



TABLE OF CONTENTS

- 1 Special Essay:
Management
Research in Japan:
An Academic
Sojourners Tale of
Interesting Research
Opportunities in
Japan
- 2 Special Essay:
Multinational
Enterprises and
Reverse Innovation
by Newly-emerging
Countries

Special Essay:

Management Research in Japan: An Academic Sojourners Tale of Interesting Research Opportunities in Japan

N. Sue Bruning, Ph.D.

Professor of Business Administration at I.H. Asper School of Business
University of Manitoba, Manitoba, Canada

About eight years ago I visited Japan for the first time. The International Federation of Scholarly Associations of Management (IFSAM) was having their Executive and Council meeting in Osaka, right before the Japanese Society of Business Administration (JSBA) annual meeting. At a reception with many Asian faces I saw a Caucasian across the room and I trekked over to find out about his experiences in Japan and in the Japanese academic community. That night I had a wonderful conversation with Ralf Bebenroth from Kobe University and we began collaboration on research focused on German expatriates working in Japan and the roles they played in the host environment. But my fascination with Japan started much earlier, in 1971 I worked for Sharp electronics in LaGrange, Illinois, for a summer. The dual management structure with one manager for the Japanese employees and another manager for the "American" employees was at first an odd structure to me, but in retrospect the system worked. There was little integration between the cultures but the managers that matched the cultural roots of the employees minimized much of the culture conflicts that have occurred in the many organizations over time. I did find it a bit odd that an organization would have two sets of policies, one for employees from each country but it was a lesson in cultural contrasts that has stayed with me for many years.

"There are a number of ways that research conducted in Japan can facilitate our knowledge of management which makes Japan and the academic/practitioner communities an interesting and fruitful research region"

Fast forward to the summer of 2013 when I was researching places to take a research leave, places where the environment was rich in opportunities to study and advance management knowledge and practice. I contacted a number of Japanese colleagues that I had met since early in the new millennium and was fortunate to connect with Chie Iguchi who, even though she had just joined Keio University, was willing to facilitate arrangements for my visiting appointment. We worked through the arrangements and over the next six months she dealt with every little needed detail to perfection. All of the pre-arrangements and a walking tour of the area upon my arrival was the beginning of a fruitful three month visit; and a bit more understanding of the Japanese academic environment and management issues. My research interests run across a number of areas, some continue to involve research in Japan and with Japanese organizations, and others without a direct Japanese connection. In this brief essay I have been invited to share a bit about my Japanese research interests and I would also like to indicate how your support facilitated the accomplishment of and progress on a number of research studies. But first, I want to give my thanks to all of the people that facilitated connections with the Japanese management academic community, as well as, practitioners who are interested in academic research related to their disciplines. I would like to mention just a few of the individuals that I am indebted to for making various arrangements to visit their universities/institutes and/or provide speaking opportunities while I was in Japan: Toshio Takahashi (Bunkyo Gakuin University), Chie Iguchi (Keio University), Ralf Bebenroth (REIB at Kobe University), Keiji Natsume (Ryukoku University), Koji Shimohata (Shikoku University), Tetsuya Usui (Nihon University) and Florian Kohlbacker (Formerly with the German Institute of Japanese Studies).



There are a number of ways that research conducted in Japan can facilitate our knowledge of management which makes Japan and the academic/practitioner communities an interesting and fruitful research region. Within my research domains there are a number of areas of research that I have and would like to continue collaborations with researchers at Japanese universities. The following are brief descriptions of the topics of personal interest that I hope Japanese connections will lead to continued collaboration and research:

