



# Investment on network infrastructure in APAC. Economic impact

Google Cloud

# Google's investment in network infrastructure in APAC

- Within APAC, Google is an investor in 6 already deployed subsea cable systems and also purchases two-thirds of its international bandwidth in the region from APAC carriers
- Across a number of countries in the region, Google has deployed:
  - PoP in 15 cities and across 8 economies
  - Google GlobalCache nodes across 278 citiesand leases capacity on domestic fibre networks between these POPs, data centres and cable landing stations
- These connectivity improvements have a remarkable economic impact, both in the telecoms sector and as a 'spill-over' in other sectors of the economy

## Economic impact of Google's network infrastructure in APAC

GOOGLE INVESTED OVER USD2 BILLION IN NETWORK INFRASTRUCTURE ACROSS APAC, WHICH SUPPORTS THE GROWTH OF THE INTERNET

**>\$2bn**

Google's APAC network infrastructure investment

6 submarine cables invested into and deployed  
15 cities across 8 countries with Google PoPs  
~2/3 of bandwidth purchased from telcos  
278 cities where GGC caches are deployed

Google services benefit from the acceleration of supply on international capacity and the increasing diversity of routes

THESE INVESTMENTS IMPROVE THE CONNECTIVITY ECOSYSTEM WHICH BENEFITS CONSUMERS AND BUSINESSES

**2024**

4.6 million internet users

246 Exabytes internet traffic

367Tbit/s in additional capacity

4.1x faster download speeds in countries with strong submarine cable supply vs. rest of APAC

12-49% reduction in end-user latency

74% lower IP transit prices in countries with strong submarine cable supply vs. rest of APAC

3 new use cases supported  
- Video Conference  
- Commerce and Transactions  
- Cloud Services

GOOGLE'S INFRASTRUCTURE INVESTMENT HELPS APAC ECONOMIES REALISE STRONG ECONOMIC BENEFITS FROM INCREASED INTERNET USAGE

Last 10 years (2010-2019)

**1.1m** Jobs  
**\$430bn** in GDP

Next 5 years (2020-2024)

**1.8m** Jobs  
**\$415bn** in GDP

# Google's investment in network infrastructure in APAC

- Google has invested over USD 2 billion in network infrastructure in APAC since 2010, contributing to improved connectivity outcomes, which support 1.1 million additional jobs and USD 430 billion in additional GDP for the region
  - continued networking investments from Google are expected to support 1.8 million additional jobs and drive additional economic benefits of approx USD 415 billion in GDP (real in 2019 USD) over the next five years (2020-24)
- These investments create positive impacts on the connectivity ecosystem across APAC, reducing the price of internet connectivity, reducing internet latency, and increasing the speeds that people can access
  - further, greater capacity leads to improved resilience and reliability, and result in a better experience for users for current and emerging new applications and uses

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# Why investment in network infrastructure is important for cloud adoption

- Google's network infrastructure connect various cloud regions with each other, providing cloud customers with access to resources beyond the cloud region they are based in and enhances the performance and reliability of Google Cloud
- Because of these investments, Google Cloud traffic is less reliant on the public internet and can withstand traffic surges during extraordinary events that are important to cloud customers
- Besides improving the performance of cloud services, Google's network infrastructure investments underpin, at the infrastructure layer, a wide suite of cloud security controls and tools
- GCP customer traffic carried on Google's own network is shielded from internet exposure, making it less likely that it will be attacked, intercepted or manipulated by malicious actors



### The importance of network infrastructure for cloud adoption

**ENTERPRISE DEMAND FOR CLOUD SERVICES IS GROWING RAPIDLY**

APAC cloud spend (USD billion)

CAGR 15%

40 (2019) 81 (2024)

**Laws and regulations** support the development and adoption of cloud services

**Public-sector organisations** are willing and able to make use of cloud services

**Private sector** faces as few barriers as possible to moving to the cloud

**CLOUD ADOPTION SUPPORTS DIGITAL TRANSFORMATION AGENDA, BENEFITS FROM CLOUD**

Higher team productivity ↑	Faster time to market ↑	Enhanced ability to launch new product / services ↑
Enhanced customer engagement and experience ↑	Better security and compliance environment ↑	Lower costs ↓

Source: Boston Consulting Group "Ascent to the Cloud" report

**NETWORK INFRASTRUCTURE IS IMPORTANT FOR CLOUD - IT IMPROVES:**

Network Infrastructure

Reliability and performance    Security

"GCP provides low end-to-end latency, fully managed infrastructure with 99.9% system availability, along with auto-scaling of storage and compute"

**traveloka**  
Country: Indonesia

"GCP processes data in the scale of hundreds of gigabytes to speed up analytics... Delivers network performance 10 times faster between data centres."

**ninjavan**  
Country: Singapore

"We migrated [our] infrastructure to GCP for its reliable subsea cable network and load balancing."

**17 Media**  
Country: Taiwan

# Why a supportive regulatory and investment regime matters

- Regulatory and investment regimes across APAC play a critical role in influencing the supply of subsea cables in each economy
- Economies with strong subsea cable supply typically have conducive regulatory and investment policies
- These strong regulatory systems, supported by transparent and well-enforced laws, provide best practices on how other economies can attract more investments

