

Agile Innovation or Perfect Product? Cross-Cultural Management Challenges and Opportunities of Japanese In-House Software Centers in India



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India is a global center for software development, attracting foreign direct investment in Global Capability Centers (GCCs) particularly from North America and Europe. Japanese GCCs are relative newcomers and less is known about them. Further, most research on GCCs has focused on strategy rather than on cross-cultural management issues that could enable or impede GCC success. To address these gaps in the literature, the objective of this qualitative study is to investigate cross-cultural issues in Japanese GCCs. The findings from 15 in-depth interviews of Indian employees and Japanese expatriates of Japanese software GCCs in the greater Bangalore area of India indicate cross-cultural management challenges and opportunities that revolve around quality and customer expectations, human resource management, and business growth and success. Research and management implications are provided.

Keywords: Global Capability Centers, Software Development, Cross-cultural Management, Japan, India

1. Introduction

India has rapidly emerged as a global center for software development, attracting foreign direct investment in this sector. The availability of talent, cost competitiveness and willingness to learn and adapt to customer requirements and technology have been major factors contributing to the growth of the Indian software industry (Agrawal, Khatri, & Srinivasan, 2012). A large number of multinational enterprises (MNEs) have opened in-house software centers in India given the tremendous success of the Indian business process management industry. These in-house centers are referred to as global capability centers (GCCs). Currently, India has around 1,600 GCCs in various business sectors, representing a 60% growth rate since 2015 (NASSCOM, 2023). GCCs employ 1.66 million employees and account for an estimated revenue of US\$46 billion for the financial year 2022 (NASSCOM, 2023).

The entry of Japanese MNEs into the software development sector in India represents a longer-term trend of Japan's globalization of production that began in the 1980s. At that time, Japanese businesses increased their competitiveness by going global, and by identifying new strategies for succeeding in rapidly changing markets (Schaede, 2020). Japanese industries dominated the world market in the 1980s and 1990s in a large number of sectors such as automobiles, shipbuilding, and consumer

electronics. However, following the burst of Japan's economic bubble in 1990 and slowdown of growth of the Japanese economy, many leading Japanese companies lost global market share and struggled to remain competitive in the global market (Mikitani & Mikitani, 2014). A number of Japanese high-tech companies that experienced slow revenue and profitability growth started GCCs in India. Japanese MNEs have accelerated their investment in India (Gupta, 2023), and currently there are over 1,400 Japanese firms operating in the automotive, electronics, software development and other sectors (India Invest, 2024).

Japanese management practices have long played a significant role in the success of Japanese firms by improving the quality of their products, as well as their productivity and competitiveness. These management practices encompass production management such as Total Quality Management (TQM) and human resource management (HRM) practices such as participative management and teamwork orientation. In fact, companies in developed economies as well as developing economies extensively adopted many of these practices in the 1980s and 1990s (Anand & Delios, 1996). It has been since argued, however, that TQM as a philosophy and as a practice provides only incremental improvements and may hold back organizations from achieving break-through innovations. This poses an important question about what is needed for Japan to succeed in today's global market for software products: is it a product that takes time to refine toward perfection or one that comes to market more quickly and refined in a subsequent version? Japanese HRM practices and their efficacy outside Japan have also been questioned in light of implications for the development of a network of global talent (e.g., Sekiguchi, Froese, & Iguchi, 2016). According to a survey of Fortune 1000 executives and GCC heads in India, the evolving role of GCCs is to move from being strictly a cost center to being a hub for innovation, where challenges include agility in the market and the ability to retain talent (Sheth, Singh, & Majumdar, 2017). Longer planning cycles are giving way to the 'Agile' methodology, while requisite talent includes domain expertise and leadership (Sheth et al., 2017).

The objective of this study is to investigate the cultural underpinnings of Japanese management that might enable or inhibit the growth and success of Japanese GCCs in India. Cross-cultural challenges of Japanese businesses have long been documented in the US and Europe (e.g., Kopp, 1994), and later in China (e.g., Lee & Reade, 2018; Yu & Meyer-Ohle, 2008). The cross-cultural issues that come to the fore revolve around differences in management style, decision making, communications, and work expectations that have led to misunderstanding, conflict, and turnover. Less is known about Japanese management in India (Ashta et al., 2021; Basu & Yoshida, 2012; Maharjan & Sekiguchi, 2016, 2017), particularly in the software industry, and what cross-cultural challenges and opportunities might be present. To our knowledge, this is the first study to examine Japanese management in GCCs in India focused on the software industry. This qualitative study draws on data gathered from in-depth interviews on the perceptions of Indian employees and Japanese expatriates working for Japanese GCCs in the software development sector in Bangalore, India. The study is expected to be of value to both scholars and practitioners since India is a growing investment destination for Japanese businesses (Marpakwar, 2024). It may also provide valuable insights on the factors that have affected the growth of Japan's high-tech industry globally.

The following is a literature review on culture and management, with a specific focus on Japanese management and Indian HRM issues in the software development industry. This is followed by the research methodology, and findings of the study. The paper concludes with implications for research and practice.

