



Renewing the Leapfrog Vision for Indonesia in the Post-Pandemic Order

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Introduction: *The Old Leapfrogging Order*

Leapfrogging could be understood as a catch-up strategy that is beyond current capabilities in the sector of industrialization and the modern concept of human living. Developing nations often take this strategy for catapulting themselves into a more developed and advanced nation. Yayboke, Carter, and Crumpler explain this method as a method sequence of investment in capabilities, production, and technological advancement that enable developing nations to transform into more developed by skipping some traditional stages of development.¹ Thus, skipping some stages of the traditional development process straight to the recent technology or development with alternative pathways is the classical perspective of leapfrogging. The strategy on its right is necessitated by developing countries to achieve bringing the welfare of its citizens in a world that is continuously moving forward. As the world modernizes, welfare evolves and newer additions of welfare traits are added each day. Simply put, access to the internet is considered achievable welfare these days. Yayboke, Carter, and Crumpler also mentioned that the most cited sample of the so-called leapfrogging strategy is the mobile phone phenomenon where it allowed many developing nations to access the technology of mobile communication without dealing with a proper landline communication technology first. Despite the odds, some countries in the world, like Korea, seem to be real proof that this strategy could work for a country's development.

Analysis: *Korea's Lesson to do so*

South Korea's miracle of the Han River gained momentum when South Korea finally rose from the ashes of the Japanese Imperial Occupation and Korean War through technological investment by the government. South Korea's economy boomed as the ICT sector that heavily invested despite





not having proper innovation at first gave benefits that made Korea jump into the global stage of international business. Keun Lee from UNIDO (United Nations Industrial Development Organization) in 2019 even stated that thanks to South Korea's success in technological development through leapfrogging, made leapfrogging gaining more attention, especially in the developing world.²

Moreover, Sang M. Lee argued that factors such as the evolving global economic climate, government policies, and Korean cultural characteristics that help the dissemination of ICT made leapfrogging in Korea is a huge success.³ The global economic climate that changed into more united as globalization grew in early 2000 caught gracefully by the Korean government as a huge investment effort in the Korean technology, communication, and research sector at that time. Not only support from the government, but Koreans also support the leap that their government has taken. As argued by Lee, Korean society is eager for performance and pace measurement, self-efficacy, and a belonging society that thrives for effectiveness. In terms of policies similarity between South Korea as a newly developed country, and Indonesia as a developing country (also not to mention that both countries are G20 and MIKTA economies) that both using leapfrogging strategy as one of many instruments of development. Both also described economic prosperity as a key national policy priority in terms of politics, directly related to national stability and even national pride. However, the distinction is that one case is possessed of a succession of doing leapfrogging policy, while the other case is in need to rework their strategies to achieve the development from behind.

The COVID-19 Pandemic and Its Obstacle in Development

However, as time goes by, developing nations are faced with many challenges to catch up, for example, the COVID-19 Pandemic. The COVID-19 Pandemic opens the developmental gap between the developed and developing world. The simplest example for this is the race for vaccines that is dominated by the rich and developed world. Countries in Asia (East Asia and India is an exception) and Africa longing for vaccines to save their population from the COVID-19 virus by buying it from the developed world. Not only that, in the time of the pandemic, the economy is also burdened heavily in the developing world as international trade is halted by the lockdown policies around the globe. Even this also affects the developed world. Leapfrogging in the current development context: Indonesia's case choices are made between economic growth and infection control however, the hit on economic development due to slowed consumption and expansion has made it a tougher task for developing countries such as Indonesia to catch up—especially since they were lagging, to begin with.

