023, online survey among 18-64 internet users and digital economy spenders, 10/08/2023- 01/09/2023 (HVU per vertical at least n >= 501, non-HVU per vertical at least n >= 880). Question V21: "When it comes to buying for the following digital activity, please select the statement most applicable to you."

However, getting the best price is key to keeping HVUs loyal to a platform

% of HVUs who cite price as reason to switch digital platforms

Based on online spend within vertical



Note: (1) Streaming includes both video-on-demand and music-on-demand.

Source: Google-commissioned Kantar e-Conomy SEA consumer survey, ID, MY, PH, SG, TH, VN, 2023, online survey among 18-64 internet users and digital economy spenders, 10/08/2023- 01/09/2023 (HVU per vertical at least n >= 501). Question V17: "Thinking about buying for the following digital activity, which of the reasons below are most likely to influence your decision to switch your final channel for a transaction?"

HVUs choose the platform with the best deals

Across verticals, HVUs show a high propensity to use multiple digital platforms and switch between them to find more reasonable prices or fees. As they spend more overall, they are motivated to get the most out of their spending.

Ensuring a reliable and accessible online experience can overcome barriers and spur higher usage and spend

Top barriers to spending more online

Based on online spend within vertical

Common barriers among all users

In e-commerce, groceries, and food delivery

Delivery issues, including **slow** delivery and **high delivery costs**, are top barriers.

Inability to guarantee a **product's authenticity** or **quality** is a key hindrance in e-commerce and groceries.

Minimum order requirements in food delivery is also a common constraint.

In transport, gaming, streaming¹, and travel

High prices are the top barrier in transport, gaming, and streaming.

Inaccurate or long wait times are a perennial issue for transport consumers.

Hidden transaction fees and **online security** concerns are common issues among travelers.

Distinct barriers among non-HVUs

A preference to **see or touch** the product has been holding non-HVUs back.

Streaming incurs a recurring cost, which they prefer to **save**.

An inability to **compete with high spending gamers** deters non-HVUs from gaming.

Note: (1) Streaming includes both video-on-demand and music-on-demand.

Source: Google-commissioned Kantar e-Economy SEA consumer survey, ID, MY, PH, SG, TH, VN, 2023, online survey among 18-64 internet users and digital economy spenders, 10/08/2023- 01/09/2023 (HVU per vertical at least n >= 501, non-HVU per vertical at least n >= 835)

Question V16: "Thinking about buying for the following digital activity, what are some of the barriers from spending more online?"

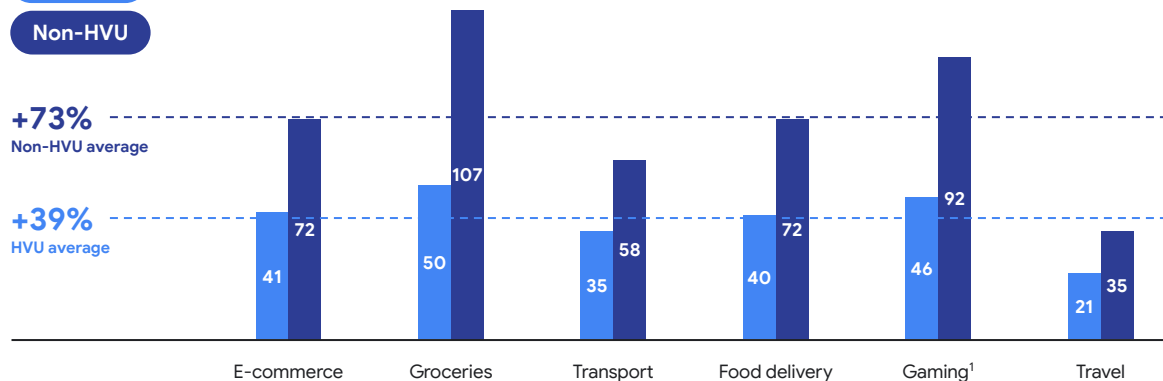
Addressing barriers to online spending can be a significant opportunity for digital players, with higher uplifts expected for non-HVUs

% increase in online spend if major online barriers were removed

Based on online spend within vertical

HVU

Non-HVU



Note: (1) Only includes purchase of games and not in-game purchases.

Source: Google-commissioned Kantar e-Conomy SEA consumer survey, ID, MY, PH, SG, TH, VN, 2023, online survey among 18-64 internet users and digital economy spenders, 10/08/2023- 01/09/2023 (HVU per vertical at least n >= 501, non-HVU per vertical at least n >= 726)
Question V16a: "Earlier you mentioned that you spend the following in an average month when buying for the following digital activity. If all your barriers were removed, how much of your total would you spend online?"

HVUs could be spending more across all categories

The biggest potential uplifts are in categories where major barriers are more addressable: groceries, gaming¹, e-commerce, and food delivery. These are largely related to distribution, supply, or security issues from purchasing online.

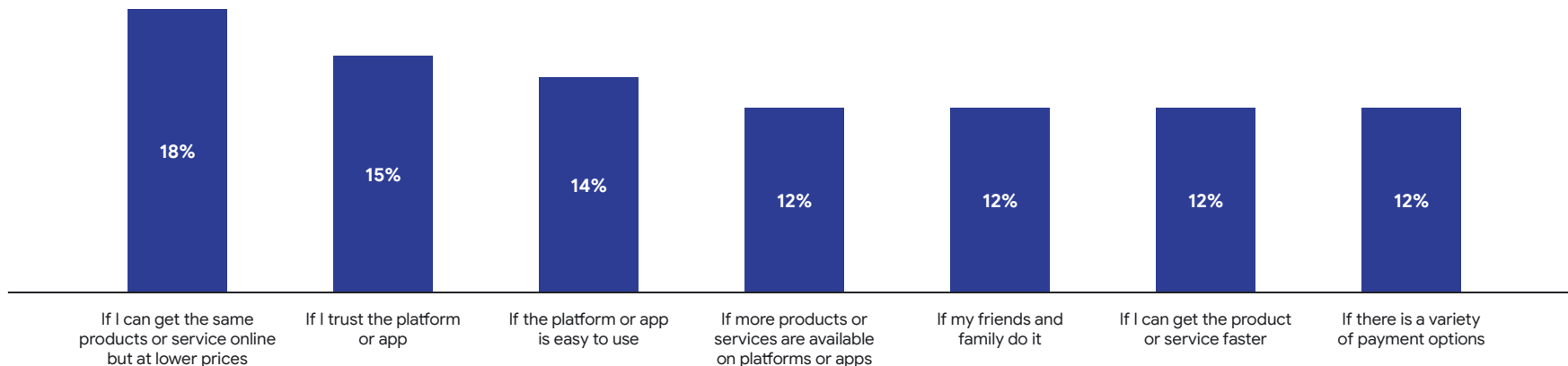
The growth opportunity for non-HVUs is 1.9X that of HVUs

Non-HVUs would spend more online or start spending online if key barriers were resolved. However, non-HVUs also face barriers, such as needing to touch and feel products, which may require creative workarounds.

For non-HVUs who only purchase offline: lower prices, trust in the platform, and ease of use can change behaviour

Top reasons to start spending online¹ (% share of fully offline non-HVUs)

Based on online spend within vertical



Note: (1) Excludes digital financial services (DFS), averaged response per non-HVU who currently do not spend online in one or more verticals.

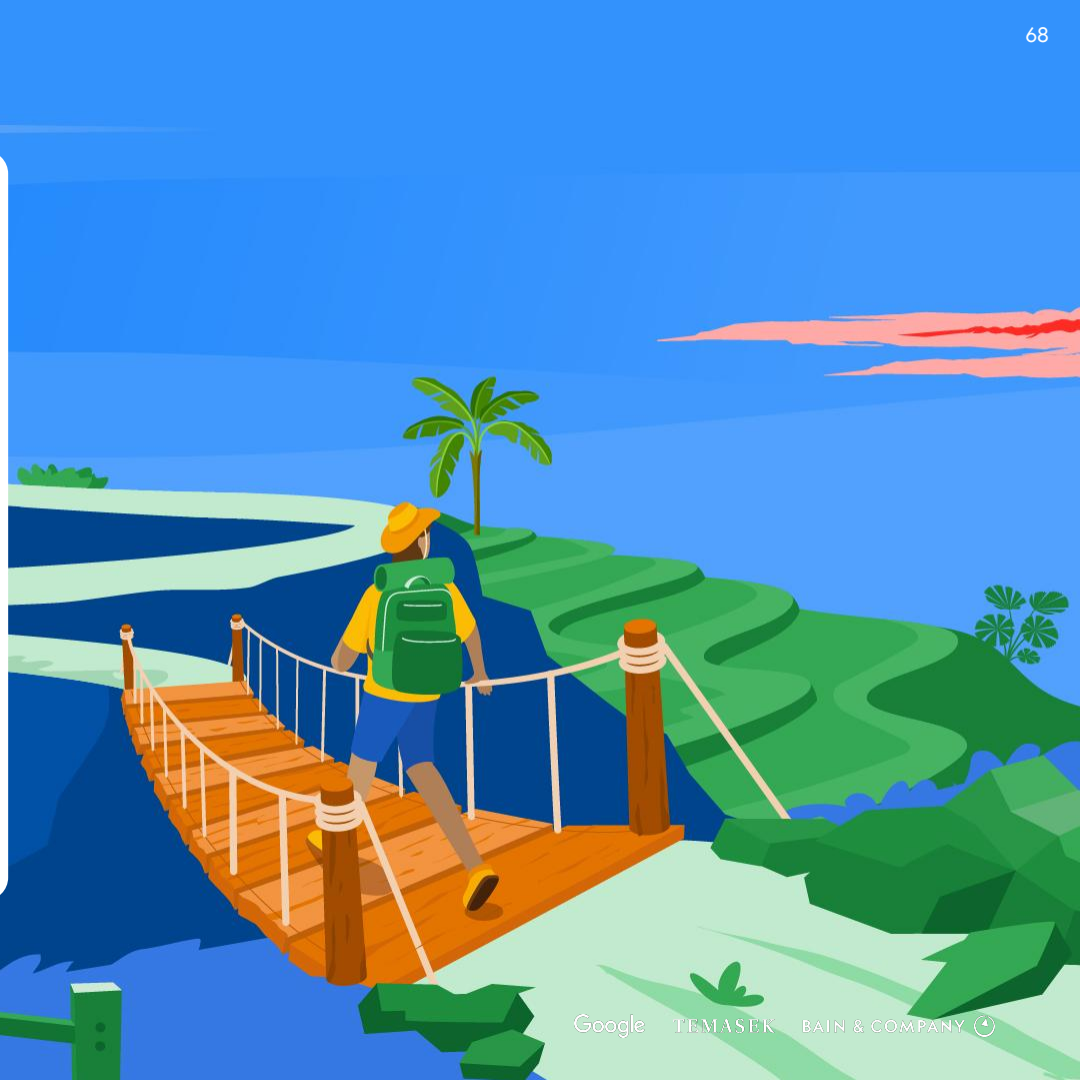
Source: Google-commissioned Kantar e-Economy SEA consumer survey, ID, MY, PH, SG, TH, VN, 2023, online survey among 18-64 internet users and digital economy spenders, 10/08/2023- 01/09/2023 (n = 2,706 non-HVU; n = 462 to 646 responses for Ride Hailing, Food Delivery, and Groceries; n = 1,006 to 1,704 responses for Gaming, Streaming, and Travel; n = 150 responses for Ecommerce; across all verticals, across all verticals, differences from the average are negligible and not statistically significant, with notable exception to groceries which was higher than average, and where speed of delivery is more important. Question A8: "Earlier you mentioned that you have never done the following online activities. What would entice you to do the following activities online?"

Bridging the digital economic divide



Digital inclusion has made inroads in the region over the past years.

Yet, as players focus on monetisation, consumers outside of metro cities are facing a widening digital economic divide.



Last year, we outlined four enablers for a sustainable digital economy; this year, we deep dive on digital inclusion

Towards a sustainable digital economy



Path to profitable growth

The digital economy is on the path to profitable growth, with 32% of GMV transactions captured as revenue.

Sectors that have proven to be profitable in the past will likely see a reinvigoration of growth.



Environment, Social, Governance

ESG has temporarily taken a back seat as players double down on profitability metrics.

Rising costs are also widening the consumer 'say-do' gap, despite the general rise in ESG awareness.



Digital inclusion

Connectivity continues to make inroads, with more users now online.

However, profitability puts short-term pressure on digital participation, as it remains challenging to operate efficiently beyond metro cities.



Data infrastructure and regulation

Improvements in infrastructure and security continue, with responsible artificial intelligence (AI) guidelines coming into focus.

Rather than a reactive measure to ethical concerns, this could be a potential source of competitive advantage.

Digital economic growth happens as a result of digital inclusion and the active participation of digital users

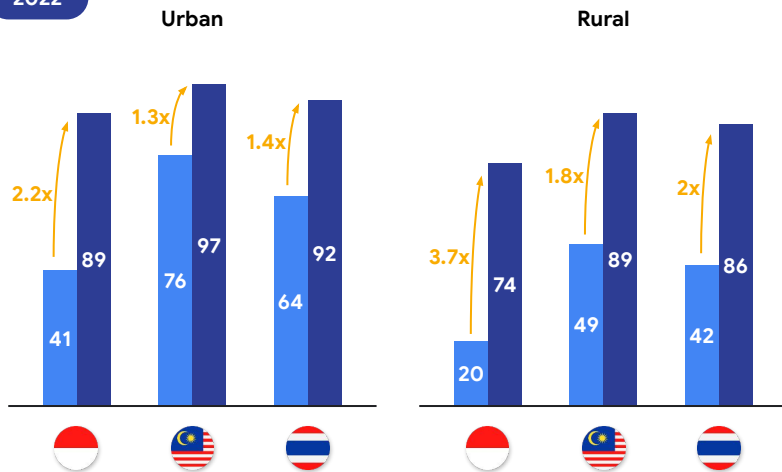


SEA has seen good progress on digital inclusion, making inroads into rural areas to bridge connectivity gaps

% households with internet access (urban vs rural)

2015

2022



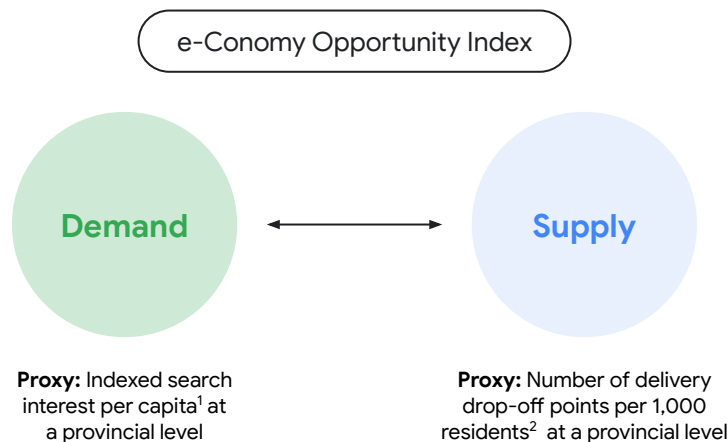
Some metro cities are nearing the digital penetration saturation point

With the commoditisation of 4G networks, falling costs of data and mobile devices, and rising smartphone ownership, digital penetration has reached an all-time high across major metro cities like Bangkok, Kuala Lumpur, and Jakarta.

Clear signals that the urban and rural connectivity gap is narrowing

Years of investment in connectivity infrastructure are finally bearing fruit, as more last mile challenges have been addressed across the region. Rural Indonesia, the Philippines, and Vietnam still have headroom for improvement.

