

KEY TAKE-AWAYS

- Understanding customer behaviour today How can telco companies in Asia become more agile and adaptive to customer needs?
- Considering financial, energy, healthcare, construction, transportation and other sectors
- What are the opportunities now for connecting, securing and digitally transforming these companies and customers?
- What are the best examples of new technology services already provided by telcos in Asia?
- Examples of reinventing the industry with Telco as a Service or Telco as a Bank
- What can traditional telcos learn from innovative players and other industries that have successfully (re)invented themselves and monetised far beyond their traditional services?
- What are the plans of hyperscale companies to offer services that were traditionally considered to be telco services?
- How is consolidation in the telco industry going to affect all of these considerations in 2022 and beyond?



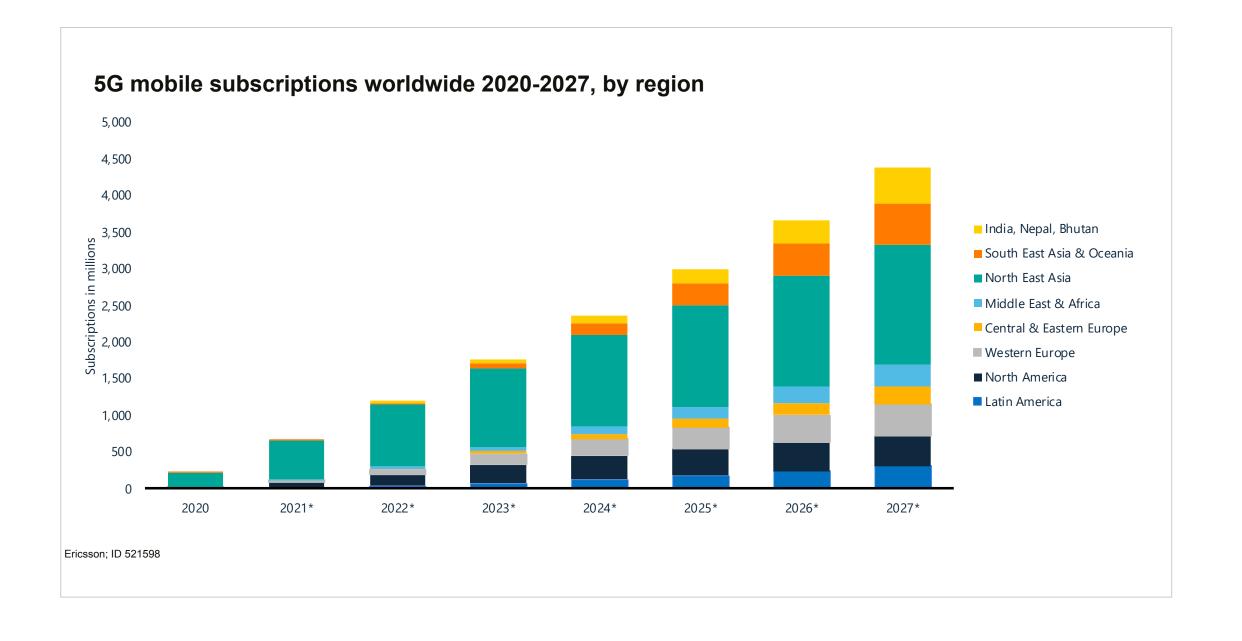
THE CHALLENGE

Market disruption has posed its own set of challenges. The proliferation of various OTT platforms, for example, and the resultant increase in demand for data, have forced telcos to reduce the price of data significantly – directly impacting revenues¹.

Similarly, OTT communications platforms have become ubiquitous, greatly eating into revenues earlier generated from voice and SMS services, which are now barely used in many parts of the world.

The same story has played out across Asia as they have seen a fall in average revenue per user (ARPU).

On the one hand, the number of subscribers is increasing, and data consumption has increased more than a hundredfold in just a decade, but on the other, this is not resulting in corresponding revenue growth.²





DIVERSIFYING BEYOND CONNECTIVITY WITH CONVERGENCE 2.0 IN THE SERVICE STACK

There has been a discernible shift among towards digital entertainment offerings among telcos, with many looking to prioritise the development of business models around digital content, games, home, payments or a mix of these. Given the centrality of the smartphone in our lives, forays are also being made into a range of other services such as health, education, various aspects of productivity, and location-based services including retail and travel.

The provision of digital services opens up several new revenue streams for telcos. And we're talking of possibilities in the consumer market alone in this paper – the possibilities in the enterprise segment are separate and immense.