2. Culture and Management: Japan and India

Culture defines an individual's values, attitudes, and behavior and thus influences various aspects of organizational life, such as leadership effectiveness (Dickson, Den Hartog, & Mitchelson, 2003). When expatriate managers are posted to foreign subsidiaries, they are often placed in a leadership role with the responsibility not only to manage the business but also to manage people. Leadership effectiveness depends upon subordinates' perceptions of what constitutes good leadership (Kahai et al., 2011). Thus, it is likely that expatriate managers will need to adapt in order to effectively lead their local operations. Cultural models such as Hofstede (1980) and GLOBE (Javidan & House, 2001) provide insights. For instance, in high uncertainty avoidance cultures, careful planning, reliability, and punctuality are important attributes of successful managers, while in low uncertainty avoidance cultures, resourcefulness, improvisation, and flexibility are more valued. Leaders from high uncertainty avoidance cultures tend to delegate less to subordinates and emphasize control (Offerman & Hellmann, 1997).

Much of the work on cultural differences regarding Asia has taken place within comparisons of East and West, e.g. between Japan and the USA, or between China and the UK. Relatively little work has been done on assessing cultural differences between Asian countries and the implications for people management. It has often been portrayed that Asian countries are similar to one another, suggesting that expatriates from one country in Asia will have a relatively easy time to adjust and manage in another Asian country. Cultural closeness, however, may not necessarily guarantee a lack of challenges in managing people or understanding the intricacies of the business environment. For instance, Japanese expatriates in China faced challenges despite both countries sharing similar cultural values (Lee & Reade, 2018). The following provides an overview of Japanese management across borders with a focus on India.

1. Japanese Management Across Borders

Japan's rapid economic rise following World War II, drew the attention of scholars and management practitioners around the world until the burst of Japan's economic bubble in the early 1990s. Japanese management, including Japanese production principles such as TQM and Japanese-style HRM were studied because they were considered key to the competitive advantage enjoyed by Japanese MNEs. Japanese-style HRM is characterized by long-term employment, seniority-based compensation and promotion, and teamwork orientation (Haghirian, 2016; Lee, Iijima, & Reade, 2011; Sekiguchi et al., 2016). Over the years, Japanese production and HRM practices have been transferred by Japanese MNEs to their foreign subsidiaries with mixed success (e.g., Ashta et al., 2021).

While Japanese MNEs have been successful in the internationalization of production and operations management, they have not been as successful in the internationalization of HRM (Sekiguchi et al, 2016). Japanese MNEs have often

followed an ethnocentric management style, where Japanese managers hold the top management positions and non-Japanese are relegated to support staff without possibilities to develop their career. Such exclusionary practice, together with traditional Japanese HRM practices that do not fit local expectations, are considered to be a primary reason for the difficulty of Japanese MNEs to attract and retain global talent (Froese & Kishi, 2013).

Other Japanese management-related challenges that have been identified in a cross-cultural context are communication and decision making. Japan is considered to be a high-context society with indirect communication (Hall & Hall, 1990). In Japan, managers expect that employees will automatically understand what is required in any situation without being told what to do. Such implicit understanding does not always translate to work environments outside Japan, and employees at Japanese subsidiaries can be frustrated, not knowing what is expected of them, even in cultural contexts that share similar cultural values (e.g., Lee et al., 2018). Decision making in Japanese companies may also be a source of frustration because of the time-consuming process of the *ringi* system that involves many layers of consultation throughout the organization (Haghirian, 2016), and because of the practice of Japanese expatriates checking with HQ before making a decision which further delays action (Lee et al., 2018).

The cross-cultural issues identified are generally concerned with differences in management style, decision making, communications, and work expectations. These differences have sometimes led to misunderstanding and conflict.

3. Japanese Management in India

Maharjan and Sekiguchi (2016) suggest that while Indian companies have been influenced by US and other Western management practices, India is culturally closer to Japan and thus Japanese management and HRM practices may be more effective in the Indian context. Maharjan and Sekiguchi (2016) note that management in both India and Japan is infused with the importance of human relationships (e.g., Ramamoorthy, Kulkarni, Gupta, & Flood, 2007) and, like the Japanese, Indians value respect, effort and dedication more than the abilities of the employees (e.g., Budhwar & Khatri, 2001). In a subsequent study that featured interviews of both Indian employees and Japanese expatriates, Maharjan and Sekiguchi (2017) found that Indian societal values such as respect for seniority and openness to participative management have contributed to the adoption of Japanese management in India.

A study by Basu and Yoshida (2012) that focused on the experiences of Japanese expatriate managers in India found several cultural similarities that aided management as well as differences that created management challenges. The positive values and attitudes that the Japanese and Indians are perceived to have in common include a 'never-give-up' attitude, self-motivation, diligence, and an interest in technical things. The management challenges include differences in perceptions between the Japanese managers and Indian employees regarding time management, teamwork, and quality. Day-to-day communication is reportedly the biggest challenge.

While these studies shed light on Japanese management in India, they do not focus on the software development sector. For our purposes, it is useful to consider the management and HRM issues that have been identified in India's software industry as this is the context in which Japanese GCCs in our study are operating and will allow a

better assessment of the cross-cultural management challenges and opportunities that Japanese GCCs might experience.

2. Management Issues in the Indian Software Industry

With the rapid growth of the Indian software industry (Bhatnagar, 2007), two major growth challenges have been identified: market orientation and people management (Agrawal et al., 2012).