We assessed demand and supply at a provincial level to understand the digital economic divide



The digital economic divide

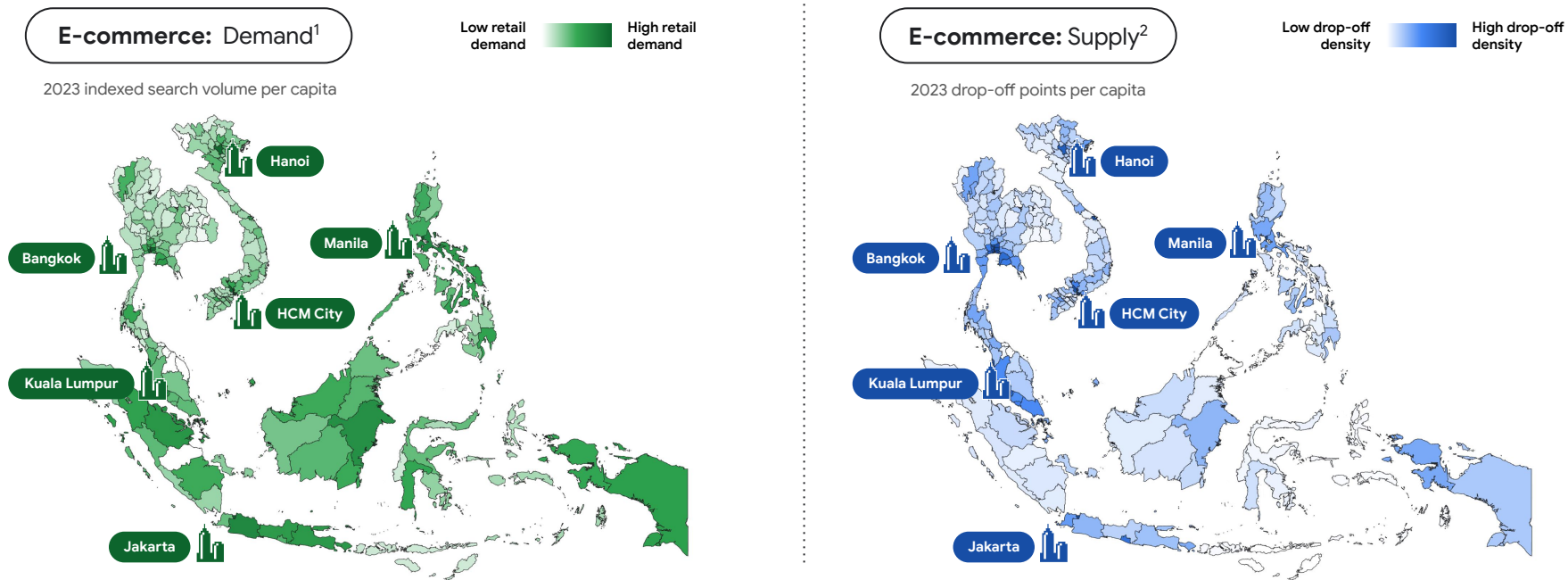
A growing gap between demand and supply for digital services can result in a digital economic divide. Areas beyond metros are particularly vulnerable given the challenging unit economics and lower purchasing power.

While consumers in these areas might have access to the internet, they are not able to participate and contribute to the digital economy meaningfully.

Notes: (1) An indication of how much e-commerce demand there is, calculated based on the e-commerce-related search interest indexed to census population per province, indexed at the country level; (2) An indication of the e-commerce fulfillment coverage, calculated based on the concentration of courier, delivery, freight forwarding, mailing, and shipping services within provinces, indexed at country level.

Sources: Google internal data, ID, MY, PH, TH, VN, Jan-Jul 2022 vs Jan-Jul 2023; Province GDP & Population; Google Maps data, ID, MY, PH, TH, VN, as of September 2023; WorldPop & Landscan Population; Bain analysis

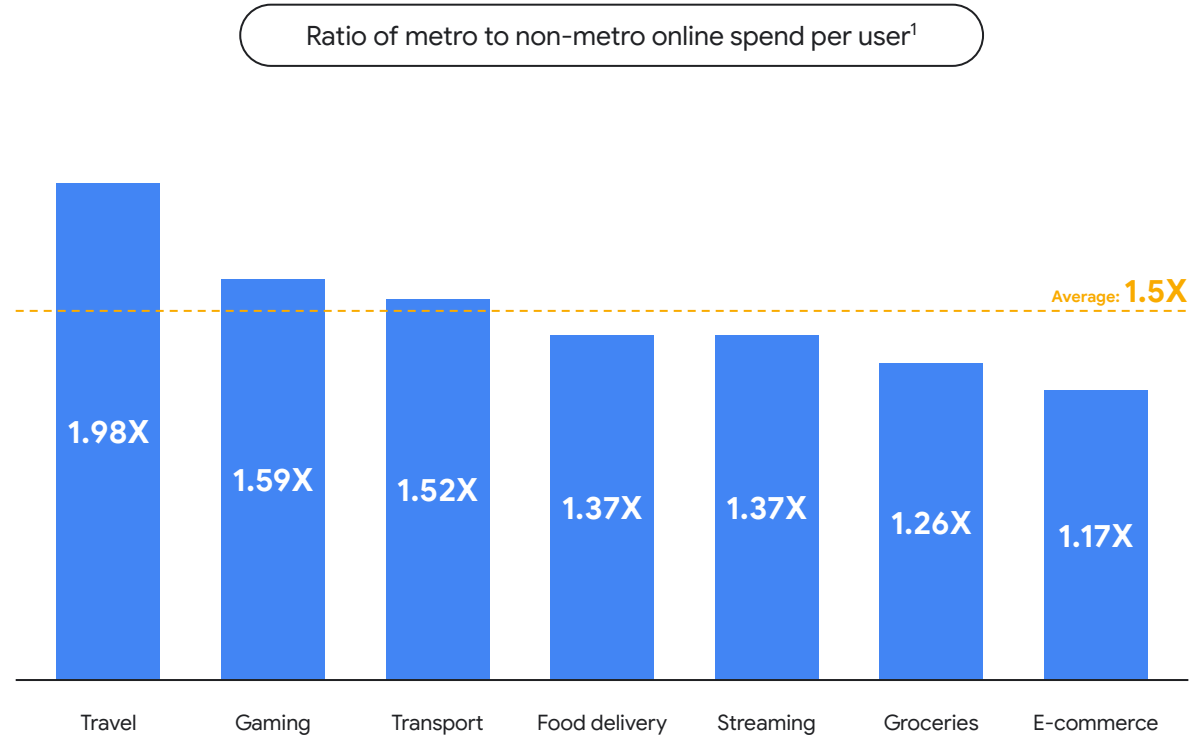
The current demand and supply gap outlines a potential risk of a digital economic divide in the e-commerce sector



Notes: (1) An indication of how much e-commerce demand there is, calculated based on the e-commerce-related search interest indexed to census population per province, indexed at the country level; (2) An indication of the e-commerce fulfillment coverage, calculated based on the concentration of courier, delivery, freight forwarding, mailing, and shipping services within provinces, indexed at country level.

Sources: Google internal data, ID, MY, PH, TH, VN, Jan-Jul 2022 vs Jan-Jul 2023; Province GDP & Population; Google Maps data, ID, MY, PH, TH, VN, as of Sep 2023; WorldPop & Landscan Population; Bain analysis

The gap could
widen further if
players focus solely
on monetisation



Note: (1) Excludes Singapore.

Source: Google-commissioned Kantar e-Economy SEA consumer survey, ID, MY, PH, SG, TH, VN, 2023, online survey among 18-64 internet users and digital economy spenders, 10/08/2023- 01/09/2023 (n=4,052 metro, n=2,526 non-metro). Question S3, A2: "In what region/area do you live?" "Please estimate how much you think you spend online in an average month across the below digital activities."

Addressing these gaps is the collective responsibility of all stakeholders



Investors

- Take a digital inclusion and a participation lens when evaluating new opportunities, while also optimising for the company's offerings and unit economics
- Encourage portfolio companies to support digital inclusion and address digital participation issues



Government

- Roll out education initiatives to improve digital and financial literacy to enable individuals to participate meaningfully and safely in the digital economy
- Invest in connectivity and physical infrastructure to support digital inclusion and accessibility of digital services
- Upskill MSMEs to help them use digital tools (e.g. AI to improve efficiency) to scale services and improve reach



Digital businesses

- Design new innovations, products, and services that facilitate wider digital participation (e.g. easier to use or more affordable products)
- Build trust with consumers outside of metro cities (e.g. cash on delivery services, refund policies, etc.)



Nonprofits / NGOs

- Identify and call attention to digitally excluded populations to drive action across all stakeholders
- Support businesses and governments in their identification of gaps across society
- Execute targeted education programs to ensure these populations become more digitally literate

Digital businesses and governments can explore the application of new technologies, such as AI, to support these efforts

Digital businesses can explore AI-driven use cases to benefit consumers and themselves



Inventory management: Optimised inventory levels reduce storage and inventory costs, ensuring that products are available based on predicted demand while minimising wastage.



Route optimisation: Driver schedules and routes can be further optimised to maximise driver and vehicle utilisation, reduce fuel costs, and minimise the time customers spend waiting or travelling.



Customer service: AI-powered chatbots and virtual assistants can provide 24/7 customer support and answer customer queries quickly and efficiently.



Personalised content recommendations: AI-driven video, song, or article recommendations can help consumers find relevant content much more quickly, improving their overall engagement.



Fraud detection and prevention: Understanding individual buying behaviour or access patterns to detect and prevent credit card fraud or identity theft, increasing security for consumers and merchants.

Not exhaustive

A policy agenda for responsible progress in AI development:

Invest in innovation and competitiveness

Invest in AI research, create shared AI research resources, and establish public-private partnerships to build and maintain high-quality datasets.

Create a pipeline of AI-ready talent

Expand pre-tertiary STEM and digital training programmes, fund more research fellowships to promote AI and technology literacy, and expand relevant tertiary education programs (e.g. computer science and AI-related curricula). Encourage upgrading AI skills in the workforce through micro-certifications and e-learning.

Promote balanced legal frameworks for AI innovation

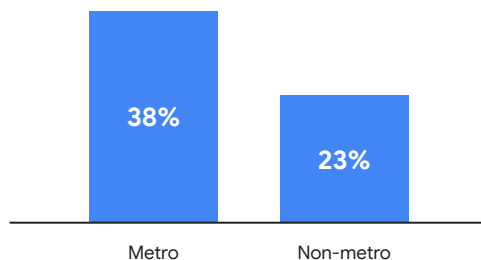
Develop privacy laws to protect personal information and enable trusted cross-border data flows. Develop copyright systems enabling appropriate and fair use of copyrighted content, while giving publishers and content creators choice and control over the reproduction of their works.

Promote globally-interoperable AI governance frameworks

Develop common standards, shared best practices, and proportional risk-based regulation through a multi-stakeholder approach to ensure that AI technologies are developed and deployed responsibly.

To encourage digital participation, challenges need to be addressed with each of the drivers

Digital literacy

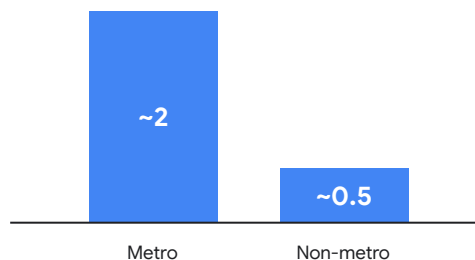


Digital literacy is necessary to foster trust

Consumers' digital literacy (i.e. their familiarity with digital services and ability to protect themselves online) needs to be improved to foster trust and drive demand.

Drop-off points

Per 10,000 population

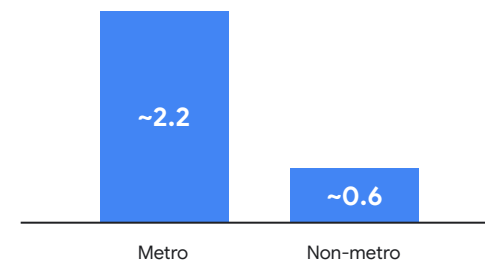


Cost-efficient supply models must be created

To facilitate digital participation, players need to identify business models that deliver better unit economics while serving a broader set of consumers.

Road density

Kilometres per square kilometre



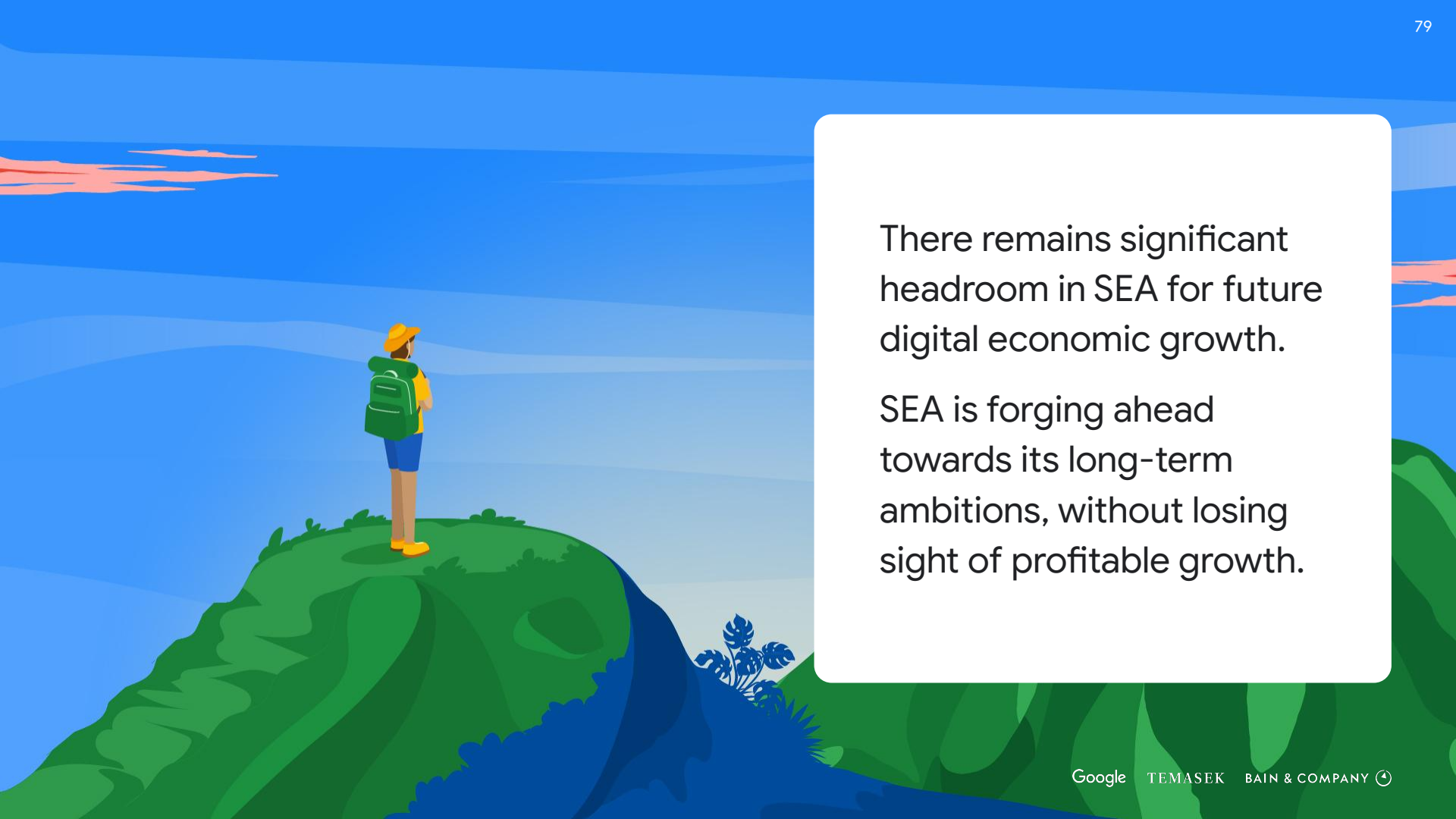
Physical infrastructure can improve cost-to-serve

Investments in physical infrastructure are needed to make serving additional areas more cost-effective for businesses.

