

Problem Lab: Digital Technology for New Opportunities

Overview

- In digital era, competition in business is about innovation based on data technology, connectivity technology and computational technology. These technologies bring in never-seen-before products, services, and business models as they could help improving performance of business activities such as faster and more robust productivity, better cost management, lower cost of scaling operations and bigger accessible market. However, these innovative creations are also changing the world faster than many laws have evolved. Mechanisms to regularly review legal frameworks, update laws, design, implement and enforcement effectively to suit the digital world are needed. Many technology laws were developed under some circumstances and cultures and then circulated to other areas while these laws are closer to people daily behaviors than others have been. The best solution to manage them without slowing innovation and opportunities is to be discussed.

Overall situation

- Advance of today technology can make nearly many human imaginations possible. Ones can access to any services and contents anywhere at any time on nearly any device with the right cost on platform business. Experience and the way to perceive values of every products and services are brought to the high level through Augmented Reality and Virtual Reality. Artificial Intelligence and robots are facilitating humans and reducing execution costs significantly. These help to move the world forward. However, they come with complicated business flows, activities and applications. These complications and very fast pace of technology require new legal framework that can keep up with them as well such as data protection, intellectual property protection, digital right protection, human right and liability, anti-competition and cyber security. New laws and new legal framework also need to be created to control issues that could arise and new tools for assessing and enforcing should be developed because the lack of clarity in some regulations could cause economic and social challenges. There is still unclear path to best manage new advanced technology without holding back innovation. Many country chose to de-regulate and re-design new regulations complying to new technologies with understanding. Not only good guys can use these technologies but bad guys also can access to them as well. Therefore the balance of over-regulating and opportunity cost is no trivial.

For example, blockchain is certainly one of the future technology, yet regulation is still uncertain and Initial Coin Offerings (ICOs) create risky markets. Many expert including US Securities and Exchange Commission (SEC) believe that 'over-regulation in an industry that is still at its infancy could limit a wide range of developments, ultimately damaging the growth of the crypto and blockchain space.'
[<https://cointelegraph.com/news/how-big-four-auditors-delve-into-blockchain-pwc-deloitte-ey-and-kpmg-approaches-compared>]

While autonomous vehicles are making a very convenient future in transportation, liability of accidents occurred is still being developed. Should we stop testing or how we should test it, when the accident causes fatal. [<https://phys.org/news/2018-03-death-involving-fully-autonomous-vehicle.html>]

Finally, many services now are provided via platform business where anyone can deliver values to their customers from anywhere at anytime in the world. How we are going to enforce laws related to 'Jus Soli' for new platform businesses.

Pressing regional challenges

1. Digital and data literacy
2. Regulatory framework – domestic and cross-border
3. Culture and mindset

Existing measures

What is the IMD World Digital Competitiveness ranking?

Digital Competitiveness Factors and Sub-factors

	Knowledge <i>Know-how necessary to discover, understand and build new technologies.</i>	Technology <i>Overall context that enables the development of digital technologies.</i>	Future Readiness <i>Level of country preparedness to exploit digital transformation.</i>
FACTORS			
SUB-FACTORS	Talent Training and Education Scientific Concentration	Regulatory Framework Capital Technological Framework	Adaptive Attitudes Business Agility IT Integration