1. Leadership of virtual R&D teams and team absorptive capacity. We have developed a research team of Tomoki Sekiguchi (Osaka University), Fabrian Froese (University of Goettingen), Bradley Alge (Purdue University), Patrick Bruning (University of New Brunswick) and me to develop a research study that is proposed to examine the role of leadership and a team's absorptive capacity in innovation outputs from global virtual research and development teams. New product development within multinational firms is fundamental to success in an increasingly dynamic and global business environment (Cascio, 2003; Hitt, Bierman, Uhlenbruck, & Shimizu, 2006); and requires the development of transnational products, those developed to simultaneously meet unique demands of multiple markets (Subramaniam & Venkatraman, 2001). These products often require culturally diverse and often geographically dispersed teams (Subramaniam & Venkatraman, 2001). However, both spatial and cultural barriers present problems for global product development teams. The geographic dispersion of the teams has led to a focus on virtual structures for the team's activities. As such, leadership, group processes, and support of global product development teams represents a challenge for the development of innovative products by firms competing in the global arena. In a similar vein, team-based work structures have also experienced increased popularity, becoming an integral work form in today's business world as a means to develop innovative products. This is evidenced by their increased importance as a research topic in the areas of work design, work structure, work dynamics, as well as innovation and new product development (Brown & Eisenhardt, 1995; Campion, Medsker, & Higgs, 1993; Cordery, Soo, Kirkman, Rosen & Mathieu, 2009; Hackman, 1987; Kozlowski & Bell, 2003; Mathieu, Maynard, Rapp, & Gilson, 2008). The study plans to focus on firms from three regions as represented by the research team: Asia (represented by Japan), Europe (represented by Germany) and North America (represented by Canada and the United States). The major objective of the study will be to provide a basis for further research on how teams can be designed to aid innovation; and will focus on leader-team exchanges within global virtual research and development teams and the team's absorptive capacity, or a teams' ability to absorb and utilize knowledge (Cohen & Levinthal, 1990). New product introductions will be the major outcome variables. Japan as one of the focal countries in the study offers a rich opportunity to understand the development of effective virtual R&D teams that can be compared and contrasted with virtual teams from other geographic regions.



"Japan as one of the focal countries in the study offers a rich opportunity to understand the development of effective virtual R&D teams that can be compared and contrasted with virtual teams from other geographic regions."

" Thus, it would appear that some of the research ideas we have already examined deserve further examination in Japan, and results from the research might be transferable to local management practice."



2. Global performance reviews and the role of networks and role expectations. In a collaborative research study with Ralf Bebenroth and Werner Pascha (2011), we discovered that the data on desired management roles of expatriate employees (primarily German employees assigned to Japan) differed depending on who was asked the question. Tungli and Peiperl (2009) surveyed human resource managers at headquarters and compared results obtained from HR managers from Germany, the UK, US and Japan. While the perspectives from the HR managers contrasted somewhat, when we compared the data from expatriate managers, their local counterparts and the results from the HR managers in the Tungli and Peiperl study the contrasts were even greater. The contrasting perspectives suggest that depending on whose perspective governs the global performance review process, the results of the review could be drastically different. Yet the expatriate manager's career success and future assignments might be heavily dependent on the results of the review. Thus, a planned study (with the study team still to be developed) is to examine how the networks and negotiated roles that expatriates develop play a role in the resulting performance review, and whether global performance review processes can be improved through the incorporation of negotiated role expectations into the process.

3. Emotional labour and employee burnout in healthcare organizations. A third area of research was spurred by a news article that I read while in Japan. I have been involved in health and safety research and the examination of employee well-being for a number of years. When I arrived in Japan a graduate student (Anastasia Szykh) and I had just completed collecting data on the relationship between emotional labour (the contrast between expected emotions to be displayed and actual felt emotions) in a healthcare setting. We are currently collecting additional data on the topic and seek to expand the research question to additional contexts to understand the cultural transferability of the relationships between emotional labour and employee burnout. Soon after my arrival in Japan there was an article that reported on the high levels of stress experienced by nurses in Japan. Thus, it would appear that some of the research ideas we have already examined deserve further examination in Japan, and results from the research might be transferable to local management practice. There are researchers in Japan that are actively examining similar topics (e.g. Vesa Peltokorpi, Japan Advanced Institute of Science and Technology). Thus, it would be a fruitful endeavor to develop new collaborative projects and opportunities on topics related to the work environment and health related outcomes.

Admittedly, the ideas and topics in this short synopsis are restricted to this author's research interests, but the brief time in Japan reinforced the perception that Japan is a country that could offer a great deal of research opportunities that expand upon the topics already explored by the current group of prolific and well-known academics in the management area; and is also an environment where new research ideas are generated and studied. The IFSAM conference, held in Tokyo in September, 2014, provided a stimulating venue and provided a number of opportunities to continue to foster collaborative relationships between academics from around the globe. Thank you for the opportunity to develop relationships with colleagues and students at a number of Japanese universities. For further information and discussion please cact me at sue.bruning@umanitoba.ca.

