

Digital economy, innovation and sustainability: some lessons for competitiveness

Introduction

Previous year, COVID-19 outbreak represented an unprecedented global disruption. Societies and countries need to initiate a rapid health, social and economic recovery. The development and distribution of vaccines against COVID-19 represent the first step towards this recovery around the world. The start of vaccination roll-out at the end of 2020 and the growing arrival of vaccines in 2021, generating a portfolio of vaccines based on different technologies, allows large-scale vaccination, a crucial step for global recovery.

Information technologies play a key role in the digital global economy and in the global recovery in post-pandemic scenario. It is important to strengthen IT applications for digital health, e-government and e-learning, contributing to the fast recovery after pandemic (Chui *et al.*, 2017). IT needs to support the transition towards a green and circular economy, ensuring less waste and more sustainable products and services. Sectors like batteries, electronics, plastics, textile and vehicles have huge potential for circularity (Chen *et al.*, 2018; European Commission, 2020; Ordóñez de Pablos and Edvinsson, 2020; Ordóñez de Pablos *et al.*, 2021; Zhang *et al.*, 2020; Zhou *et al.*, 2020).

On 17 March 2021, the European Commission adopted a legislative proposal with a common framework for a Digital Green Certificate. In April, guidelines were agreed about the technical specification for the implementation of the Digital Green Certificate, which is very important to ensure important issues such as personal data protection, interoperability and security (European Commission, 2021a).

As the European Commission (2021b) announced:

26 Member States and Norway and Iceland have signed a declaration to accelerate the use of green digital technologies for the benefit of the environment. They will deploy and invest more green digital technologies to achieve climate neutrality and accelerate the green and digital transitions in priority sectors in Europe, for example by using the NextGenerationEU and InvestEU funds.

Countries and regions need to use their valuable talent, invest in strategic human capital, nurture and deploy social capital and use their capabilities to benefit from the great potential of information technologies to provide innovative solutions for new and emerging challenges (Aboelmaged and Hashem, 2019; Lytras and Ordóñez de Pablos, 2008; Lytras *et al.*, 2009; Moazzez *et al.*, 2020; Ordóñez de Pablos, 2004, 2005). It is important to develop strong collaborations and build strategic networks among stakeholders to find answers and work together for a more sustainable future.

Contents of the issue

This issue is formed by four regular papers that address key topics in today's economic environment like blockchain, digitalization, fintech, talent and science and technology policies. Additionally, it includes a special section on sustainability, innovation and green issues in Asia.

The first paper, titled "Diffusion of blockchain in logistics and transportation industry: An analysis through the synthesis of academic and trade literature" (by Anuj Batta, Mohina Gandhi, Arpan Kumar Kar, Navin Loganayagam and Vignesh Ilavarasan), states that:



blockchain technology has fascinated researchers and industry professionals. Since its birth, the attention for blockchain has been exponentially increasing, however, most of the industries are still skeptical in adoption for value creation. The purpose of this study is to analyze the actual level of implementation and diffusion of blockchain technology within the logistics and transportation industry by comparing and using the collective intelligence of academic literature and industry practices of implementation of blockchain in this domain.

The second paper, titled “Talent mapping: A strategic approach towards digitalization initiatives in the Banking and Financial Technology (FinTech) Industry in Indonesia” (by Wimboh Santoso, Palti Marulitua Sitorus, Sukarela Batunanggar, Farida Titik Krisanti, Grisna Anggadwita and Andry Alamsyah), affirms that:

the development of information technology is highly influential to all sectors, including the financial industry. Various transformations are made in overcoming the dynamics of technological advancements, including the mapping of human resources. This study is conducted in the banking industry and companies operating using financial technology (FinTech) in Indonesia. This study aims to identify talent competencies needed in the future, based on current conditions and future needs, through mapping talent in the banking and FinTech industries.

The third paper, titled “Evaluation of the Indonesia National Strategic Policy of Science and Technology Development” (by M. Mustangimah, Prakoso Bhairawa Putera, Setiowiji Handoyo, Muhammad Zulhamdani and Sri Rahayu), states that:

the research outlines the improvement of framing in Indonesia science and technology policy content, policy formulation model, policy strategy implementation, and policy performance indicators. This study is conducted by implementing action research model to generate new knowledge as a research interest, through the search for solutions or improvements to problematical situation, applying Soft Systems Methodology. Thus, this research model is regarded as Soft Systems Methodology-based Action Research (SSM-based AR). Policy formulation is not Evidence Based in which policy documents remain theoretical, and are impractical or not detailed in engaging real conditions and strategic issues, yet the targets are measurable despite predictive results. Change and strengthening are required in the National Science and Technology policy for the next period, on the basis that future research policies are encouraged to address problems and solutions to build a country based on science and technology. Indonesia requires policies involving both effective and efficient national research; therefore, the need for an integrated policy direction conveying science and technology and other related sectors such as the health sector and food remains vital.