Regarding market orientation, Agrawal and colleagues (2012) note that the industry has been positioned at the low end of the value chain such as maintenance and debugging. Industry observers have expressed the need for the Indian software industry to move up the value chain towards development of software products. Agrawal et al. (2012) found that software professionals in India prefer to work on software development involving current and new technologies. Yet, “the nature of the work in the Indian software industry is essentially maintenance and testing functions for legacy systems” and software professionals get bored easily with this type of work (Agrawal et al., 2012: 165). Software professionals perceive that a typical maintenance project does not provide enough learning opportunities; it simply requires bug fixing or time-bound enhancement and hence is not considered to be significant or challenging work.

Against this background, some of the key HRM challenges identified in the Indian software industry include the low-skilled nature of the work, the work and learning preferences of software professionals that remain unmet, a lack of well-developed HRM systems and processes, high employee turnover, and a shortage of software professionals with sufficient knowledge and competencies, among others (Agrawal et al., 2012; Agrawal & Thite, 2003). While India has a large talent pool, not all are “industry-ready” with skills beyond what is needed at the entry level; thus, middle and senior managers are in short supply and subject to poaching (Bhatnagar, 2007). The growth of the Indian software industry is thus constrained by skill shortages, high levels of employee attrition, and rapidly increasing manpower costs.

According to Agrawal and Thite (2003), Indian software professionals are no different from others regarding typical occupational traits. Additionally, however, they show some unique Indian cultural characteristics. Apart from the typical concerns of managing organizational expectations and their own personal expectations for gaining technical excellence and tangible and immediate rewards, they also need to manage the expectations of their peers and family. Agrawal and Thite (2003: 254) note that “peers discuss, often in exaggerated terms, how they are working on the latest technology and receive substantial wage increases, particularly overseas offers.” Further, parents and family members of software professionals are influenced by the media hype surrounding the prospects of the Indian software industry, exert pressure on them to go for positions that offer big money, overseas trips, and other perquisites (Agrawal & Thite, 2003). Moreover, settling abroad has been considered a status symbol in Indian society, and this is attractive from the perspective of the family. The USA tends to be the preferred ultimate destination for settling permanently since the USA is considered to be the industry leader in terms of remuneration and opportunities to work on emerging technologies. Further, Indian software professionals are relatively more familiar with the language and culture in the USA compared to countries such as Germany and Japan. “These multiple pulls and pressures create

immense confusion in the minds of Indian software professionals and tempt them to go for short-term gains, often at the cost of the technical excellence to be gained by staying on in one position or organization for a sufficiently long period” (Agrawal & Thite, 2003: 254).

Such expectations translate into HRM-related problems. For instance, when software professionals are being interviewed for a position, they state that learning is their most important objective, but then lobby for positions that are seen as high potential by their peers and family members. Many become disillusioned with salary increases and promotions and express their frustration by resigning from their jobs (Agrawal & Thite, 2003). This is exacerbated by the global demand for Indian software professionals that has resulted in high turnover and spiraling salary costs for the Indian software services industry. Because settling abroad is a status symbol, “the majority of Indian software professionals aspire and tend to migrate overseas permanently once they acquire about three years’ experience making it difficult for software organizations to staff and particularly, lead projects” (Agrawal & Thite, 2003: 254).

3. Methodology

The study utilized a qualitative, exploratory approach which is considered appropriate when there is a dearth of previous research on the subject, and when in-depth interviews will help to surface insights that may not be readily gained through other research methods (Eisenhardt & Graebner, 2007). A qualitative method seeks to understand phenomena that are poorly understood and deeply contextualized (Yin, 2009), and is of growing importance in international business research (Birkinshaw, Brannen, & Tung, 2011).

The research was conducted in Bangalore, India. Bangalore was selected for the following reasons. One, Bangalore is well known throughout the world for being a primary center for global in-house software centers. Among all of the cities that host GCCs, Bangalore continues to garner the highest percentage of GCCs in India (Vidya, 2024). Two, given that GCCs may restrict researcher access for confidentiality reasons, GCC locations were narrowed to a convenience sample (Seth, 2023). The first author, who is based in Bangalore, was able to leverage his strong business network and his background in Japanese management to gain access to the GCCs of three large Japanese MNEs located in greater Bangalore. The sample size reflects the fact that Japanese GCCs in Bangalore are relatively small in number, and difficult to access. The first author was provided rare access to these Japanese GCCs, particularly as these are captive centers and cater to a Japanese client base.

Fifteen in-depth semi-structured interviews were conducted by the first author, consisting of eleven Indian employees and four Japanese senior managers working in the GCCs. Interviewees included senior general managers, general managers, and project managers, among others. The interviews were conducted in English, one of the main business languages in the Bangalore software industry. The interview protocol consisted of open-ended questions to elicit responses on the cross-cultural challenges and opportunities for Japanese GCCs in the Indian software industry.

The interview transcripts were coded into categories independently by the authors, and then compared and summarized. As elaborated below, the categories fall into three general themes: quality and customer expectations; management and HRM issues, and; business growth in India. Each theme is comprised of the relevant sub-issues.

4. Findings

1. Quality and Customer Expectations

• Planned Perfection

Interviews highlighted the extent of planning that Japanese companies do in comparison with others in the global software industry to mitigate uncertainties in a software project. In the global software industry, it is common practice that customers and service providers are prepared to live with uncertainties and continue to redefine project priorities on a regular basis. Software project specifications often get redefined during the different phases of the project based on the requirements of customers. The global software industry has technologies such as Agile Technology that facilitates change on a regular basis. These technologies require accepting and working with uncertainties as part of software development during the entire project planning and execution phase.