On the enterprise side, IoT, predictive analytics, and machine learning are creating new business opportunities. For example,

the global IoT market alone is expected to be worth \$1.4 trillion by 2026, up from \$760 million in 2020³. The bulk of this growth will be in the B2B space, but a smaller share will also come from the B2C uptake of IoT services.

Virtual reality applications are becoming mainstream too, implying higher data consumption. In this scenario, telcos can maintain their competitiveness by offering low latency since an immersive experience like VR cannot be interrupted.

Key consumer revenue streams for telcos



The traditional offering

Traditionally, telcos relied on text messaging and voice calls for the bulk of their revenue streams.



Payments

Telcos are partnering with payments and fintech companies, or launching their own payments apps to capitalise on the growing scope of the digital economy.



Enterprise IoT

Telcos can provide a robust network for IoT tools and services that businesses across sectors can leverage as we move towards Industry 4.0.



5G

5G has immense capabilities and provides myriad opportunities for telcos, who stand at the crossroads of capitalising on this growth.





Telcos are partnering with digital content and services apps to sell two or more services as part of bundles. Bundling facilitates consumer acquisition and retention, and data consumption.



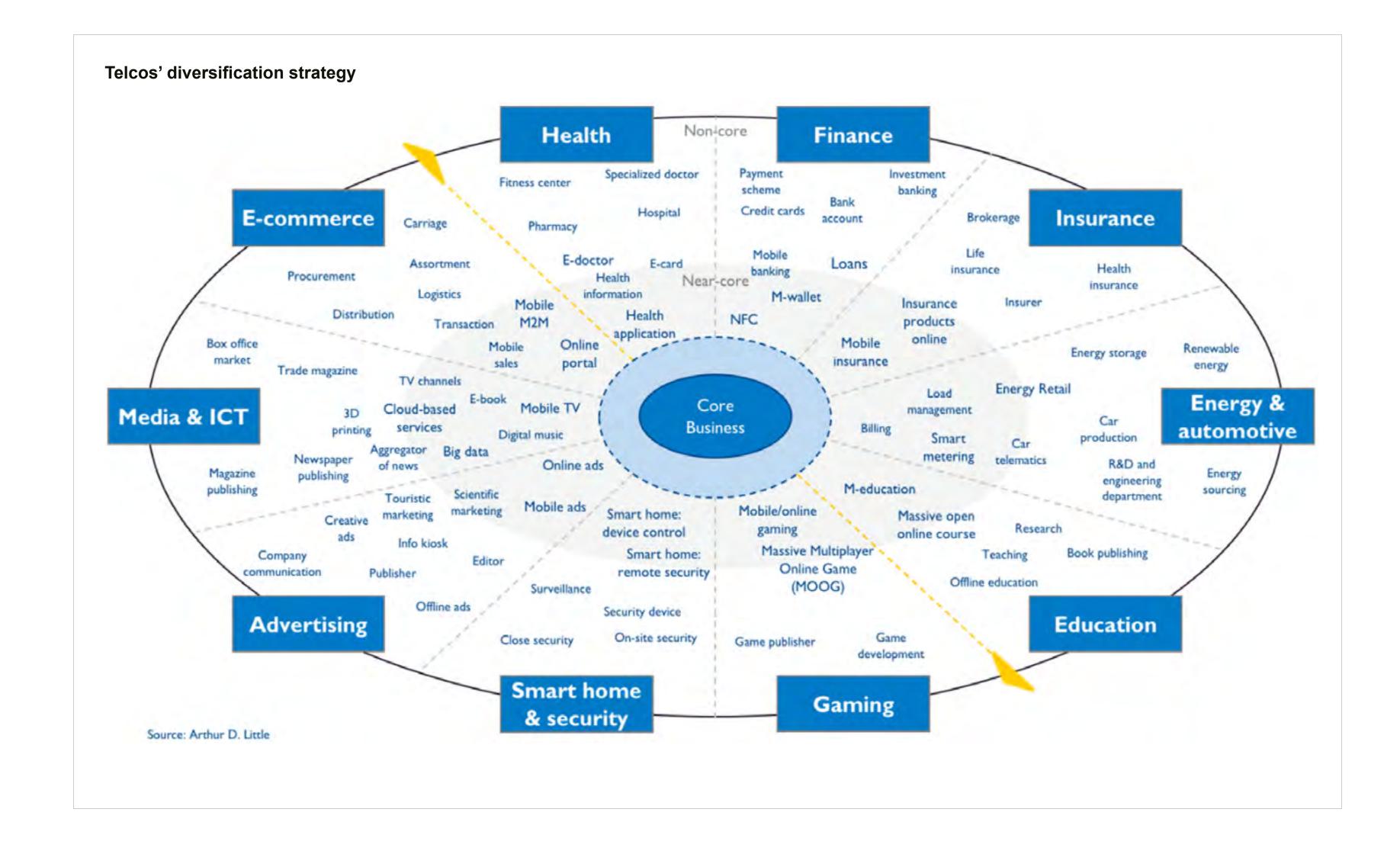
Productivity