REFERENCES

- Brown, S. L. & Eisenhardt, K. M. (1995) "Product development: Past research, present findings, and future directions." *Academy of Management Review*, 20: 343-378.
- Bruning, N.S., Bebenroth, R. & Pascha, W. (2011) "Valuing Japan based German expatriate and local manager's functions: Do subsidiary age and managerial perspectives matter?" *International Journal of Human Resource Management*, 22: 778-806.
- Cascio, W. F. (2003) "Changes in workers, work, and organizations." In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), *Handbook of psychology and Industrial and organizational psychology*, Vol. 12: 401-422.
- Campion, M. A., Medsker, G. J., & Higgs, A. C. (1993) "Relations between work group characteristics and effectiveness: Implications for designing effective work groups." *Personnel Psychology*, 46: 823-850.
- Cohen, W. M. & Levinthal, D. A. (1990) "Absorptive capacity: A new perspective on learning and innovation." *Administrative Science Quarterly*, 35: 128-152.
- Cordery, J., Soo, C., Kirkman, B., Rosen, B., & Mathieu, J. (2009) "Leading parallel global virtual teams: Lessons from Alcoa." *Organizational Dynamics*, 38: 204-216.
- Hackman, J. R. (1987) "The design of work teams." In J. W. Lorsch (Ed.), *Handbook of organizational behavior*, Englewood Cliffs, NJ: Prentice Hall, 215-242.
- Hitt, M. A., Bierman, L., Uhlenbruck, K., & Shimizu, K. (2006) "The importance of resources in the internationalization of professional service firms: The good, the bad, and the ugly." *Academy of Management Journal*, 49: 1137-1157.
- Kozlowski, S. W. & Bell, B. S. (2003) "Workgroups and teams in organizations." In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), *Handbook of psychology: Industrial and organizational psychology*, Vol. 12: 333-375.

Special Essay:

Multinational Enterprises and Reverse Innovation by Newly-emerging Countries

Takabumi Hayashi, Ph.D.

Professor of Kokushikan University,
Professor Emeritus of Rikkyo University, Tokyo, Japan



When I first visited the Philippines in 1972, I used to take a boat from Davao to Manila. It took a week. When I peered down into the hold area of the boat, I was shocked by the harsh labor conditions of the workers there. The workers, each carrying a bag weighing 30-40 kilograms in the poorly ventilated space, were all children around 12-15 years of age.

In 1989, I had an opportunity to teach Japanese Business and Labor at De La Salle University in Manila. I was again surprised by the many children just in front of the University, begging for money. And again in the last seven or eight years, I have travelled, mainly in the Philippines, for research surveys, and I have again been surprised by how issues of poverty and poor living conditions remain.

Through such personal experience, I, as a researcher, have developed interests in the following key areas, and the concepts and contexts associated with them:

- Newly-emerging Countries,
- Technology Transfer,
- MNEs,
- Innovation and Reverse Innovation, and
- BOP.

1. Newly-emerging Countries in the context of economic history

Recently, the term "newly-emerging countries" (NECs) has been used increasingly often in parallel with "newly-industrializing economies" (NIEs), as proposed by the Organization for Economic Cooperation and Development. In terms of economic history, the former has the same meaning as the latter.

In 1995, with Professor Bing-Fu Chen of Nankai University, I wrote *Technology Development and Technology Transfer in Asia*, wherein I noted that:

In the economic history of the world, when Great Britain experienced the first industrial revolution in the second half of the 18th century, Germany, France, and the United States were at the stage of NIEs. When Germany, France, and the United States were in the final stages of their industrial revolution at the end of the 19th century, Japan was at the NIE stage. Asian NIEs (South Korea, Taiwan, Hong Kong, and Singapore), whose industrial infrastructure has developed rapidly since the end of the 20th century, must also be ranked in world economic history as NIEs (Hayashi, 1995, p.47)

" Thus, if NECs such as China, India, Russia, Vietnam, Indonesia, and Turkey can be considered NIEs in terms of world economic history, a new paradigm is required for the world's economic system in the 21st century."

Thus, if NECs such as China, India, Russia, Vietnam, Indonesia, and Turkey can be considered NIEs in terms of world economic history, a new paradigm is required for the world's economic system in the 21st century.

2. Technology Transfer and Reverse Technology Transfer

When reverse innovation is examined within the context of world economic history, various technologies that served as engines of the Industrial Revolution in Great Britain were transferred to the United States and the European continent, and became the technological basis for subsequent industrial revolutions in these countries. These technologies were then transferred to Japan, which experienced its own industrial revolution at the beginning of the 20th century. Internationally-transferred technologies are then improved in the countries to which the technologies have migrated, and innovative technologies are newly developed there. As part of the process of innovation, these technologies are eventually transferred back to home countries; termed reverse technology transfer, this is the historical process of reverse innovation. Historical change in techno-hegemony between major countries and regions also represents a historical flow of innovation and reverse innovation.