While Japanese customers, like other software customers continue to redefine their project requirements and software specifications during the project execution phase, it is common for the Japanese GCCs to plan every aspect of the project before execution to ensure that project outcomes are as planned. Indian interviewees noted that Japanese companies are highly systematic, process bound, and data focused. Documentation is important and sometimes there is a reluctance to accept new software project management technologies that require living with uncertainties on a continuous basis. One interviewee noted that:

The Japanese do not need to employ the Agile software approach because they are very disciplined and things usually go as planned. But having such discipline and clarity costs time and affects the launch of products in the market. (Indian Interviewee)

Another respondent echoed this sentiment by saying:

Agile Technology is not relevant for the Japanese as there are no uncertainties in their world. (Indian Interviewee)

Japanese respondents expressed similar views. One Japanese senior general manager noted that the Japanese like to avoid uncertainty and therefore need information about an entire development process. Japanese companies like to deliver perfect software and want to incorporate changes as required by customers. And at the same time, Japanese cultural conditioning of risk aversion and fear of failure holds them back from experimentation and learning new technologies which in turn affects launch speed and quality of innovations. Japanese respondents acknowledged these challenges, as the following indicates:

The Japanese need to know all the requirements before development. The quality targets are also set before development. Sometimes, the stringent quality requirements delay the launch of a software product. However, [our company] is considering shifting to the 'Agile' method of software development. (Japanese Interviewee)

2. Multiple Tests for Debugging

A quality-related issue that came to the fore particularly among Indian respondents was the expectation that all bugs would be removed from the software. Interviewees explained that before delivery to a customer, software is tested in a variety of test cases to check whether the software will work in all those situations, and that test cases in their company far exceeded test cases in non-Japanese companies. As stated by one interviewee:

If North American and Indian software teams would use 100 test cases to accept new software, Japanese easily would design 1,000 test cases to check the same new software. In addition, Japanese companies insist on a very meticulous and perfect documentation about every aspect of testing. (Indian Interviewee)

In spite of best efforts, interviewees explained, it is difficult to check for all possible scenarios in which the given software will work. That is why, in US or European companies, invariably a few bugs are left, which are resolved in the next version of the software. In the case of Japanese companies, there is an expectation of detailed testing to ensure that the software is completely free of bugs, which might lead to a delayed introduction of the product to the market:

If Microsoft were to ensure perfect Windows software, the first version of the software would have been delayed by ten years and there would be no opportunity to release ten versions of the Windows software. (Indian Interviewee)

Japanese interviewees also observed that their companies like to check software for all possible case situations in which the software should work and to aim for zero defects. One interviewee noted that performance indicators have been introduced to their vendors in India, and that employees are rewarded every six months for meeting quality requirements:

Our company has very high quality requirements and we prefer our standards over the vendor's quality standards. Vendors need to be educated in the Japanese methods of software development to ensure zero defects. (Japanese Interviewee)

Such approach to quality is preferred by Japanese companies even if it takes longer to complete a project, as expressed by a Japanese senior general manager:

Quality is paramount for the Japanese even if it means a longer time to complete development. (Japanese Interviewee)

The detailed focus on quality and bug testing was questioned by Indian respondents given the time requirements and implications for productivity and innovation. One stated:

Such detailed testing by Japanese software companies may ensure that software is totally bug free. However, it is very demanding and many times frustrating for software professionals. It affects productivity of the software team and the project will require more time and resources. Indians, who have worked with North American and European software firms, find it very irritating to invest so much effort in testing to remove bugs which may not be very significant in terms of the product specifications and functionality. (Indian Interviewee)

Another interviewee stated that Japanese companies are known for their success essentially due to their commitment to delivering quality to customers through practicing Total Quality systems and processes in manufacturing, and questions the applicability to software development:

It appears that Total Quality is being transferred to the IT and software sector. In the high-tech industry in addition to delivering quality products and services, being innovative is equally or possibly more important. An innovative product or a service is more easily noticed by markets and customers than a perfect quality high-tech product without some new and innovative features. (Indian Interviewee)

3. Deference to the Customer

Customers of Japanese GCCs expect quality, and Indian interviewees noted the high deference given to their Japanese clients, with one interviewee stating that ‘the customer is like a God.’ All the requirements of a customer need to be understood and delivered. There is no question of arguing with customers or questioning their requirements. According to one interviewee, the Japanese customer might even shout at the service provider and this is considered to be acceptable. This is surprising to interviewees who note that Indian software professionals are knowledge workers and worthy of respect:

Indian software professionals respect their customers as professionals. They listen to their customers but at the same time, they expect that the customers should treat them as professionals and listen to their views and difficulties, if any. (Indian interviewee)

4. Management and HRM

• Work Ethic

Japanese and Indian respondents commented on work ethic issues that include differences in punctuality and dedication to work. It was acknowledged by both Japanese and Indian respondents that the Japanese work hard, are punctual, and have the same expectations for their Indian employees. Regarding punctuality, Japanese and Indian interviewees comment similarly, as follows:

The Indian developers are not punctual and this is a major gripe for the Japanese. (Japanese Interviewee)

The Japanese build impressions of people and stick to it. They evaluate people in terms of punctuality, delivery of work and well-thought speech which can be substantiated with evidence. If a person falters during the impression building phase he will lose the trust of the Japanese. (Indian Interviewee)