Yet, despite such hindrances, attempts to leapfrog have been made as with the example of South





Korea, particularly with technological advancements. Cases in point have been exemplified with the rapid rise of mobile technology in which the introduction into developing markets made line technologies skipped over entirely. Leapfrogging in information technology has made it possible for developing countries to go over outdated iterations of the technology in quick successions or avoid spending on them at all—thereby allowing reallocation into the newer techs' expansion. That means the wonders of catching up are still juxtaposed against ironic underdevelopment in basic infrastructure and institutional developments.⁴ Examples include sanitation in Indonesia—where even in the capital many areas still lack access to proper hygiene and sanitation facilities. This means that images of the middle and upper class in sky-rises with high-tech equipment gloss over poor slums with a lack of clean water.⁵

Such contrasting conditions make apparent the obstacles in the non-wholistic approach to leapfrogging that focuses only on technological increments without attentive care towards human, cultural, and institutional developments or even the basic provision of public services. Potential attempts to address this are seen in the current Indonesian government's capital city relocation to East Kalimantan. The new capital is planned to be built from the ground up with lessons of contrasting developments in the old capital while acquiring newer technological and institutional character readily learned from developed countries. This means that the new capital shall serve as a leapfrog implementation that will be all-encompassing where an ever-connected society with the latest techs and gears sit side-by-side with a society fulfilled in the provision of basic infrastructures.

Given the issues mentioned then, a renewed leapfrog strategy may well be necessary and which is not technologically centered. The idea of this alternative leapfrog strategy however does not mean that technological developments need to be foregone entirely. Instead, techs could be shared and transferred instead of needing to be learned so that the resource focus on learning can be spent elsewhere, such as institutional development or other infrastructure requirements. This is not to say again that receiving transfers of technology omits learning capacities, but what the lessons of the Asian tigers have told us is that the tech industry was simply copying and pasting (otherwise imitate, replicate, then adapt). Countries, such as the People's Republic of China, are still doing it now with no significant challenges towards intellectual property concerns from international regimes. In doing so, the government is then able to shift its focus on other areas of development.

Conclusion: A Modern Leapfrog Strategy that is Not Technologically Centered

As the state of leapfrogging is bound to limitations even amidst business-as-usual conditions, such as





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No. 26 / 20 May 2021
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in the pre-pandemic, it is understandably difficult for developing countries shortly to come back full force with their rapid development—especially as they lag in recovering domestic health conditions to even kick-start an economic recovery. Therefore, more stepping-stones or water lilies inline need to leap with varying degrees of difficulties. Responsibility by the developed countries who would have reaped the benefits of past development and is still privileged with its compounded effects would be ensuring that the lagging behind countries is not left behind as per the objective of the Sustainable Development Goals. At the same time, the Western countries could afford the same developmental assistance and blind-eye support for current developing countries as it did to the Cold-War allied Asian countries (such as South Korea, Taiwan, Japan)—that is by the provision of unconditional technological transfers and gloss over attempts towards imitations, replications and adaptation attempts coupled with a degree of protective strategy to ensure domestic market maturation in developing countries like Indonesia. This is because at the end of the day as users only we will not succeed in leapfrogging. Only when we become users, learners, and creators of technological developments can we then leapfrog without stumbling over. We're already users by right of the free market imports of developed country technologies, it's only appropriate then that we demand them to allow us in becoming learners and creators of the things they push towards us.





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Endnotes

- ¹ Yayboke, Erol, William A. Carter, and William Crumpler. (2020). The Need for a Leapfrog Strategy. <https://www.csis.org/analysis/need-leapfrog-strategy>
- ² Keun Lee. (2019). Economics of Technological Leapfrogging. Department of Policy, Research, and Statistics Working Paper 17/2019. United Nations Industrial Development Organization.
- ³ Lee, S. (2003). South Korea: From the Land of Morning Calm to ICT Hotbed. *The Academy of Management Executive* (1993-2005), 17(2), 7-18. Retrieved February 9, 2021, from <http://www.jstor.org/stable/4165947>
- ⁴ Ufford, Stephen. (2021). Fast Lane to the Future: Three ways the 'leapfrog effect' is transforming developing countries – and revolutionizing finance. <https://nextbillion.net/fast-lane-to-thefuture/>
- ⁵ Shah, Tushaar et al. (2001). Limits to Leapfrogging: Issues in Transposing Successful River Basin Management Institutions in the Developing World. *Intersectoral Management of River Basin*. <https://publications.iwmi.org/pdf/H029115.pdf>





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