No. 399

The Influence of National Level Factors on International Kaizen Transfer: An Exploratory Study in the Netherlands

Kodo Yokozawa

Manufacturing Management Research Center,

Faculty of Economics, the University of Tokyo, Japan

Harm-Jan Steenhuis

Department of Management, College of Business and Public Administration,

Eastern Washington University

May 2012

The Influence of National Level Factors on International Kaizen Transfer: an Exploratory Study in the Netherlands

Kodo Yokozawa

Manufacturing Management Research Center
Faculty of Economics, the University of Tokyo, Japan

Harm-Jan Steenhuis

Department of Management
College of Business and Public Administration
Eastern Washington University, USA

Abstract

The purpose of this research study was to examine the international transfer of kaizen. The central research question was formulated as what national level factors influence the transfer of kaizen? In the study, an inductive case study approach was followed with semi-structured interviews. The study focused on Japanese subsidiaries in the Netherlands. A total of 15 companies participated in the research. Two main factors, not previously identified in the literature, were found: the level of eagerness of employees and the level of discipline of employees. Based on these two factors, transferring kaizen to the Netherlands was found challenging.

Key Words: Kaizen, international operations, technology transfer, knowledge transfer

1. Introduction

One of the advantages of multinational companies (MNC) is their ability to coordinate manufacturing practices across the manufacturing network, see for example (Flaherty, 1986, Flaherty, 1996). In some cases, this requires the transfer of equipment or production lines but it can also relate to production philosophies. Examples of the latter are Japanese philosophies such as just-in-time and lean production.

In the 1970s and 1980s, Japanese manufacturers became prominent in several industries such as electronics and cars. Western companies tried to emulate Japanese approaches such as the Toyota Production System, see (Liker, 2004), and lean manufacturing, see (Henderson and Larco, 2003). Japanese companies also transferred production systems to their overseas locations (Aoki, 2008).

In line with the approaches of Western companies to emulate Japanese practices and with the approaches of Japanese companies to transfer their practices to overseas subsidiaries came an increase in research on Japanese management practices. For instance, scholars have tried to identify the keys of Japanese success, e.g. (Womack et al., 1991). Subsequent research has shown that transferring Japanese practices across borders has not been easy. Babson (1995, p. 238) concluded "The Japanese model was not so easily transferred to the US in any case, for many of the social and corporate structures that made worker commitment mandatory in Japan's auto industry were unique to the system's home base."

It is important to make a distinction between implementing kaizen and transferring kaizen. Implementation generally refers to the process of putting a decision or plan into effect. Pettigrew (1990) offered a framework for implementation studies. He views the implementation as a process of change referring to the actions, reactions and interactions of the various interested parties as they seek to move the firm from its present position to its future state (Pettigrew, 1987). Similarly, Savolainen (1999) studied the processes and dynamics of continuous improvement (CI) implementation. She approached CI from the perspective of organisational renewal and looked at implementation as a managerial ideological change process. Transfer generally means moving from one place to another. The main difference with implementation is that two main actors are involved, i.e. a sender and a receiver. For example, Szulanski (1996, p.28) indicated that "transfers of best practice are seen as

dyadic exchanges of organisational knowledge between a source and recipient unit." One area of focus in transfer oriented studies is the environmental difference or distance between the two actors because the extent of this difference influences the transfer process. This difference can be cultural, physical, and linguistic etc. (Bhagat et al., 2002, Chen et al., 2010, Welch and Welch, 2008). This research area for this study is the transfer of Japanese management systems by Japanese companies.

Based on the extensive research that goes back to the 1980s, one could easily conclude that this topic has been sufficiently researched. However, in line with Babson (1995), more recent research still indicates that 80 per cent of Japanese companies find the international transfer of Japanese management systems problematic (Yokozawa et al., 2010). Of these, kaizen is considered the most problematic concept for transfer (Yokozawa et al., 2010). Kaizen or continuous improvement (CI) is one of the key concepts deployed by Japanese manufacturers (Brunet and New, 2003) and is defined in general terms as continuous improvement involving everyone in the company (Imai, 1986) .

The purpose of this research is to contribute to the understanding of the influence of national level factors on the international transfer of kaizen. Ohmae (1985) argued that for business, there are three important regions in the world, i.e. the triad, which consists of Japan, the United States and Europe. In this study a choice was made to focus on kaizen transfer between two of the regions, i.e. transfer of kaizen from Japan-based companies to Europe. Within Europe a further distinction was made based on where Japanese companies invest. Data from the Japan External Trade Organization (JETRO) shows that for the last seven years, i.e. 2003 until 2009, the Netherlands was six times the largest recipient in Europe of Japanese investments (http://www.jetro.go.jp/en/reports/statistics/). Therefore, it was decided to focus the research on the international transfer of kaizen by Japanese manufacturers to the Netherlands.

2. Kaizen

Original idea of kaizen or continuous improvement was developed in the US and transferred to Japan after World War II (Shroder and Robinson, 1991; Huntzinger, 2002). It was adapted and further improved by the Japanese manufacturers which they

3

even gave it a Japanese name: *kaizen* (Kenney and Florida, 1993). Shroeder and Robinson (1991) discuss that there are two main reasons why continuous improvement program proliferated rapidly in Japan soon after the World War II. First reason is that Japan faced serious resource shortage which they had to find an inexpensive means to improve production and reduce cost. Second, Training Within Industry (TWI) was introduced to Japanese industry by the US occupation forces, had a large influence in training Japanese workers and managers in methods analysis and laid a solid foundation for continuous improvement (Huntzinger, 2002). Suggestion systems are further reinforced by quality control circle (QC) movement in the early 1960s and even more proliferated during the oil crisis in 1973 as companies seek for established methods to reduced cost without making big investment. Around 1970s to 1980s, Japanese manufacturers became famous for high quality products, in sectors as diverse as electronics, automobiles and steel making. Many researchers indicated that kaizen helped Japanese manufacturers to gain a significant competitive edge (Bessant, 1994; Imai, 1986; Oliver and Wilkinson, 1992).