Indian respondents note the hard work of their Japanese colleagues and point out differences in expectations for rewarding hard work. Whereas the Japanese are satisfied with the intrinsic reward of a job well done, Indian employees expect an extrinsic reward for their hard work. Hard work is expected of the Indian employees in the Japanese GCCs, as noted in the following:

As a people, the Japanese are polite and team-oriented. They are dedicated to producing high quality outputs and they do not need to be rewarded for their hard work like Indian developers. For the Japanese, good work is the reward. (Indian Interviewee)

The Japanese do not argue about tasks allotted to them even if they may be repetitive. They are very disciplined, methodical and organized. The Japanese expect the same qualities in the Indian employees. They like the Indian people and respect them. Indians are very keen learners but lack discipline. (Indian Interviewee)

5. Communication

Communication was mentioned by both Indian and Japanese interviewees as a challenge, in terms of the spoken language as well as explicit versus implicit communication. It was noted by both that language represents a barrier with both sides needing to be comfortable with English and Japanese. Japanese managers noted the particular challenge of different styles of English in India.

Japanese are accustomed to the American way of speaking English. India is a very diverse country and people from different states speak English in different ways. 'Hinglish' is a challenge for the Japanese. (Japanese Interviewee)

For the Indian software professionals, learning Japanese has career implications:

If an Indian does not know the Japanese language he/she will not be able to communicate with the customers and will not be able to grow in their role. (Indian Interviewee)

Also, implicit communication in the Japanese workplace can sometimes result in misunderstandings when communicating with Indian vendors about project delivery, according to Indian interviewees. Unstated expectations, often related to quality and testing requirements get revealed during the project delivery phase and invariably lead to conflict and delay.

6. Employee Turnover

Japanese have long practiced the concept of lifetime or long-term employment and hence find it difficult to appreciate the high rate of attrition experienced in Indian software companies. In addition, Japanese companies invariably appoint Japanese managers at senior and top management positions, and promotions for Indian employees do not occur quickly in comparison with other companies in the industry. One interviewee noted that:

Promotions happen quickly in Indian IT. People can become a project lead in five years and a project manager in eight years. In Japan it takes 20 years to become a project manager. (Indian Interviewee)

Relatedly, Indian interviewees described their thinking about company tenure and the desirability to work for American and European companies where there are greater opportunities:

In India, if a person stays with an organization for more than three years it is assumed that something is wrong with that person. (Indian Interviewee)

Indian engineers join Japanese companies, learn skills and then jump to companies which provide more desirable onsite opportunities. Japanese companies pay less than American and European companies. (Indian Interviewee)

High employee turnover was not the case in all companies, however:

Attrition is low and there are many employees who have 10-15 years of experience at [our company]. In 2002, we hired 20 engineers and out of this group 13 people still remain. The fresh engineers tend to remain but the lateral hires have a tendency to move out. Lateral hires come with experience and tend to compare practices at [our company] with American working practices. (Indian Interviewee)

Thus, while lack of career progression opportunities beyond middle management level in Japanese GCCs may be an additional causal factor for high employee turnover at the middle management level in Japanese GCCs, attrition may be more acute among lateral hires that have experience with other companies.

7. Business Success in India

Interviewees, both Indian and Japanese, commented on the opportunities they saw for greater success of Japanese businesses in India (and globally).

• Cultural Affinity and HRM

There is a perceived affinity between Indian and Japanese people that was expressed during the interviews, and these cultural complementarities could result in strong team performance:

Upon joining the Japanese firm it takes a couple of years to learn the Japanese way of doing business. People from Pune, Kolkata and Tamil Nadu have an affinity for Japanese culture and Japanese organizations. Also, they seek opportunities which the herd is not chasing. (Indian Interviewee)

Indians are good at making plans in ad hoc situations while the Japanese are good at focused and systematic planning. However, the consensus decision making style of the Japanese slows things down in a turbulent business environment which requires quick action. If Japanese and Indian teams can be merged it would result in the best team in the world in terms of long term planning and delivery. But the Indians need to learn discipline and the Japanese need to release some control. (Indian Interviewee)

One company has dealt with cross-cultural challenges by creating a new position to bridge cultures and leverage knowledge:

There are some cultural challenges for [our company]. Documentation is difficult due to the bilingual nature of the business, English and Japanese. [Our company] has created a position known as the 'bridge engineer.' The bridge engineer is an Indian developer who is aware of Japanese culture, mindset and implicit communication styles. The bridge engineer also possesses project management knowledge, and armed with this array of skills is able to extract tacit knowledge from the Japanese engineers. (Japanese Interviewee)

Japanese respondents also noted the importance of building reputation and attraction of talent through providing challenging opportunities:

[Our company] finds it difficult to retain talent as people are constantly on the lookout for interesting work which challenges their abilities. In the Indian job market [our company] is not known for software development yet. This gives the company an opportunity to spread awareness in colleges and create a brand for itself in the talent markets. [Our company] can build its brand by recruiting fresh graduates and providing challenging internship opportunities to students. By word of mouth [our company] can build its brand. (Japanese Interviewee)

8. Market Orientation and the Role of GCCs

Another issue related to business success is the Japanese GCCs' focus on a Japanese client base:

The Japanese sales people are still focused mainly on Japan as a market. The Managing Director of [our company] India is well travelled and does not approve of this sales strategy which he believes could lead to the demise of [our company]. Sales are focused on Japan because people are comfortable with Japan as a market. [Our company] is a big brand and they can charge a premium and deliver premium products. The Japanese are not keen on international sales. (Indian Interviewee)

