

SECURING THE CONTINUITY OF FINANCIAL OPERATIONS WITH SATELLITE BROADBAND

Being the backbone of the global economy, the banking sector is heavily dependent on reliable internet connectivity to ensure financial inclusion.

One of the fundamental characteristics of any modern developed economy is near-universal financial inclusion, where all citizens have access to a formal financial system.

Banking is the backbone of the global economy and, more than ever, it depends on internet connectivity and modern digital solutions. By far, one of the biggest challenges of the banking industry lies in serving the most remote banking branches securely and bringing rural and isolated communities up to speed with urban environments.

Despite the clear need for universal broadband in the finance sector, many areas of the Asia Pacific region have been left behind. Contrary to popular

belief, funding, or the lack thereof, is often not the biggest barrier to financial innovation either. More often than not, the challenge is geographical.

For example, being some of the world's largest archipelagos and consisting of thousands of mountainous islands, the Philippines and Indonesia face major topographical challenges around the rollout of 4G and 5G mobile technologies.

Similarly, fiber optic networks can be prohibitively costly and difficult to deploy in such areas too, and even where they are available, uptime typically falls between 85 and 90%. Moreover, when a monsoon season lasts almost half of the year and threatens serious disruption to services,



it quickly becomes clear why providing dependable broadband in remote areas is easier said than done.

With today's financial operations being so heavily dependent on internet connectivity, satellite broadband promises to bridge the gap by bringing financial inclusion to isolated communities. As a critical enabler of economic growth, improved internet access will allow financial services companies to better serve rural clients and small-island economies so that they too can benefit from digital innovation.

Satellite broadband offers the universal coverage, 99.9% availability, and a readily deployable solution for making that happen. Satellite connectivity also has a proven track record for robust information security – a vital need across the financial sector.

Here is a summary of some of the biggest connectivity challenges the finance sector currently faces:

- Lack of sufficiently fast and reliable connectivity in rural and isolated areas
- The need to monitor the integrity of transactions in areas with poor connectivity
- Overcoming congestion issues in high-demand networks like 4G LTE
- Serving unbanked people who do not have internet connections of their own
- Aligning with constantly evolving regulatory demands and standards
- Rolling out branchless and mobile banking services in remote areas

The importance of reliability in finance sector connectivity

In 2019, Bangko Sentral ng Pilipinas found that [71% of the adult population were unbanked](#). While the gap has narrowed in the past two years, especially in the wake of the pandemic, the lack of universal internet coverage continues to hinder economic growth and innovation in many regions.

Regional governments in the Asia Pacific region are already starting to recognize the need for better connectivity in currently unserved and underserved regions.

In March 2021, President Duterte of the Philippines, [signed an executive order](#) E0127, allowing more entities to provide satellite broadband services to far-flung communities, with the specific goal of boosting financial

inclusion. This is intended to work alongside the rollout of the country's new National Identification system, and it has already seen over 5 million unbanked Filipinos [open transaction accounts with Land Bank](#) alone.

The widespread wealth gap in many countries of the Asia Pacific is partly due to the lack of financial inclusion. Thus, bringing unbanked rural clients into mainstream finance lays the vital foundations for inclusive economic growth and sustained development. However, this can only be achieved with reliable internet connectivity as financial transactions move further into the online space.



The now well-established shift towards online banking is not the only reason why dependable connectivity is so important. Even those who do not use the internet themselves still depend on it indirectly for routine financial operations.

ATM withdrawals and payments through point-of-sale (POS) systems, for example, must communicate through a host computer en route to the bank's nearest data center. This is also possible via dial-up machines, but only in the case of very low-volume transactions. In reality, the delivery of modern financial services requires modern connectivity options. Dial-up, however, is impractical for all but the lowest volumes of transactions.

While the traditional fixed-line telephone networks do provide reliability, their extremely limited bandwidth make them impractical for the vast majority of online operations. Undeniably, the best option is fiber-optic broadband, but it is far

from universally available, and rolling it out to remote rural clients and small island communities remains impractical.