Notes: Metro is based on the weighted average across SEA capitals (Singapore as a whole, Bangkok, Kuala Lumpur, Manila, Jakarta, and Hanoi). Drop-off points refer to the points to drop off delivery parcels to logistics companies and is a proxy to how well an area is served by digital services. Sources: World Bank; Government statistics; UN; UNICEF; AIB; Google Maps; Bain analysis

The path forward: profitable growth



An illustration of a hiker with a green backpack and a yellow hat standing on a green cliff, looking out over a vast blue landscape under a blue sky with some pinkish clouds. The hiker is positioned on the left side of the frame, looking towards the right.

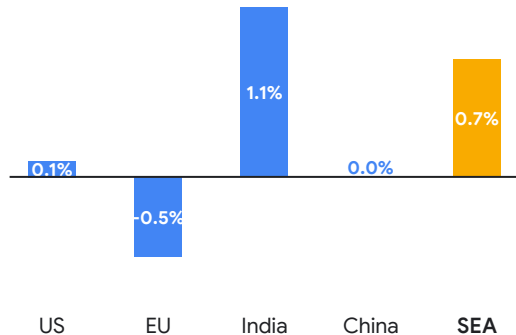
There remains significant headroom in SEA for future digital economic growth.

SEA is forging ahead towards its long-term ambitions, without losing sight of profitable growth.

Despite the ebbs and flows, SEA has substantial headroom for long-term growth

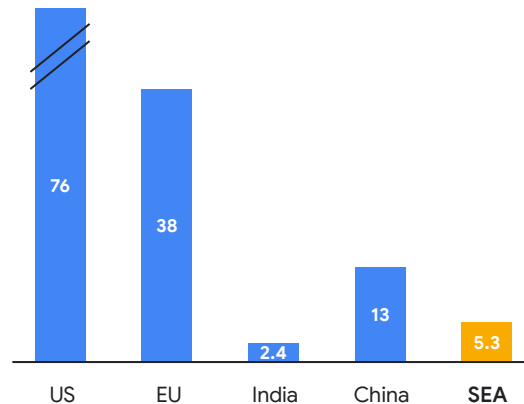
Growing working population

Working population growth rate¹
(2023-2028 CAGR)



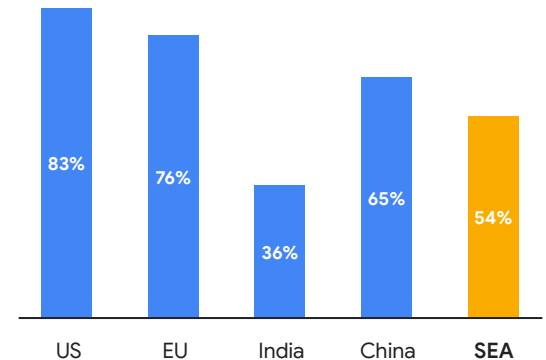
Room for income growth

GDP per capita
('000 USD, 2022)



Remaining urbanisation potential

Current urban population²
(% of total population)



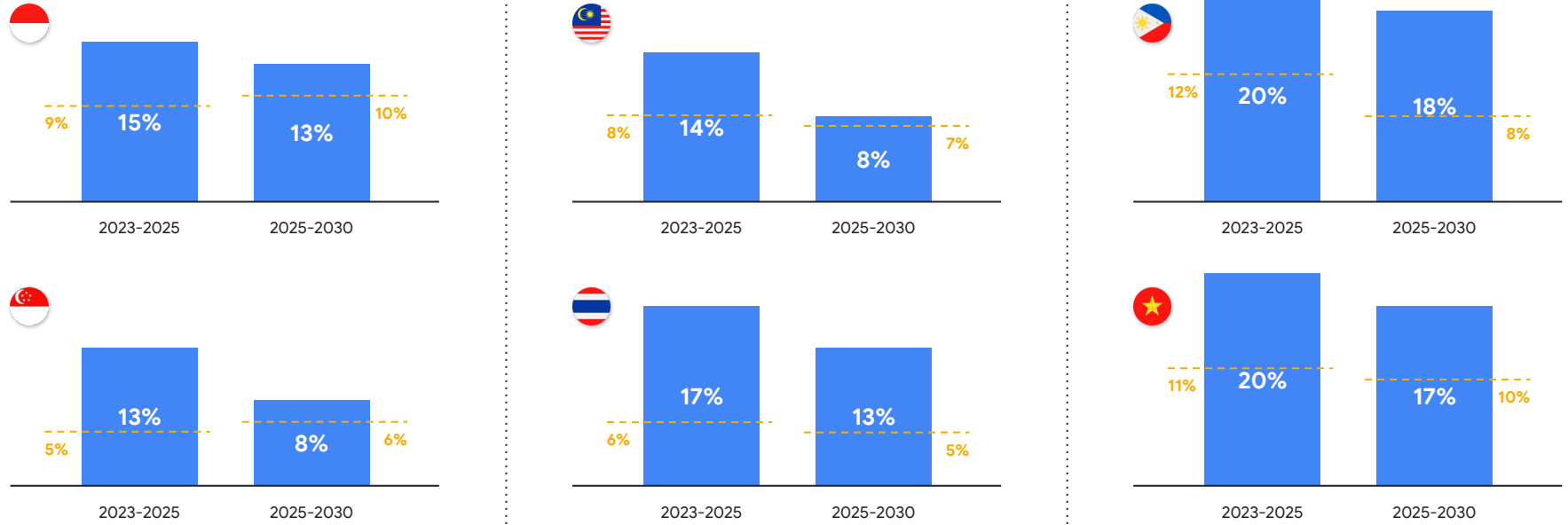
Notes: Data is as of August 2023. (1) Population age 15+; (2) Urban population refers to people living in urban areas, as defined by national statistical offices.
Sources: United Nations Population Division; S&P Global Market Intelligence; World Bank; Bain analysis

The digital economy will continue to be a major growth driver in SEA

Digital economy GMV vs GDP growth

Expected digital economy CAGR

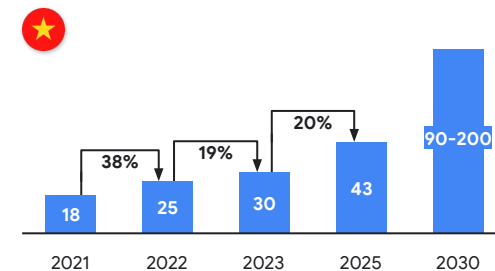
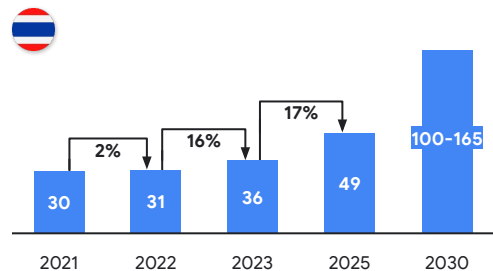
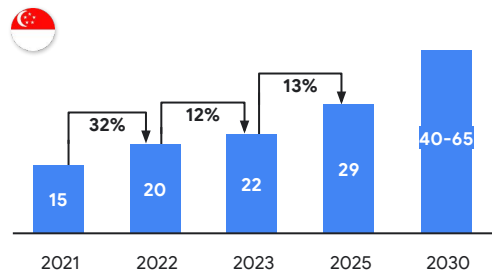
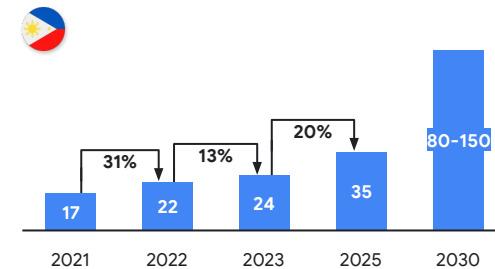
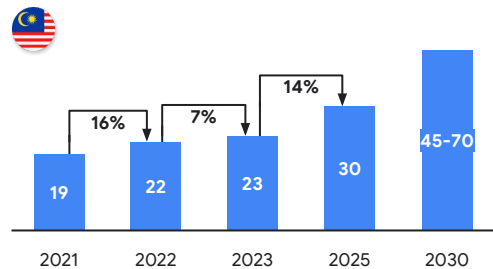
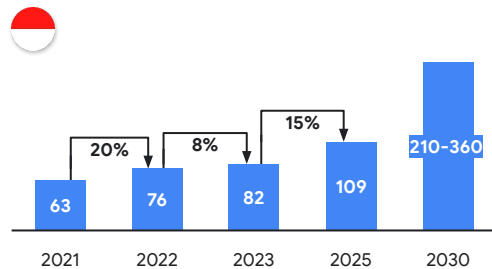
Expected nominal GDP CAGR



GMV will continue its upward trajectory through the rest of the decade

Digital economy GMV (\$B)

CAGR ↓

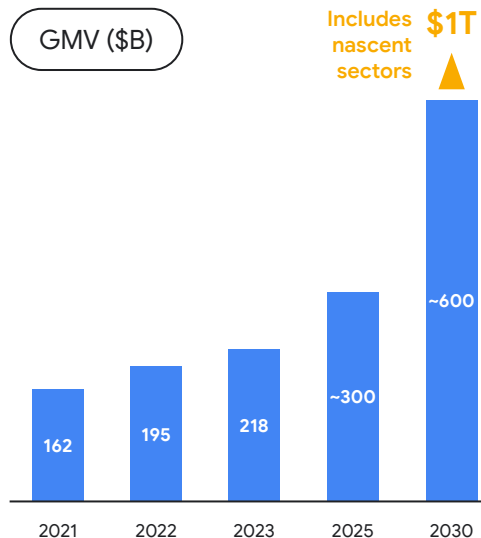


Notes: GMV projections from 2021 to 2030 exclude digital financial services due to differences in GMV definition; 2030 projection includes ballpark estimates for nascent sectors such as healthtech, edtech, AI, etc.

Source: Bain analysis

These developments have the potential to be game-changing as SEA navigates the path to profitable growth

Long-term market growth prospects remain strong



\$1T GMV is within reach provided these come to fruition

More profitable sectors as companies focus on unit economics

As companies adjust their monetisation models and focus on increasing efficiency (e.g. through the implementation of AI-driven use cases), profitability will improve across the board, driving up the availability of resources for market growth and the attractiveness of different digital economy sectors.

More digital consumers through bridging the divide in digital economy participation

Directly addressing barriers to participation in the digital economy will accelerate the rate of consumer adoption across the region. By tapping into this latent demand, the growth of digital penetration can be increased significantly.

More geographic coverage as infrastructure expands beyond metros

Investments in digital and physical infrastructure, as well as economic development plans, can help make it feasible for digital businesses to extend services to areas outside metro cities where demand for digital products and services is growing. The right investments will lower cost-to-serve and accelerate digital penetration.

More digital businesses as offline and nascent sectors cross the threshold

Sectors beyond those covered in this report can drive substantial growth in the digital economy as their adoption reaches critical mass. For example, the emergence of nascent sectors, such as online grocery, healthtech, edtech, property and car sales all hold potential to drive GMV growth in the longer term.

More interconnected regional activities through trade and digital agreements

The development and harmonisation of relevant policies and agreements across ASEAN will benefit both businesses and consumers. Trade and data governance agreements, as well as infrastructure policies and standards, will remove barriers to cross-border digital economy activity and stoke growth across the region.

Notes: GMV projections from 2021 to 2030 exclude digital financial services due to differences in GMV definition; 2030 projection includes ballpark estimates for nascent sectors such as healthtech, edtech, AI, etc.

Source: Bain analysis



Country spotlight: Indonesia



Country overview

Growth and inflation are expected to normalise

As the economy normalises, Indonesia's GDP growth will likely moderate from 2022's inflation highs. Fortunately, inflation is easing more quickly than expected as input prices ease and government interventions take effect. Indonesia is still expected to grow faster than the regional average and drive a significant portion of digital economy growth.

Mobility restrictions finally removed at the end of 2022

As pandemic-related mobility restrictions lifted at the end of 2022, there was a resurgence in offline activities. Various digital economy sectors, including food delivery and e-commerce, are seeing growth dwindle, but transport is thriving. Travel is also seeing encouraging upswings, both from a domestic demand and business travel perspective.

Sticky customers make up for the loss of price-sensitive users

E-commerce, food delivery, and transport players have reduced the number of promotions and incentives on offer in view of balancing growth and profitability. Growth has slowed as price-sensitive consumers seek alternative options, but sufficient numbers have stuck around, offsetting slower market growth with higher net revenue growth.

Regulators will drive the trajectory of the digital economy

Regulators heavily influence the direction of key digital economy sectors. On one hand, nationwide digital payments standards and frameworks have sparked a steep incline in digital payments adoption. On the other hand, a new rule banning e-commerce imports below \$100 to support local merchants may have a negative impact on the overall market.