Many exist that have examined the kaizen process. Imai (1986) discussed the relationship of kaizen success with the use of methods and tools such as quality control circles, suggestion systems, and total quality control. He discussed that those methods are closely related to kaizen but they are not the same. Imai (1986) mentioned that kaizen is a philosophy that encompasses those methods. Some authors view kaizen as an organisational capability (Brunet and New, 2003, Aoki, 2008, de Jager et al., 2004). Fujiomoto (1997) classified the organisational capability in regard to manufacturing companies into three levels: first the most fundamental level of maintenance capability which is the ability to maintain a particular level of performance consistency. The second level is improvement capability, which affects the pace of performance improvements, and final level is evolutionary capability which is capability for capability building. For instance, in order to develop the improvement capability, the middle option which this paper is concerning, practicing a number of routine is important. In Toyota, about ten thousand suggestions a year are submitted by employees. The procedure is based on what it called Quality Control (QC) story – the standardised QC approach of problem-solving and standardisation, or the PDCA cycle (Kondo, 1990) – and everyone is involved in the kaizen activities.

4

Fujimoto (1997) mentioned that through repeating these routines gradually become organisational capability. Bessant *et al.* (2001) provides intensive study on how the organisational capabilities for sustainable and incremental innovation which can be developed by practicing a number of behavioural routines. Bessant (2003) says the process of accumulating such a resource is a long and difficult one involving articulation and learning of behaviours and practising and reinforcing them until they become routines. They focused on the ways in which certain behavioural patterns can be built up across organisations to deliver operational and ultimately strategic advantage through high and regular involvement in the improvement process.

Several factors that are critical for successful kaizen process have been identified in the former studies. For instance, managerial commitment (Bessant, 2003, Boer et al., 2000, Imai, 1986). This was mainly because they determine the level of resources allocated to the kaizen activities particularly considerable investment in human and financial, informational, technological resources. Top management acts as a driver of kaizen activities, creating values, goals and systems to develop kaizen culture.

Use of methods and tools is also discussed in the literature that can enhance and diffuse kaizen more widely across the organisation (Bessant, 2003, Boer et al., 2000, Bessant et al., 1994, Imai, 1986). Common tools that are used with kaizen are such as Pareto analysis, check sheets, and cause-and-effect diagrams, while brainstorming remains a robust and extensively used problem solving aid (Bessant et al., 1994).

The role of organisational structures is noted by a number of authors as critical to kaizen success. Parry and Song (1993) highlighted the unique nature of centralisation and formalisation in Japanese organisations. They noted that decision making authority in Japanese organisations is widely diffused rather than mere top-bottom or bottom-up. Regarding job description Japanese companies have ambiguous jobs which are roughly defined and employees are expected to present ideas for improvement (Kono, 1982). This is in sharp contrast to the job description patterns in many western companies where job descriptions are defined and are more structured. Group decisions and teamwork combined with the ambiguous jobs allows employees more socialisation. The overall structure of Japanese companies is a mix of organic and mechanistic structure (Adler, 1999, Liker and Morgan, 2006). Mechanistic structured organisations have high level of standardisation, formalisation, specialisation, and

hierarchical authority. Organic structured organisations, on the other hand, have low levels of standardisation, formalisation, specialisation, and hierarchical authority (Burns and Stalker, 1961, Courtright et al., 1989). Adler (1999) introduced the concept of enabling bureaucracy to discuss how Japanese companies leverage this mixture of organic and mechanistic structure for competitive advantage. This means that Japanese organisations develop mechanistic structures, such as standardisation, to reduce variation in processes; but they are based on the organic structures such as teamwork and employee participation. At the core of the enabling bureaucracy lies employees' involvement and empowerment, using rules and procedures as enabling tools, and hierarchical structures to support the work of the doer rather than to bolster the authority of the higher ups. This is explained by Adler and Borys (1996) as:

"The standardised work process brings workers and supervisors together to define cooperatively and to document in great detail the most effective work methods and task allocations... Strong formal and informal incentives encourage workers to identify and propose improvements in methods. Deviations from the detailed, prescribed methods signal either the need for further worker training or the need to revise the inadequate standardised work methods. In this context, the TQM dictum "you can't improve a process that hasn't been standardised" becomes a philosophy of collaborative learning..." (p. 72)

The role of communication and mode of knowledge sharing is discussed by Nonaka (1994) and Nonaka and Takeuchi (1995) who noted that socialisation is the dominant mode of knowledge transfer in Japanese companies. 'Socialisation' is the process of sharing experiences and thereby conveying tacit knowledge from one person to another. Thus a more experienced person shares the mental models and technical skills with others. 'Socialisation' counts more on the tacit knowledge of employees rather than explicit knowledge. Nonaka and Takeuchi (1995) further noted that Western managers are more likely to underutilise the value of tacit knowledge as compared to their Japanese counterparts. The communication structures in Japanese companies are designed to provide both horizontal and vertical communication (Kono, 1982). The problems and suggestions for improvements arise from the shop floor level and then are directed to top-management for organisation-wide improvements.

A number of authors have highlighted the social factors that contribute to the success of kaizen. These factors include teamwork, trust based business management, strong networking, and supplier development, labour turnover rate, labour union (Beechler and Yang, 1994, Choy and Jain, 1987, Kenney and Florida, 1993), experience and awareness about kaizen (Bessant, 2003), consistency (Bessant et al., 1994, Boer et al., 2000) and strategic framework (Bessant et al., 1994, Boer et al., 2000).

The above mentioned literature helps to understand the kaizen process and factors that influencing this process. However, those do not consider the national factors that may have an influence on the kaizen transfer abroad. Many authors have attributed these difficulties to the context specificity of kaizen which means that due to its origin in Japanese context, kaizen is difficult to replicate elsewhere. In the next section, literature regarding national factors on kaizen transfer is reviewed.

3. National factors

Two relevant areas in the literature are reviewed in this section. One is the literature on international kaizen transfer (3.1). It will focus on what types of national level factors have been identified in the former researches. Moreover research area of international knowledge transfer is reviewed (3.2) to investigate how this study regarding international transfer of kaizen can contribute to fill the gaps in this broader research area.

