Guest Editorial Preface

Global Strategic Management and Technology:
Research Revisited

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THEORETICAL BACKGROUND

Today, we are at the beginning of the Fourth Industrial Revolution. Developments in genetics, artificial intelligence, robotics, nanotechnology, 3D printing, and biotechnology, to name just a few, are all building on and amplifying one another. This will lay the foundation for a revolution more comprehensive and all-encompassing than anything we have ever seen. Smart systems—homes, factories, farms, grids, or cities—will help tackle problems ranging from supply chain management to climate change. The rise of the sharing economy will allow people to monetize everything from their empty house to their car. (WEF, 2016, p. v)

In today's business environment, it might be difficult to identify a single task, service, or product that is not touched by modern technology. Selecting technology is part of the strategic management process of any company. A strategic management process establishes an organization's purpose and business objective for developing organizational capabilities to constantly and efficiently manage technological change. Despite the extent of the substantial literature on the field of strategic management and technology management, various specialists testify to how both these two dimensions remain characterized by the effective lack of empirical research on the actual phenomena themselves (Grant, 2003; Rudd et al., 2008).

The field of strategy has evolved substantially in the past twenty-five years. Firms have learned to analyze their competitive environment, to define their position, to develop competitive advantages, and to understand threats to the sustaining advantage in the face of challenging competitive threats (Casadesus-Masanell & Ricart, 2010).

However, factors such as globalization, deregulation, or technological change are profoundly changing the competitive game. Nowadays, the era of Globalization makes firms able to accept and capture opportunities. The world seems limitless and scientific and technological development is unstoppable. However, for firms to succeed in digital transformation, they need to redesign and redefine their business strategies. Increasing the digitization of business processes, products, and services makes it imperative to develop a better understanding of digital business strategies (Yeow, Soh, & Hansen, 2018).

Digital business strategies help to change markets and sustain innovation in contemporary economies through an interface with customers, partners, and suppliers (Romanelli, 2018). Advances

in information and communication technologies have sparked recent interest in the innovation of business models. Many electronic businesses (e-business) constitute new business models (Casadesus-Masanell & Ricart, 2010). Current digital trends lead companies to redefine their product and business portfolio by digitizing products and services.

Yang, Kaneko, Fujii, and Yoshida (2017) claim that technological capabilities are developed over time, as a result of the company's internal research and development and its external technology supply activities. Attention should be focused on how companies have access to technology and how they use that technology to develop the internal technological capabilities needed to respond to changes in the technological paradigm.

Although strategic management and technology management have traditionally been considered separate modes, scholars have begun to acknowledge that organizations simultaneously engage in global strategic management and technology management with each other. Strategic management can establish the organization's technology development program and its business strategy by exploiting and exploring its sustainable competitive advantage (Ferreira et al., 2013). Organizations, both large and small, need to comprehend that technology is a strategic and competitive asset that must be successfully managed. Managers and entrepreneurs need to continually develop technology development strategies and improve organizational capabilities as a routine business objective. This process is impacted by changes in the external economic, political, and social environment, actions of existing and potential rivals, and the internal characteristics of the organization (Brockhoff, 2002; Fernandes & Ferreira, 2013).

As regards the presumably positive association between strategic management and technology management in the prescriptive literature, the empirical research findings demonstrate that following several decades of research, the actual effects of strategy on technology management and consequently on performance remain inconclusive and unproven (Efstathiades et al., 2012).

In this sense, managers are alert of the strategic position of technology in bringing value and competitive advantage to their organizations and networks in which they operate (Phaal et al., 2004). These questions are becoming more critical as the cost, complexity, and rate of technology change increases, and competition and sources of technology globalize. Technology management requires effective processes and systems to be put in place to guarantee that existing and potential technological resources within the organization are aligned with its strategic needs. The impact of changes in technology and markets needs to be assessed, in terms of potential threats and opportunities, including disruptive technologies and markets. Global strategic management nowadays is still mostly dominated by mental models based on neoclassical economics (Ramírez & Selsky, 2016). However, the persistent advances and spread of technology turbulence in the contextual environments of various organizations have called those models into question. Therefore new global strategic models are needed.

In this context, it is important to recognize that well-performed, comprehensive, and extensive literature reviews on different scholarly topics/areas generally falling under the global management and technology stream help identifying the research gaps and set future research agenda to provide vibrant directions for further research.

CONTENT OF THIS SPECIAL ISSUE

The central purpose of this special issue is to substantive the value of using different global management perspectives. As a complement to this central purpose, we look to demonstrate why and how global strategic management and technology practices can enrich strategy advances both organizational theorizing about the environment and strategy scholars' search for an effective model in digital transformation revolution contexts.

This special issue aggregates six articles with different and novel approaches to highlight aspects of global strategic management and technology that conventional literature has neglected. The first paper, written by Pedro Veiga, Ronnie Figueiredo, Sérgio Teixeira, and Cristina Fernandes, entitled

"Opening Pandora's Box. Everything we (not) know about the Global Strategy", offers a systematic literature review about global strategy. Using in-depth content analysis and bibliometric techniques, the authors identify the main theories used in the previous literature and suggest a future research agenda.

The second paper entitled "Economic Impact of Information Industry Development and Investment Strategy for Information Industry" written by Boqiang Lin, Zhijie Jia, and Malin Song, assesses the economic impact of information industry development by applying a dynamic recursive computable general equilibrium model, bringing some important implications to companies, government, and other policymakers.