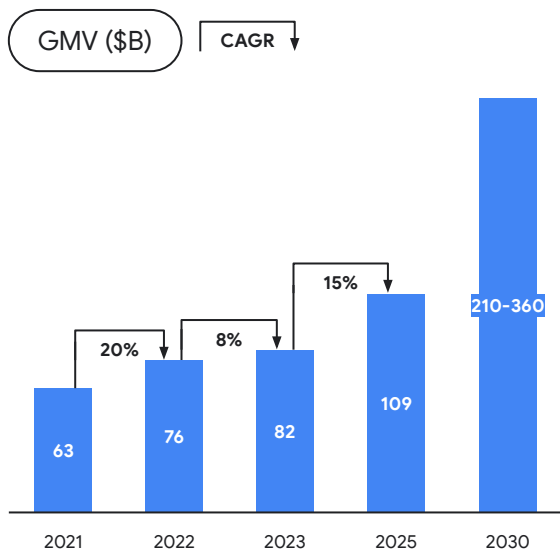


Indonesia

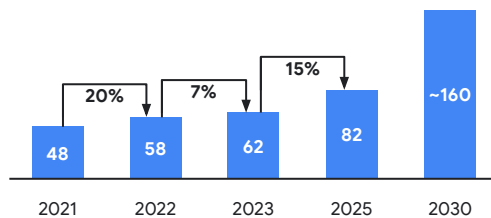


Despite ripples from macro headwinds, Indonesia is expected to bounce back and reach ~\$110B in 2025, largely fueled by e-commerce

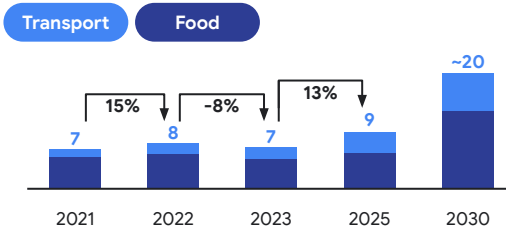
Overall digital economy



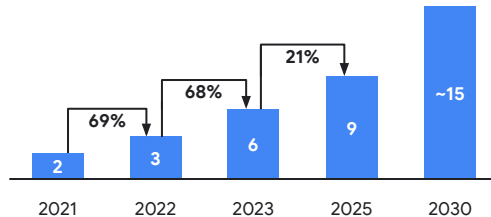
E-commerce



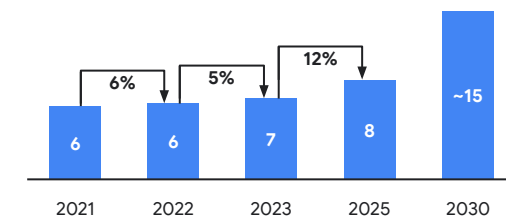
Transport & food



Online travel



Online media





Jakarta leads in digital participation; gaps widen beyond capital

E-commerce: Demand¹

2023 indexed search volume per capita

Low retail demand  High retail demand



E-commerce: Supply²

2023 drop-off points per capita

Low drop-off density  High drop-off density

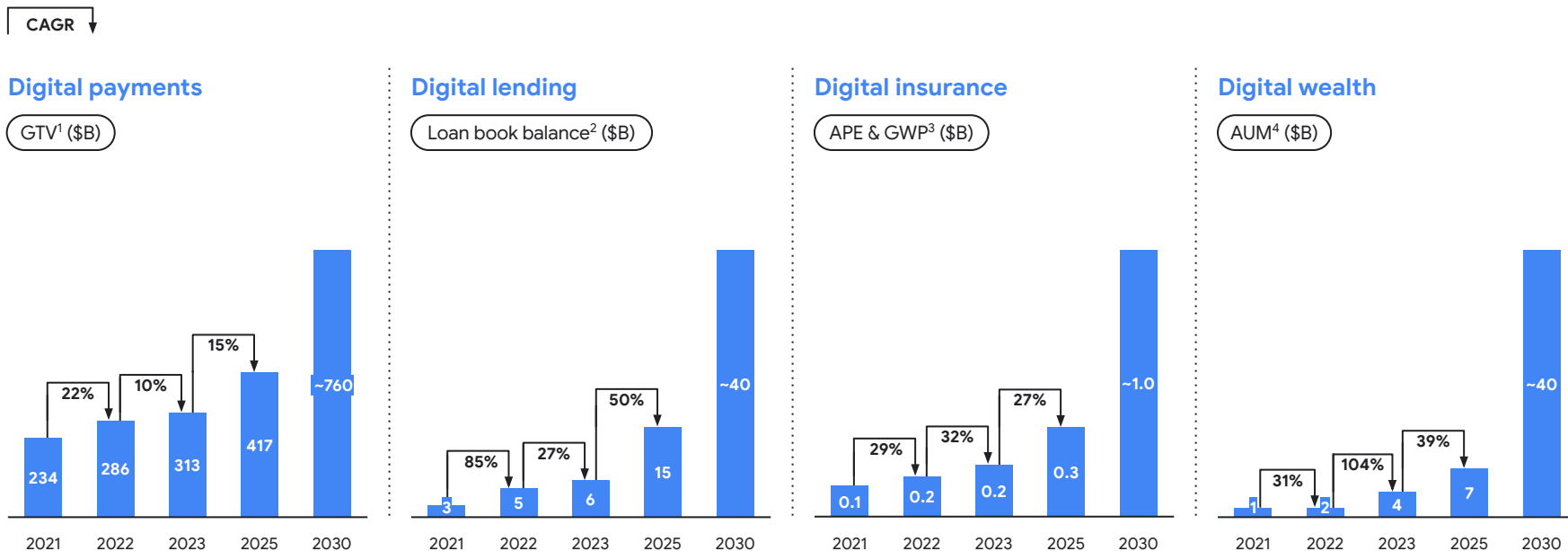


Notes: (1) Indication of how much e-commerce demand there is, calculated based on the e-commerce-related search volume, indexed to census population per province, indexed at the country level; (2) Indication of the e-commerce fulfillment coverage, calculated based concentration of courier, delivery, freight forwarding, mailing, and shipping services within provinces, indexed at country level.

Source: Google internal data, ID, Jan-Jul 2022 vs Jan-Jul 2023; Province GDP & Population; Google Maps data, ID, as of September 2023; WorldPop & Landscan Population; Bain Analysis



DFS: Lending and wealth expected to rise rapidly from a low base



Notes: (1) Gross transaction value (GTV) for digital payments includes the value of credit, debit, prepaid card, account-to-account (A2A), and e-wallet transactions; (2) Loan book balance for digital lending includes end-of-year balance for consumer loans (excluding credit card and mortgage) and SME loans; (3) APE & GWP for digital insurance includes APE for life insurance and health under life insurance policies and GWP for non-life insurance; (4) Assets under management (AUM) for digital wealth includes end-of-year mutual fund AUM balance. Source: Bain analysis

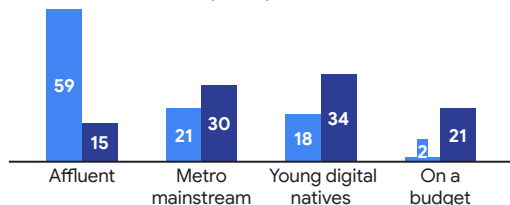


HVUs spend 6.8X vs non-HVUs; highest delta in travel

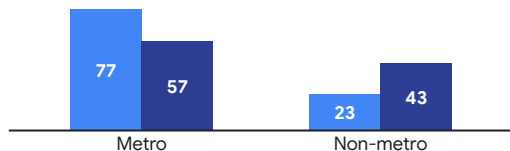
HVU

Non-HVU

HVU composition¹ by demographic² (%)

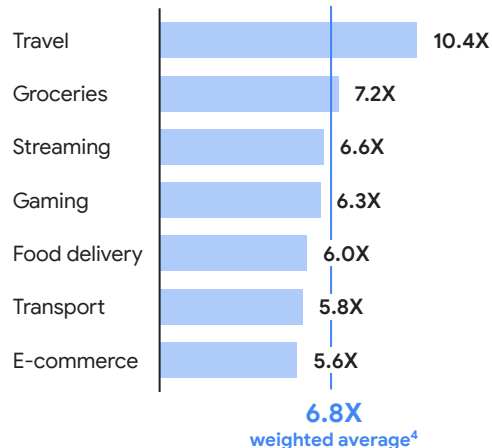
Based on total online spend³ per user

HVU composition¹ by geography (%)

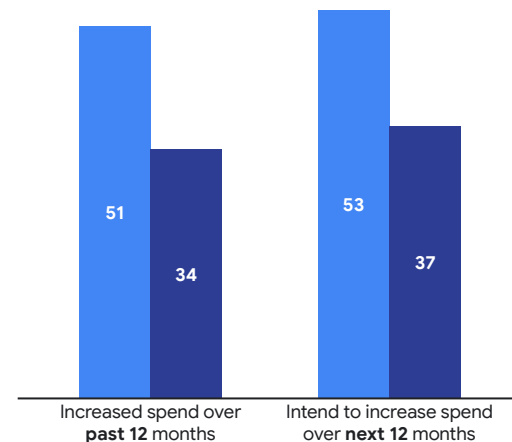
Based on total online spend³ per user

HVU vs non-HVU online spend

Based on average online vertical spend per user



Change in spend (%)

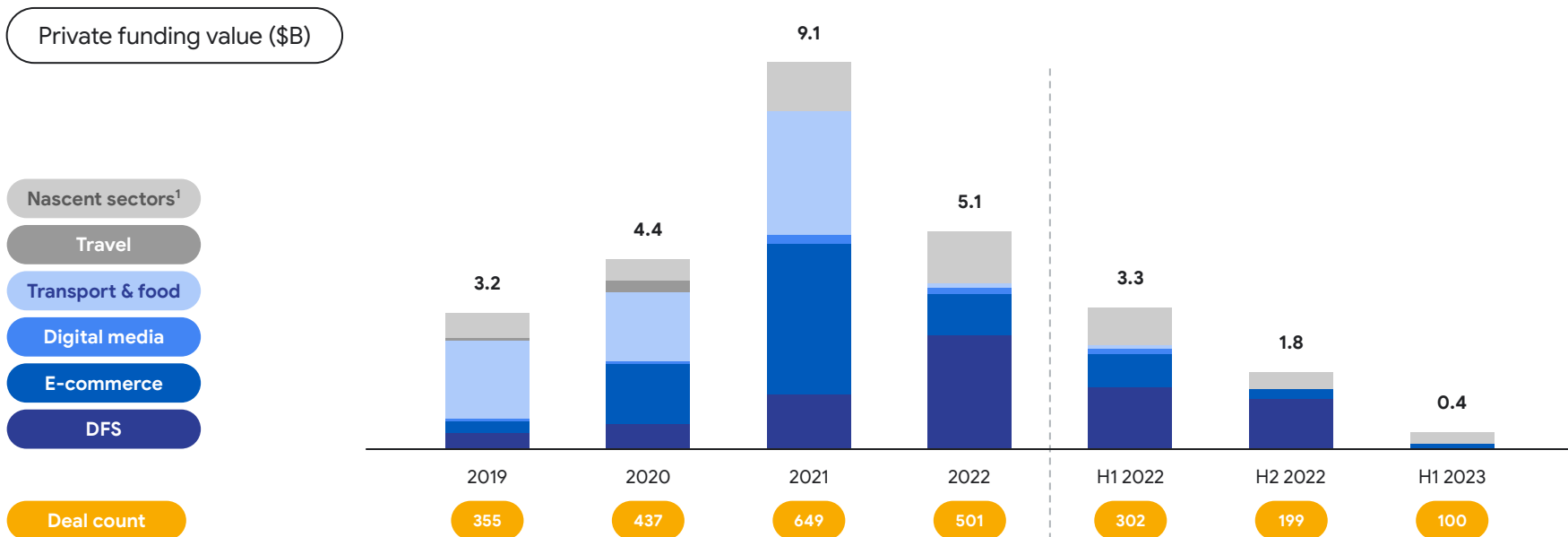
Averaged across verticals³ per user

Notes: HVU = high value users. (1) Average composition across SEA; (2) Affluent = High income; Metro mainstream = Age 30 and above & medium income; Young digital natives = Age 18-29 & medium income; On budget = low income; (3) Excludes digital financial services (DFS). (4) Based on aggregate HVU user spend / aggregate non-HVU user spend, across all 7 categories.

Source: Google-commissioned Kantar e-Conomy SEA consumer survey, ID, MY, PH, SG, TH, VN, 2023, online survey among 18-64 internet users and digital economy spenders, 10/08/2023 - 01/09/2023 (n=1,302 Indonesia) Question S7, S3, A2, A5, A7: "Which of the following best describes your regular monthly household income situation before tax?" "In what region / area do you live?" "Please estimate how much you think you spend online in an average month across the below digital activities." "Comparing this year to the previous year, how has your spend for the following digital behaviours changed?" "Thinking about the upcoming year, how do you think your spend for the following digital behaviours will change?"



Funding dropped sharply across sectors to less than \$1B in H1 2023



Note: (1) Nascent sectors include categories that are still relatively nascent in SEA such as enterprise, healthtech, edtech, deeptech/AI, Web3/crypto, property, automotive, etc.

Source: Bain analysis



Country spotlight: Malaysia





Malaysia

Country overview

Domestic demand stands resilient despite external headwinds

Household spending is on the rise, in tandem with employment and wages. As a result, domestic demand will drive economic growth in the market. However, investments in Malaysian digital companies decline to the lowest levels in years, in line with regional and global trends, suggesting slower growth in the near term for the digital economy.

Return of tourism to uplift economic growth

While tourism levels have been slower to recover, the pace of recovery is expected to accelerate and is likely to exceed government targets by year end. Outbound travel demand remains elevated, providing support for continued recovery and near-term growth in the digital travel industry. Online transport services like ride-hailing are also benefiting from the trend.

The return to offline routines has not shaken up sticky digital behaviours

Foot traffic in shopping malls has recovered or, in some areas, even exceeded pre-pandemic levels. The food and beverage industry is experiencing a similar uptick. But even with this resurgence, Malaysian consumers have held onto the habits that make their lives easier, like e-commerce and food delivery.

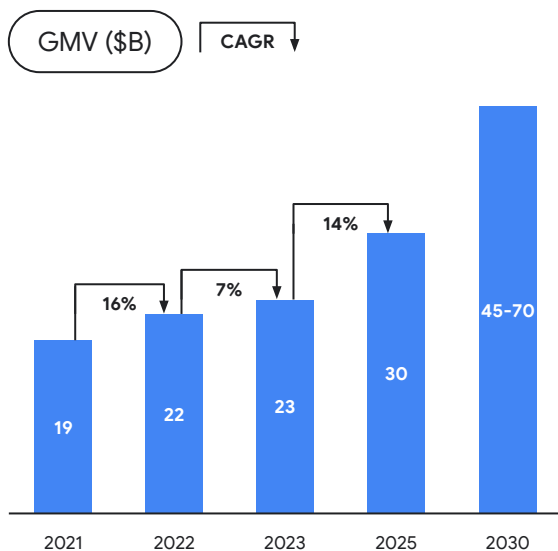
Digital payments continues to be a focus area

Cash is no longer king in Malaysia as QR codes and other forms of digital payments become ubiquitous. The government has supported e-wallet adoption, distributing benefits to lower-income communities through e-wallets. Other digital financial services such as lending, insurance, and investment have also seen increased adoption, driven by local and regional pure-play fintechs and financial institutions.

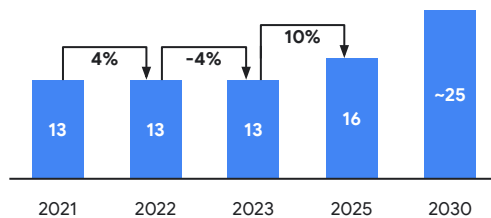


Online travel recovery drives the digital economy to \$23B in 2023, and e-commerce acceleration required to hit ~\$30B by 2025

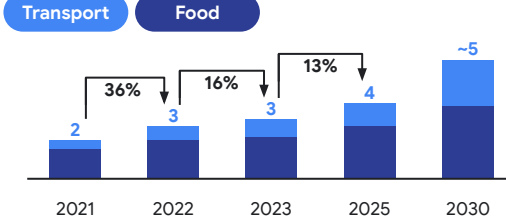
Overall digital economy



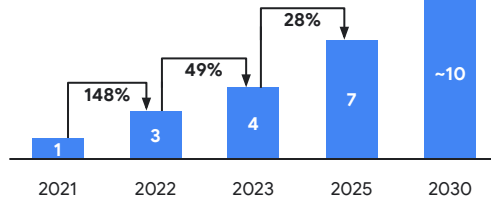
E-commerce



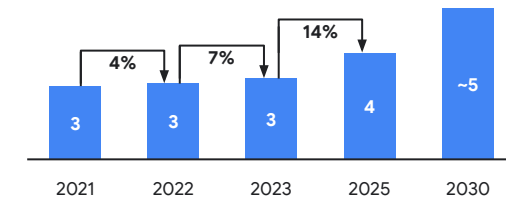
Transport & food



Online travel



Online media



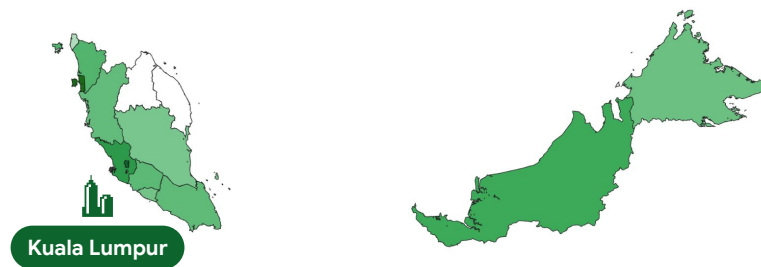


Kuala Lumpur leads in digital participation; gaps widen beyond Selangor

E-commerce: Demand¹

2023 indexed search volume per capita

Low retail demand  High retail demand



E-commerce: Supply²

2023, drop-off points per capita

Low drop-off density  High drop-off density



Notes: (1) Indication of how much e-commerce demand there is, calculated based on the e-commerce-related search volume, indexed to census population per province, indexed at the country level; (2) Indication of the e-commerce fulfillment coverage, calculated based concentration of courier, delivery, freight forwarding, mailing, and shipping services within provinces, indexed at country level.