3.1 Literature on international kaizen transfer

There are many studies that indicate that national factors have influence on the transfer of kaizen. One of the national level factors that have been identified in the literature are labour turnover, which is related to commitment of employees to the company (Beechler and Yang, 1994, Kenney and Florida, 1995), and industrial relations which is related to the influence of unions (Beechler and Yang, 1994, Choy and Jain, 1987, Kenney and Florida, 1993, Shimada, 1990). For example, Kenney and Florida (1995, p. 797) found that a higher labour turnover rate than in Japan complicates efforts to develop conformance to Japanese-style norms, behaviours and management techniques. Furthermore, Kenney and Florida (1995) found that companies followed

different approaches in the US based on whether a union was present or not. Four of the nine Japanese or US-Japanese joint ventures in their study on car assembly were non-unionised. These chose rural greenfield sites to avoid unionisation. Also, Japanese team-oriented policies and flexible work rules, a smaller number of job classifications, and the utilisation of different pay systems tended to conflict with union rules which emphasise work specialisation and individual responsibilities (Kenney and Florida, 1995).

Many other authors found that national culture has an influence on the international kaizen transfer. Fukuda (1988) examined the extent of the application of features of Japanese-style management (i.e. ideologies and practices) in more than one hundred Japanese subsidiaries. He concluded that the Japanese management systems were difficult to transfer overseas because they were closely tied to the prevailing culture. Recht and Wilderom (1998) emphasised the role of culture and found that successful transfer of kaizen oriented suggestion system is possible in non-Japanese companies through a number of changes that impact deep culture. Flynn and Saladin (2006) and Power *et al.* (2010) mentioned of general cultural dimensions that may influence a process management program. The underlying message of the research of Flynn and Saladin (2006), Power *et al.* (2010), and Recht and Wilderom (1998), is that cultural differences play an important role in the success or failure of international kaizen transfer. In addition to these studies, some studies have an explicit focus on total quality management (Dahlgaard et al., 1998, de Macedo-Soares and Lucas, 1996, Naor et al., 2008, Sousa-Poza et al., 2001). Several studies have pointed out that national culture plays an important role (Lagrosen, 2003, Vecchi and Brennan, 2011). Mathews *et al.* (2001) studied quality management practices in the UK, Finland and Portugal. They found that the existing differences in quality management practices were related to national culture. Using Hofstede's framework, they found that the dimensions of uncertainty avoidance and power distance particularly had explanatory power in the national differences observed. Lagrosen (2002) in a study involving the UK, Germany, France and Italy as well as Tata and Prasad (1998) reached similar conclusions.

3.2 Literature on international Knowledge transfer

Influence of the national factors on the knowledge transfer has been investigated in the former researches. Welch and Welch (2008) and Duan *et al.* (2010) found that the language plays a critical role during the knowledge transfer process. Welch and Welch (2008) found that language plays a roles as a 'reconfiguration agent' which means that language continually reconfigures the total international knowledge transfer system; acting as a precursor, contextual influence and even reconstructing basic messages.

Some others examined the impact of geographic distance on knowledge transfer effectiveness in multinational companies. Ambos and Ambos (2009) found that as geographic distance increases, its contribution to knowledge transfer effectiveness decreases dramatically. This is similar to findings from Daft and Lengel (1986) who found that when the geographic distance between knowledge sender and recipient is high, obstacles such as long transmission channels and different time zones limit the effectiveness of transfer, as the complexity and cost of knowledge exploration and transaction increase. Kayes *et al.* (2005) examine the managers' critical competencies for cross-cultural knowledge absorption. From an intensive literature study of knowledge management and cross-cultural competency research, they identified seven competencies for knowledge absorption. Some of these competencies are related to national level factors.

Several authors found that cultural factors have an important impact on knowledge transfer process. Hong *et al.* (2006) examined the cross-cultural influences on organisational learning in MNC. They conducted a qualitative study at five Japanese manufacturing companies in China. Their findings indicate that there are differences between frontline Japanese and Chinese workers in terms of constructive engagement and member solidarity, thus limiting organisational learning. That is attributed to deep-seated cultural values of the frontline Chinese workers who resist such involvement. Hong *et al.* (2006) confirms that national level factors are important when transferring knowledge. Van Wijk *et al.* (2008)   examined how organisational knowledge transfer between and within organisations relate differently to their antecedents and consequences. They concluded that cultural distance particularly hinders knowledge transfer in terms of intraorganisational knowledge transfer. Chen *et al.* (2010) looked specifically at the impact of national culture on the structured knowledge transfer from a US-based (onshore) technical support centre to an offshore

support centre in China. It was found that cultural and communication difficulties and weak relationships were the critical barriers to successful knowledge transfer.

In conclusion, since the 1980s, many studies have been conducted that focussed on kaizen or continuous improvement, see e.g. (Aoki, 2008; Bessant, 2003; Boer et al., 2000). In addition literature of knowledge transfer studies also show that national level factors have a significant influence on the transfer. However, further exploration of the influence of national environmental factors on international kaizen transfer is required due to following reasons. Aside from some studies that were mentioned previously, even though national level factors have been studied to have an important impact as shown in these sections, there are relatively few studies that investigated the relationships between national level factors and kaizen transfer. This may be because those factors especially the cultural aspects are rarely visible within the quantitative methods that have dominated in published studies. The deeper reason for the occurrence of these factors, i.e. an explanation of why and how they play a role, is only superficially known. For this study, and in line with the exploratory nature of it, the central research question was formulated as: what national level factors influence the transfer of kaizen?

4. Methodology

Since the purpose of this study is to explore which national level factors influence the transfer of kaizen, the survey method is appropriate. Especially due to the exploratory nature, versus a testing or confirmation approach, a choice was made to use survey interviewing (Fowler, 2009, Fowler and Mangione, 1990).

4.1   Survey instrument

Due to subjectivity of answers it was not possible to develop absolute measures of national level factors. However, the purpose of the study was to explore and therefore relative perceived differences in national environments were sufficient.

The survey contained a set of structured questions to enhance consistency in interview approach and thus reliability. The purpose of the initial set of structured questions was to identify the most important national level factors. Three examples of these structured questions are provided below showing a difference in the most

broadly stated question (looking for perceptions on general national differences, i.e. compared to any other country), to differences between Japan and the Netherlands (since the research is related to a Japanese subsidiary in the Netherlands), to a more specific question on the Dutch environment.

