

Preface

INTRODUCTION

After the COVID-19 outbreak in 2020, societies, economies, countries and regions face unprecedented challenges in several dimensions simultaneously, mainly, health, social, economic dimensions. Countries need to recover pre-pandemic economic growth fastly, boost productivity and job creation, invest in smart healthcare systems and services and work towards a climate-neutral and circular economy.

On the one hand, companies and economies need to use the opportunities of the transition to a greener economy. The demand for greener products and services can boost the creation of new jobs. The circular economy, with its potential impact on the life cycle of products, can contribute to the creation of sustainable growth and jobs (Ordóñez, Xi and Almunawar, 2021; Ordóñez *et al.*, 2021).

The New Circular Economy Action Plan of the European Commission for a Cleaner and More Competitive Europe (approved in March 2020) (European Commission, 2020) addresses actions to make sustainable products the norm in the European Union or focus on specific sectors that use most resources and that have potential for circularity (for example, electronics, food, textiles, vehicles, water). This plan supports the European Green Deal.

There are not many publications that address this combination of topics (circular, digital, green, sustainable performance) and even less publications that explore these issues in the Asian region/ASEAN. This book will clearly fill this gap offering readers a rich collection of chapters with innovative concepts, strategies, and solutions to understand key issues in the digital, circular, and green economy.

OBJECTIVE

The book explores new and emerging frameworks, tools, strategies to support companies and economies towards the green and digital transformation. It will analyze the role of disruptive technologies, cutting-edge green technologies and in these emerging practices in Asia and how they can boost the creation of new business opportunities, more jobs and economic growth for the recovery of economies in post-covid-19 scenarios.

It aims to be an international platform to bring together academics, scholars, researchers, decision makers, policy makers, and practitioners to share new theories, research findings, and case studies, to enhance understanding and collaboration in green growth, digital economy, environmental impact, green public procurement, sustainable performance, the transition to a more circular economy, etc.

TARGET AUDIENCE

Professors in academia, deans, heads of departments, director of masters, students (undergraduate and postgraduate level), politicians, policy makers, corporate heads of firms, senior general managers, managing directors, information technology directors and managers, libraries, etc.

CONTENTS OF THE BOOK

The book presents a collection of 18 book chapters addressing key topics like circular and digital economy, digital transformation, electronic payment services, the development of a national innovation system, green issues and sustainability and covering different countries like Bangladesh, Brunei, China India, Indonesia, UAE and Vietnam.

Chapter 1, titled “Influence of Corporate Sustainability on Providing Electronic Payment Services by Banking Industry in India” (by Shweta Sharma and Aakanksha Agarwal), examines “the role of sustainable finance practices and their impact on digital banking services in India. An increased frequency of internet use for various digital banking services provides an opportunity to inbuilt the banking industry with various online services. This study reviews the literature on sustainable corporate finance and the adoption of e-banking services. The study uses an exploratory research-based approach to understand the usage rate and adoption of internet banking. A questionnaire-based survey was conducted on 325 respondents. Findings of the study suggest that there is a gradual increase in the adoption of internet banking, but major barriers in adoption are a threat of security, privacy and trust”.

Chapter 2, titled “Policies and Innovations of Financial Technology Business Models in the Digital Economy Era on the E-Business Ecosystem in Indonesia” (by Ahmad Setiawan, Amri Dunan and Bambang Mudjianto), affirms that “the rapid development of technology and information systems continues to give birth to various innovations, especially those related to financial technology to meet the various needs of the community, including access to financial services and processing of financial transactions. Financial Technology (Fintech) is the implementation and utilization of technology to improve financial and banking services. The development of financial technology in Indonesia itself is growing rapidly, along with the development of existing technology. Fintech is developed by utilizing the latest software, internet and computing technologies. Based on this, this study examines the development of innovation and policies for the fintech business model in the e-business ecosystem in Indonesia. This research is a qualitative research, with data collection methods through focus group discussions, in-depth interviews, and literature studies. This paper recommends that the government develop and make policies for fintech business model innovation in the e-business ecosystem in Indonesia”.

Chapter 3, titled “Advanced Technological Factors Affecting Digital Banking Usage Intention” (by Chua Chen and Omkar Dastane), studies the “impact of various innovation technology factors on digital banking customers’ usage intention. The selected factors are online banking, mobile payment, artificial intelligence-based robot advisor and cloud-based services. Th study develops conceptual model against theoretical background of the Innovation Diffusion Theory, Technology Acceptance Model and Unified Theory of Acceptance and Use of Technology. Empirical data was collected through online survey using a self-administered questionnaire. Quantitative research method was employed with a total sample size of 302 respondents using snowball sampling technique. Normality & reliability tests were performed followed by confirmatory factory analysis, validity assessment and structural equation modelling using

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AMOS 24. The findings confirm positive significant impact of artificial intelligence-based robot advisor and cloud-based services on usage intention. Theoretical contribution, managerial implications are then discussed along with limitations of current study and future research avenues”.