Source: Google internal data, MY, Jan-Jul 2022 vs Jan-Jul 2023; Province GDP & Population; Google Maps data, MY, as of September 2023; WorldPop & Landscan Population; Bain Analysis

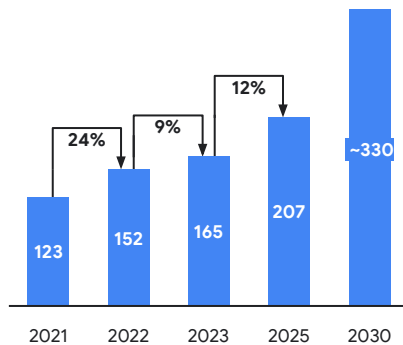
Malaysia



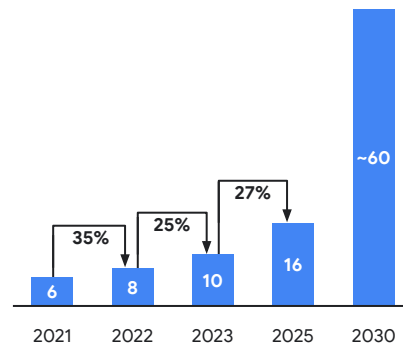
DFS continues its upward trend, largely supported by the government's push for digital payments adoption

CAGR ↓

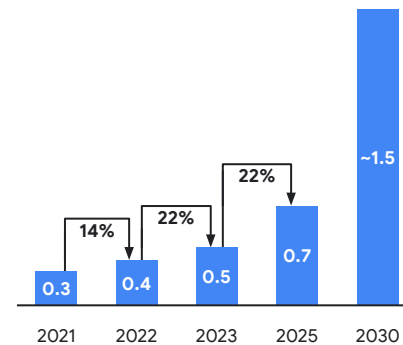
Digital payments

GTV¹ (\$B)

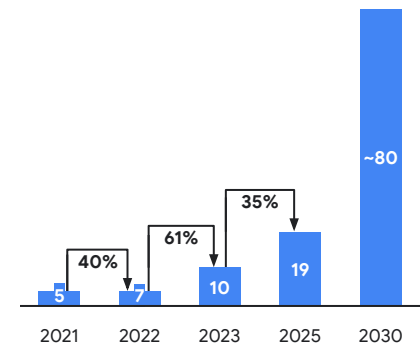
Digital lending

Loan book balance² (\$B)

Digital insurance

APE & GWP³ (\$B)

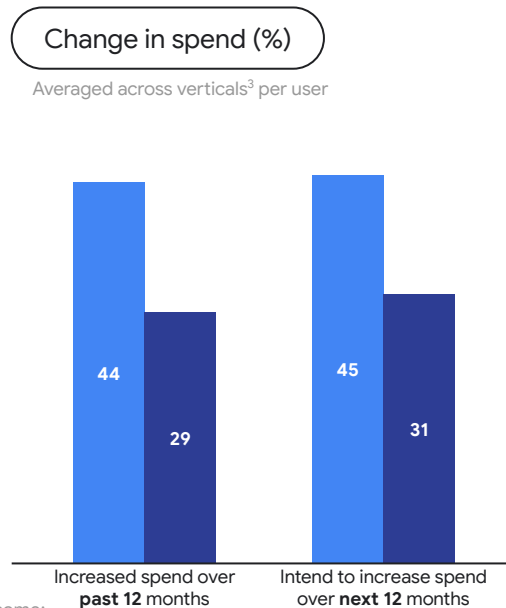
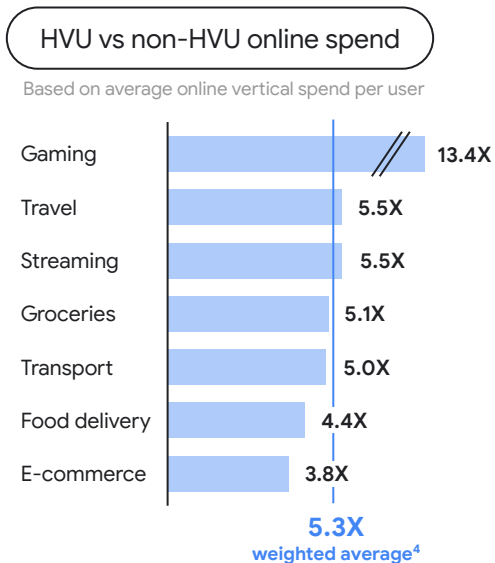
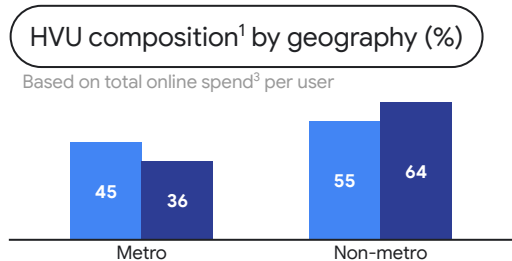
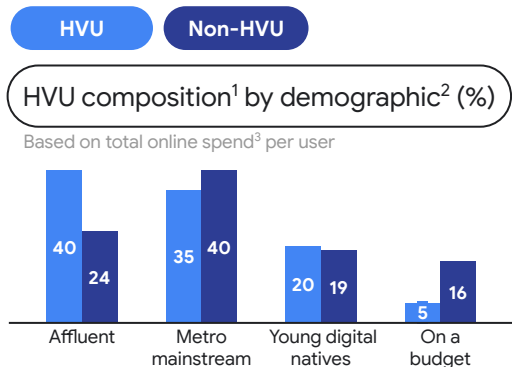
Digital wealth

AUM⁴ (\$B)

Notes: (1) Gross transaction value (GTV) for digital payments includes the value of credit, debit, prepaid card, account-to-account (A2A), and e-wallet transactions; (2) Loan book balance for digital lending includes end-of-year balance for consumer loans (excluding credit card and mortgage) and SME loans; (3) APE & GWP for digital insurance includes APE for life insurance and health under life insurance policies and GWP for non-life insurance; (4) Assets under management (AUM) for digital wealth includes end-of-year mutual fund AUM balance. Source: Bain analysis



HVUs spend 5.3X vs non-HVUs; even distribution of HVU demographics



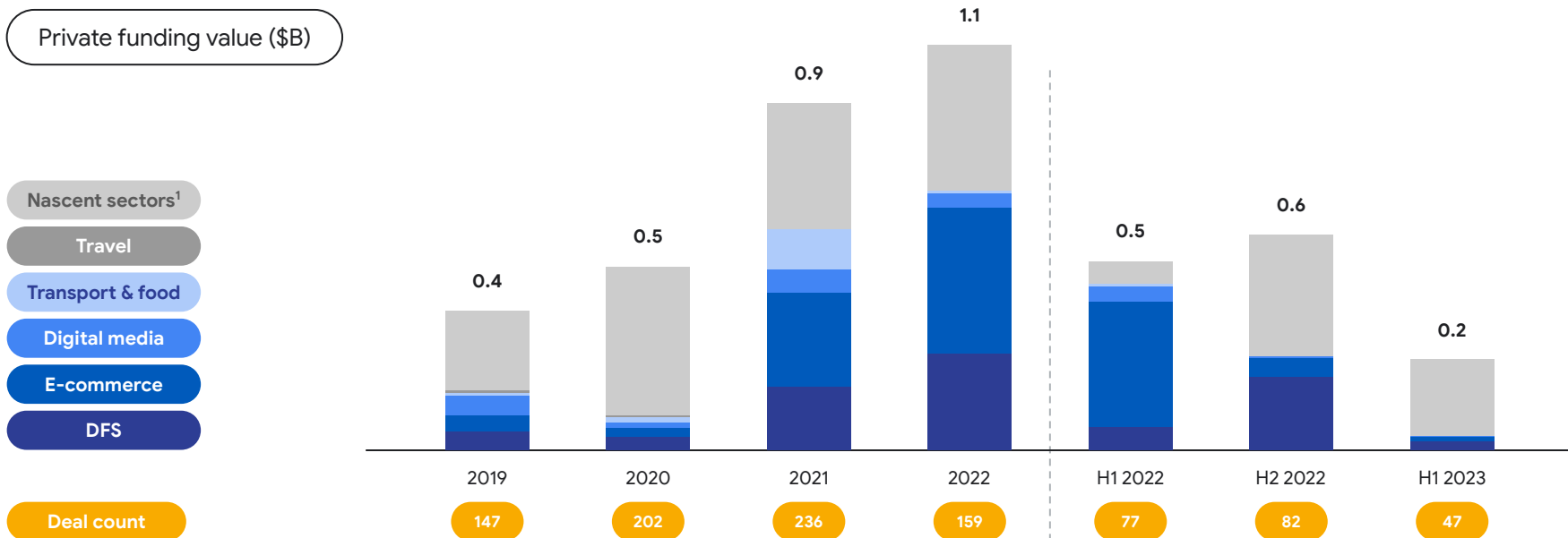
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Source: Google-commissioned Kantar e-Conomy SEA consumer survey, ID, MY, PH, SG, TH, VN, 2023, online survey among 18-64 internet users and digital economy spenders, 10/08/2023 - 01/09/2023 (n=1,300 Malaysia) Question S7, S3, A2, A5, A7: "Which of the following best describes your regular monthly household income situation before tax?" "In what region / area do you live?" "Please estimate how much you think you spend online in an average month across the below digital activities." "Comparing this year to the previous year, how has your spend for the following digital behaviours changed?" "Thinking about the upcoming year, how do you think your spend for the following digital behaviours will change?"

Malaysia



Funding declines across the board, including in previously popular sectors like e-commerce and DFS



Note: (1) Nascent sectors include categories that are still relatively nascent in SEA such as enterprise, healthtech, edtech, deeptech/AI, Web3/crypto, property, automotive, etc.

Source: Bain analysis



Country spotlight: Philippines



Country overview



Healthy expansion set to continue

In addition to rising domestic demand, a recovery in the services sector (including services exports) will drive growth over the medium to long term. Meanwhile, private consumption will see an uptick driven by lower unemployment rate, increased remittances from overseas, and tourism recovery. The country is expected to reach upper-middle income status by 2025, further supporting healthy digital economy growth.

Foreseeable high growth given emerging digital participation

While internet users in the Philippines are amongst the most engaged in the world, digital participation across sectors remains lower. This signals sizable headroom for digital economic growth over the medium to long term as incomes grow. E-commerce is also expected to benefit from the shift of informal, unorganised commerce to organised e-commerce platforms.

Infrastructure investment to fuel transport growth in outer cities

Both domestic and regional transport providers are expanding to outer cities to fuel long-term growth. To capture these segments, businesses have started growing their two-wheeler offerings as a more affordable alternative. Sustained infrastructure investments are expected to support this by making transport more efficient and accessible in these regions.

E-wallet and account-to-account (A2A) nab the largest share of growth

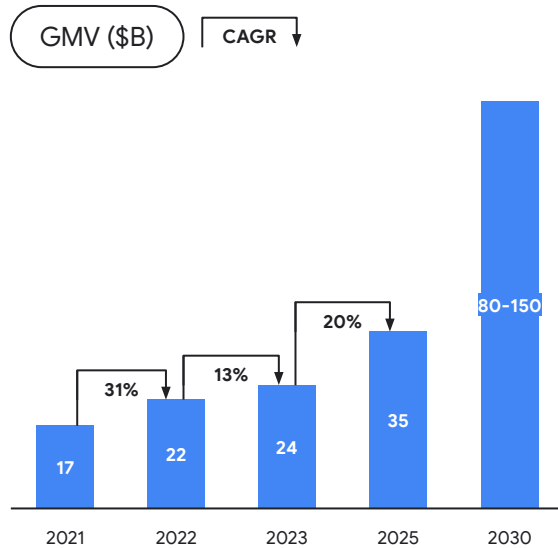
As digital payments gain traction, e-wallet and A2A payment rails will see the fastest growth due to lower costs to merchants. Informal A2A payments, in particular, are expected to grow in merchant adoption as they look to sidestep formally registration of business accounts with digital payments providers.

Philippines

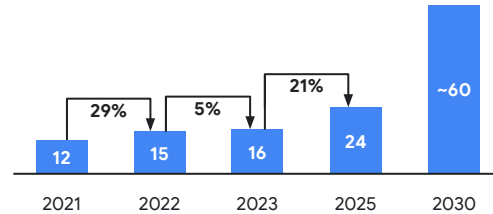


Philippines is expected to continue its double-digit climb towards ~\$35B by 2025, largely fueled by e-commerce

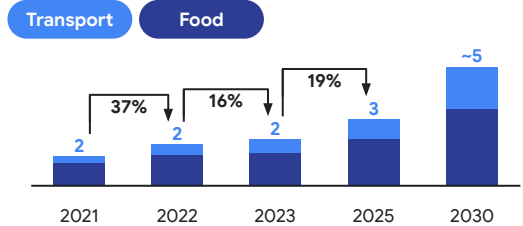
Overall digital economy



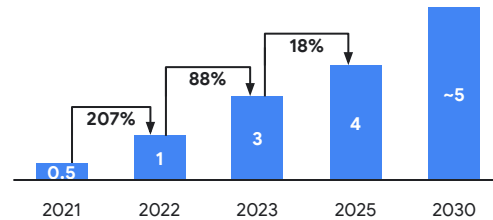
E-commerce



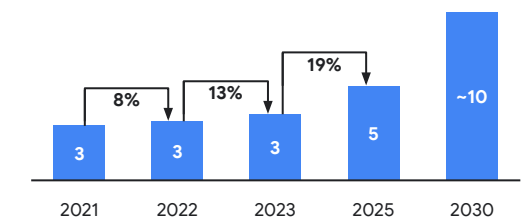
Transport & food



Online travel



Online media





Metro Manila leads in digital participation; gap widens beyond capital

E-commerce: Demand¹

2023 indexed search volume per capita

Low retail demand  High retail demand



E-commerce: Supply²

2023, drop-off points per capita

Low drop-off density  High drop-off density



Notes: (1) Indication of how much e-commerce demand there is, calculated based on the ecommerce related search volume indexed to census population per province, indexed at the country level; (2) Indication of the e-commerce fulfillment coverage, calculated based concentration of courier, delivery, freight forwarding, mailing and shipping services within provinces, indexed at country level.