- Which countries do you perceive as easier or more difficult to transfer kaizen compared with the Netherlands?
- What are differences between Dutch and Japanese companies regarding the implementation of kaizen?
- Which Dutch specific national factors affect the process of international transfer of kaizen and how do these factors affect the transfer process?

When the reasoning behind something is of interest, when a narrative form is required because answers are virtually impossible to reduce to a few words, or when systematic information is gathered about a potentially complicated situation, then open-ended questions are preferred (Fowler, 1995). Therefore, the survey also contained several open questions that allowed probing deeper into issues identified by the respondent. The purpose of the probing questions was to reach a deeper level of understanding regarding the why and how of the identified national level factors.

4.2 Sample selection

A list of Japanese manufacturers in the Netherlands was obtained from the website of the Netherlands Foreign Investment Agency (NFIA). Another list of Japanese manufacturers in the Netherlands was obtained from JETRO. The two lists were combined which led to a list of 52 companies, i.e. the population for the study. Since this number was relatively small, it was decided to contact all companies for participation in the research rather than taking a sample.

Initial contact with the companies was made by phone. Five companies had either recently closed or transferred their operations to other countries. This reduced the population to 47 companies with manufacturing activities in the Netherlands. Out of these, 32 companies declined to cooperate. Thus, fifteen companies agreed to cooperate with the research project. General characteristics of these companies are shown in Table 1.

Table 1. General case company characteristics

Case	Products	Employees	Employees consolidated
A	Construction machinery	between 100-500	16,117
B	Slide fasters	less than 100	38,399
C	FA-related apparatuses	between 100-500	35,045
D	Stainless steel welding materials	less than 100	34,459
E	Photosensitive materials for photography	more than 500	76,358
F	Electrodes	less than 100	120
G	Safe instrumentation systems	more than 500	20,266
H	Food	less than 100	15,822
I	Forklifts	more than 500	33,164
J	Molded articles of piocelan	less than 100	1,372
K	Safety glass	between 100-500	19,742
L	Plastic building materials	less than 100	19,742
M	Polyolefin foams	between 100-500	19,742
N	Attaching shrink labels and cap seals	less than 100	2,368
O	Thin Steel Sheets	less than 100	4,607

4.3 Respondent selection

In each company between one and five respondents were interviewed. All of the interviews were recorded and transcribed. Respondents were selected based upon their experience of working abroad, and thus their ability to perceive national level influences. This criterion was applied because an issue of concern is the possibility of stereotyping, although some aspects of a stereotype may be accurate (Triandis, 1994, p.138). In general, the more contact with another group, the more accurate the comparative judgment (Triandis, 1994, p.138). Another criterion applied to respondents was that they had sufficient knowledge of kaizen. This effectively meant that respondents were middle- and top-managers. The respondents included both Japanese and Dutch citizens, eliminating a potential bias from a specific national

group.

4.4 Data analysis methods

The data was analysed by looking for patterns in the answers. Thus, a first level of analysis looked for common elements across all companies. Two factors were found that were identified across the companies as national level factors.

Next, a second level of analysis was conducted to look for potential differentiating factors which included: company size, the time period the company had been implementing kaizen, the degree of completion of kaizen transfer, the number of overseas subsidiaries, and the nationality of the CEO. No patterns were found in this second level analysis but this finding should be cautiously interpreted due to the limited number of respondents overall.

5. Data

Since the data was collected through an open-format survey interview, the result is a wide range of possible answers. Tables 2 and 3 provide illustrative information on answers for the question which compares other countries to the Netherlands. Table 4 provides insight into the perception of Dutch specific national level factors. The analysis of patterns in the responses led to the identification of two main factors which influenced the success of kaizen transfer and which were perceived by the respondents as being national level factors. The two factors are *level of discipline of employees* and *eagerness of employees.* Table 4 provides illustrative comments from the respondents that related to these two factors. Due to the emphasis on national level factors in the interviews, it can be concluded that the two factors are perceived by respondents to be national level differences compared to organisation level differences.

Table 2. Countries that are perceived as easier to transfer kaizen to compared with the Netherlands

Country	Responses	Number of times mentioned
China	Chinese are hungry for anything. They are enthusiastic about	4

	something which they can acquire techniques, knowledge and experience. (Company A/Project Manager)	
	China has a mentality to enjoy their work. It's important for people to find interests to do these activities. I believe that Chinese people have it. (Company K/Vice President)	
	China has the basic idea. (Company I/Production Manager)	
	China has good background for kaizen that labours are high quality and young. (Company A/General Manager)	
East Europe (Czech Republic and Slovakia)	I visit Poland very often and visited about 50 companies. I've seen many suppliers found they were very diligent. They were completely different from other countries. People are diligent and have a hungry-sprit. (Company A/Project Manager)	5
	Polish have diligence with relatively cheap labour costs. (Company A/General Manager)	
	Czech and Slovakian have a hungry sprit but still less diligent than Polish. (Company A/Project Leader)	
	I think countries in Eastern Europe where people have desire to improve their own capabilities. It's important for employees to have it even it's for earning extra money or having a promotion. (Company I/Production Manager)	
	Maybe some countries in the East Europe because their economy is growing so people are motivated. Moreover, the management systems are not yet established; so they are more likely to accept new management systems. (Company B/Production Leader)	
North European countries (UK and Scandinavian countries)	In Sweden, people are very motivated to improve these items even those are outside their job description. (Company D/Production Manager)	4
	Scandinavian countries. They focus on the quality. (Company J/Managing Director)	
	Scandinavian countries. They are very social culture. They go	

	together to sauna. They do many social activities. They are very close to each other when they do something. (Company G/QSE Manager)	
	I think those people are open to other cultures and I would say that they are eager to learn. (Company E/Staff Manager)	
US	US is very keen on safety, rules and everything that they do. They have written rules so they are very keen on this. If they implement like this they will make it as a rule and everybody will follow this rule. (Company D/Production Manager)	1
UK	UK is a mature country. They have the way they work and they do things that are very labour oriented which is make it easier to do. (Company G/QSE Manager)	2
	As far as the language is concerned, England is one of the choices. (Company A/General Manager)	
Germany	Very strict for the quality, cost and waste. (Company B/Production Leader)	4
	Germany is an industrialised country. I think Germans are very proud of what they do and what they produce; so the mentality is a little stronger when they are working on the shop floor. (Company J/Managing Director)	
	You need a country with commitment. I think German can be. If I look at the German cars, they learned from Japanese quickly for example JIT deliveries. They were really eager to learn from that methodology. (Company E/Plant Manager)	
	In Germany, people are very strict. They are really doing what they are really taught. The boss is really the boss and they knock on the door before they enter. Boss asked to do this and they are really doing this. (Company F/Production Manager)	
Korea	I think it's easier to develop kaizen mentality in Asian countries like in Korea. Let's say the personal-initiative, they do things which are not written down. They take care about others, like sense of belonging exists. (Company F/Managing	2