Personal productivity, enabled by connectivity, is becoming increasingly popular. This includes apps for productivity, collaboration, etc.

Source: DOCOMO Digital

And similarly, home automation services are proliferating. Some telcos are well-positioned to offer services for energy management, home security and appliance control, and even keep a tab on vital health metrics⁴.

The global home automation market totalled \$39.6 billion in 2016 and is expected to reach \$81.6 billion by 2023⁵.



As 5G networks start rolling out across the world, there is enormous opportunity for telcos to make money with **5G bundling as well as network slicing.** GSMA predicts that network slicing can generate \$300 billion worth of new revenue for telcos by 2025⁶.

Bundling is the offering of a combination of products or services to attract customers. For telcos, it often means adding on another or several services it provides into one package to enhance engagement, prevent customer churn, drive loyalty and generate higher customer lifetime value.

Telcos and OTT platforms share a symbiotic relationship. Telcos facilitate content delivery to the end-user while OTT platforms have the content that fuels data consumption. We see a lot of traction with OTT partnerships especially in the video streaming space.

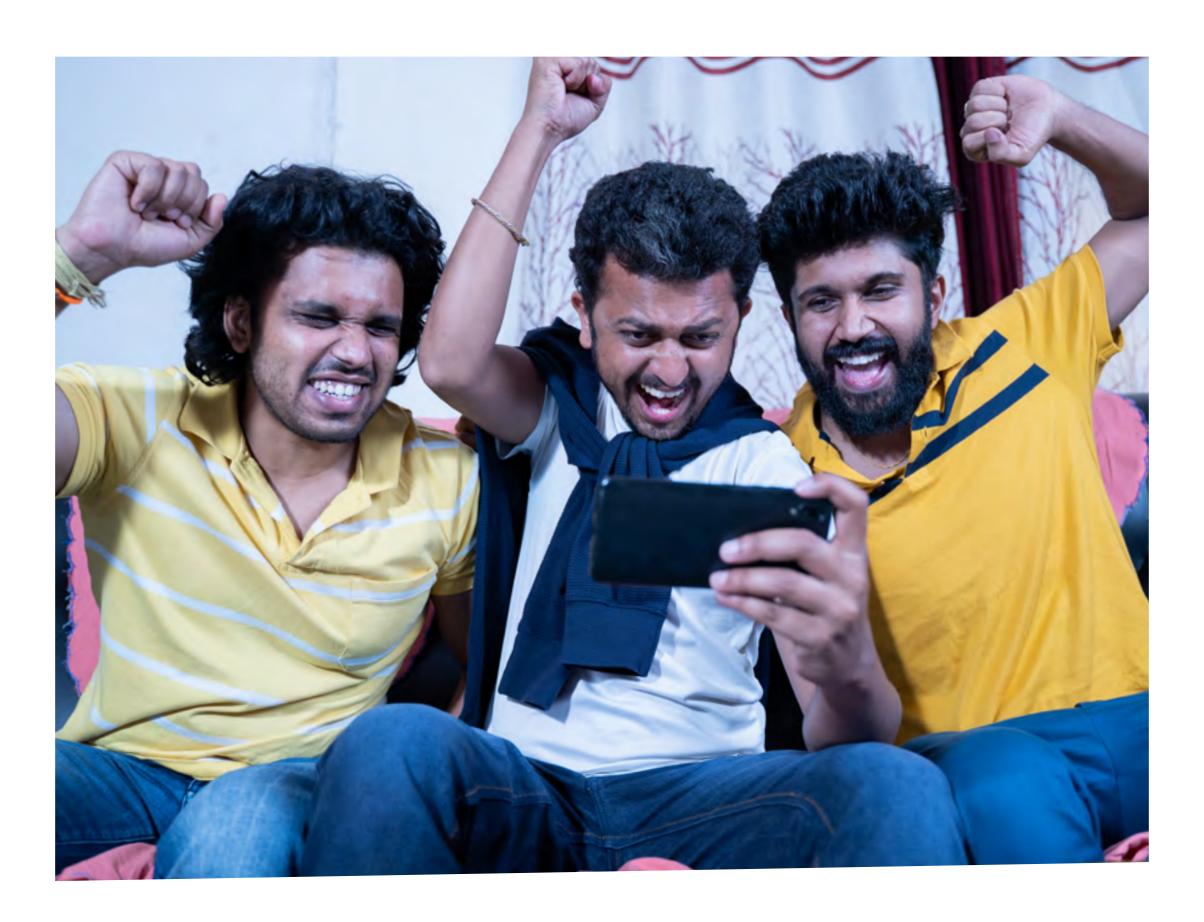
In addition to video and music, cloud gaming and live sports will be the most significant services that bundling will help unlock value in. We will also see increasing partnerships in the ar/vr applications space.



