

Preface

The economic growth in China is tremendous. A thorough examination of Chinese economy, business, innovation and technology seems to be more timely than ever. The Belt and Road Initiative (BRI) provides a new context for economic development, expansion and impact of the Chinese economy globally.

The subject area of this book is related to the integration of four complimentary areas:

- International Business
- Innovation and Technology Management
- Sustainability Research
- Economic Development

The overall context provides a fascinating perspective to the study of the Chinese economy through the lens of the new generation of entrepreneurship and global expansion. Moreover, this edited volume adopts and promotes an interactive exploratory strategy that aims at facilitating the processes of teaching, learning and acquisition of skills necessary to engage with business in or with China. The objective of this edited volume is two-fold:

- To serve as a leading, innovative reference edition on Chinese Business, Technology, Economy and Innovation
- To serve as a reference edition for all those interested in understanding the key aspects of the new generation of business and innovation in China

Ideally, contributions exploring diverse issues delineated by the above-mentioned research-areas, will seek to present the outcomes of the scientific inquiry in a manner conducive to their use for active learning. In this manner, this edited volume will turn into a very much sought-after reference edition for postgraduate studies and executive seminars.

SUBJECT AREAS

Sustainable economic growth, international business, collaboration and innovation are the key concepts that define the topics discussed in this volume.

This edited volume promotes a 4-tier integrative approach:

- A detailed overview of the latest developments of International Business and Innovation Management Domain
- A detailed analysis of Key Competitive Advantages and Value propositions of Chinese Economy
- A thorough discussion of Technological Innovation and Key Pillars of Economic Development in China
- Discussion of key cases studies of successful companies and lessons learnt in China

The purpose of the *Foreign Business in China and Opportunities for Technological Innovation and Sustainable Economics* is to demonstrate state-of-the art approaches of International Business and Innovation Management in China and to show how new, advanced, international business and innovation models and adoptive strategies can expand the sustainability frontiers for China. Consequently, chapters are sought that touch on these aspects and extend technical and domain knowledge in the global economy. In fact we intend to initiate a dialog between the educational, computing, business, human, and technical views of the field that effect the International Business and Innovation Domains through the adoption of novel teaching strategies.

TARGET AUDIENCE

The audience of this edited volume consists of students, educators, international business experts, innovation experts, computer engineers, scientists, and non-technical readers who are interested for innovation and entrepreneurship and international business in China and worldwide. It can be used as a reference editions for all those interested in Innovation, Emerging Technologies and International Business as well as for textbook for advanced and focused Innovation and International Business courses.

TOPICS

Topics of interest include, but are not limited to, the following scope:

Strategic Objective 1: The Emerging Agenda of Innovation Management and International Business Domain

- Technology Driven Innovation
- Business Models
- New Markets Expansion
- International Collaboration
- Distributed Production Schemas
- Multinational Companies Strategies
- Innovation Strategies
- Sustainability Research
- Smart Cities Research
- High Tech Industries Innovation
- Business Models for e-innovation
- Electronic Marketplaces
- Global Innovation Networks

Strategic Objective 2: A Detailed Analysis of Key Competitive Advantages and Value Propositions of Chinese Economy

- Mass production management in China
- Value Adding workflow integration
- Logistics and Distribution Centers
- Robotics and Industrial Automation
- Shipping Industry in China
- High Tech Industry
- Entertainment Parks in China
- Smart Cities in China

Strategic Objective 3: A Thorough Discussion of Technological Innovation and Key Pillars of Economic Development in China

- Sectoral Studies in Education, Industry, Bioinformatics, Tourism, Services Industry, Logistics, Commerce, Retailing, E-services and Applications, Mobile Systems
- Sectoral Studies in Healthcare and Biotechnology,
- Sectoral Studies in Robotics, Nanotechnology, Green Energy, Green Computing
- Sectoral Studies on Public Administration and E-Government

Strategic Objective 4: Discussion of Key Case Studies of Successful Companies and Lessons Learnt in China – Emerging Technologies Focus

- The Internet of Everything (IoE)
- E-research
- Innovations for emerging services and Systems
- Cloud Computing: SaaS, PaaS, IaaS
- Data Science and Artificial Intelligence
- Cognitive Computing
- Virtual Reality and 3D modeling
- Medical Informatics
- Smart City innovations
- Predictive Analytics Reporting (PAR) Framework, Learning, and Transfer
- Integration of Semantic Web Approaches in Educational Learning Systems
- Case Studies

Strategic Objective 5: Policy Making for Technology-Driven Innovation

- Strategic Studies
- Roadmaps
- Actions and Guidelines
- Best Practices and Lessons Learnt

ORGANIZATION OF THE BOOK

The book is the first in a series of three books planned in order to cover the five strategic objectives analyzed in the previous section. It is organized into nine chapters. In this book, authors discuss different aspects of international business, innovation management, and technology-driven innovation in the context of China's Belt and Road Initiative.

