

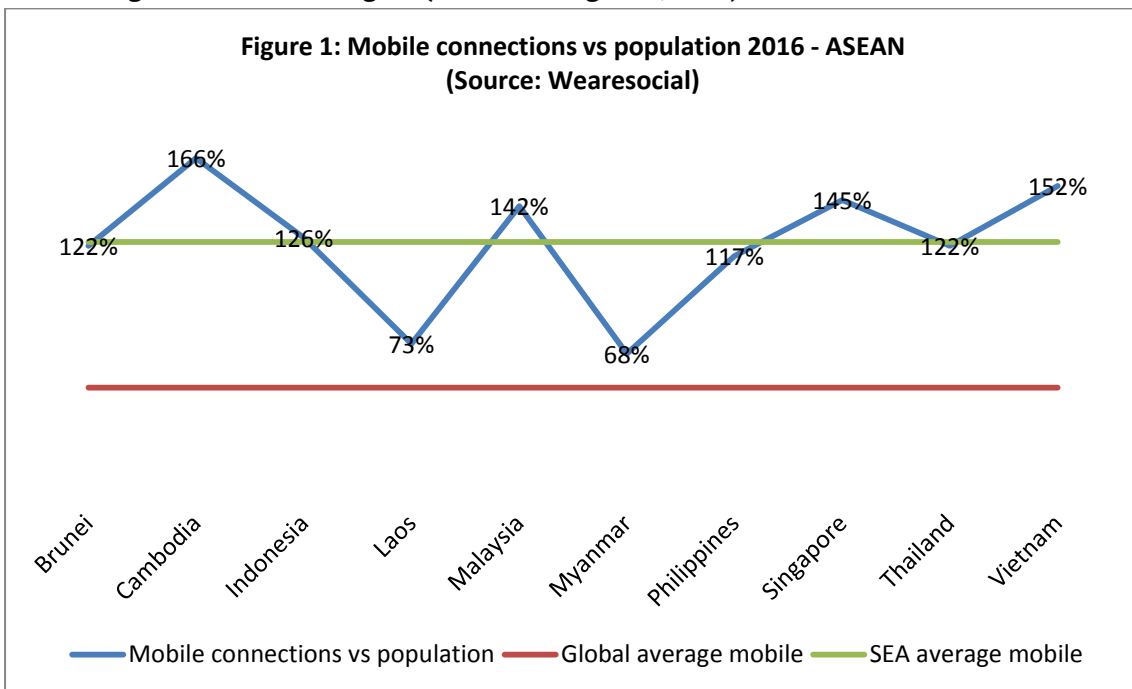


ENCOURAGING MOBILE DEVICES IN ASEAN

ASEAN leaders should create compatible cross-border regulatory frameworks to better facilitate and encourage mobile growth in the region

CURRENT SITUATION AND THE ROLE OF MOBILE IN ASEAN

Mobile penetration in ASEAN reached 124 percent in January 2016 while the number of unique mobile users only account for 51 percent across the rest of the world (Figure 1). Many countries in the region are considered “mobile first” nations such as Indonesia, Malaysia, the Philippines, Thailand and Vietnam (Wearesocial). Smartphone ownership levels in Singapore have reached the highest in the world (Deloitte, 2015) while in Philippines smartphone growth has driven the internet penetration in the country to grow at the highest rate in the region (GSMA Intelligence, 2014).



Mobile development has been contributing to the economy much more than one might imagine. First, several studies have suggested that the growth of mobile adoption and usage in developing countries has played a key role in economic development:

- A 10 percent rise in penetration of 3G networks increases GDP growth per capita by 0.15 percent,
- A 10 percent increase in mobile-phone adoption in developing markets increases long-run productivity by 4.2 percent (Williams, Chris, 2012),
- A one percent increase in mobile penetration rates is associated with 0.5-0.6 percent higher rates of FDI (Zain, 2014).



Second, mobile usage in small and medium businesses (SMEs) creates crucial differences in their performance. BCG has found that SMEs that adopt advanced mobile technologies increase revenue up to two times faster and add jobs up to eight times faster than their peers (BCG, 2015).