BEST SUCCESS STORIES

NTT DOCOMO and SK Telecom have pioneered the combination of payments (Direct Carrier Billing) and loyalty with dBarai and Moneta respectively. More than 20% of their revenues come from services beyond connectivity. (Telco as a Bank)

Until now, OTT apps launched by telcos were available only to their customers. However, **Airtel India** changed its strategy by allowing non-Airtel users to access the OTT app Airtel XStream for a subscription fee, broadening revenue opportunities⁷.



Airtel Payment Bank, its fintech arm, is already profitable and is likely to reach \$1B in revenues by 2030 with current Gross Transactions Value at \$20B⁸.

Singtel, one of the largest telco companies in Singapore offers the XO Plus plans which provide users with a 5G handset, 150GB data allowance, and a three-month complimentary subscription to its AR educational content on Bookful and VR live music content with MelodyVR.

The Bookful app brings to life stories using AR and 3D animations to enrich the learning experience. Meanwhile, "MelodyVR provides unlimited access to the world's largest library of 360-degree VR concerts⁹."

Many Asian carriers have also created B-branded MVNOs to create a fresh digital-first identity to relate to the younger demographic (Telco as a Service). create a fresh digital-first identity to relate to the younger demographic (Telco as a Service).

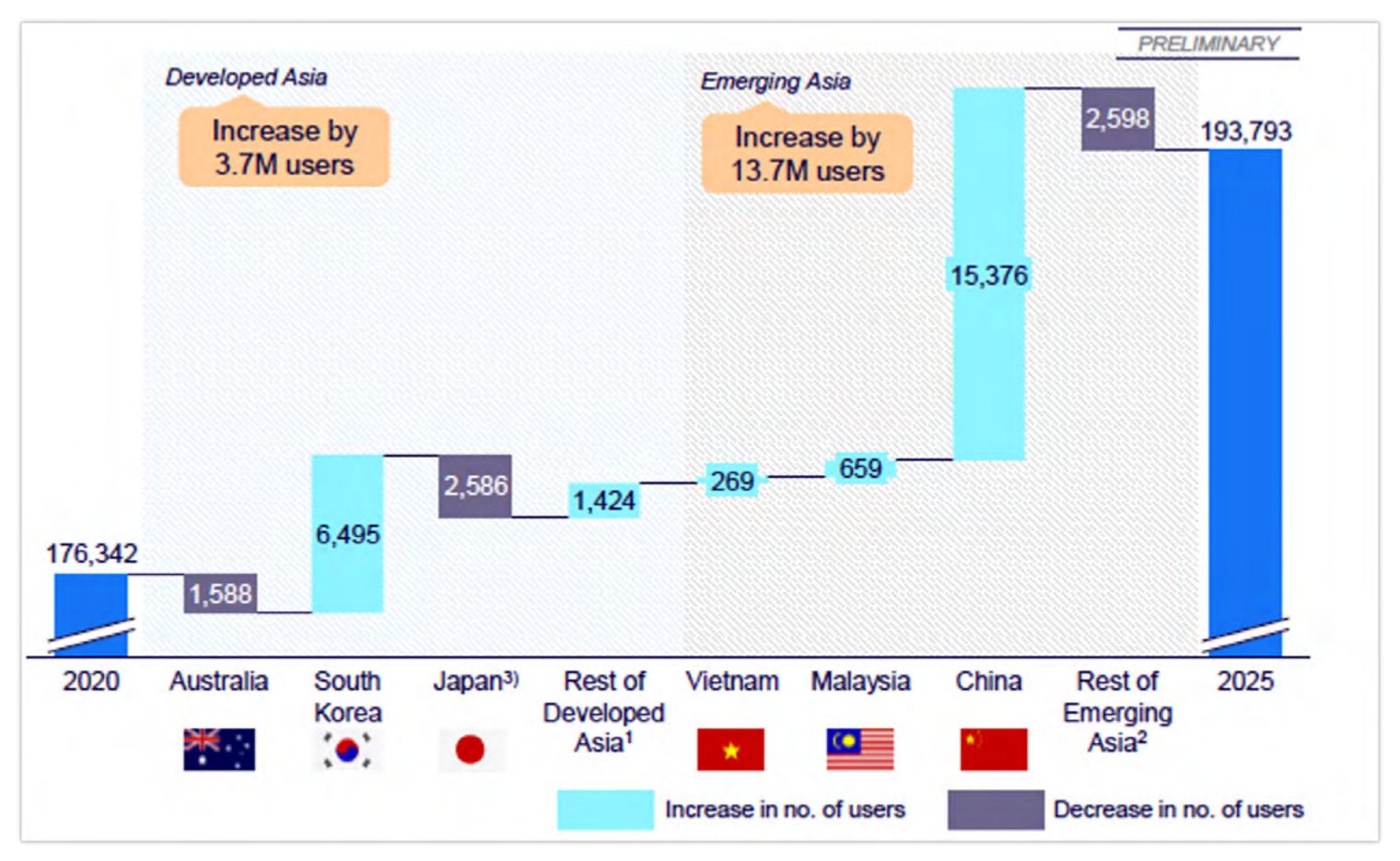
This trend is likely to accelerate especially in markets where the incumbent carrier was owned wholly or in part by the government.