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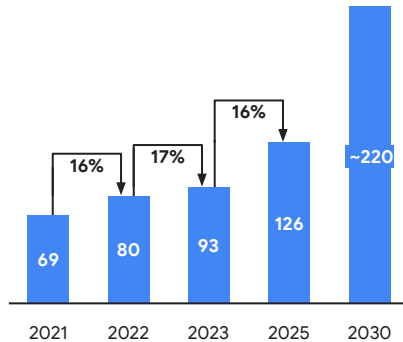


Steep DFS growth projected to continue from a low base

CAGR ↓

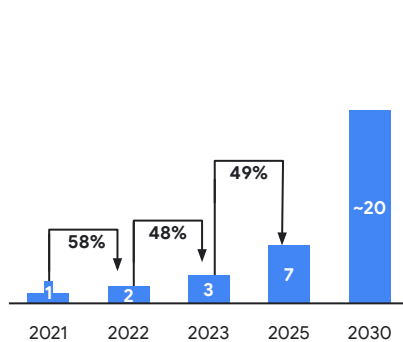
Digital payments

GTV¹ (\$B)



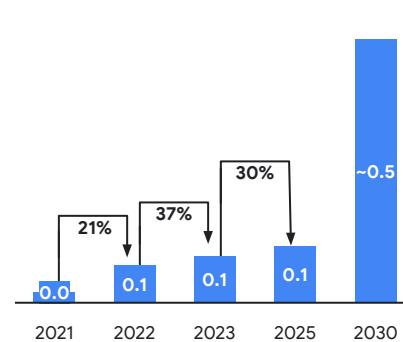
Digital lending

Loan book balance² (\$B)



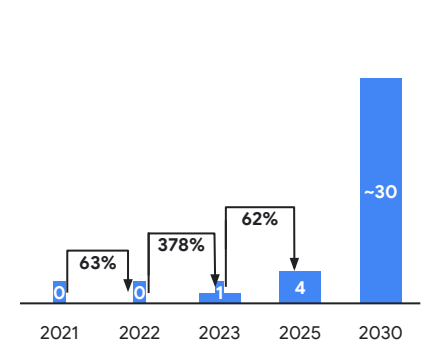
Digital insurance

APE & GWP³ (\$B)



Digital wealth

AUM⁴ (\$B)



Notes: (1) Gross transaction value (GTV) for digital payments includes the value of credit, debit, prepaid card, account-to-account (A2A), and e-wallet transactions; (2) Loan book balance for digital lending includes end-of-year balance for consumer loans (excluding credit card and mortgage) and SME loans; (3) APE & GWP for digital insurance includes APE for life insurance and health under life insurance policies and GWP for non-life insurance; (4) Assets under management (AUM) for digital wealth includes end-of-year mutual fund AUM balance. Source: Bain analysis



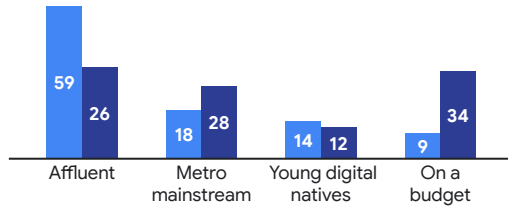
HVUs spend 6.3X vs non-HVUs; transport is a key differentiator

HVU

Non-HVU

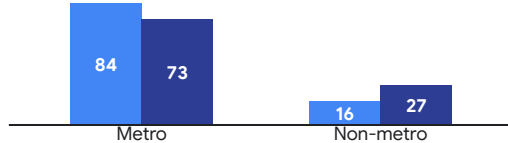
HVU composition¹ by demographic² (%)

Based on total online spend³ per user



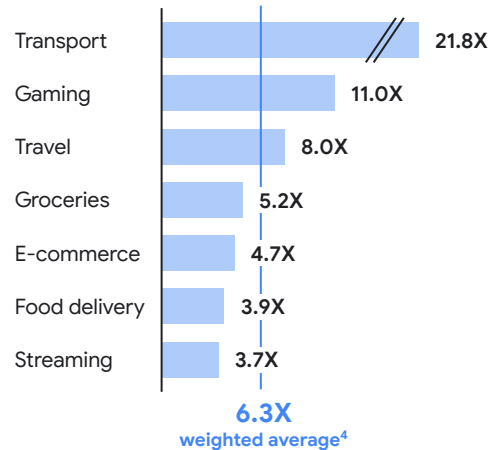
HVU composition¹ by geography (%)

Based on total online spend³ per user



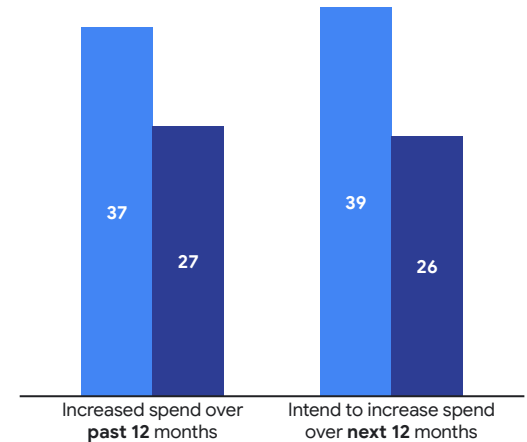
HVU vs non-HVU online spend

Based on average online vertical spend per user



Change in spend (%)

Averaged across verticals³ per user



Notes: HVU = high value users. (1) Average composition across SEA; (2) Affluent = High income; Metro mainstream = Age 30 and above & medium income; Young digital natives = Age 18-29 & medium income; On budget = low income; (3) Excludes digital financial services (DFS). (4) Based on aggregate HVU user spend / aggregate non-HVU user spend, across all 7 categories.

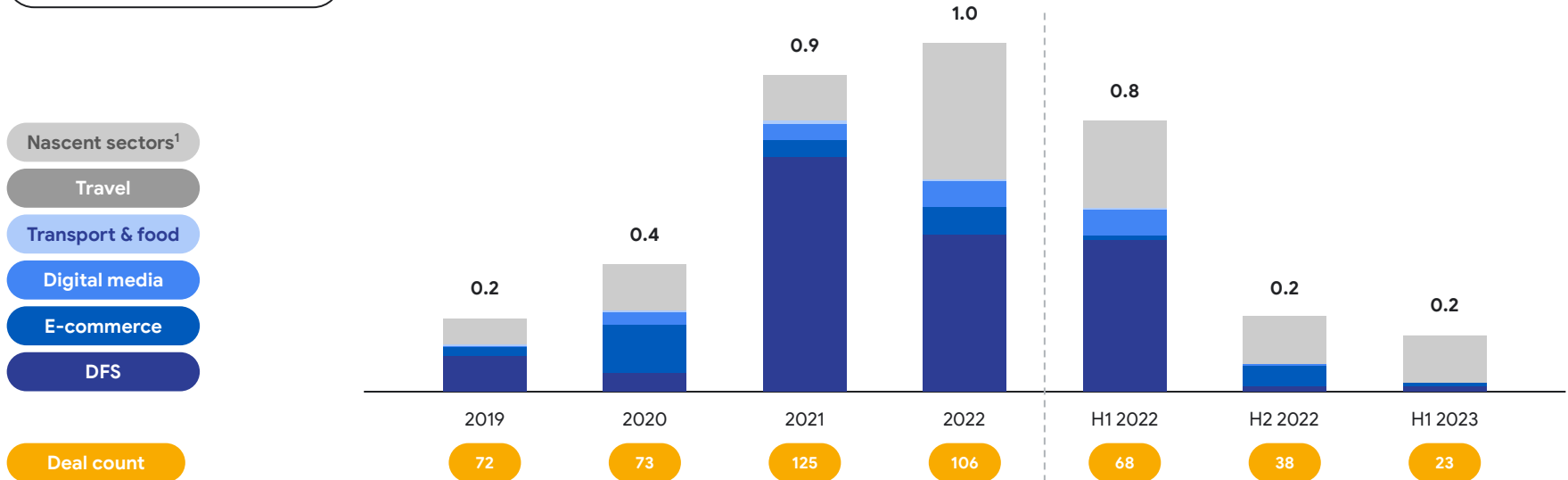
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Philippines



Funding dropped substantially from pandemic highs, including previous heavyweight DFS

Private funding value (\$B)



Note: (1) Nascent sectors include categories that are still relatively nascent in SEA such as enterprise, healthtech, edtech, deeptech/AI, Web3/crypto, property, automotive, etc.

Source: Bain analysis



Country spotlight: Singapore



Country overview

Low but steady growth, with the digital economy in the front seat

Weaker domestic demand and higher costs of living have squeezed discretionary income. Nonetheless, the country has managed to avoid recession, with both the consumer and tourism sectors expected to pick up. In the long term, the ageing population and relatively developed economy is expected to maintain course. The digital economy will continue to drive a growth premium versus GDP.

High penetration across digital economy sectors

Singapore is home to the highest digital penetration in SEA, across multiple digital economy sectors. Given the country's 100% urban rate, internet saturation, and well-developed physical infrastructure, its consumers boast the highest e-commerce penetration and willingness to spend on other digital services, including online media.

Reaffirming status as a regional hub with international travel recovery

Singapore's star status as a business and transit hub set the pace for its strong travel recovery. Of all SEA economies, Singapore saw the swiftest bounce back in travel. The country has also established itself as a hub for major concerts, events and business conferences, all which play a key role in attracting tourists into the region.

Room for growth across digital wealth and insurance

Digital payments in Singapore are relatively mature: 90% of consumer payments happen via digital channels. Other financial services, like wealth and insurance, however, remain ripe for growth. The rapid digitalisation of wealth offerings and the increasing availability of embedded insurance products are expected to further fuel growth.

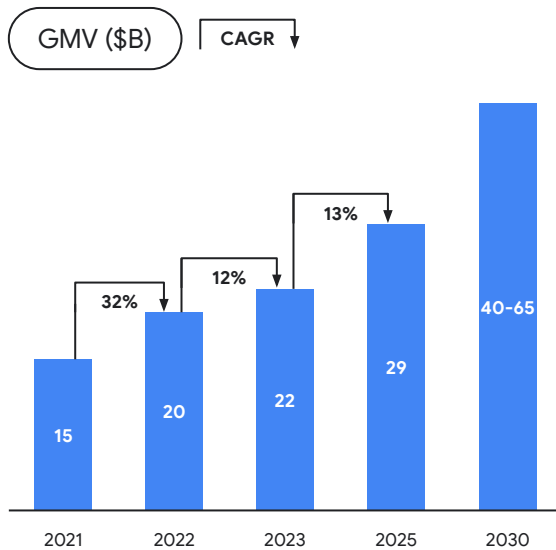


Singapore

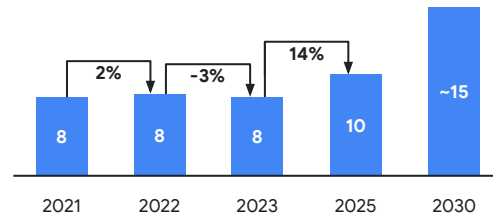


Travel is now the second largest sector in the digital economy, e-commerce acceleration required to hit ~\$30B by 2025

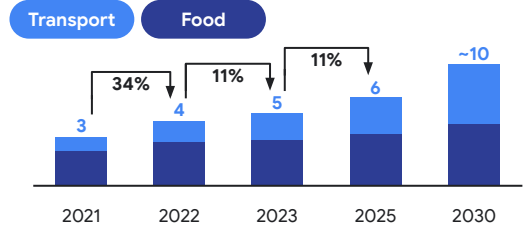
Overall digital economy



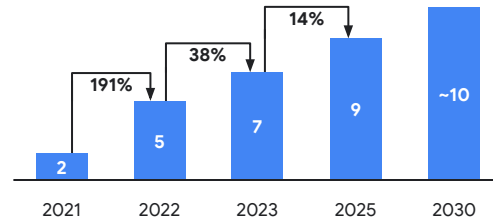
E-commerce



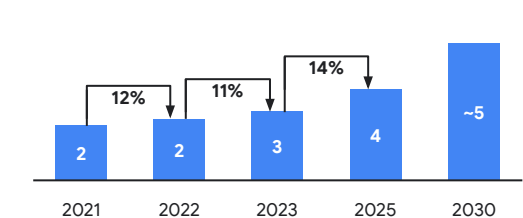
Transport & food



Online travel



Online media



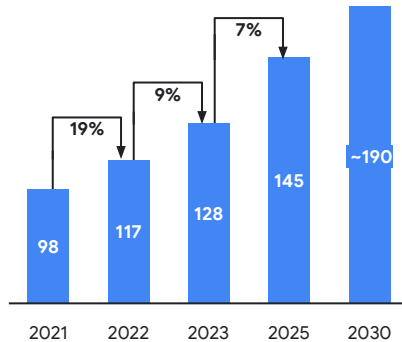
Singapore



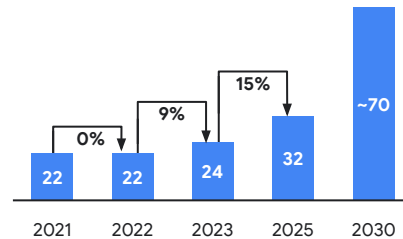
Significant headroom remains as traditional financial institutions continue to grow digital offerings

CAGR ↓

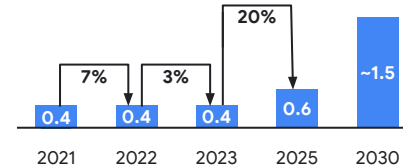
Digital payments

GTV¹ (\$B)

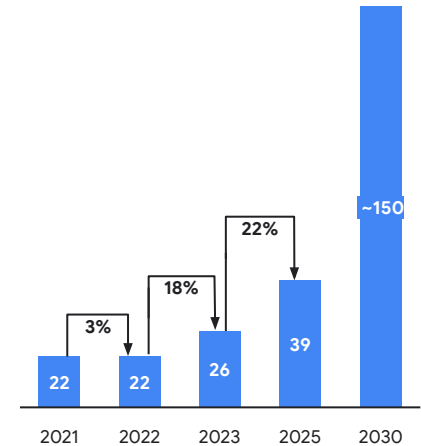
Digital lending

Loan book balance² (\$B)

Digital insurance

APE & GWP³ (\$B)

Digital wealth

AUM⁴ (\$B)

Notes: (1) Gross transaction value (GTV) for digital payments includes the value of credit, debit, prepaid card, account-to-account (A2A), and e-wallet transactions; (2) Loan book balance for digital lending includes end-of-year balance for consumer loans (excluding credit card and mortgage) and SME loans; (3) APE & GWP for digital insurance includes APE for life insurance and health under life insurance policies and GWP for non-life insurance; (4) Assets under management (AUM) for digital wealth includes end-of-year mutual fund AUM balance. Source: Bain analysis

Singapore

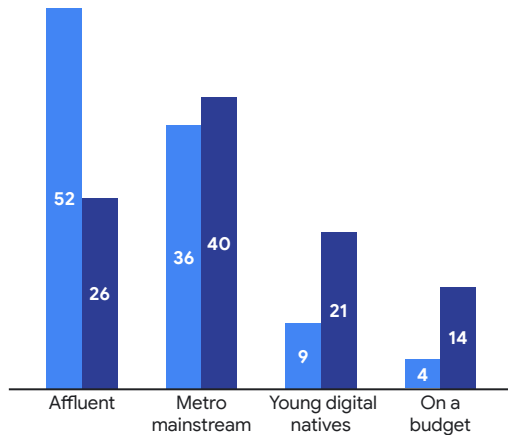


HVUs spend 8.4X vs non-HVUs: the highest multiple in SEA

HVU

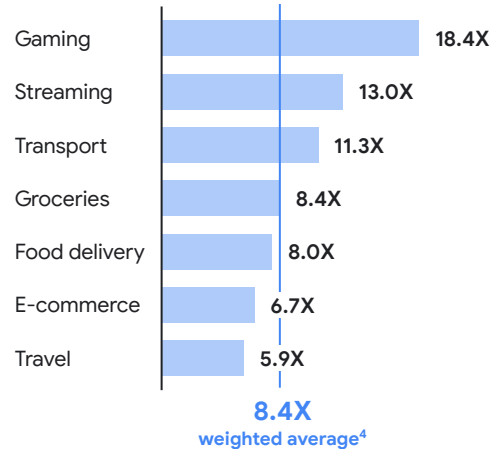
Non-HVU

HVU composition¹ by demographic² (%)

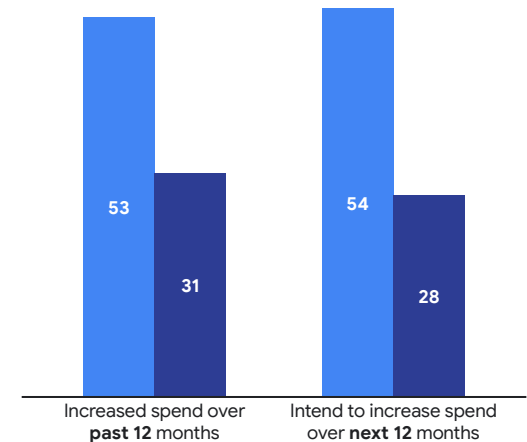
Based on total online spend³ per user

HVU vs non-HVU online spend

Based on average online vertical spend per user



Change in spend (%)

Averaged across verticals³ per user

Notes: HVU = high value users. (1) Average composition across SEA; (2) Affluent = High income; Metro mainstream = Age 30 and above & medium income; Young digital natives = Age 18-29 & medium income; On budget = low income; (3) Excludes digital financial services (DFS). (4) Based on aggregate HVU user spend / aggregate non-HVU user spend, across all 7 categories.