Focusing sales on the Japanese market does not imply a lack of innovation potential, as noted by one respondent:

Innovation in Japan is good. The Japanese are very good at creating prototypes but hardly anything is taken to market. There is a lot of blind technology which the company doesn't know how to utilize. (Indian Interviewee)

However, innovation is not high in Japanese GCCs:

For a captive division like [ours]... the levels of innovation are low and experienced, process-oriented professionals are preferred. (Indian Interviewee)

Indian respondents say they would like GCCs to be given greater responsibilities on more complex projects, that is, to be a strategic partner with the Japanese HQ. As one respondent notes:

India at one point was stereotypically believed to be a low-cost destination for outsourcing. Now Indian software engineers are becoming known for the software development prowess hence they can share their knowledge with the Japanese and inspire them to make a difference in their own software market. (Indian Interviewee)

There is pressure to change this focus, and to move toward greater innovation and knowledge work at the GCC level. North American and European GCCs have worked with Indian software professionals much longer than Japanese GCCs and have increasingly begun to treat their GCCs less as cost centers and more as innovation hubs. Japanese GCCs, according to interviewees, remain at the lower end of the market.

5. Discussion and Conclusion

The key to success in the decades ahead is to look not just at the quality and sophistication of one's products but also at the breadth and diversity of one's markets.

-Peter Löscher, 2011, p.273

Japanese firms have accelerated their investment in India over the past two decades (Buckley et al., 2012; Farrell, 2008), especially in recent years (Invest India, 2024). By some reports, India is now considered to be the number one target country for Japanese companies (Marpakwar, 2024). India is a global center for software development, attracting foreign direct investment in this sector. The availability of talent, cost competitiveness and willingness to learn and adapt to customer requirements and technology have been major factors contributing to the growth of the Indian software industry (Agrawal et. al, 2011). There is a need to better understand cross-cultural considerations between Japan and India as potential barriers or enablers to successful business ventures, particularly in the software industry. More research is needed in this area given the importance of the Indian market to Japan.

The study has limitations that provide additional avenues for future research. This includes the small sample size and a focus on one geographic area, Bangalore. Bangalore continues to attract the highest number of GCCs among Indian cities, and is thus an attractive research location; however, more studies are needed on Japanese GCCs in other Indian cities to assess the generalizability of our results. While acknowledging these limitations, the findings provide a rare glimpse into the world of Japanese GCCs in the Indian software industry that has not been previously studied, and provides implications for management.

For instance, the findings suggest that a focus on quality, long-term planning, and other revered practices from the TQM era that contributed to the success of Japanese manufacturing companies, may prevent Japanese high-tech companies from realizing their full potential. For software services and the high technology industry, innovations and being first in the market are valued by customers. Further, the global knowledge economy is highly turbulent and demanding in terms of disruptive innovations (Mikitani & Mikitani, 2014). It requires a willingness to nurture creativity and

decentralized decision-making, and acceptance of risk (Beyer von Morgenstern et al., 2011). Slow decision making processes and continued reliance on high level managers in Japan can hold back Japanese companies (Gupta, 2023), particularly in the rapidly changing software sector.

Implications for management also include the career expectations of Indian employees. These include a desire to work on more challenging technological tasks, and to not focus time on maintenance and debugging. Interviewees also expressed a desire for career development and progression, and would leave an organization in order to find more attractive career opportunities. These findings are consistent with earlier work in the Indian IT sector (e.g., Agrawal et al., 2012), and with a more recent study by Ashta (2024) indicating the importance of recognition and rewards to Indian employees of Japanese firms. While employee turnover, for instance, is common in the industry, there may be other factors that exacerbate attrition in Japanese GCCs, particularly the perceptions of non-challenging work and limited promotion prospects. Japanese respondents expressed frustration over differences in work ethic, particularly around punctuality, lack of planning and concern for quality, which may reflect cultural differences in uncertainty avoidance (Hofstede, 1980), where it is considerably higher in Japan compared to India.

Both Indian and Japanese respondents commented on at least two ways that the success of Japanese GCCs in the Indian software sector might be enhanced. First, it was noted that there are cultural affinities between Indians and Japanese that can be built upon. This finding is consistent with the observations in previous studies that highlight the benefit of cultural similarities between Indians and Japanese for effective work and business relationships (Ashta et al., 2021; Maharjan & Sekiguchi, 2016, 2017). One Indian interviewee, for instance, noted Japan and India together can create the best teams in the world if Indians can become more disciplined and Japanese can give up some control. One company created a new position, the 'bridge engineer' to smooth relations between the Japanese HQ and the GCC in India, while also providing an attractive position. Another company planned to enhance its brand in the software development space by offering interesting and challenging internships to fresh Indian graduates. There is opportunity in leveraging cultural similarities and synergies to enhance business reputation and success (e.g., Ashta et al., 2021).

Second, interview findings indicate that it is time for a re-evaluation of Japan's market orientation and the role of GCCs. Japanese sales continue to be focused on the Japanese market. Interviewees saw an opportunity for innovative product development that would be of value not only to the Japanese market but to global markets as well, which underscores observations by others indicating that Japanese companies do not use India as a base for production for exports (e.g. Gupta, 2023). The interviewees were very clear that Japanese GCCs in India need to be strategic partners. The role of GCCs has been at the lower end of the market, focusing on routine de-bugging. There is an opportunity to move Japanese GCCs into more of an innovation hub, enabling innovative software development. This requires, however, that Japanese companies learn to live with uncertainties as a part of software development and product enhancement, and to adopt technologies which facilitate managing and living with uncertainties. One company, as highlighted by the Japanese interviewees, is considering to move in that direction. It was noted that Japanese software companies

should define quality for the software industry in congruence with the global industry and its multiple stakeholders. This requires broadening the market beyond Japan.