In developed Asia, the number of subscribers will:

- Decrease in Japan as MNOs such as KKDI are launching their own digital telco brands to compete with MVNOS
- Increase in South Korea as ICT has plans to release low cost 5G mobile data plans from MVNOs to increase competition
- Decrease in Australia as more MNOs are establishing their own low price brands

In Emerging Asia, the number of subscribers will:

- Increase in China following the issuance of commercial licenses for MVNOs, which offer more specialized and higher-value services
- Increase in Malaysia as the merger of Digi and Celcom as well as the launch of SWN-based 5G by DNB is likely to boost subscriptions for MVNOs.
- Increase in Vietnam as more MVNOs are established, such as Digilife in April 2022, which is the country's 4th MVNO operator



Source: PRESS RELEASES, ARTHUR D. LITTLE ANALYSIS

Note:

- 1) Rest of Developed Asia refers to New Zealand, Singapore, Hong Kong, Taiwan
- 2) Rest of Emerging Asia refers to Thailand, Myanmar, India, Bangladesh, Indonesia, Maldives, Pakistan, Philippines, Sri Lanka
- 3) Excludes M2M and IoT subscriptions which are growing rapidly and likely to continue

Beyond advanced markets such as Japan and South Korea, most Asian markets continue to be pre-paid.

Thanks to the proliferation of affordable Android and Apple SE smartphones, consumers across Asia are increasingly spending the majority of their time and money on their phones.

Carriers can play a pivotal role in not only providing payment and content services but also in aggregating multiple content subscriptions in direct-to-consumer applications.

Asia is considered to be the growth driver for the digital economy and Asian carriers are increasingly embracing change faster than their counterparts in other emerging markets. The Asian consumer stands to benefit from this innovation.



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- ⁹ Singtel. Singtel unveils next-generation XO Plus plans with 5G access, AR and VR content. Available online at: https://www.singtel.com/about-us/media-centre/news-releases/singtel-unveils-next-generation-xo-plus-plans-with-5g-access-ar-and-vr-content

ABOUT US

DOCOMO Digital is the international payments business of NTT DOCOMO. We partner with carriers, merchants, OTT services, app stores and payment providers in both developed and emerging markets around the world. We solve for the challenges of customer acquisition and retention, regulation, and complexity for our partners with alternative payment methods such as direct carrier billing and digital wallets. With teams based in 15 countries, we enable our partners to grow their digital services revenues while enhancing the customer experience for their users. Our robust managed services platform and coverage across carriers and the most locally relevant payment methods enable faster time-to-market, especially for streaming, gaming, e-commerce, and productivity application providers.

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