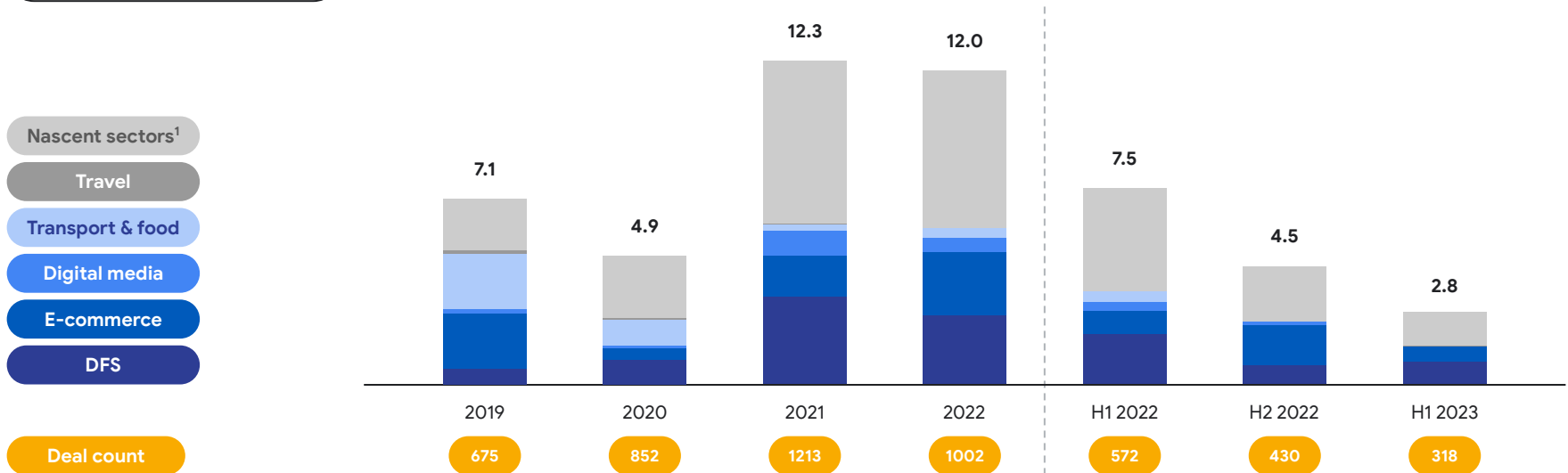
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Singapore



Funding continues a steady decline in 2023, setting the tone for the wider SEA region

Private funding value (\$B)



Note: (1) Nascent sectors include categories that are still relatively nascent in SEA such as enterprise, healthtech, edtech, deeptech/AI, Web3/crypto, property, automotive, etc.

Source: Bain analysis



Country spotlight: Thailand



Thailand

Country overview



Moderate growth driven by economic pick-up

Growth is expected to pick up due to increases in private consumption and the gradual return of international tourism. Exports are contracting slower than expected, with the government projecting a slight rise by the end of 2023. Overall, Thailand's growth will be relatively moderate compared to the rest of SEA, with promising long-term fundamentals.

Slower international tourism recovery hinders economic growth

Inbound travel may have been on the rebound, but at a slower pace than expected. Thailand's heavy reliance on tourism revenues means that the country has been more adversely affected than the rest of the region, especially as arrivals from China remain below pre-pandemic levels. Nevertheless, new government policies, such as visa waivers for Chinese visitors and other initiatives by the Tourism Authority of Thailand, are paving the way to a full recovery by 2024.

Growth in digital infrastructure fuels digital participation

Thailand observed rapid growth in digital infrastructure since the pandemic, benefiting the digital economy at large. It currently has the largest subscription video-on-demand market in SEA. Despite requirements for localised content, Thai consumers are very willing to purchase video- and music-on-demand subscriptions.

Regulators pushing DFS sector towards the underserved

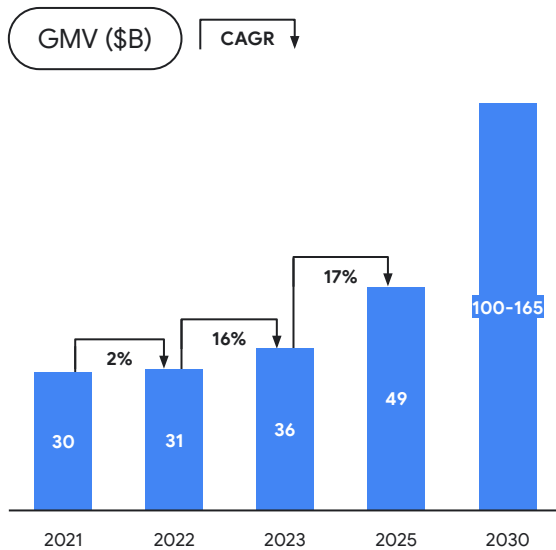
The central bank plans to issue new digital banking licences in 2024 that are designed to provide better customer experiences and increase the reach of financial services across Thailand. The PromptPay A2A system expansion will support this effort, connecting more Thais to financial infrastructure.

Thailand

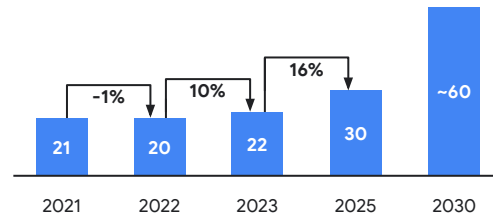


Travel recovery to drive near-term growth, but e-commerce remains the power driver towards a ~\$50B digital economy in 2025

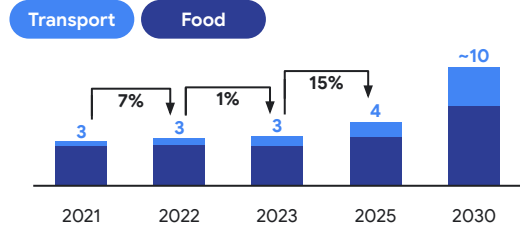
Overall digital economy



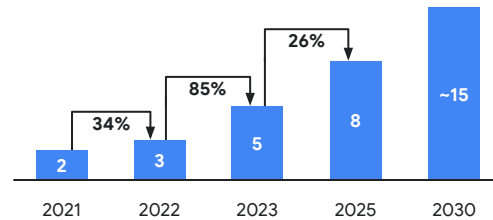
E-commerce



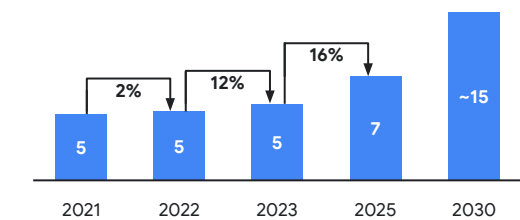
Transport & food



Online travel



Online media



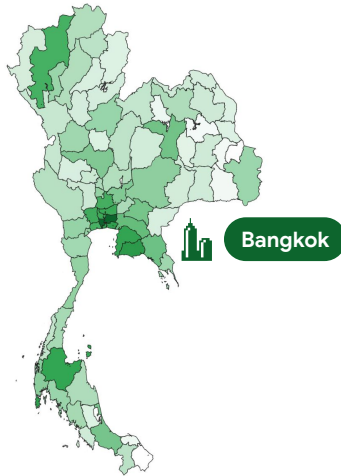


Bangkok leads in digital participation; gaps exist beyond capital

E-commerce: Demand¹

2023 indexed search volume per capita

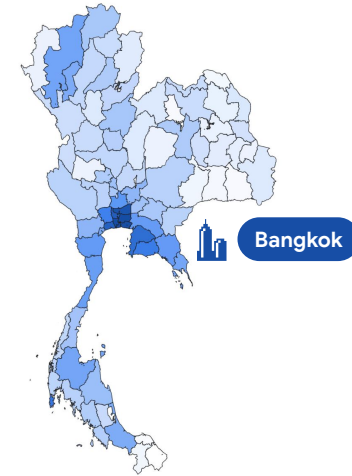
Low retail demand  High retail demand



E-commerce: Supply²

2023 drop-off points per capita

Low drop-off density  High drop-off density



Notes: (1) Indication of how much e-commerce demand there is, calculated based on the ecommerce related search volume, indexed to census population per province, indexed at the country level; (2) Indication of the e-commerce fulfillment coverage, calculated based concentration of courier, delivery, freight forwarding, mailing, and shipping services within provinces, indexed at country level.

Source: Google internal data, TH, Jan-Jul 2022 vs Jan-Jul 2023; Province GDP & Population; Google Maps data, TH, as of September 2023; WorldPop & Landscan Population; Bain Analysis

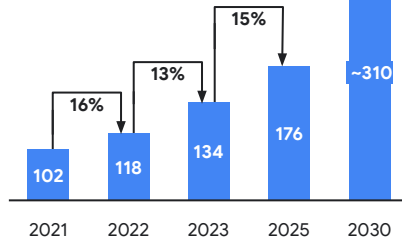
Thailand



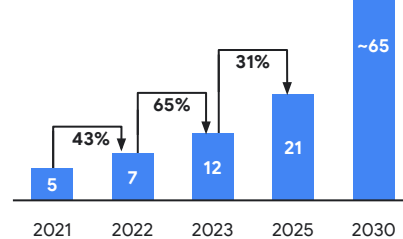
Regulators' focus on underserved will continue to support DFS growth

CAGR ↓

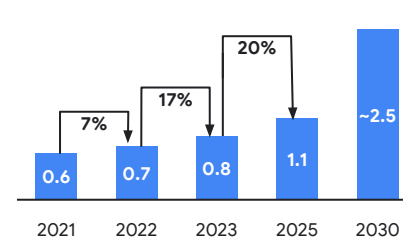
Digital payments

GTV¹ (\$B)

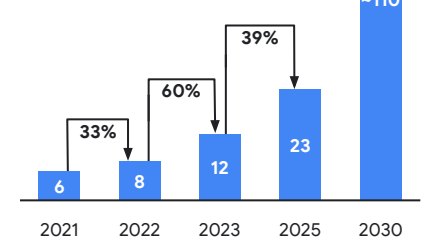
Digital lending

Loan book balance² (\$B)

Digital insurance

APE & GWP³ (\$B)

Digital wealth

AUM⁴ (\$B)

Notes: (1) Gross transaction value (GTV) for digital payments includes the value of credit, debit, prepaid card, account-to-account (A2A), and e-wallet transactions; (2) Loan book balance for digital lending includes end-of-year balance for consumer loans (excluding credit card and mortgage) and SME loans; (3) APE & GWP for digital insurance includes APE for life insurance and health under life insurance policies and GWP for non-life insurance; (4) Assets under management (AUM) for digital wealth includes end-of-year mutual fund AUM balance. Source: Bain analysis



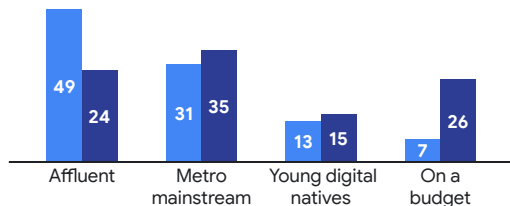
HVUs spend 7X vs non-HVUs; intent to grow spend highest in SEA

HVU

Non-HVU

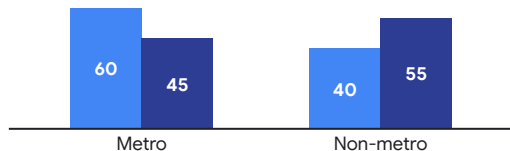
HVU composition¹ by demographic² (%)

Based on total online spend³ per user



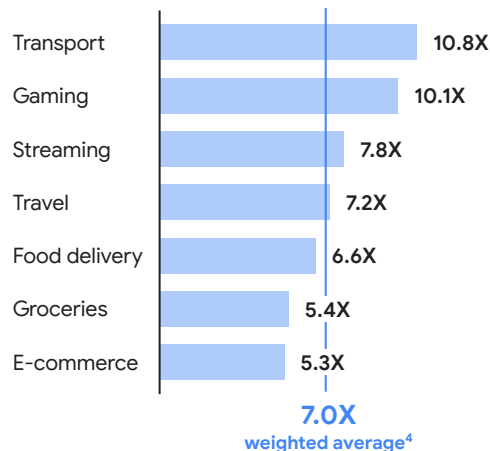
HVU composition¹ by geography (%)

Based on total online spend³ per user



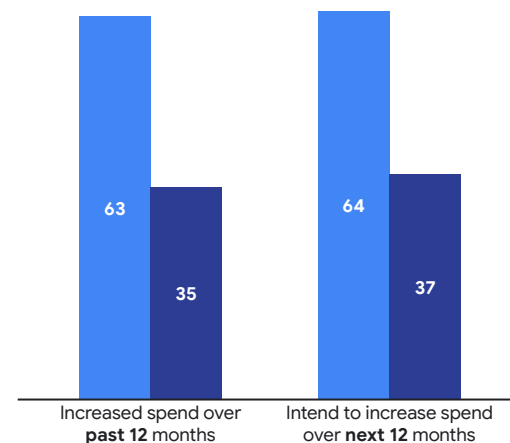
HVU vs non-HVU online spend

Based on average online vertical spend per user



Change in spend (%)

Averaged across verticals³ per user



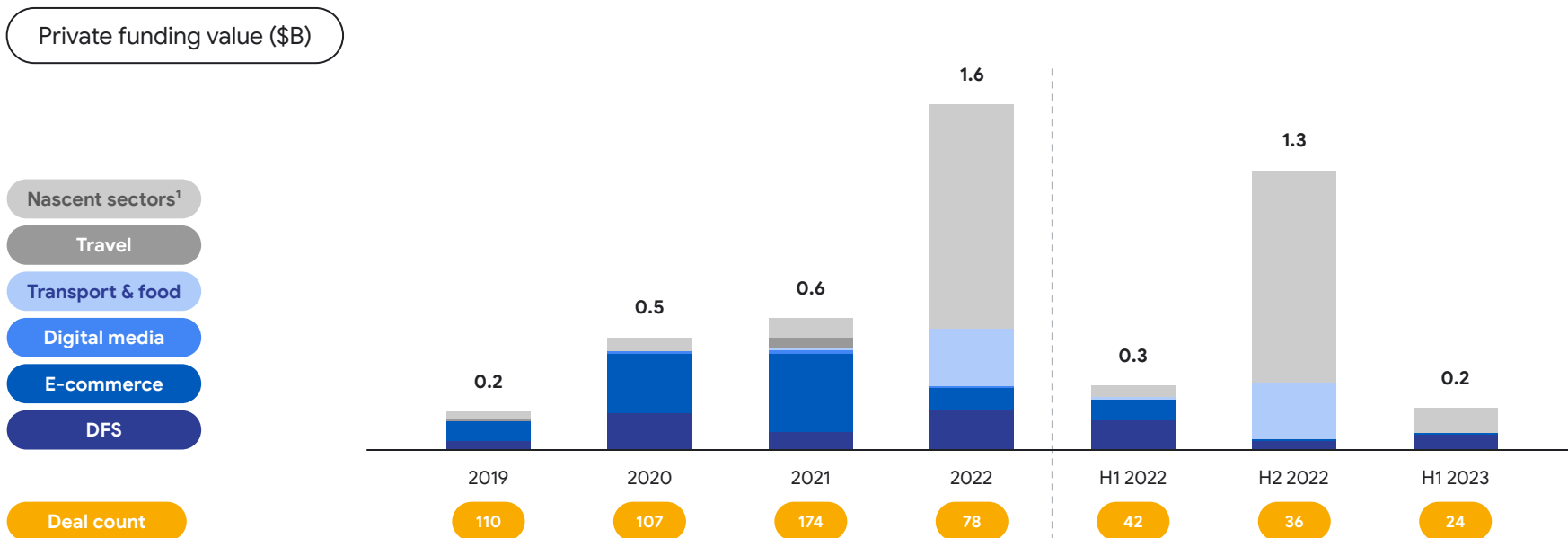
Notes: HVU = high value users. (1) Average composition across SEA; (2) Affluent = High income; Metro mainstream = Age 30 and above & medium income; Young digital natives = Age 18-29 & medium income; On budget = low income; (3) Excludes digital financial services (DFS). (4) Based on aggregate HVU user spend / aggregate non-HVU user spend, across all 7 categories.