Third, innovation supported by mobile applications has also been transforming industries such as health service delivery, money services, mobile education, transportation and e-commerce. For example, the growing popularity of mobiles has inspired the development of mHealth – the practice of medicine and public health supported by mobile devices – which has not only improved the quality of health service but also made healthcare more accessible to rural areas. Smartphones have become increasingly important for e-commerce because more online shopping transactions have been done over smartphones by Asian customers.

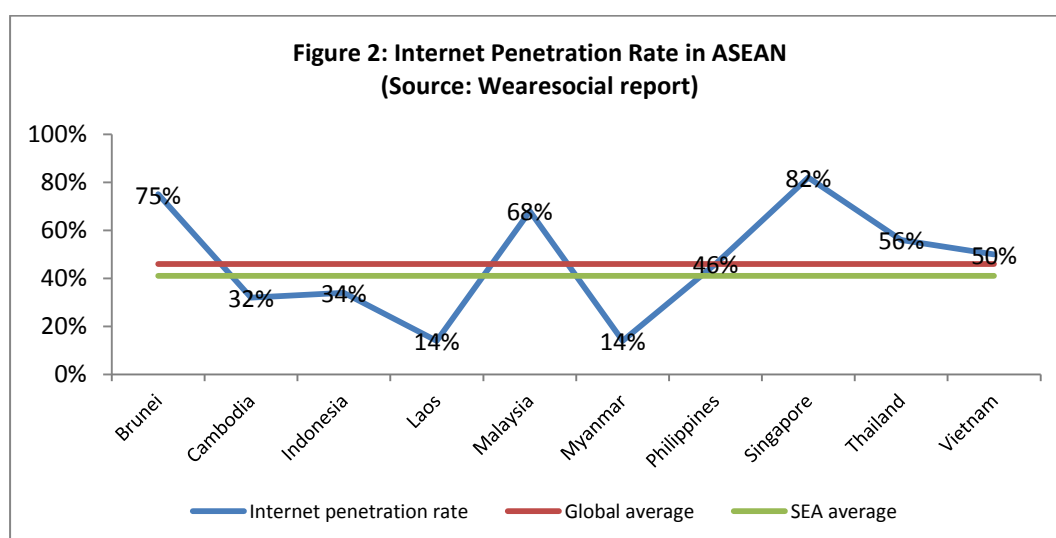
With the strong development pace of mobile and its influential roles in the region, it is crucial for ASEAN countries to recognize and be able to take advantage of mobile growth for their economic development through compatible cross-border regulatory frameworks that can better facilitate and encourage mobile growth in the region.

CHALLENGES AND RECOMMENDATIONS

The Connectivity Gap

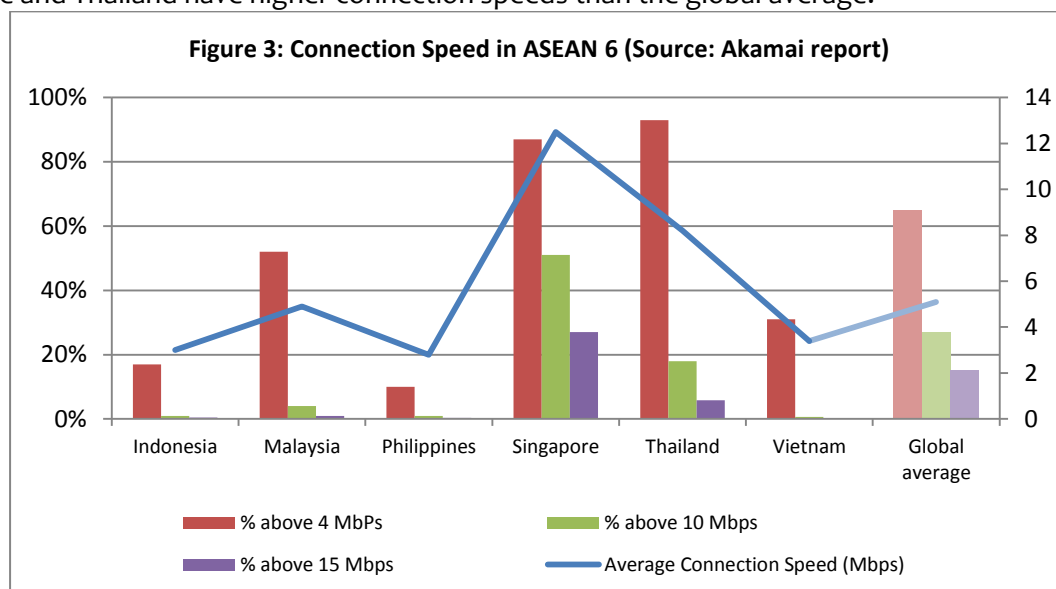
Even though internet and data coverage has rocketed over the past decades, there are significant differences in the availability, affordability and quality of internet and data for mobile users across countries. Deloitte showed that consumers in emerging ASEAN countries were not satisfied with 2G/4G and wanted to continue using 4G/LTE (Deloitte, 2015).