	Director)	
	I think Korea. I think the hungry sprit is necessary. They are motivated to do things. They can think about many ideas for improvements. (Company F/Production Advisor)	
South East Asia	I think the problem that we have here in Holland is that people are stubborn and they want to do things in their own way. In Asia, people follow the rules. They tend to do things without continuously discussing things with managers. Here, people want to discuss everything. (Company M/Managing Director)	6
	I think Asia. (Company E/Factory Manager)	
	Vietnam. This is what comes to my mind. Or perhaps Thailand. In these countries people are obedient and let's say…they have a mentality to do things in a long-term. They have similar mentality to Japanese. They are easier to get familiar with Japanese systems and processes. (Company I/Senior Production Engineer)	
	South East Asia is suitable I think. For example Vietnam and Thailand. Their production techniques are not yet established; so there are many rooms for improvement. They are open to accept new techniques abroad. (Company F/Production Advisor)	

Table 3. Countries that are perceived as more difficult to transfer kaizen to compared with the Netherlands

	Responses	Number of times mentioned
Germany	Germans tend to do jobs which are written in the job description. Their characteristics are stubborn I think. (Company A/General Manager)	4
	Germany because they have bureaucratic mind-sets. (Company G/QSE Manager)	
	Germany is special country. It could work because their disciplines are	

16

	stronger. They could work as in Japan. It could be successful but many times I recognised the conflicts if it is transferred from Japan to Germany. (Company E/Staff Manager)	
	Since few years ago, I'm responsible for the German factory. I thought it would be easier to establish this mentality because this is really true that German workers are much more disciplined and dedicated to perform his job than Dutch. They are like Japanese. Japanese are very dedicated to produce beautiful and high quality products. However, the best cars still come from Germany. They have a dedication for the quality. I thought it must be better bases for kaizen but it was not true because I tried it. In Germany, job description is like 5 pages and if it's not on the job descriptions, people say "umm, I don't have to do it". They like the job to be black and white. (Company C/ Managing Director)	
South East Asia	Indonesians are too relaxed. People from hot countries might have similar characteristics. Some don't even come to the factory. They don't have much responsibility to their job. (Company A/General Manager)	3
	It is country like Malaysia and those Asian countries with a lot of power distance. The big power distance that is difficult to implement kaizen. (Company C/Managing Director)	
	We have been in Indonesia for 25 years. What I found is that people are too relaxed there and found it difficult to give training to key people under this circumstance. (Company A/Planning Advisor)	
US	US. They are contract based society and they only do things which are written down. (Company D/Managing Director)	2
	In the US, there are locations where labour union is strong like area around Detroit. (Company A/General Manager)	
India	People are more relaxed and not so strict. Rules are important but socialisation is even more important. (Company B/Managing Director)	2
	India. We have a factory since 1980 and we are having problems there. (Company A/General Manager)	

Southern Europe (France, Italy Spain)	In the South of Europe, discipline is less. They live day by day. (Company E/Staff Manager)	9
	Difficult for foreigners to be accepted. (Company A/General Manager)	
	They are taking things very easy. If you want to do business or if you want to have answer for the question, you can wait for a month. They have less discipline which is necessary for doing kaizen activities. (Company O/Managing Director)	
	I think countries where shop floor workers do what they are told. So they are not investing in thinking about how it could be done better but just follow what is said by the shop floor management. (Company C/Managing Director)	
	Their minds are relaxed. They are like if we couldn't finish today we'll finish tomorrow, don't worry. (Company N/Production Manager)	
	Especially in Southern countries they have this kind of pride or arrogance. Probably because they are big countries and they feel powerful. (Company E/Staff Manager)	
	In France and Italy, boss rules the world so they don't' have much interest in the voice of employees. They don't care. (Company G/QSE Manager)	
	I think like Italians and French. I felt like that work is not part of their life. They work for life. I think it is difficult. (Company C/Production manager)	
	I think Latin countries maybe. Again this is just a general my feeling generally Latin people are not serious about anything relaxed about work, life, family. (Company F/Production manager)	
East Europe	They are former communist countries where their own initiative is never rewarded. So they do what they are accustomed to do but to change that mentality is more difficult. (Company B/Managing Director)	

Table 4. Examples of interview responses

| Factor | Example statement provided in interview |

Discipline	Too much freedom in thinking and action. The point is that for kaizen especially kaizen team activities, if everyone has their strong own will it has to be convinced which is very time consuming. Obedient and discipline in Japan is much more. Dutch people are that everyone has their very strong opinion and they want to express it. They do it even there is no added value. (Company E/Staff Manager)
	Strong point of the Dutch worker is that they challenge for everything. And the Dutch are much more than Japanese. On the other hand, if there are some engineers who made a method and told operators to follow, it is their bad habit that they immediately challenge and say that "no I know the better way". (Company C/General Manager)
	Lack of discipline. This is the key but we have difficulties. Also if you want to do a PDCA cycle well, discipline is very important. Stick to the rules, stick to the standard. (Company C/General Manager)
	I think in the Netherlands it is very difficult. This comes mainly from lack of discipline and also the attention that people have to the job. That's why I think not so many companies do succeed. We shouldn't say too negatively about lack of discipline but …not many people want to do a good job as same as in Japan. They are more relaxed and sometimes not so necessary to do things strictly. (Company C/Managing Director)
Eagerness	Commitment to the company is different [between Japanese and Western people]. I think for Japanese people …ego is not so large, so when they are asked to do which is not part of their job or asked to do something extra, longer hours without pay, my experience is Japanese person will automatically do that whereas Western person are generally, initially openly complains, requests more money or you know so their personal ego is more. So basically the attitude towards importance of themselves or the importance of the company is different. (Company O/Managing Director)
	The starting point is different. It is normal for us to do something which is not described in the job description in Japan, but here, people think like why we should have to do something which is not part of our job. (Company D/Production Manager)
	Asking them to follow something which is not written in the job description is difficult. They defensively protect their own territory and they are not cooperative to share information with other people. They are not good at working in other people's