According to some Japanese market observers, it is not only the quality of the product but the diversity of the market that is important for future growth (Löscher, 2011). This is tied to what others have called the ‘Galapagos Effect’ in Japan whereby the country secludes itself from the rest of the world by gearing its high-quality technological products only for the Japanese market (Mikitani & Mikitani, 2014; Sekiguchi, 2011). Sekiguchi (2011: 284) asserts that Japan’s IT industry has moved in this secluded direction due to the “peculiarities of the nation’s technology and industrial structure,” a trend with serious implications for Japan as a whole. The findings of our study suggest that Japanese traditional management practices may contribute to such a secluded ‘ecosystem’ in the software development industry by focusing on perfecting products for a select client base, which is consistent with Ashta’s (2024: 29) observation that Japanese companies in India continue “to apply a high-specification approach from their home country.” As noted by Sekiguchi (2011), stand-alone excellence is no longer sufficient for many products, since what is currently valued is more about what the items can do when they are plugged into a larger, global network.

To move beyond a secluded business ecosystem and capture the full potential of software development, Japanese businesses would benefit through creating new markets instead of relying so heavily on the Japanese market (e.g., Sekiguchi, 2011). Relatedly, Japan’s IT companies need to develop professional staff capable of influencing global counterparts to shape international standards around Japan’s excellent technologies. This requires, among others, the creation of networks of global talent that can help to transform Japanese technology and expertise into global standards. Japanese companies may need to revitalize their HRM policies by introducing incentives and rewards to attract, motivate, and retain creative, talented employees (e.g., Ashta, 2024). Japanese GCCs in India would be an excellent and valuable place to put this into action.

6. References

1. Ashta, A. (2024). ‘Perlmutter visited. Japanese international business strategic orientation transformation in India: Progress made and forces against.’ *Journal of Asian Business and Economic Studies*, 31(1), 27-39.
2. Ashta, A., Stokes, P. J., Smith, S. M., & Hughes, P. (2021). ‘Japanese CEOs Cross-Cultural Management of Customer Value Orientation in India,’ *Management Decision*, 59(10), 2355-2368.
3. Agrawal, N. M., Khatri, N., & Srinivasan, N. (2012). Managing growth: Human resource management challenges facing the Indian software industry. *Journal of World Business*, 47: 159-166.
4. Agrawal, N. M., & Thite, M. (2003). Human resource issues, challenges and strategies in the Indian software industry. *International Journal of Human Resources Development and Management*, 3(3), 249–264.
5. Agrawal, N. M., & Thite, M. (2006). Nature and importance of soft skills in software project leaders. *Asia Pacific Management Review*, 11(2), 405–413.

6. Anand, J., & Delios A. (1996). Competing globally: How Japanese MNCs have matched goals and strategies in India and China. *Columbia Journal of World Business*, 31: 50–62.
7. Basu, S., & Yoshida, R. (2012). How to overcome the cultural divide? A study of Japanese expatriates' work experience in India. *South Asian Journal of Business and Management Cases*, 1(2), 115-133.
8. Beyer von Morgenstern, I., Kenevan, P., & Naeher, U. (2011). Rebooting Japan's high-tech sector. In C. Chandler, H. Chhor, & B. Salsburg (eds). *Reimagining Japan: The Quest for a Future that Works*. San Francisco, USA: Viz Media, LLC., pp. 297-304.
9. Bhatnagar, J. (2007). Talent management strategy of employee engagement in Indian ITES employees: Key to retention. *Employee Relations*, 29(6), 640-663.
10. Birkinshaw, J., Brannen, M. Y., Tung, R. L. (2011). From a distance and generalizable to up close and grounded: Reclaiming a place for qualitative methods in international business research, *Journal of International Business Studies*, 42: 573-581.
11. Buckley, P. J., Cross, A. R., & Horn, S. A. (2012). Japanese foreign direct investment in India: An institutional theory approach. *Business History*, 54(5): 657-688.
12. Budhwar, P. S., & Khatri, N. (2001). A comparative study of HR practices in Britain and India. *International Journal of Human Resource Management*, 12(5): 800-826.
13. Dickson, M. W., Den Hartog, D. N., & Mitchelson, J. K. (2003). Research on leadership in a cross-cultural context: Making progress, and raising new questions. *The Leadership Quarterly*, 14(6), 729-768.
14. Eisenhardt, K. M. & Graebner, M. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50: 25-32.
15. Farrell, R. (2008). *Japanese investment in the world economy: A study of strategic themes in the internationalization of Japanese industry*. Cheltenham, UK: Edward Elgar.
16. Froese, F. J., & Kishi, Y. (2013). Organizational attractiveness of foreign firms in Asia: Soft power matters. *Asian Business & Management*, 12(3), 281–297.
17. Gupta, S. (2023). Japanese and Korean firms in India. Working Paper No: 678, Indian Institute of Management Bangalore. Retrieved April 26, 2024 from: <https://repository.iimb.ac.in/handle/2074/22051>
18. Haghirian, P., Ed. (2016). *Japanese Management in the Twentieth Century. Routledge Handbook of Japanese Business and Management*.
19. Hall, E. T., & Hall, M. R. (1990). *Understanding cultural differences*. London: Nicholas Brealy Publishing.
20. Hofstede, G., (1980). *Culture's consequences: International differences in work-related values*. Newbury Park, CA: Sage.
21. Invest India (2024). India-Japan: A Special Strategic Partnership. Retrieved May 23, 2024 from: <https://www.investindia.gov.in/country/japan-plus>
22. Javidan, M., & House, R. J., (2001). Cultural Acumen for the Global Manager: Lessons from Project GLOBE. *Organizational Dynamics*, 29(4), 289-305.