Chapter 4, titled “Factors Affecting IoT-Based Business Management in the Post-Pandemic Period” (by Mahadi Miraz, Ferdoush Saleheen, Mohammad Almunawar, Farhana Sumi, Shumi Sarkar and Mohammad Hasan), analyzes “the relationship between facilitating condition, digital literacy, pandemic adoption, social influence, application use intention, and IoT-based business. Also, the research used systematic random sampling was employed in this study to achieve the most rigorous analysis of the possible research objectives, even though 277 legitimate replies were received in response to the survey questions asked at the online-based companies in Bangladesh. The scope of this study is the urban SME industry in Bangladesh. Besides that, the data was being analyzed with the help of Partial Least Squares Structural Equation Modeling (PLS-SEM). These research findings showed that facilitating condition (FC), digital literacy (DL), pandemic adoption (PA), social influence (SI), Application use intention (AUI), and IoT-based business (dependent variable) effect in SME business industries in Bangladesh”.

Chapter 5, titled “Framework for Assessing Online Shopping Use Under the Digital Transformation of the Economy in a Post-Pandemic Era” (by Abubakar Mukhtar Yakasai, Mohammad Almunawar and Muhammad Anshari), states that “the sudden appearance of Covid-19 has positively ameliorated digital presence generally as well as B2C e-shopping transactions. This situation attracts researchers’ interest to unravel the effect of Covid-19 vis-à-vis various e-commerce activities. Recent studies have already shown a direct impact of the pandemic on many businesses, especially B2C transactions. However, its moderation effect, and its effect as a control variable, were scarcely traced in the literature. Hence, the chapter explains and proposes a framework for assessing online shopping use under the digital transformation in a post-pandemic era, including both a moderating and a control effect of the Covid-19 pandemic. Building on the TAM theoretical model, the proposed framework added risk factors and channel credibility as additional independent variables, and the Covid-19 pandemic as both moderating and a control variable, respectively. Using existing literature, the authors establish relationships among variables and conceptualise both the moderating and control effects of the Covid-19 pandemic, respectively”.

Chapter 6, titled “Developing a National Innovation System in Small States: A Case for Brunei Darussalam’s Economic Development – A Catalyst for Digitalization Catch-Up and Economic Growth” (by Amirul Noeh, Pg Siti Rozaidah Pg Idris and Muhammad Anshari Ali), presents the results of a study with “some empirical insights for adopting a National Innovation System (NIS) to catalyze capacity building in small states with relatively low technology-based research and development resources. These countries may have to start further back than other nations; however, this paper maintains that with the right NIS, latecomers can have the advantage of catching up economically. This study explores Brunei Darussalam’s journey to catalyze innovation for sustainable economic growth, particularly digitalization and deep tech. The study found that establishing a national innovation ecosystem could be effective, with national consensus and acceptance behind the approach. It emphasizes building critical infrastructures, institutions and governance to promote efficient knowledge flow, talent development, digital literacy and overall absorptive capacity. Because Brunei is a small state, coordinating and facilitating cohesive linkages among its key stakeholders can strategically mobilize change. As Brunei Darussalam embarks on such a trajectory, it must determine a relevant model”.

Chapter 7, “Business Process Reengineering of Digital Learning Ecosystem: Green Strategy for Recovery and Sustainability” (by Heru Susanto, Fadzliwati Mohiddin, Leu Fang-Yie, Muhammad Sanip, Alifya Kayla Susanto, Desi Setiana, Didi Rosiyadi, Fahmi Ibrahim and Asep Insani, Uus Khusni),

discusses the results of a study “conducted to investigate e-learning acceptance and factors influencing higher institutions students in Brunei Darussalam. Among the factors involved in this study were perceived ease of use, perceived usefulness, self-efficacy, technology availability and usage and intention to use. Technology acceptance models (TAM) were used as a basis for the study and for hypothesizing the effects of such variables on the use of e-learning. The findings of this study found that there is significant influence of self-efficacy to perceived ease of use and perceived usefulness while perceived ease of use have direct impact to perceived usefulness and perceived usefulness have influence to intention to use towards e-learning systems”.