Figure 2 shows that ASEAN countries have substantial gaps in terms of internet penetration rates. Countries like Brunei, Malaysia and Singapore have high internet coverage while the rest only have slightly above average and below average rates. Noticeably, Laos and Myanmar have an extremely low internet penetration rate – only 14 percent.





Regarding internet connection speeds, most ASEAN countries’ performances are below global average. As can be seen in Figure 3, apart from Singapore and Brunei, 70-90 percent of the connections in Philippines, Indonesia and Vietnam have very low speed or below 4 Mb/second (Mbps) while only 50 percent of the connections in Malaysia are above 4 Mbps speed – which is still under global average. Only Singapore and Thailand have higher connection speeds than the global average.



High cost is also a problem in ASEAN. As defined by the Broadband Commission, affordable broadband should be less than five percent of average monthly income.¹ This standard suggests how costly high-quality internet is for people in Cambodia, Indonesia, Philippines and Vietnam (Figure 4).

Figure 4: ASEAN fixed-broadband affordability (Source: ITU Measuring the Information Society 2013)

Country	Global rank
Brunei	45
Cambodia	108
Indonesia	64
Laos	109
Malaysia	30
Myanmar	146
Philippines	78
Singapore	2
Thailand	67
Vietnam	84

There are at least two things policy makers can do to mitigate the existing gap in connectivity across ASEAN countries. First, mobile infrastructure should be improved so that it can accommodate a larger number of mobile users and mobile-related service providers. This can be done by opening access to spectrum and backhaul. Second, “open access” policies in ASEAN countries should focus more on removing barriers to spur mobile usage and attract more mobile network operators. This can be done by reducing or eliminating burdensome taxes on end-users such as airtime taxes or handset taxes and on

¹ Broadband Commission (2015), Broadband Target.