Another alternative, which is typically more widely available in the Asia Pacific region than terrestrial networks, is 4G mobile broadband. This will eventually be superseded by 5G, which is faster and has a better range.

However, the topography of countries like Indonesia and Philippines means that mobile technologies will be unable to ensure universal broadband availability for the foreseeable future. Moreover, even where these services are available, they can be very vulnerable to interference, poor weather conditions, and generally spotty coverage. Given that many financial operations require near total reliability, mobile connectivity typically cannot be relied on exclusively.



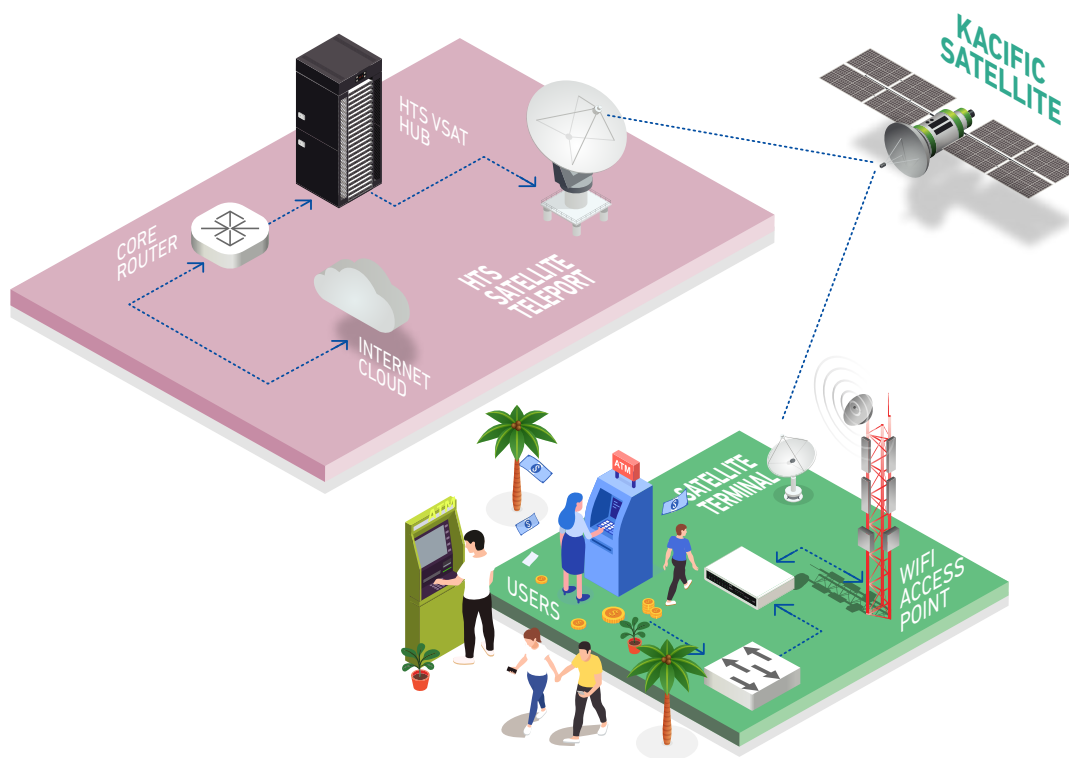
How satellite broadband helps ensure financial continuity

GEO satellite connectivity offers two key advantages to the financial sector.

First, with almost 100% global coverage, it allows financial services companies to reach unbanked citizens even in the most remote communities. Kacific's geostationary satellite, Kacific1, covers

25 countries in Asia Pacific, bringing reliable and high-speed connectivity to even the most remote areas of the Philippines and Indonesia.

Secondly, it helps ensure financial continuity in cases where other options, such as fiber optic or 4G LTE are available, but inconsistently so.



As such, even where other connectivity are available, financial operations should ideally have a backup service in place, such as [Kacific Mobile Backhaul](#), to address outages and overcome congestion on 4G and 5G networks. This will help ensure consistent service delivery, data backup, and the enablement of essential IoT applications.