A brief overview of each of the chapters follows:

Section 1: Foundations of China's Growth, Innovation, Competitiveness, and Belt and Road Initiative Strategies

- Chapter 1. China's Economic Growth and Innovation in Globalization
- Chapter 2. One Belt One Road: Capital Investments, Economic Integration, and Growth of Participating Countries

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- Chapter 3. An Analysis of China's International Competitiveness Capability
- Chapter 4. Doing Business in China: An EU Firm Perspective
- Chapter 5. Literature Survey on the "Belt and Road" Initiative: A Bibliometric Analysis

Section 2: Belt and Road Initiative and International Collaboration

- Chapter 6. China's Belt and Road Initiatives: Prospects and Challenges in the Islamic World
- Chapter 7. OBOR: A New Hope for Future Indonesian or a New Trap? Case Study in Indonesia

Section 3: Technology-Driven Innovation in Belt and Road Initiative (BRI)

- Chapter 8. Use of Learning Analytics in China: A Benchmarking model for Higher Education
- Chapter 9. Connecting One Belt One Road Countries via Wireless Sensor Network

Chapter 1 discusses China's Economic Growth and Innovation in Globalization. The purpose of this chapter is to investigate the potential long-term effects of contemporary globalization on the Chinese economy and innovation in an era of global hypercompetition. Globalization today is basically accepted as the process that removes geographical boundaries and enables the economic integration and interdependence of national economies into the international economy through trade, foreign direct investment, migration, and capital flows. Since productivity remains the critical determinant of long-term national growth and prosperity, the effects of today's globalism on productivity demands the need for business organizations in particular to sustain a competitive advantage and to remain profitable over time. Based on an integrative literature review, this chapter explores why China must continue to develop its innovation capabilities as well as to provide opportunities for foreign businesses over the long-term via responsible economic development that also benefits the nation's domestic population.

Chapter 2 discusses the Belt and Road Initiative in the context of Capital Investments, Economic Integration and Growth of Participating Countries. This chapter starts with the need for infrastructure investment in One Belt One Road (OBOR) countries. By employing a simple linear regression analysis, it is evident that

massive infrastructure could lead to an improved well-being of member countries. The chapter also highlights the current state of infrastructure investment levels of participating countries. The evidence shows that most member countries lack quality infrastructure levels. The concluding part of the chapter explores economic integration among member countries. Through network analysis, it is evident that though member countries are gradually being integrated, such integration is at a slower rate than expected. Massive investment in infrastructure in China and by extension the countries along the Belt and Road would not only provide financial gains to business partners but would as well lead to an improved well-being of countries in the Initiative. This provides an opportunity for both domestic and foreign businesses to consider massive investment in infrastructure in China which is at the center of the Initiative.

Chapter 3 is devoted to the Analysis of The China's International Competitiveness Capability. The criteria used in measuring the competition at the country level, determined by the International Management Development Center in the World Competitiveness Report are economic performance, government efficiency, business efficiency, infrastructure. The international competitiveness of China, which is claimed to be same position with the United States in the world market in 2050, has been evaluated in this study, based on IMD competitiveness criteria. China has great progress in development through major changing strategies, methods, and reforms over the last seventy years. According to the international competition report, its rank is 13th in the international competition. The reason for China's capability on international competitiveness and its impact on the world economy is based on the fact that it combines cheap labor with the liberalization in foreign trade and foreign direct investment.

Chapter 4 delivers a study on Doing Business in China from an EU firm perspective. This chapter examines how the intersection of economy, politics, laws and culture in contemporary China influences the choices and alternatives EU businesses seeking to invest in China. Although China recorded a tremendous growth of its trade volume with other countries, the institutional and regulatory frameworks of the Chinese economy have proven to be at least challenging to the EU businesses. In fact, several disputes have arisen and many of them have been discussed in the WTO Dispute Settlement Body. The chapter elaborates on one of them to explain in which ways China is not the easiest place to conduct business.