" On the other hand, the flow of reverse innovation which is now attracting public attention consists of, rather than partial technologies, final products that have been developed within a newly-developing country in which the subsidiary is located."

3. MNEs, and Technology Transfer & Reverse Technology Transfer

The appearance of multinational enterprises (MNEs) and the establishment of international production and development bases after the Second World War stimulated a flow of technology transfer from home to host countries of MNEs. After MNE host countries had constructed their own national innovation systems, a flow of reverse technology transfer from host countries to home countries developed (Hayashi, 1987; Mansfield & Romeo, 1984). The former constitutes a knowledge flow of international intra-firm technology transfer from MNEs in home countries to foreign subsidiaries; the latter is an international reverse knowledge flow of intra-firm reverse technology transfer from foreign subsidiaries to MNEs in their home countries. In the case of American MNEs, reverse knowledge flow of international intra-firm reverse technology transfer from foreign subsidiaries to MNEs in the United States has been witnessed since 1980.

However, these aspects of reverse innovation between home-country headquarters and subsidiaries were seen as knowledge flows between subsidiaries in developed countries and headquarters in home countries – which were usually developed countries – and consisted of parts of the overall technologies required to manufacture a product.

On the other hand, the flow of reverse innovation (Govindarajan & Trimble, 2012) which is now attracting public attention consists of, rather than partial technologies, final products that have been developed within a newly-developing country in which the subsidiary is located.



4. Reverse Innovation and Disruptive Innovation

The noteworthy point is that, although reverse innovation is a flow of innovation from an MNE's subsidiary in an emerging country to the MNE in its home country, reverse innovation indicates a knowledge flow that contains the characteristics of disruptive innovation (Christensen et al., 2006). International intra-firm reverse technology transfer has hitherto implied that once the partial technologies developed in a subsidiary in an emerging country are transferred to a home-country headquarters, the headquarters will then customarily produce an end product by integrating those partial technologies with the marketing knowledge and other skills developed in the home country.

5. Reverse Innovation as Social Innovation

The important point is that innovation which succeeds in an emerging country contains elements which satisfy requirements of the local market. Therefore, reverse innovation, wherein innovation is materialized in the form of products and services, can satisfy conditions applicable to low-income and good-enough markets in advanced countries. In other words, reverse innovation from markets in emerging countries to markets in advanced countries can be disruptive, gradually eroding mainstream markets. Reverse innovation also contains the characteristics of social innovation, able to improve the life quality of people with low income regardless of nationality. The most important social problems that can potentially be solved by MNEs include how to establish a strategy to eliminate poverty among people at the base of the economic pyramid (BOP) in NECs, and how to achieve reverse innovation, by which NEC-developed innovation developed in NECs can be transferred to other NECs and advanced countries.

To realize social innovation that can create employment and raise income levels in the process of developing and distributing products and services which people at BOP level can buy, it is crucial to create and use marketing knowledge and technological information applicable to the cultural conditions and social infrastructures peculiar to such people in emerging countries, whose lives can be improved. To develop and commercialize new products and services based on the cultural conditions and social infrastructures locally characteristic of BOP situations, locally-embedded knowledge and wisdom must be taken into consideration. In other words, to develop, manufacture, and distribute new products and services for those at BOP level, grassroots innovation must be adopted in some form or other. Moreover, locally-driven frugal innovation, or innovation by economizing on the use of limited resources, must be nurtured to create the kind of social innovation that accommodates the needs of BOP society. Such frugal innovation needs to be sustainable and transferable to facilitate reverse innovation (Asakawa, Cuervo-Cazzura and Un, 2014).



"The important point is that innovation which succeeds in an emerging country contains elements which satisfy requirements of the local market."

" Future BOP strategy for MNEs must determine how to cope with local value chains by making use of a global value chain and the global R&D resources owned by MNEs."

6. MNEs and BOP Strategies as Social Innovation

If the prime purpose of social innovation is to free BOP people from poverty, it is important to construct a local value chain that creates employment and reasonable income, so that BOP people can participate in the development, manufacture, and distribution of products and services. For that purpose, it is essential to establish a sustainable business ecosystem that can construct a local value chain.