Digital finance is also booming across Asia Pacific, which presents new challenges and opportunities alike for financial institutions and their clients. For example, the top mobile wallet in the Philippines had [46 million users by June 2021](#) – an increase of 20 million from January 2020.



With fintech startups rapidly redefining the financial landscape in the Philippines and beyond, trust in mainstream finance and digital banking alike is growing rapidly. With that trust, demand is also growing. On the other hand, this also means that isolated communities face a growing possibility of getting left even further behind if they continue to suffer from a lack of reliable connectivity.

Ensuring continuity across the sector is vital for the financial wellbeing of entire communities. Even in cases where it does not serve as the primary connectivity option, satellite broadband is still immensely valuable for the sake of redundancy.

After all, large swathes of Indonesia and the Philippines are prone to natural disasters from earthquakes to tsunamis to volcanic eruptions. Even calmer monsoon seasons can cause enormous disruption to communications by knocking out phone lines and cell towers and damaging fiber-optic infrastructure. But with satellite broadband access, communities can stay connected to essential banking and other services.



To meet these demands, [Kacific Enterprise Backup](#) keeps your business safe from disruptions to regular terrestrial and mobile broadband connectivity. Any financial institution can easily install Kacific's satellite as a hot backup site in the event of fiber cuts or cable downtime, at a small fee.

Acting like an insurance for the primary connectivity, the backup solution ensures that the bank will be fully operational 100% of the time. This is especially crucial for banks where real time transactions occur, and [the rate of network downtime means losses starting from \\$7,900/min.](#)



While absolute 100% reliability can never be expected, ATM withdrawals and POS systems should be available at least 99% of the time, especially during disaster scenarios, where preserving continuity becomes the top priority.

The coverage and reliability of satellite broadband is precisely why it continues to uphold its role in disaster-recovery and business continuity scenarios. All it requires is an intact satellite dish, and banks can continue to deliver vital services to their clients.



Kacific provides dedicated rapid response systems for use in these emergency scenarios.

The [Kacific CommsBox system](#) includes a self-installing and preconfigured VSAT antenna,

solar-powered energy pack, and user access terminals in a sealed container that can be airdropped into remote regions. These solutions can also be used to provide mobile banking services to isolated areas with a van.



In isolated areas, the [Kacific Internet of Things](#) also ensures continuity by enabling dependable broadband connectivity to low-bandwidth embedded systems like ATMs and POS devices. Branchless banking services can also be delivered to these areas with dedicated wholesale satellite broadband bandwidth from Kacific's FlexVNO and Gigstarter services.



Lastly, the particular type of satellite broadband technology used by Kacific, is the most widely adopted in the finance sector - the very small aperture terminal (VSAT). VSAT antennas are small remote terminals that access geostationary or geosynchronous orbital satellites to relay data from between Earth stations to other terminals.

They are designed to transmit narrowband data, with bitrates ranging up to 16Mbit/s. This is ample for routine high-throughput financial operations, such as point-of-sale transactions and ATM withdrawals.

With small and easy-to-install VSAT terminals, Kacific's satellite dishes can be installed almost anywhere with a line of sight to the skies, providing reliable connectivity to allow for secure

financial transactions.

One of the main benefits of VSAT systems is that they can be used in place of large physical networks. Since a ground station, rather than the VSAT antenna itself, handles communication with the satellites, there is less infrastructure needed to service more remote locations.

This means it is cheaper and quicker to deploy, allowing banks to continuously expand the reach of their services for the betterment of rural economies and remote communities. As the basis of economic growth and innovation, bringing satellite broadband to the finance sector presents the potential to bring virtually every region in the world up to speed with digital innovation.

Kacific is a next-generation broadband satellite operator providing coverage throughout the Asia Pacific region. We are committed to providing the latest in universal, high-quality, affordable satellite broadband to the finance sector.

[Contact us](#) today to find out more.

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