23. Kahai, S. S., Sosik, J. J., & Avolio, B. J. (2011). Effects of participative and directive leadership in electronic groups. *Group & Organization Management*, 29(1), 67-105.
24. Kopp, R. (1994). International human-resource policies and practices in Japanese, European and United States Multinationals. *Human Resource Management*, 33(4), 581-99.
25. Lee, H-J., Iijima, Y., & Reade, C. (2011). Employee preference for performance-related pay: Predictors and consequences for organizational citizenship behavior in a Japanese firm, *The International Journal of Human Resource Management*, 22(10), 2086-2109.
26. Lee, H-J., & Reade, C. (2018). The role of ying-yang leadership and cosmopolitan followership in fostering employee commitment in China: A paradox perspective. *Cross Cultural & Strategic Management*, 25(2), 276-298.
27. Löscher, P. (2011). Japan, the Asian pioneer. In C. Chandler, H. Chhor, & B. Salsburg (eds). *Reimagining Japan: The Quest for a Future that Works*. San Francisco, USA: Viz Media, LLC., pp. 271-273.
28. Maharjan M. P., & Sekiguchi, T. (2016). The influence and effectiveness of US-style and Japanese-style HR practices on Indian firms: A conceptual perspective. *South Asian Journal of Human Resources Management*.
29. Maharjan M. P., & Sekiguchi, T. (2017). Human resource management practices of Japanese companies in India: Dealing with the transfer-adoption dichotomy. *Journal of Asian Business Studies*, 11(3), 323-341.
30. Marpakwar, C. (2024, Mar 15). 'India is now the No. 1 investment target country of Japanese companies,' *Times of India*. Retrieved April 22, 2024 from: <https://timesofindia.indiatimes.com/city/mumbai/india-is-now-the-no-1-investment-target-country-among-japanese-companies/articleshow/108529703.cms>
31. Mikitani, R. & Mikitani, H. (2014). *The Power to Compete: An Economist and an Entrepreneur on Revitalizing Japan in the Global Economy*. Hoboken, NJ: Wiley.
32. NASSCOM (2023). GCC 4.0: India Redefining the Globalization Blueprint. New Delhi: NASSCOM. Retrieved April 24, 2024 from: <https://nasscom.in/knowledge-center/publications/gcc-40-india-redefining-globalization-blueprint>
33. Offerman, L. R., & Hellmann, P. S. (1997). Culture's consequences for leadership behavior: National values in action. *Journal of Cross-Cultural Psychology*, 28(3): 342-351.
34. Ramamoorthy, N., Kulkarni, S. P., Gupta, A., & Flood, P. C. (2007). Individualism-collectivism orientation and employee attitudes: A comparison of employees from the high-technology sector in India and Ireland. *Journal of International Management*, 13(2), 187-203.
35. Schaeede, U. (2020). *The Business Reinvention of Japan: How to Make Sense of the New Japan and Why it Matters*. Stanford, CA: Stanford University Press.
36. Sekiguchi, T., Froese, F. J., & Iguchi, C. (2016). International human resource management of Japanese multinational corporations: Challenges and future directions. *Asian Business and Management*, 15(2), 83-109.

37. Sekiguchi, W. (2011). Escape from Galapagos. In C. Chandler, H. Chhor, & B. Salsburg (eds). *Reimagining Japan: The Quest for a Future that Works*. San Francisco, USA: Viz Media, LLC., pp. 284-291.
38. Seth, A. (2023). Rationale, implementation challenges and success factors for establishing GCCs-Global Capability Centers (Captives). Doctoral Thesis, Indian School of Business (India). Retrieved April 27, 2024 from: <https://www.proquest.com/openview/6121bd6735159c31c4dbe93c41563d07/1?cbl=2026366&diss=y&loginDisplay=true&pq-origsite=gscholar>
39. Sheth, A., Singh, B., & Majumdar, P. (2017). Global In-house Centers in India. Bain & Company. Retrieved April 22, 2024 from: <https://www.bain.com/insights/global-in-house-centers-in-india/>
40. Vidya, S. (2024). India's global capability centers thrive amid IT slowdown: From support to innovation, hiring surges. *Business Times Magazine*. Retrieved June 27, 2024 from: <https://www.businesstoday.in/magazine/deep-dive/story/indias-global-capability-centres-thrive-amid-it-slowdown-from-support-to-innovation-hiring-surges-414548-2024-01-23>
41. Yin, R. K. 2009. *Case Study Research: Design and Methods*, Sage, CA.
42. Yu, J., & Meyer-Ohle, H. 2008. Working for Japanese corporations in China: A qualitative study, *Asian Business and Management*, 7: 33-51.

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