	territory. (Company F/Vice President)
	In Germany, the job description is like five pages and if something is not on the job descriptions, people say 'umm, I don't have to do'. They like the job to be black and white. (Company C/Managing Director)
	The best example would be for instance, when the machine breaks down, especially during the night shifts, most of the time maintenance personnel are not there. There is a huge difference between Dutch and Japanese on how to react in this situation. Japanese operators working in Japanese mother factory, when they face the machine breakdown, they will try to fix it to produce 20 or 30 products until the next shift starts in the morning. In contrast, Dutch operators tend to think that 'I am not maintenance, why should I fix it.' I hear this very often even from Dutch managers. If I take a look at the Japanese factory, each individual is thinking what I can improve for the company, often people refer this as loyalty to the company. I don't see this here in Dutch factory. (Company I/Production manager)

6. Discussion

In this section, the findings with regard to the two national level factors, i.e. level of discipline of employees (6.1) and eagerness of employees (6.2) will be discussed. Their combined influence on kaizen transfer will be discussed in section 5.3.

6.1 Employees' level of discipline

Respondents indicated that the level of discipline of employees, which was perceived as a national level factor, has a big influence on the transfer of kaizen to the Netherlands. How the level of discipline plays a role can be determined from the way it was identified by respondents. For example, some respondents perceived certain countries as easier for kaizen transfer compared to the Netherlands because the employees in such countries were considered more obedient. As an illustration, an executive senior production engineer from Company I indicated that easier countries for transferring kaizen are "South-East Asian countries such as Vietnam and Thailand. People in those countries are obedient like the Japanese." This obedient aspect was not limited to Asian countries as the quote from the production manager from Company D illustrates who identified Germany as a better country for transferring kaizen

compared to the Netherlands: "In Germany, they are very strict. They are really doing what they are really told." Similarly, the staff manager of Company E stated, "In Germany, kaizen could work because their discipline is stronger. They could do kaizen with discipline similar to in Japan." Another example comes from the production leader from Company B, who, when talking about Germany, said, "The boss is really the boss and they knock on the door before they enter and the boss asks to do this and they are really doing this." The general production manager of Company G said something similar about Germany, "They listen to their manager." Some countries were perceived as having employee attitudes with less discipline than in the Netherlands and consequently they were perceived as more difficult for transferring kaizen compared to the Netherlands. For example, Southern European countries such as Italy and Spain were placed in this category.

Based on these findings it can be concluded that the 'level of discipline of employees' was considered an important national level factor. This factor relates to general attitudes of employees in a country referring to the ease with which employees do what they are told. In some countries, employees follow instructions strictly, for example in Japan and Germany. While in other countries, employees do not always follow instructions precisely or question the instructions, for example in the Netherlands. It is easier to transfer kaizen to countries in which employees have a high level of discipline than to countries where employees have a low level of discipline.

The reason why the level of discipline is important for the transfer of kaizen might relate especially to the aspect of *transfer*, i.e. introducing something new. When something new is introduced, it requires a change from the existing routines. In countries where employees are disciplined and strictly follow orders, the new routines can be 'enforced' through discipline. In countries where employees do not strictly follow orders it is much harder to establish the new, kaizen related, routines because when employees do not accept the new routines, they will not follow them.

6.2   Eagerness of employees

The second common factor identified by respondents was the eagerness of employees. How the level of eagerness of employees plays a role can be determined from the different ways in which respondents identified this concept. For example, several

respondents noted that it is easier to transfer kaizen to East Asian countries compared to the Netherlands because employees in East Asia have a 'hungry mentality', i.e. they are eager to do the work. As an illustration, the general manager of Company D stated, "I think that the hungry spirit is necessary. In those countries people are hungry for money so they can think about many ideas for improvement." Another example comes from the production manager of Company L who stated, "Asian countries are easier. I think that in those countries people try to work hard to improve themselves. For instance, if the company pays for overtime work, people earn more money as they improve their ability. They have a hungry spirit to learn new things." The eagerness of employees was not only identified for Asian countries. Some respondents mentioned that several Scandinavian countries would be easier for kaizen transfer compared to the Netherlands due to eagerness. For example, a staff manager of Company E stated about employees in Scandinavian countries; "I would say they are eager to learn."

Differences in national levels of eagerness of employees were also identified as a difference between Japan and the Netherlands. For instance, it was connected with a perception of the employee level of commitment. A manager at Company E stated "The commitment of the people is much higher [in Japan] towards the company. People are willing to invest also after working hours to have these events to come up with a proposal to invest time. Here [in the Netherlands] after 4:30pm people are gone to the parking lot and gone home." In a similar way, Germany was seen as less attractive for kaizen because job descriptions are very precise and if something is not in the job description, employees do not want to do it. The eagerness of employees in the US was viewed in a similar manner as in the Netherlands, i.e. employees were perceived to defensively define their job responsibility, i.e. limit their responsibilities to what is in the contract. This is in contrast to in particular Asian countries. The production advisor of Company D said, "I think it is easier to develop the kaizen mentality in Asian countries like Korea, China, Singapore and Thailand. They do things which are not written down."