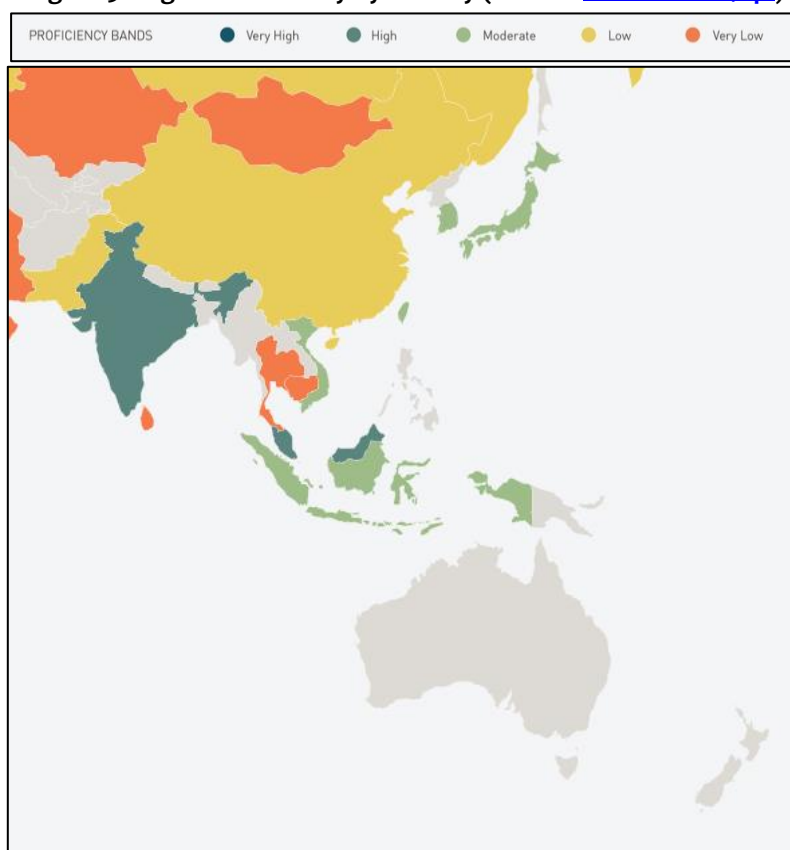


operators such as equipment, devices and services taxes. Definitions for “open access” can be different across countries but they share some common elements such as they refer to wholesale access to network infrastructure or services that is provided effectively on fair and reasonable terms, for which there is some degree of transparency and non-discrimination. (OECD, 2013) These can help to shape a good level of competition in the market.

The Content and Services Gap

Even if the connectivity gap is solved and everyone can get online, this does not guarantee that equivalent benefits will be gained across different countries. This is due to the fact that the content and services mobile users can get access to or can use when they are online differ significantly across countries. First, most of ASEAN countries do not speak English as their first language and their English proficiencies are at different levels (Figure 5). This results in a remarkable difference in how much information two people from two different countries can receive online, since most of online content is in English. Second, different regulations on mobile services also create a gap in how much benefit mobile users can get online.

Figure 5: English Proficiency by country (Source: www.ef.com/epi)



There are at least three things policymakers can do to mitigate this gap. First, governments should encourage more creation of local content and give more support to mobile app development. A study done by OECD shows that growth of local content has a strong correlation with the development of network infrastructures (OECD, 2011). Second, government should also take more initiatives to promote open data so that more online mobile apps and services will be developed and benefit people. Take sakay.ph – the first online map and direction service for Manila – for example. This mobile app would not have been possible if Philippine government had not decided to place students with GPS devices on the



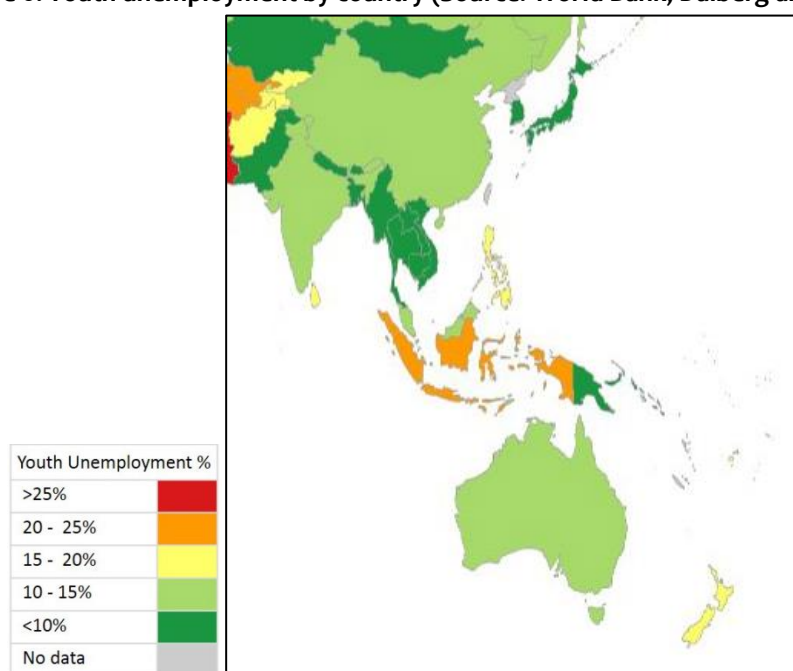
city's jeepneys (most popular means of public transportation in Manila) and release the data. Third, cross-border mobile payments must also be supported in ASEAN countries because of the benefits it can bring to mobile users, startups and SMEs. For mobile users, mobile payment will allow more flexible sell and buy activities because face-to-face or complicated transactions are no longer required. For startups and SMEs, mobile payment will not only help to reduce operating costs for the businesses but also help them become more attractive to international customers.