The third paper, "A Perception-Based Model for Mobile Commerce Adoption in Vietnamese Small and Medium-Sized Enterprises", written by Ngoc Tuan Chau, Hepu Deng, and Richard Tay, investigates the critical determinants for the adoption of mobile commerce (m-commerce) in Vietnamese small and medium-sized enterprises. Using structural equation modeling, the authors identified some critical dimensions for the adoption of m-commerce. The relevance of these findings for companies and the government in formulating policies and strategies to m-commerce development and dissemination is highlighted in the study.

The fourth paper, entitled "The Influence of Organizational Ambidexterity on the SMEs' Speed of Internationalization", written by Carina Silva, Miguel González-Loureiro, and Vitor Braga, attempts to analyze the role of exploitation orientation and exploration orientation on international growth. Based on an empirical study of manufacturing small and medium-sized enterprises, the authors identify several relations and implications of these constructs on international exploitation and exploration. Some contributions to a better understanding of the role that organizational ambidexterity plays on the SMEs' speed of internationalization are identified.

In the fifth paper, entitled "Price Strategy, Market Orientation and Business Performance in the Hotel Industry", Carlos Sampaio, Ricardo Rodrigues, and José Hernández-Mogollón, aim to analyze the relationship between market orientation and business performance in a sample of Spanish and Portuguese hotel industry. The authors found out several important findings and implications for firms' strategy and relationship with their performance.

Finally, Cristina Gallego-Gomez, Carmen De-Pablos-Heredero, and José Montes-Botella, with the paper entitled "The Impact of Customer Relationship Management Systems on Dynamic Capabilities at Firms: An Application to the Banking Industry", focus on the banking industry to analyze to what extent the implementation of Customer Relationship Management systems has evidenced good results in terms of dynamic capabilities. This study was empirically validated using a sample of banking firms with the resource to structural equation modeling. The authors discuss some important implications relating to the impact of Customer Relationship Management on the dynamic capabilities of firms and strategies oriented to customers.

CONCLUSION AND FUTURE AGENDA

This special journal issue aimed to assemble high-quality papers that extend and increase understanding the global strategic management and technology. Furthermore, the selected papers provide a global panorama about the theme of this special edition, as well as methodological approaches to scrutinizing the phenomenon along several pertinent analysis dimensions. This contributes to more advanced research on strategic management and global technology, which is a multifaceted and complex field of research. Additional attention needs to be paid in the future for this research issue. The papers included in this special issue have emphasized some research gaps and future research agenda that will encourage the research debate among academics and policymakers.

The guest editor's expectation is that the articles included in this special issue will further inspire future research, as there subsists huge scope for academic work that examines the role of strategic management and technology in a global perspective.

PART 2

This Issue Also Contains the Following Regular-Issue Papers

Article 7

Building an Internet-Based Knowledge Ontology for Trademark Protection, by Charles V. Trappey, Ai-Che Chang, and Amy J. C. Trappey

This research proposes an intelligent trademark legal precedent recommendation system to assist trademark owners to find relevant past cases, laws, and judgments to form legal arguments to defend against infringement. Judicial precedent and applicable laws from the USA are used to construct an ontology of trademark litigation knowledge. The ontology is used to analyze potential infringement cases with similar laws and precedents used to resolve previous legal disputes. The analysis provides a basis for proceeding with legal action necessary to protect a company's brand equity when arguing potential trademark infringement.

Article 8

Technology Used in Knowledge Management by Global Professional Event Services, by Krzysztof Borodako, Jadwiga Berbeka, Michał Rudnicki

This exploratory study aims to identify and classify ICT used in knowledge management among professional event service providers. By applying method triangulation (interviews, meta-linguistic coding, analysis of association graphs and netnography), the authors identified key terms related to knowledge management and technology. Firms differed by type and length of market presence. The technologies used by firms were grouped into five types. The analysis of competition in search engines confirms high scores for technology service providers, i.e., cloud data and beacon.

Article 9

ICT as "Knowledge Management" for Assessing Sustainable Consumption and Production in Supply Chains, by Surbhi Uniyal, Sachin Kumar Mangla, Pappu R. S. Sarma, Ming-Lang Tseng, and Pravin Patil.

This research seeks to gauge Information and Communication Technology (ICT)—as change management—for industries in the successful adoption and execution of SCP. In so doing, potential key ICT based factors to SCP are identified from the literature and experts' feedback. This paper suggests a decision framework for assessing the interrelationships among and between the ICT oriented factors by utilizing Graph Theory and Matrix Approach. Data for this work derives from three automotive companies operating in India. From findings, 'Governance and Management', is the topmost factor for the adoption of SCP in value chains. The relationship among the index values is further evaluated using Spearman's rank correlation coefficient. This research can facilitate practitioners, government agencies, and customers for a better understanding of ICT driven factors in managing resources, reducing waste, and improving cost, which would further help in meeting sustainable development goals of the United Nations of responsible consumption and production and innovation, industry, and infrastructure.

Article 10

Using Publicized Information to Determine the Sustainable Development of 3-PL Companies, by Kris M. Y. Law, Kristijan Breznik, and Andrew W. H. Ip

This study focuses on public information such as mission statements of the top 50 global 3-PL companies and the relevant sustainable development. A comprehensive content analysis identified four major content dimensions of mission statements relating to sustainability development. The dimensions are driving forces, approaches, responsibility to stakeholders, and competitive values. This paper offers a good methodological reference for researchers or practitioners managing the public information of organizations. Network analysis reveals that the location of companies has a limited effect on their mission and strategy as they all provide global service.

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