The fourth paper, titled “Customer Acceptance of Ride-Hailing in Indonesia” (by Mohammad Nabil Almunawar, Muhammad Anshari, Muhammad and Syamim Ariff Lim), studies:

the enabling factors and the customers’ acceptance of ride-hailing in Indonesia. We adopt some constructs from Unified Theory of Acceptance and Use of Technology (UTAUT) 2 as the framework for our study to derive factors that influence the acceptance of ride-hailing in Indonesia. Samples through a convenience sampling method were collected from an online survey were transformed into data through coding and subsequently processed using SPSS for descriptive analysis, reliability test, correlation and multiple regression analysis for hypothesis testing. Ride-hailing started in 2015 in Indonesia. Five enabling factors make digital ride-hailing possible, the Internet, smartphone, broadband wireless network, digital map and GPS. We found that Performance Expectancy, Social Influence, and Habit positively influence customers to accept ride-hailing in Indonesia.

As mentioned earlier, this issue includes a special section titled “Research Advances on Sustainability from an Interdisciplinary Approach: Some examples in Asia”. The papers contribute to show light into issues like sustainable performance, new technologies,

knowledge management and green issues in several Asian countries, in particular, India, Myanmar and Pakistan.

The first paper of this special section is titled “Enhancing sustainable performance through job characteristics via workplace spirituality: A study on SMEs” (by Qaisar Iqbal, Noor Hazlina Ahmad and Basheer Ahmad). It shows:

empirical evidence of the associations between perceived job characteristics and workplace spirituality with environmental sustainability within the domain of small- and medium-sized enterprises. This study aims to investigate the influence of perceived job characteristics (job identity, task significance and task variety) on environmental sustainability through workplace spirituality.

The second paper, titled “Enigma of successful new technology utilization by auto parts MSMEs in Northern India” (by Jagdeep Singh and Harpuneet Singh), presents the results of a study which aims is:

to discover the elements that affect the new technology utilization by auto parts’ micro-, small- and medium-sized enterprises (MSMEs) in northern India. Based on the literature and professional reviews, 75 critical factors were identified on the basis of that affecting technology utilization in the auto parts-manufacturing MSMEs in Punjab. A survey was conducted in 113 auto parts industries (MSMEs) in Punjab. Descriptive statistics and factors analysis (principal component analysis) in SPSS software was used to examine the data. After the analysis, 56 prominent factors were presented those are affecting the technology utilization in auto parts industry. After the study, 23 factors were identified, which explains the variance of 74.99% of the total data. Most important factors for new technology utilization in MSMEs in Punjab are proper understanding of current operation and availability of professional consultant, problems with the compatibility of equipment and fear of layoffs, and the least important factors are volume flexibility and maintenance expenses.

The third paper “Innovation and research skill for knowledge-based economy of Myanmar: Current status and recommendation” (by G. R. Sinha) presents a study:

assesses the current status of Innovation and Research Skill in Myanmar that could contribute Knowledge based Economy, the paper suggests a critical review based methodology that studies about knowledge-based economy of Myanmar, a beautiful country with all potential of practicing innovation and research skill. Employability skills in students as well as professionals make them competent in their profession; and thereby contributing the country as knowledge-based economy (KBE). The KBE can take any country becoming biggest and sustainable economy in the world. Innovation and research based skills play most significant roles in novel contributions and consistent growth in all sectors of economy. Thus, it has been studied and concluded that Myanmar has been doing greatly to encourage, rather practice the modern research and innovation skills in making it KBE country. There are few important challenges posing gap between the skill development and KBE nation; which are identified and recommendations have been made to overcome the challenges envisaging Myanmar as KBE. Quality indicators and set of skills and viable ways of their development are identified.

The last paper of the special section is titled “The attitude and purchasing of female consumers towards green marketing related to cosmetic industry” (by Aakanksha Singhal and Garima Malik). It affirms that:

consumers are looking for the well-known brands having quality which satisfy their needs. Most of the people value the environment and belief to protect it. They are aware about the environmental problems but it is not necessary that their purchasing should lie on this basis. There may be a difference between their attitude towards eco-friendly cosmetic products and the purchasing which lies on some important factors such as product features, price, promotion and convenience to purchase. This paper discusses the relationship between different age, education

and income groups of female consumers with the attitude of female consumers towards green cosmetic products. This paper also highlights the purchasing of female consumers towards eco-friendly cosmetic products and the relationship of it with their attitude.

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