Based on these findings it can be concluded that the 'eagerness of employees' was considered an important national level factor. This factor relates to general attitudes of employees in a country referring to a proactive approach of employees to not just do their job but to go above and beyond what is strictly speaking required or

mentioned in their contract. Two different types of underlying motives for national level eagerness of employees were found in the case interviews. For some countries the eagerness aspect was explained by respondents in economic terms. This means that employees are residents of an economically deprived country and are motivated to improve their situation. This leads to eagerness as displayed in their jobs. Examples of countries where this occurs are Asian countries such as Thailand, urban areas in China, and East-European countries. For another set of countries eagerness was explained by respondents as being related to a certain level of commitment to the company. This level of commitment is the result of national employment systems and how people are treated. For example, in Japan, the situation of life-time employment plays a very important role. When Japanese employees start their working career, they generally expect to work in the same company for a lifetime. This mentality leads people to have a feeling that they are sharing their employment success with the success of the company they are working for. In this situation, employees are committed to the welfare of the company and tend to demonstrate an eagerness to go beyond strictly defined job descriptions. In several other economically advanced nations such as the Netherlands and Germany this eagerness is at a much lower level than in Japan. It is easier to transfer kaizen to countries in which employees have a high level of eagerness than to countries where employees have a low level of eagerness.

The reason why the eagerness of employees is important for the transfer of kaizen might especially relate to specific characteristics of kaizen. Brunet and New (2003) define kaizen as continuous improvement involving activities that are outside of the contributor's explicit roles. A similar idea has been mentioned by Hayashi (1994). Thus, kaizen relates to a mentality of employees where they try to continuously improve the company's performance even when it is not part of their job description. Countries where employees stick to the exact description of their job, such as the Netherlands and Germany, will present challenges for implementing kaizen. While in countries where employees are eager to do additional things, it will be relatively easy to implement kaizen.

6.3   *International transfer of kaizen*

The previous two sections illustrate the two main national level factors which were

23

perceived by the respondents as influencing the transfer of kaizen. Although the interviews were set-up in an open format, i.e. any type of answer could have been provided initially by respondents, the answers are primarily culture oriented. Thus, a first finding is that cultural factors are the most important factors for the transfer of kaizen. The two factors can be combined in a graph to illustrate their combined impact on the transfer of kaizen. This is depicted in Figure 2.
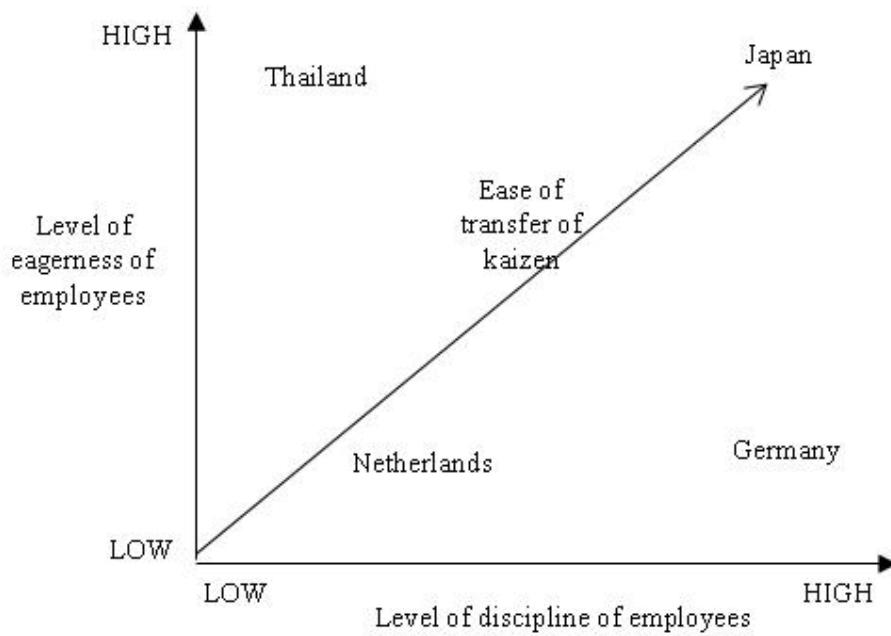

Figure 2. Ease of transferring kaizen.

Figure 2 illustrates that it is easier to transfer kaizen to another country where both the level of eagerness of employees as well as the level of discipline of employees are high. This is the situation in Japan where kaizen was developed. Based on the responses in the cases Thailand, the Netherlands and Germany have been added in the graph. Based on a relatively low level of eagerness of employees as well as a relatively low level of discipline of employees, the Netherlands is a relatively difficult country for transfer of kaizen. Germany might be a little better due to a high level of discipline of employees but it suffers from a relatively low level of eagerness of employees. Similarly, Thailand might be attractive from a perspective of a high level of eagerness of employees but it suffers from a relatively low level of discipline of employees.

For companies that want to transfer or adopt kaizen, it is important to evaluate the level of eagerness of employees as well as the level of discipline of employees to determine the ease with which kaizen can be transferred or adopted. For countries in the lower left part of Figure 1 this does not mean that kaizen cannot be transferred or adopted but it will take more effort than for countries that are positioned in the top right part of Figure 2.

7. Conclusions

The purpose of this research study was to examine the international transfer of kaizen. The central research question was formulated as: what national level factors influence the transfer of kaizen?

In the study, an inductive case study approach was followed with semi-structured interviews. The study focused on Japanese subsidiaries in the Netherlands. A total of 15 companies participated in the research. The conclusions of the study should be cautiously interpreted as the number of respondents was relatively low, the respondents included only Japanese and Dutch citizens, and for example no companies with more than 500 employees were included.

It can be concluded that respondents perceived two national level factors, which are related to national culture, to be the most important. One factor is the level of eagerness of employees which is positively associated with the ease of kaizen transfer. The other factor is the level of discipline of employees which is also positively associated with the ease of kaizen transfer. The level of eagerness can be affected by poor economic conditions. For countries which are economically advanced, it is connected with the level of commitment that employees have to the company. Based on these findings, it can also be concluded that the Netherlands is perceived to be one of the more challenging countries for kaizen transfer.

It is recommended that future research focuses on a further operationalisation of the two national level concepts in this study, i.e. eagerness and discipline, and test the relationship with ease of kaizen transfer. Future research should also look more specifically at the two factors and how they relate to previously identified cultural dimensions, see e.g. Hofstede (2001). Additionally, the study can be expanded to other countries. In that case it is recommended to use more respondents, have respondents of

multiple nationalities who are able to evaluate comparative national differences, and to include a wider range of company sizes.