Future BOP strategy for MNEs must determine how to cope with local value chains by making use of a global value chain and the global R&D resources owned by MNEs. Such local value chains can develop, manufacture and distribute products and services for BOP consumers based on grassroots innovation, in which people at the BOP participate. A local value chain is thus able to create employment and income through its local business eco-systems.

However, should MNEs successfully cope with a local value chain, they will also have to cope with reverse innovation, which may become distinctly disruptive in both MNEs' home countries and in other advanced countries.

7. Japan-based MNEs and BOP Strategies

Although many Japanese MNEs try to tackle NEC markets, very few have successfully coped with BOP markets in NECs. Only Ajinomoto, MANDAM and Fumakilla (which provide seasoning materials, cosmetic products, and anti-mosquito insecticides respectively) appear to provide products to BOP consumers through local traditional retail outlets. Of these three Japan-based companies, MANDAM and Fumakilla have established local value chains from local production through local retailing networks. These companies are not typical MNEs, but rather SMEs, employing 100-300 regular employees. On the other hand, Ajinomoto, a large-scale MNE employing nearly 4,000 regular employees (excluding those of associated companies), has established a globalized value chain that concentrates production on low-cost locations such as China and Thailand, and provides products to overseas channels. However, local value chains in other overseas subsidiaries of Ajinomoto are limited in terms of the width and depth available in the local business eco-system network. While the company has succeeded in creating competitive advantages in leveraging global value chains, it appears to fall short in creating employment and income for BOP people and local suppliers.

In NEC markets, the targets for Japan-based MNEs in both the electronics and automobile-related industries are more than the upper-middle classes. In this sense, current BOP strategies by Japanese MNEs are not those that BOP people in NECs really require. If Japanese MNEs are to succeed in coping with BOP markets, they will need to address reverse innovation from NECs.

These points represent my current avenues of research interests.



REFERENCES

- Asakawa, K., Cuervo-Cazzura, A., and Un, A. (2014) "Frugality-based advantage." Paper presented at *the Academy of International Business Annual Meetings*, Vancouver, Canada, June.
- Christensen, C. M., Baumann, H., Ruggles, R., and Sadtler, T. M. (2006) "Disruptive Innovation for Social Change." *Harvard Business Review*, 84(12), 94–101.
- Govindarajan, V. and C. Trimble (2012) "*Reverse Innovation*." Harvard Business Review Press.
- Hayashi, T. (1995) "Technology Accumulation in East Asia and the Japanese Style Technology Transfer System." In C. Binfu and T. Hayashi (eds.), *Technology Development and Technology Transfer in Asia*, Tokyo, Bunshindo, 47-73.(In Japanese)
- Hayashi, T. (1987) "International R&D Network and the International Intra-firm Reverse Technology Transfer Strategy of MNEs." *Mitashougaku Kenkyu*, 30(5), 116–131. (In Japanese)
- Iguchi, C. (2014) "National Innovation System and the Role of MNE Subsidiaries on the Global Value Chain: The Case of Japanese MNEs in the Philippines." *Mitashougaku Kenkyu*, 56 (6), 33–46. (In Japanese)
- Mansfield, E. and Romeo, A. (1984) "Reverse Transfer of Technology from Overseas Subsidiaries to American Firms." *IEEE Transactions on Engineering Management*, 31 (3), 125–136.
- Prahalad, C. K. (2002) "*The Fortune at the Bottom of the Pyramid: Eradicating Poverty through Profits*." Upper Saddle River, Prentice Hall
- Prahalad, C. K. and Allen Hammond (2002) "Serving the World's Poor, Profitably." *Harvard Business Review*, 80 (9), 48–57.

Japan MNE Insights will be published twice a year on the AMNE official website (www.mne-jp.org). Please feel free to contact with the editorial team if you have any question or request.

Japan MNE Insights Editorial Team

Editor-in-Chief

Chie Iguchi, Keio University

Editor

Masashi Arai, Kyorin University

Tamiko Kasahara, University of Shizuoka

Tetsuya Usui, Nihon University

Japan MNE Insights Editorial Team is currently located at
Office of Dr. Tamiko Kasahara,
University of Shizuoka, School of Management and Information
52-1 Yada, Suruga-ku, Shizuoka, 422-8526, Japan
TEL/FAX:+81-54-264-5435 (direct)
Contact e-mail address: kasahara@u-shizuoka-ken.ac.jp

Copyright © Academy of Multinational Enterprises (Japan)