

## **How e-commerce can thrive in areas with no power or internet**

### ***Papua New Guinea's central bank trials block-chain technology to boost financial inclusion***

*Port Moresby, Papua New Guinea, June 2018* – In a remote, rural village in Papua New Guinea that has limited infrastructure and Internet, an innovative box has been trialed to give residents access to financial and other services for the first time.

The box, which runs on a small solar panel, creates a unique digital identification for residents, allowing them to make and receive payments on their mobile phones and access a range of services to improve their lives and grow their livelihoods.

“It’s a big constraint for our people, especially in rural areas,” said Loi Martin Bakani, Governor of the central Bank of PNG, of the lack of traditional IDs such as birth certificates.

“Our goal for the people of Papua New Guinea is financial inclusion, not only in terms of having bank accounts but also having access to financial services, which is very important,” he said.

With rugged terrain, limited access to electricity and poor internet connection, PNG faces challenges to achieving its goal. As much as 85 per cent of the eight million-strong population does not have a bank account and only 18 per cent live in urban areas where traditional banks are located. But most people have mobile phones.

Governor Bakani said a range of innovative technological solutions are being explored to increase the population’s access to financial services and ability to do business. Digital IDs can give residents better access to remittance services throughout Papua New Guinea. It can also reduce land ownership disputes, a common issue in PNG, as owners can leave a digital footprint to verify ownership.

The IDBox that has been trialed in Lalaura Village, some six hours drive from the capital, uses residents’ fingerprints and their SIM card numbers that are encrypted to form an ID. The personal information is recorded or stored on blockchain technology. Blockchain allows for the verifiable and permanent storing of information on a globally decentralized database, in a way that is secure from tampering.

The project is also set to be trialed in another area of Papua New Guinea.

“We are undertaking research to carefully consider blockchain as a technology to achieve our objectives of financial inclusion,” Bakani told a recent APEC trade policy dialogue on digital trade in Port Moresby.

“We can leapfrog mature economies with this technology.”

Papua New Guinea’s efforts come as APEC trade ministers have emphasized the importance of continuing to work together to “bridge the digital divide” among member economies, including identifying and addressing new issues and barriers to digital trade in the region.

Ministers also emphasized the need to forge ahead with building capacity, sharing best practices and undertaking other cooperative measures so that citizens of all economies reap the benefits of the digital economy.

“We are committed to promoting cooperation on harnessing the opportunities brought by the internet and digital economy, while working together to bridge the digital divide,” ministers said in a statement after their recent meeting in Port Moresby.

Darren Hanniffy from the Digicel Group, which has erected more than 1,300 communication towers in Papua New Guinea, said given the government’s commitment to innovation, a tremendous opportunity existed to push ahead with developing the digital ecosystem, including digital IDs, mobile financial services and greater connectivity. But Hanniffy, head of shared value at Digicel, said collaboration and cooperation were needed from government, commercial investors and institutional donors for such an ecosystem to succeed.

Governor Bakani said the bank was still investigating whether digital IDs stored on blockchain technology as well as other innovations would be adopted for the whole of Papua New Guinea.

“The journey that we have started has been exciting, frustrating, exhilarating and rewarding also. Our journey is two years old and we have come a long way. We have a lot more to learn, but we also don’t want to be left behind,” he said.