

13. Country Report of Papua New Guinea¹

13.1 Current Status of the ICT Sector of Papua New Guinea

Figure 1. Papua New Guinea



Source: Wikipedia Papua New Guinea

Papua New Guinea is a country culturally rich and diverse with a population of over 8 million people and with over 800 languages and is the largest island nation in the South Pacific with a land mass of 462,840 square kilometres². With its geographic position as the gateway to the Pacific and Asia, it can become a thriving example of fast paced development if undertaken well where critical sectors like Information and Communications Technology (ICT) can be delivered as an economic and social enabler in enriching and empowering national development based on its challenges.

The Information and Communications Technology (ICT) sector has since grown in Papua New Guinea and has made progress over the last decade. The Digicel telecommunications and satellite TV service reach into rural areas has shown the development impact with the use of ICT and Mobile. However ICT continues to remain as one of the many greater challenges in proving its useful and valuable contribution to economic and social development and to overall GDP due to Papua New Guinea's large disconnect areas and rugged terrains that make Telecommunications reach expensive and inaccessible and the required policies to promote ICT and its full adoption as a key change driver for economic and social development.

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² https://en.wikipedia.org/wiki/Papua_New_Guinea

It was only two decades ago that the Internet was introduced to the country around 1993 followed by the rapid uptake of Mobile Telecommunications and Broadband to public which has enabled ICT to reach population both in the urban and rural settings through the use of Mobile phones, internet and applications. It is estimated that 90% of all internet usage is currently conducted over Digital broadband and Mobile networks. Progress in Telecommunications has come primarily from mobile networks, where accessibility has expanded from less than 3% population coverage in 2006 to over 80% by early 2016³. However major challenges still remain in other areas such as collecting real time accurate data and statistics in ICT demographics and its impact on gender particularly women and youth and underrepresented groups due to the ongoing high cost of access, lack of electricity and energy grids in communities and the comprehension, use, accessibility and education of ICT by the general population and by policy and decision makers.

In an unpublished report presented at the recent ICT Stakeholder workshop⁴ in Port Moresby on 27 November 2017 hosted by PNG's telecommunications regulator NICTA and by the Ministry of Communications, Information Technology and Energy sector, policy development for ICT receives under 0.1% consideration in Government budget planning which is way less than Fiji island nation in the Pacific. With this reported minimum focus on ICT by governance, it can contribute to missed opportunities on how ICT can be an empowerment tool and platform for economic and social development for PNG's population which includes women. From the researched unpublished report by the Ministry, recognition and emphasis has been given to ensure ICT is considered and strategized as a cornerstone for development in alignment with the United Nations Sustainable Development goals (SDGs) and the upcoming APEC 2018 agenda on Digital economies as a member country and to achieve the country's Vision 2050.

Whilst policy is being discussed for ICT and APEC dialogue, the interest on knowledge and use of smart technologies and their emergence on the market in Papua New Guinea is also taking place and causing disruption around the awareness, understanding and the acceptance into society. For example Block chain technologies⁵ dialogue has reached PNG shores and its learning may have begun as early as 2015 which has caused uprising queries around use of current banking systems and policies and the impact on domestic and international trade both for formal and informal businesses in PNG. It has also raised queries around security of financial information and Insurance when trading online with Digital currencies and how PNG will be trading using the digital platform.

³ <https://www.prnewswire.com/news-releases/90-of-internet-usage-in-papua-new-guinea-is-conducted-over-digital-broadband--mobile-networks-300543547.html>

⁴ <http://bernardosbagofbeans.com/2017/11/nicta-host-stakeholder-workshop.html>

⁵ <https://bitcoinmagazine.com/articles/central-bank-papua-new-guinea-adopts-blockchain-technology/>

However the primary lacking engagement is the education around these new and upcoming disruptive technologies and level of comprehension by general population including women. It is assumed that the majority of the population are yet to understand what these technologies will bring and how to engage with them in their day to day lives as we know that majority of the population still live in the rural areas and have low literacy rates. We are learning that just across the borders in Australia and New Zealand, PNG's neighbouring countries, technologies like Artificial Intelligence (AIs) are taking over jobs usually done by humans, Driverless cars⁶, Drones technology and Internet of Things (IOTs) are now in operation in homes and cities and these will soon reach PNG shores and the challenge remains as to how smart technologies will impact the lives of PNG population and how policies will shape their use and adoption.

One technology we can also look at is the technology in the rural classroom and learning environments where most students and teachers do not use tools such as Electronic white boards, or general white boards and or interactive tablets and computers to conduct teaching and learning but continue to use Chalk and Duster environments. With new emerging ways of learning both with student and the teacher, we can also see that the conventional classroom and way of learning as changed so much over the decade with the use of technology now available in teaching and learning environments. PNG has yet to move its classroom learning in the Digital Age and to embrace smart technologies and these are some of the challenges in smart technology adoption.

As the world moves to more digitized platforms for economic and social engagements, it is increasingly becoming important for PNG to drive ICT and digital ways as this will have an impact on business, governance and education and how population will engage in social and economic developments.

⁶ <http://www.abc.net.au/news/2017-09-11/driverless-cars-job-losses-hacking-issues-and-ethical-questions/8893384>