Chapter 8, titled “Technological Innovations in Supply Chain Management Towards a Circular Economy in the Healthcare Sector of UAE” (by Sumita Dave and Nikita Shaikh), states that “traditional techniques of linear economy generate a lot of waste which leads to unsustainable practices in the supply chain management. This chapter analyses the impact of circular economic system practices on company’s overall performance for a circular supply chain and explores the mediating position of technologically driven supply chain plays inside these relationships in the healthcare sector in reference to UAE. UAE and the 2030 Agenda of Sustainable Development Excellence in Implementation 2017 report suggests that UAE raises cognizance of, and integrates, sustainability standards into its agenda to promote sustainable lifestyles. Since most products in UAE are imported, the supply chain is lengthy and fragmented making procurement expensive. Hence, an innovative technology driven green supply chain can be an effective solution for both cost and waste reduction”.

Chapter 9, titled “Digital Economy Transformation in Nexus with External and Social Sustainability: Indonesian Experience” (by Arif Budimanta Sebayang, Telisa Aulia Falianty, Firdha Anisa Najiya and Gusti Raganata), states that “in response to Indonesia’s accelerating digital use, this study aims to address challenges to implement digital business models and identify the impact of digital economy to external and social & environment sustainability. This study uses desk study, descriptive statistical analysis and quantitative regression model, and qualitative information from discussion with relevant stakeholders. This study provides several important results. First, increase in mobile cellular subscription will lead to increase in inequality, while percentage of internet user to population shown otherwise. Second, the study also found that technology has a possibility to affect environment since it could increase CO₂ emission. Second, the study also found that technology has a possibility to affect environment since it could increase CO₂ emission. The digital technology gives the pressure to increase Balance of payment deficit. The recommendations: increasing the digital access, digital literacy, developing pro-environment technology, and increasing the exports of digitally deliverable services”.

Chapter 10, titled “Sustainability and Consumerism: How Green Are the Green Sectors?” (by Subhanil Banerjee, Shilpi Gupta and Souren Koner), affirms that “the Brundtland Commission report Our Common Future in 1987 gave birth to the concept of sustainable development. The meaning is benefitting the present without compromising the future. It was felt that unless conventional growth and development are replaced by sustainable development through environment-friendly actions then doomsday is very near. However, such sustainable development was followed by a global spree of consumerism that only added to the environmental burden. This dichotomy needs to be understood and for the same purpose, one needs to go back to that point of Earth’s history when ecology and economy were synonymous. From then on needs to be understood the drift between the ecology and economy that has brought us to today’s scenario. In this background, the present article raises questions on how green is the green sectors. Furthermore, can sustainable development and consumerism can be captured as one body ‘sustainable consumerism’”.

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Chapter 11, “Recycling Behaviour of Urban Households in the Vietnamese Mekong Delta” (by Huynh Xuan, Tien Dung Khong and Huynh Khai), offers “new insights into the perception and determinants of municipal solid waste behaviour. A quantitative data set was obtained to analyzed by directly interviewing 579 urban households in in the Vietnamese Mekong Delta stratified by urban-type level. Binary Probit model and OLS regression indicate the significant influences of urbanization level, organization membership, the concern to environmental status, and education level of households. Finally, results reveal that the municipal solid waste recycling level can be significantly increased by motivating urban households’ incentives, therefore, policymakers in Vietnam as well as in developing countries should also provide more incentive to households by subsidy the recycled materials (i.e. paper and unusable metal) and well-managed informal recycling systems including itinerant waste buyers”.

Chapter 12, “How Responsible Are the Consumers? Analysis of Food Waste Behavior of Household” (by Namita Kapoor), affirms that “one of the most important concerns with the economies facing is food security amidst the growing population. The population growth has exerted tremendous pressure on food security and has raised concerns over food sustainability. The sustainability of food waste is an environmental, economic and social issue which has useful policy implications. The issue has been studied through the analysis of responsible consumption and food waste. The literature has emphasized on improving the efficiency in supply chain to reduce food waste but research on food waste at the consumer level is still at the natal stage. It is important to understand to develop the framework for responsible consumption and to assess the factors which may contribute to reduction in food waste at the household level. The study aims to examine the scope of responsible consumption to attain environment sustainability”.

Chapter 13, titled “Recovery of Energy and Materials From Small-Scale Tofu Processing Industries in Indonesia” (by Neni Sintawardani, Umi Hamidah, Widyarani, Diana Wulan and Dewi Nilawati), observes that “tofu factories spread across Indonesia as tofu is a cheap source of protein and favorite food for almost all population groups. Most tofu producers are micro/small business owners. In addition to soybeans, clean water is the most important input to produce tofu curd. It will generate a large amount of wastewater and solid waste, which still contains significant amounts of easily biodegradable organic matter. There are often complaints and protests from the public about the pollution in air and water in the area from the discharged waste. Tofu producers know about this, but their limited income and capital force them to ignore the environmental issues. The potential of tofu waste treatment technologies to produce new products or clean materials that can be fed back into the production process is discussed and reviewed to ensure all input materials in the tofu process can be used optimally and efficiently in a closed-loop production process. And it could be implemented easily and economically by the factories”.