Chapter 5 summarizes authors' contribution related to a Literature Survey on the 'Belt & Road' Initiative: A Bibliometric Analysis. The purpose of this chapter is to analyze some peer-reviewed publications to find out the key research journals, contents and emerging issues of the 'B&R' Initiative led by China. Based on the tools and techniques of bibliometric approach, a total of 210 research papers were

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extracted systematically from the Science Direct and the Web of Science database. The research methods integrated in this chapters are: systematic literature review, bibliometric citation, authorships and affiliations, and contents analyses. This paper argues that there are growing academic interests and attentions in the B&R research across the world. The principal reasons for the increase in research in the B&R Initiative are the appearance of publications in prestigious journals, the global economic rise of China and its model of development, and the policy priorities of the government of China. The results show that a total of 32 peer-reviewed research papers were published in 10 prestigious journals.

Chapter 6 tries to determine how China's Belt and Road Initiatives will interact and integrate with Prospects and Challenges in the Islamic World. China's multi-billion dollars Belt and Road Initiative (BRI) has become a talk of the town due to the huge financial investment and economic opportunities for poor Eurasian states. BRI promises fast-track infrastructure development, transnational connectivity, unimpeded trades and calibrates economic growth in developing countries through shared development model. However, BRI has also engendered sensitive economic and security challenges. The Islamic world has warmly welcomed the BRI but China's engagement in the Islamic world also poses serious challenges to its foreign policy. This chapter aims to highlight the potential prospects and challenges related to BRI projects in the Islamic world and its implication for China's foreign policy. It also provides useful policy guideline for better execution of BRI-related projects and to evade China's possible debilitating conflict with regional and global powers.

Chapter 7 addresses the impact of BRI in the surrounding countries: OBOR, Is a New Hope for Future Indonesian or a New Trap? Study case in Indonesia. One Belt One Road (OBOR) first declared by the China's President is believed by part of people as a new hope and a new horizon for a number of developing countries. OBOR has been viewed as a new challenging proposal and as an ice breaking for the long decades of infrastructure's stagnant in Indonesia, the largest economic region in Association Southeast Asian Nations (ASEAN). This study is an update OBOR recent development in Indonesian which also coincidentally declared as a new maritime-axis when new reform government has taken in to power since 2014. Many views had been released, pro-contra had been severely dispatched into two separate blocks of Indonesian's experts in two standpoints; one to support and the other to challenge involving Indonesia in the OBOR. This study has been thoroughly analyzed by mining information and data from big data sources, combined with semi-structured interviews of various executives and contractors.

Chapter 8 provides a study about the Use of Learning Analytics in China - A Benchmarking model for Higher Education. This chapter per the authors examines the feasibility of a learning analytics tool in the Chinese Higher Institutions

educational environment. At first, the general definition of learning analytics is examined. Additionally, the authors shed light on case studies of universities that have already implemented learning analytics. Moreover, the Chinese educational environment is examined through a thorough analysis of the learning analytics necessity. Based on the literature review, a learning analytics tool is proposed. In a technical basis, the tool is a combination of ELLI or Effective Lifelong Learning Inventory, a dispositional learning analytics tool, and a recommender system. The ultimate function of the tool is that it links students with a specific educational profile with successful students with similar profiles. Finally, the author identified the key limitations of the prototype and performed a general analysis on the tools goals and expectations in the Chinese Higher Education Institutions.

Chapter 9 discusses the challenge of Connecting One Belt One Road Countries via Wireless Sensor Network. The economy of China grows rapidly attributable to the advent of wireless networks. The networks provide connection between nodes (sensors, gateways, systems, people, etc.) for data transmission and communication seamlessly. This is crucial element to achieve sustainable economics. It is worth mentioning that wireless communication is the optimal solution compared with wired communication given the fact that China has huge land area and largest number of population in the world. Traditional wireless technologies like 4G, Bluetooth, ZigBee, ISA 100.11a and WirelessHART have been well addressed in literature. In this chapter, the focus is moved to 5G, Lora, IEEE 802.11 af, ah, ax and ay. Selected applications health monitoring, toxic gas monitoring, connected target coverage Problem and mobile crowd sensing are discussed in detail. Geographic routing, wireless charging and wireless coexistence are challenging issues that need to be addressed in the near future.

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