Source: Google-commissioned Kantar e-Conomy SEA consumer survey, ID, MY, PH, SG, TH, VN, 2023, online survey among 18-64 internet users and digital economy spenders, 10/08/2023 - 01/09/2023 (n=1,300 Thailand) Question S7, S3, A2, A5, A7: "Which of the following best describes your regular monthly household income situation before tax?" "In what region / area do you live?" "Please estimate how much you think you spend online in an average month across the below digital activities." "Comparing this year to the previous year, how has your spend for the following digital behaviours changed?" "Thinking about the upcoming year, how do you think your spend for the following digital behaviours will change?"

Thailand



Funding returns to more typical levels after a spike in H2 2022



Note: (1) Nascent sectors include categories that are still relatively nascent in SEA such as enterprise, healthtech, edtech, deeptech/AI, Web3/crypto, property, automotive, etc.

Source: Bain analysis



Country spotlight: Vietnam



Country overview

Manufacturing and exports will be key to growth

The weakening of export demand severely moderated growth momentum in H1 2023. While Vietnam will continue playing a significant role as global companies diversify their supply chains, securing public investment to address infrastructure constraints will be key to unlocking growth. Wages and employment will continue to have a cascading impact on the digital economy.

Domestic travel uplifts broader industry

Full recovery in the travel sector is expected this year, driven primarily by sharp growth in domestic travel. The launches of new airlines and an increase in the number of international routes have enabled this uptick, despite the delayed return of Chinese tourists.

Local players propelling growth in digital media

Vietnam's thriving digital media scene is supported by strong local demand and many local players. Gaming, especially mobile gaming, is growing particularly quickly, with some local developers finding international success. Local music-on-demand streaming providers also continue to be prominent, even as piracy poses challenges to subscriptions.

Cashless payments continue to flourish

Digital payment continues to grow in Vietnam driven by strong support from the government, investment from commercial banks, and the widespread popularity of QR codes. This trend is expected to accelerate as the state bank promotes cashless payment services in rural and remote areas.

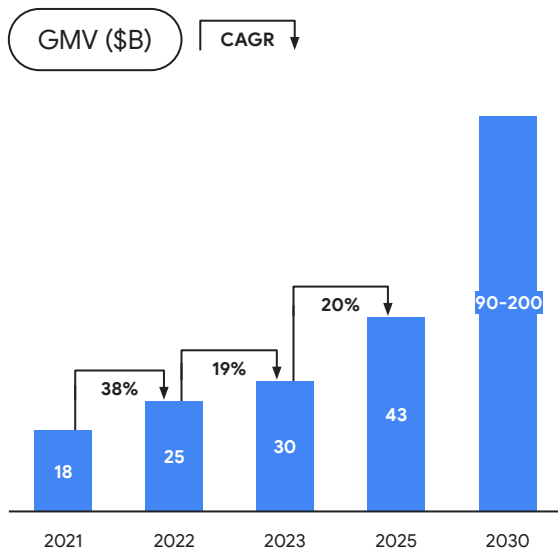


Vietnam

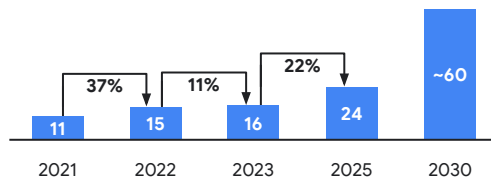


The digital economy is on track to reach ~\$45B by 2025, fueled by strong expectations of economic growth

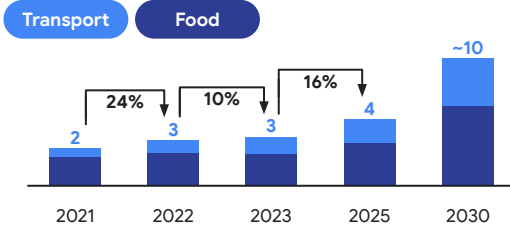
Overall digital economy



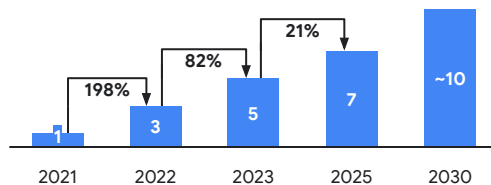
E-commerce



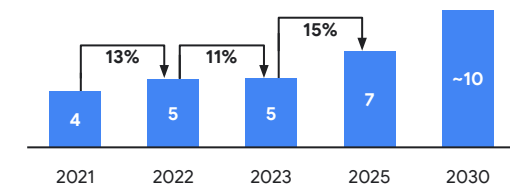
Transport & food



Online travel



Online media



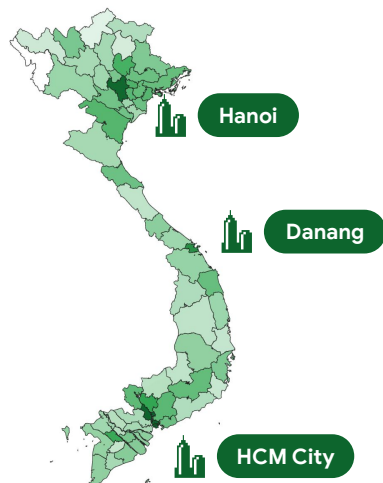


Top 3 metro cities lead in digital participation; gaps widen beyond

E-commerce: Demand¹

2023 indexed search volume per capita

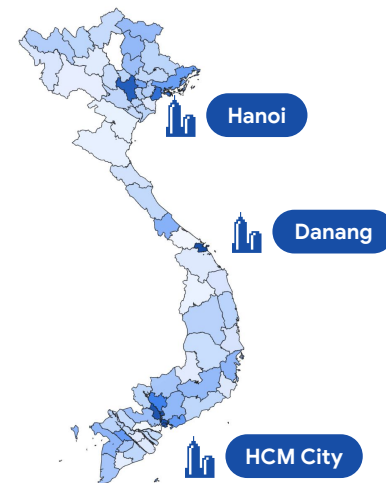
Low retail demand  High retail demand



E-commerce: Supply²

2023, drop-off points per capita

Low drop-off density  High drop-off density



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Source: Google internal data, VN, Jan-Jul 2022 vs Jan-Jul 2023; Province GDP & Population; Google Maps data, VN, as of Sep 2023; WorldPop & Landsat Population; Bain Analysis

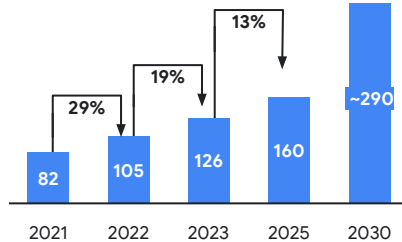
Vietnam



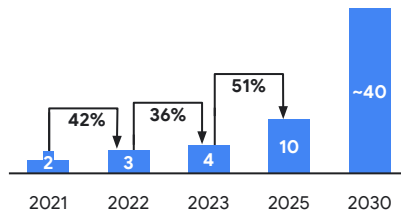
Steep growth in DFS on top of a low base

CAGR ↓

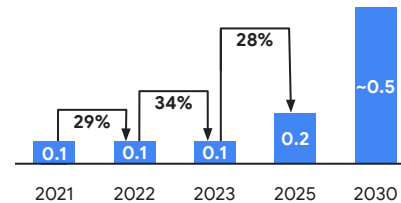
Digital payments

GTV¹ (\$B)

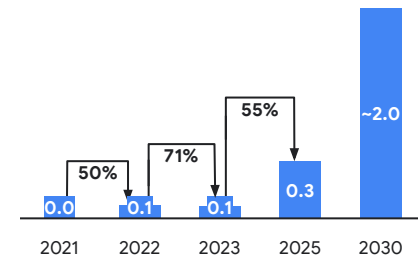
Digital lending

Loan book balance² (\$B)

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APE & GWP³ (\$B)

Digital wealth

AUM⁴ (\$B)

Notes: (1) Gross transaction value (GTV) for digital payments includes the value of credit, debit, prepaid card, account-to-account (A2A), and e-wallet transactions; (2) Loan book balance for digital lending includes end-of-year balance for consumer loans (excluding credit card and mortgage) and SME loans; (3) APE & GWP for digital insurance includes APE for life insurance and health under life insurance policies and GWP for non-life insurance; (4) Assets under management (AUM) for digital wealth includes end-of-year mutual fund AUM balance. Source: Bain analysis



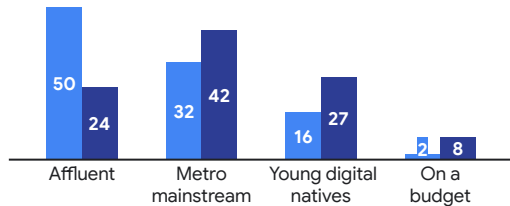
HVUs spend 5.4X vs non-HVUs; most positive change in spending outlook

HVU

Non-HVU

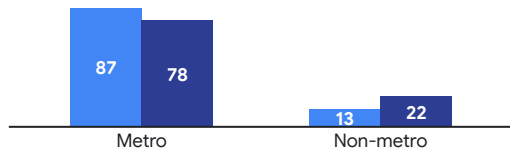
HVU composition¹ by demographic² (%)

Based on total online spend³ per user



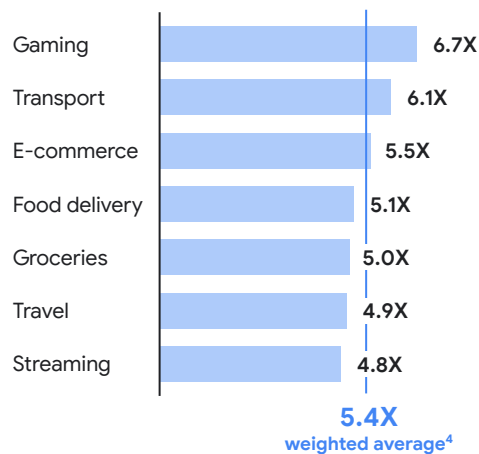
HVU composition¹ by geography (%)

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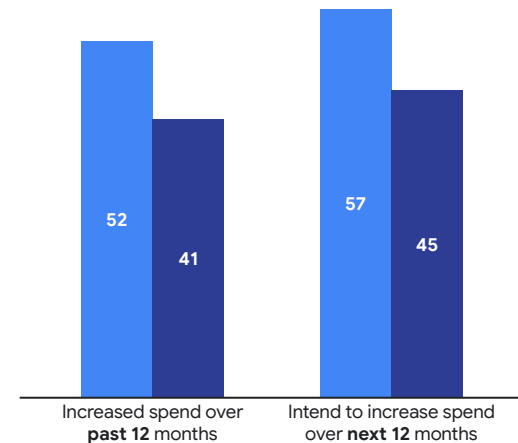
HVU vs non-HVU online spend

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Change in spend (%)

Averaged across verticals³ per user



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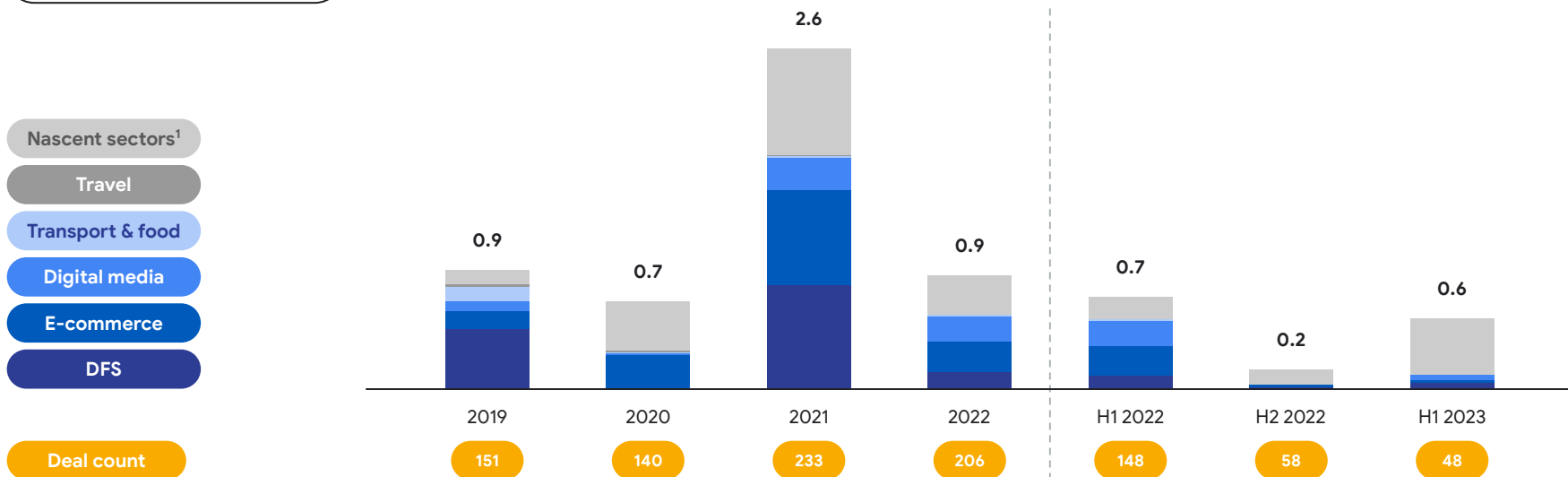
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Vietnam



Slight rise in private funding in H1 2023, driven by activities in the nascent sector

Private funding value (\$B)



Note: (1) Nascent sectors include categories that are still relatively nascent in SEA such as enterprise, healthtech, edtech, deeptech/AI, Web3/crypto, property, automotive, etc.

Source: Bain analysis