Chapter 14, titled “The Effect of Chinese Green Transformation on Competitiveness and the Environment” (by Poshan Yu, Andong Jiao and Michael Sampat), states that “people in China are paying more attention to environmental issues as they increase in importance and consequence. At the same time, the Chinese government has gradually begun paying more attention to the environment, advocating sustainable development. The government has been actively developing green financial products such as green loans, green insurance, green funds, and other financial products to help Chinese companies “go green” and reach peak carbon and carbon-neutral goals ahead of schedule. China attaches great importance to its “green transformation” goals, as can be seen from the number of new policies related to green and sustainable development. Under these circumstances, companies must follow the policy and carry out green upgrades or risk total failure. This chapter mainly discusses the background of what firms face in

China's green finance environment, taking clean energy, green buildings, and green transportation as examples of how companies should adapt to these trends and improve their competitiveness".

Chapter 15, "Rural Tourism and its Impact on the Economy: A Study of Ialong Village, Meghalaya" (by Saibal Saha, Sawarisa Suam and Ankita Sarangi), affirms that "the changing tastes and preferences of tourists have given rise to a new form of tourism, rural tourism. This new form of tourism plays an important role to change the rural economy and living standard of villagers. Meghalaya, the abode of clouds, is famous for a number of its villages and attract thousands of tourists every year. This research aims to study the impact of rural tourism on the economy of the village. For this study, Ialong village has been selected and 150 people were interviewed with the help of a structured questionnaire and insights of people concerned were noted and analyzed. It was found that people believe the facilities of electricity, hygiene, toilets, accommodation have improved and have accounted for more influx of tourists into the region. However, lack of exposure of the different villages and their offerings in advertisement media have limited the potentials of growth of tourism in these villages".

Chapter 16, "Market Segmentation and Dark Tourism and the (Post) Pandemic Scenario" (by Bruno Sousa, João Veiga, João Veloso and Sara Pereira), observes that "dark tourism is a segment of tourism that has been growing in recent decades and is strongly associated with tragedy and mystery. There are several academic researchers who present literature on this specific group of tourist consumers. As a result, 2020 was strongly marked by the pandemic of the new coronavirus (covid-19). This chapter presents a reflection on the role of dark tourism in the pandemic and post-pandemic period. From an interdisciplinary perspective, this chapter presents contributions to (dark) tourism, marketing and pandemic management".

Chapter 17, titled "The Projected Images of a Thrift Store Chain in Japan: A Study of Online Interview Materials" (by Bình Nghiễm-Phú), states that "being thrifty and frugal has become a distinct lifestyle choice. An insightful knowledge about thrifty and frugal consumers on the demand side has been revealed by previous studies. However, related issues on the supply side have largely been neglected. Therefore, this study aims to examine the projection of the thrift store images. By analyzing interviews displayed on public websites with the director and staff of Treasure Factory, a big thrift store chain in Japan, this study has revealed that the company is actively projecting its images. Among seven images, Treasure Factory is especially focusing on products, purchase processes and distribution channels (place), and customer benefits (psychology). The remaining images (prices, promotion, customers or people, and partnerships) are less emphasized but still harmoniously synchronize with and support the main images. Implications for the theory behind thrift stores and for the actual management of them are discussed based on these findings".

Chapter 18, titled "COVID-19 Health Pandemic: A Turnaround in Economic Infrastructure" (by Saibal Saha, Bedanta Bora, Anindita Adhikary and Sangita Saha), states that "the 100th anniversary of health pandemic has introduced a rarely used term 'Social Distancing'. The pandemics occurring every century between 1720 and 2020 has paralyzed the world. Covid-1 pandemic has caused numerous deaths, drained resources, halted trade, and shattered economies across the world. Humankind is faced with the challenge of survival, putting a halt on the growth dynamics. Lockdown imposed by Governments have flattened the curve of COVID-19 victims, but only to delay the spread of the deadly virus. Till the time a complete cure is discovered, people have managed to find ways to prevent the spread of the virus by developing new norms of day-to-day survival. The study aims to highlight the crisis born by COVID-19 and measures to maintain sustainability in the new normal. The methodology used is primarily based on published literature and data. Findings of the study indicate that there is absolute uncertainty on 'What

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Next’ and ‘How’. Hence, it is concluded that any resurgence attempt to equipoise this catastrophe is predicted to be prolonged and so its end results”.

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