Guest Editorial

Rajesh K. Pillania

Institute for Strategy, New Delhi, India; Fellow Asia Programs, Harvard, Cambridge, USA; and Faculty, MDI, Gurgaon, India E-mail: rajesh@pillania.org

Maria Alejandra Gonzalez-Perez

International Business Department, Universidad EAFIT, Carrera 49 No. 7 Sur 50, bloque 26 – Oficina 606, Medellin, Colombia E-mail: mgonza40@eafit.edu.co

Biographical notes: Rajesh K. Pillania is a Prolific Researcher with many papers in international/national journals and conferences. His areas of expertise are global strategy, innovations and emerging markets. He is an advisory board member of many international research journals, professional bodies, and conferences. He is a sought-after guest editor for special issues by a number of international journals. He has worked in Americas, Europe and Asia and his academic experience includes the Business School, Panjab University (Chandigarh, India); R.H. Smith School of Business, University of Maryland (Maryland, USA); Northumbria University (Newcastle, UK); most recently, Harvard (Cambridge, USA); COPPEAD (Rio, Brazil). Currently, he is Chairman, Institute for Strategy, India; Fellow Asia Programs, Harvard, Cambridge, MA and Faculty, MDI, Gurgaon, India. He holds a PhD and MBA.

Prof. Dr. Maria-Alejandra Gonzalez-Perez (PhD) is an Associate Professor and the Head of the International Business Department at Universidad EAFIT in Colombia. She is the Director of the Research Network on International Studies at Universidad EAFIT. She is also an Associate Researcher at the Centre for Innovation and Structural Change (CISC) at the National University of Ireland, Galway (NUIGalway).

With a high growth rate and still significant untapped potential, emerging markets are the growth engines of the world economy. Globalisation and technology are two prime drivers of the global economy. Innovations have become popular again and globalisation of research and development is taking place. Emerging markets are becoming source of low-cost research and development initiatives, on the one hand, and at the same time these markets need technology for the developmental needs. How to face the changing realities of technology globalisation requires substantial strategic thought, guidance and implementation. With this background, papers were invited for the special issue on *'Emerging Markets'* on various aspects of innovations and technology globalisation and

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316 R.K. Pillania and M.A. Gonzalez-Perez

emerging markets. The special issue generated a lot of interest and finally six papers were selected, supported by a research note.

The research note 'Global innovation and knowledge scenario: the stars, followers and laggards' studies 140 countries on knowledge and innovation using the three knowledge parameters namely innovation, education and Information and Communication Technologies (ICTs). The research work identifies three groups using cluster analysis. These groups are labelled as Knowledge Stars, Followers and Laggards based on their performance on the three parameters. Interestingly, the emerging markets fall in all of the three categories. Whereas Russia, Hungary, Poland, etc., come into stars; China, Brazil and South Africa, etc., come into Followers; India comes into laggards' category. The research note stresses on the need for improving the performance of Laggards on knowledge and innovation front for social development and competitiveness.

The first paper 'Ownership and visibility: a pattern of industrial technology catching-up in transition economies' integrates the literature on transition economies, visibility and the literature on industrial technology catching-up in developing countries, to present a pattern of industrial technology catching-up in transition economies from the perspective of ownership. The pattern indicates that the State-Owned Enterprises (SOEs) and Private-Owned Enterprises (POEs) play different roles in the process of technology catching-up. Specifically, SOEs play a more active role in importing foreign technology and innovation activities, whereas POEs are inclined to come to the fore in assimilation activities. It points out that knowledge transfer between SOEs and POEs is key to catching-up occurrence in transition economies. It contributes to the extant literature by questioning the previous work assuming that the industrial technology catching-up players (firms) are homogeneous, thus increasing the understanding of unique catching-up path in the transition economies.

The second paper 'Systemic problems in technology transfer in emerging markets' identifies the systemic nature of the problems that arose in the course of the transfer of technology from an advanced country to an emerging market and explores the technology policies that the government adopted to help business firms solve the systemic problems. The paper argues that even those portions of the technical knowledge that can be duly purchased by and licensed to the recipient are more likely to meet obstacles for successful transfer. Some of the systemic problems are hard to be resolved by business companies on their own, and assistance from the government of the emerging country concerned is needed. The government should be careful to ensure that the timing is appropriate when allowing new firms to compete in marketing the same technology.

The third paper 'Innovations in emerging countries: an institutional approach' explores how emerging countries, in spite of the resources and infrastructure constraints, are catching up with developed countries, and develop substantial innovation capabilities. Drawing on the institutional approach, a conceptual framework is presented in this paper. The framework explains intricate dynamics of innovation in an emerging country context; it addresses the interplay of a broader emerging country context and individuals' and organisations' actions and interactions that produce innovations and change. This understanding of the dynamics of innovation will help firms in developing entrepreneurial and innovation capabilities and designing innovation context in the emerging countries.

The fourth paper 'How transfer of R&D to emerging markets nurtures global innovation performance' connects literature on knowledge management to a

Guest Editorial

network-based theoretical framework helpful to analyse and explain the impact of globalisation of R&D on innovation performance. This framework is applied to two case companies, both global leaders within their respective industries, to analyse the extent to which their strategic globalisation of R&D activities, from Scandinavia to China, has contributed to increased innovation performance. The paper suggests that close interaction and cross-fertilisation with local knowledge networks are of eminent importance for newly established R&D offsprings to improve overall innovation performance of their globalised R&D network.

The fifth paper 'WiMAX diffusion in USA and Korea: a comparative study integrating scenario planning and Bass model' discusses the technology's progress, functionality and fair competition. It develops a forecast for mobile WiMAX as an emerging technology using Scenario Planning and Bass Model methodologies. The results obtained for each scenario are analysed and compared with the behaviour of WiMAX's subscribers in both the USA and Korea. The study discusses the differences in the US and Korea models. The research presents that WiMAX will diffuse in Korea at a faster rate owing to positive response from imitators. With substantial market potential and a clear picture of subscriber needs, the next radical expansion is expected to occur in the field of personal broadband services. The WIMAX standard promises to deliver superior speed, cost-effective and high-quality services with long distance comprehensive coverage.

The last paper 'Academia–private sector collaborations in the Costa Rican Information and Communication Technology (ICT) cluster' discusses three cases of collaborations between actors from the private and academic sectors. The three cases of collaboration had positive developmental effects for the Costa Rican firms involved. The Costa Rican case shows that having public universities capable of preparing world-class knowledge workers, and managing to attract MNCs, do not necessarily or automatically produce the sort of systemic innovation observed in Silicon Valley or in the Israeli ICT cluster. In order for the Costa Rican ICT cluster to prosper, the state should address the coordination failures that impede research collaborations, and attempt to gradually change the non-collaborative customs of the academic sector, for example by funding collaborative R&D ventures that involve MNCs, local companies and universities.

The special issues cover various issues related to emerging markets. We acknowledge the support from the Editors, *International Journal of Technology and Globalisation*, Inderscience and reviewers and research staff for the special issue. We sincerely hope it will help in improving our understanding of innovations and technology and globalisation in the emerging market context.