

Set up the market to make the most of new cables

The new Coral Sea and Kumul Submarine cable networks promise to deliver cheap, reliable and fast internet to PNG's doorstep. But, PNG needs three critical market reforms if it wants to make the most of its new infrastructure and transform into a self-sustaining digital society.

PNG has much to gain by creating the building blocks for a digital society.

According to World Bank research, improved internet connectivity is expected to generate more than USD 5 billion in GDP growth and 300,000 jobs in the Pacific region by 2040.

Benefits of improved internet connectivity in the Pacific region by 2040



GDP growth
of USD 5bn



300,000 jobs

Source: World Bank

Thanks to the new telecommunication links, PNG can seize an opportunity to create a significant boost to the reach, speed and reliability of its internet. Linking Port Moresby, Honiara and Sydney, the Coral Sea cable network will deliver a minimum of 20 terabytes of data per second. The Kumul Submarine system links that cable with 15 provincial centres along the PNG coast and provides interconnection points with international submarine cables from Indonesia.

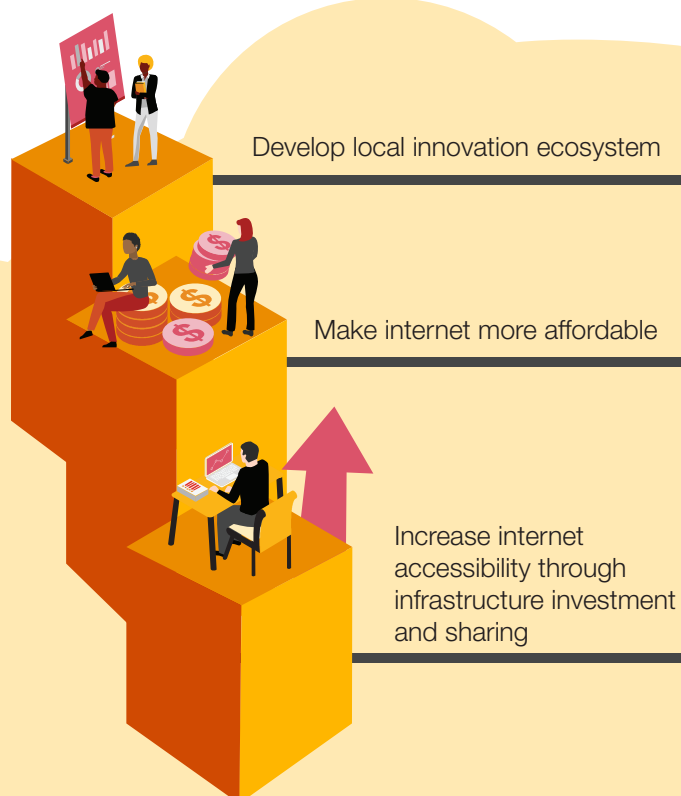
But having fast and dependable internet at PNG's doorstep does not guarantee country-wide adoption of digital technologies and services. To ensure all share the benefits of the country's new connectivity, PNG needs to move its entire society and economy from analogue to digital. This process of 'digitalisation' will require three key market reforms aimed at increasing accessibility, lowering prices and encouraging the development of new and innovative digital solutions locally.

Encourage asset sharing and investment to connect people locally

To connect the new cables with the towns and villages spread across the country, PNG needs a significant amount of additional telecommunications infrastructure. Learning from countries such as New Zealand, India and Myanmar, the Government can consider creating a regulatory framework that encourages and incentivizes private operators to provide additional connecting infrastructure, and to share their infrastructure to reduce capital expenditure and reach more people at lower cost. Such a framework could therefore identify and address market failure of connectivity investment.

Given all the investment made in the cables, the framework could also consider incentives or provisions to ensure operators make use of the links. Without widespread use by the telecommunication industry, it will be difficult for PNG to realise the full value of its new assets.

Market reforms that will enable digitalisation in PNG



Make internet more affordable

Only **11%** of the PNG population have internet connectivity



Source: World Bank

Internet in PNG is still relatively expensive and used by only 11% of the population. By comparison, Myanmar, which has been until recently a similarly underdeveloped country when it comes to communications, has seen digital connectivity skyrocket. Mobile penetration has gone from 5% in 2013 to 100% today, with eight out of ten users now owning a smartphone. This rapid adoption was made possible because the government made ICT a state-level priority and adopted a framework to drive service affordability.

PNG should consider similar initiatives to lower the price of internet services. Mechanisms to encourage operators to use the new cables and to share assets would help put downward competitive pressure on internet prices, as would healthy market competition for reaching the PNG population.

Grow local innovation

PNG should radically boost localised digital innovation. At the moment, the level of home-grown ICT innovation such as coding, development and incubation services is low. Yet without its own innovation ecosystem, PNG will remain reliant on other countries for digital solutions and services. In addition, the solutions that PNG needs are unique and may not be solvable through global products.

For example, in India, local developers created an app for fishers to see different market rates for each species at a glance in real-time. So, every morning they can check to see which market is offering the best price for their catch and make a decision about where to sell. Similarly, the Indonesian app Gojek originated to solve a local problem - helping motorbike taxis (ojeks) find rides. Today, Gojek is a multi-service platform providing digital access to over 20 services relevant to Indonesians. It's debatable whether international app developers would have the localised know-how to solve local problems such as these.

With the right level of encouragement and support, PNG could develop its own digital solutions, grow job opportunities and move down the path towards digitalisation. We are already seeing smart local entrepreneurs launch apps that make it easier to do things such as buy and sell power, sell bilums to a wider market or stream local TV. These are just the tip of the iceberg. There is a myriad of local issues across education, health and SMEs that would benefit from greater digital innovation.

The new Coral Sea and Kumul Submarine cable networks represent a once-in-a-generation opportunity to transform PNG by bringing the benefits of technology to all our citizens and businesses. But we need to make the necessary reforms to turn this opportunity into a reality.

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