The Skills Gap

The last existing gap that might prevent ASEAN countries from making full use of the opportunities from mobile-first world is the skills gap.

There are three policy recommendations to improve the skills gap in ASEAN countries. First, policy makers should encourage more businesses to get on mobile. This can be done by making businesses aware of how important it is for them to have their products or services available on mobile devices, how they can make best use of mobile development to boost their businesses and more importantly what these businesses are concerned the most when they consider investing in mobile. Second, with the fast and powerful transformation mobile has made on how people do businesses, it is necessary for policy makers to take a more open-minded approach to new business models. This will benefit the local citizens and the economies. Third, a more long-term approach is to invest in education and reduce skills mismatches. A skill mismatch is one of the main reasons for youth unemployment and varies across ASEAN countries (Figure 6). To address this problem while investing in education, policy makers should think about what they should do to get future generations ready for mobile-first world and internet of things. Importantly, support for education and the growth of mobile technology will provide mutually benefits because advancements in basic literacy can help improve the relevance of local content and services while mobile learning applications can be useful in basic literacy improvement.

Figure 6: Youth unemployment by country (Source: World Bank; Dalberg analysis)





CONCLUSION

The fast development of mobile in the last decade has given huge benefits to most countries all over the world. Even though many opportunities are still out there for ASEAN countries, the gaps between where we are now and where we could reach to remain a challenge. Therefore, policy makers across ASEAN should embrace the mobile-first world to make a leap forward, narrowing the gaps in the region and gaining more economic success.

REFERENCES:

BCG (2015, January 15). The Mobile Revolution: How Mobile Technologies Drive a Trillion-Dollar Impact. Retrieved at: https://www.bcgperspectives.com/content/articles/telecommunications_technology_business_transformation_mobile_revolution/

Deloitte (2015) Mobile multiplies - Global Mobile Consumer Survey - Infographics, Southeast Asia edition.
E-Marketer (2015, September 16). Asia-Pacific Boasts More Than 1 Billion Smartphone Users. Retrieved at: <http://www.emarketer.com/Article/Asia-Pacific-Boasts-More-Than-1-Billion-Smartphone-Users/1012984#sthash.3hvVtKco.dpuf>

GSMA (2015). The Mobile Economy – Asia Pacific 2015. Retrieved at: <https://gsmaintelligence.com/research/?file=fb9efco32061d5066boeda769ad277f&download>

GSMA Intelligence (2014, December). Country Overview: Philippines. Retrieved at: <https://gsmaintelligence.com/research/?file=141201philippines>.

OECD (2013), “Broadband Networks and Open Access”, *OECD Digital Economy Papers*, No. 218, OECD Publishing. Retrieved at: <http://dx.doi.org/10.1787/5k49qgz7crrm-en.pdf&download>

OECD (2011). The Relationship between Local Content, Internet Development and Access Prices: Main Findings and Conclusions. Retrieved at: http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/local_content_study.pdf

Wearesocial (2016, January). 2016 Digital Yearbook.

Williams, Chris (2012, November 20). The impact of mobile on economic growth. A report for the GSM Association, GSMA and Deloitte. Retrieved at: <http://www2.deloitte.com/uk/en/pages/technology-media-and-telecommunications/articles/impact-of-mobile-telephony-on-economic-growth.html#>

Zain (2014, February 24). The SocioEconomic Impact of Mobile Telecommunication in the MENA Region. *Zain’s 30th Anniversary Thought Leadership Report*, 2014. Retrieved at: <http://www.zain.com/en/media-center/press-releases/zain-releases-a-study-on-the-socio-economic-impact-of-mobile-telecommunication-in-the-mena-region/>

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