

Digitization is an economic productivity booster

Emerging economies reap demographic dividends, while advanced ones with aging populations gain staying power.



p-Tools: Productivity methodologies, tools, and techniques



When it comes to boosting national economic productivity, policymakers often look at their demographics with hope. This is relevant to Asian economies, which are home to almost 60% of the world population. That hope is not without basis, because East Asia has successfully reaped demographic dividends since 1960. As populations, especially in Japan, have started to age, however, growth rates have slowed.

Meanwhile, opportunities for other Asian countries remain strong. According to a 2016 UN report, PR China (PRC) and India alone had one billion and 860 million working-age people, respectively, in 2015. Even though the PRC's working-age population is now falling, it will remain high in absolute terms. In coming decades, India's increasing working

age-group will ensure that Asia maintains dominance in terms of workforce numbers. Could this potential demographic advantage be successfully converted into actual dividends?

A key challenge is that several populous Asian countries, including Bangladesh, India, and Pakistan, still have pyramidal socioeconomic structures, meaning that people are poor, illiterate, and largely unemployed. Consequently, those countries do not rank highly on the Human Development Index (HDI), a key indicator of life expectancy, education, and per capita income. Social engineering strategies could help alter those structures to some extent and raise HDI rankings. However, nonhomogenous population compositions mean that the results of those strategies might not be seen until

the window of the demographic dividend has closed, making it highly unlikely that those countries could take full advantage of their demographic potentials.

Digitization as an HDI catalyst

Well-structured digitization programs could help the low-HDI Asian economies fast-track their social engineering programs and consequently optimize productivity gains by the future working-age population. The World Economic Forum (WEF) Global Information Technology Report 2016 stressed the need for policymakers to work with other stakeholders to adopt holistic, long-term strategies for development of information and communication technologies (ICT), while highlighting that innovation today is increasingly based on digital technologies and business models. The report is a continuation of a series published by the WEF measuring the global drivers of the ICT revolution using the Networked Readiness Index (NRI) as a gauge.

Significantly, among countries that emerged as frontrunners in benefiting economically from investments in ICT and therefore had high NRI rankings, Singapore topped the list, followed by Finland, Sweden, Norway, and the USA. The Republic of China (ROC), Hong Kong, Japan, and the Republic of Korea (ROK), were Asian economies among the top 20. The *APO Productivity Databook 2016* showed that Singapore had a 10% higher score than the USA benchmark in terms of per-worker productivity. Hong Kong, the ROC, and Japan were other Asian economies with high per-worker productivity scores. The correlation between high NRI rankings and productivity levels in various countries should be explored, as a strong correlation between ICT investment and GDP growth has been confirmed in previous studies.

The 2013 Global Information Technology Report stated that an increase of 10% in a country's digitization score fueled a 0.75% growth in its GDP per capita. Citing other studies, the report also emphasized that digitization was "4.7 times more powerful than the 0.16% average impact of broadband deployment on per capita GDP." More importantly, the report dispelled the notion that digitization led to an increase in unemployment. It noted that a 10-point increase in digitization led to a 1.02% drop in the unemployment rate, which was also 4.6 times greater than the effect that the widespread adoption of broadband had on reducing unemployment. Reduced unemployment would obviously lead to increased productivity in the long run.

Digital dividends for high-HDI economies

While digitization could help economies achieve demographic dividends, what about the ones that have already passed that phase and are now dealing with aging populations? It is significant that economies with high HDI rankings such as the ROC, Hong Kong, Japan, and Singapore also have

high scores on the NRI. Those countries are also currently benefiting from their previous investments in ICT. Even though they may not be able to reap demographic dividends again in coming decades, they are now enjoying what may be termed "digital dividends." The digital dividend is manifested in various forms, and economic productivity is one. Not surprisingly, the ROC, Hong Kong, Japan, and Singapore also have high per-worker productivity levels.

Special role of broadband

Even though broadband may be only a part of the larger ICT suite, it is a fundamental building block. Since being scaled for the masses, broadband technologies have helped spur national economic growth, in Asia and elsewhere. The advent of mobile broadband devices helped make growth more widespread and evenly distributed across populations. Ac-

cess to broadband has empowered the smallest of companies and enterprising individuals, enabling them to be more productive than before. Mobile broadband has also emerged as a vehicle for delivery of other building blocks of the digital superstructure that is currently being deployed across Asia. Be it cloud, big data, social media, or the Internet of Things, the true potential of digital services can be realized only when a robust

and ubiquitous broadband infrastructure is in place.

Benchmarks for Asia

The rise of an Asian economy like Singapore to a level matching or exceeding global benchmark economies like the USA is a development that bodes well for others. While geographic proximity makes it relatively easy for stakeholders in the Asia-Pacific to view and comprehend such success stories, sociocultural similarities make it easier to relate to the enabling policies and their implementation. Moreover, regional economic groupings like ASEAN offer platforms for exchanges of ideas and best practices.

Other Asian countries with high NRI scores, like the ROC, Hong Kong, Japan, and the ROK, can serve as useful benchmarks for emerging economies in the region. While Singapore may be a useful benchmark for more advanced economies, the others could be useful for emerging economies. This makes sense, since countries in the Asia-Pacific are in different stages of ICT adoption and digital maturity compared with European counterparts exhibiting greater uniformity in terms of ICT and digital adoption. 🇮🇳



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