Keeping in mind the methodological constraints, companies benefit from this research because it contributes to understanding how easy it will be to transfer kaizen. Having this understanding allows companies to set more realistic expectations with regard to kaizen implementation.

References

Adler, P.S. (1999), "Building better bureaucracies", *Academy of Management Executive,* Vol.13, No.4, pp. 36-47.

Adler, P. S., and Borys, B. (1996), "Two types of bureaucracies: enabling and coercive", *Administrative Science Quarterly,* Vol.41(March), pp.61-89.

Ambos, T.C. and Ambos, B. (2009), "The impact of distance on knowledge transfer effectiveness in multinational corporations", *Journal of International Management*, Vol.15, No.1, pp.1-14.

Aoki, K. (2008), "Transferring Japanese kaizen activities to overseas plants in China", *International Journal of Operations and Production Management*, Vol.28, No. 6, pp.518-539.

Babson, S. (1995), "Restructuring the workplace: post-Fordism or return of the foreman?" Asher, R. and Edsforth, R. (Eds.), *Autowork,* State University of New York Press, Albany, pp.227-256.

Beechler, S. and Yang, J.Z. (1994), "The transfer of Japanese-style management to American subsidiaries: contingencies, constraints, and competencies", *Journal of International Business Studies,* Vol. 25, No. 3, pp. 467-491.

Bessant, J. (2003), *High-involvement innovation: Building and sustaining competitive advantage through continuous change,* Wiley, Chichester.

Bessant, J., Caffyn, S., and Gallagher, M. (2001), "An evolutionary model of continuous improvement behaviour", *Technovation,* Vol.21, No.2, pp. 67-77.

Bessant, J., Caffyn, S., Gilbert, J., Harding, R., and Webb, S. (1994), "Rediscovering continuous improvement", *Technovation,* Vol.14, No.1, pp.17-29.

Bhagat, R. S., Kedia, B. L., Harveston, P. D., and Triandis, H. C. (2002), "Cultural Variations

in the Cross-Border Transfer of Organizational Knowledge: An Integrative Framework", *The Academy of Management Review,* Vol.27, No.2, pp.204-221.

Boer, H., Berger, A., Chapman, R., and Gertsen, F. (Eds.) (2000), *CI changes: from suggestion box to organisational learning. Continuous improvement in Europe and Australia,* Ashgate Publishing, Aldershot.

Brunet, A.P. and New, S. (2003), "Kaizen in Japan: an empirical study", *International Journal of Operations & Production Management*, Vol. 23, No. 12, pp. 1426-1446.

Burns, T., and Stalker, G. M. (1961), *The Management of Innovation*, Tavistock Publications, London.

Chen, J., Sun, P.Y.T. and McQueen, R.J. (2010), "The impact of national cultures on structured knowledge transfer", *Journal of Knowledge Management*, Vol.14, No.2, pp. 228-242.

Choy, C.L. and Jain, H.C. (1987), "Japanese management in Singapore: Convergence of human resource management practices", *Asia Pacific Journal of Management*, Vol.4, No.2, pp.73-89.

Courtright, J. A., Fairhurst, G. T., and Rogers, L. E. (1989), "Interaction patterns in organic and mechanistic systems", *Academy of Management Journal,* Vol.32, No.4, pp.773-802.

Daft, R.L. and Lengel, R.H. (1986), "Organizational information requirements, media richness and structural design", *Management Science,* Vol.32, No.5, pp.554-571.

Dahlgaard, J.J., Kristensen, K., Kanji, G.K., Juhl, H.J., and Sohal, A.S. (1998), "Quality management practices: a comparative study between East and West", *International Journal of Quality & Reliability Management*, Vol.15, No.8/9, pp.812-826

de Jager, B., Minnie, C., de Jager, J., Welgemoed, M., Bessant, J., and Francis, D. (2004), "Enabling continuous improvement: a case study of implementation", *Journal of Manufacturing Technology Management,* Vol.15, No.4, pp.315-324.

de Macedo-Soares, T. D. L. v. A., and Lucas, D. C. (1996), "Key quality management practices of leading firms in Brazil: findings of a pilot-study", *The TQM Magazine,* Vol.8, No.4, pp.55-70.

Duan, Y., Nie, W., and Coakes, E. (2010), "Identifying key factors affecting transnational knowledge transfer", *Information & Management,* Vol.47, No.7/8, pp.356-363.

Flaherty, M.T. (1986), "Coordinating international manufacturing and technology", Porter, M.E. (Eds.), *Competition in global industries,* Harvard Business School Press, Boston, pp.83-110.

Flaherty, M.T. (1996), *Global Operations Management.* Mc Graw-Hill, New York.

Flynn, B. B., and Saladin, B. (2006), "Relevance of Baldridge constructs in an international context: A study of national culture", *Journal of Operations Management*, Vol.24, No.5, pp.583-603.

Fowler, F.J. (1995), *Improving survey questions,* Sage Publications, Thousand Oaks.

Fowler, F.J. (2009), *Survey research methods,* 4th edition, Sage Publications, Los Angeles.

Fowler, F.J. and Mangione, T.W. (1990), *Standardized survey interviewing,* Sage Publications, Thousand Oaks.

Fujimoto, T. (1997), *Seisan shisutemu no shinkaron (Evolutionary Theory of Production Systems)* Yuhikaku, Tokyo.

Fukuda, K.J. (1988), *Japanese Style Management Transferred: The Experience of East Asia.* Routledge, New York.

Hayashi, Y. (1994), *Ibunka interface no keiei: kokusai ka to nihonnteki keiei,* Nihon keizak shinbun sha, Tokyo.

Henderson, B.A and Larco, J.L. (2003), *Lean transformation, How to change your business into a lean enterprise*, The Oaklea Press, Richmond.

Hofstede, G. (2001), *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations,* Sage Publications, Thousand Oaks.

Hong, J.F.L., Easterby-Smith, M., and Snell, R.S. (2006), "Transferring organizational learning systems to Japanese subsidiaries in China", *Journal of Management Studies*, Vol.43, No.5, pp. 1027-1058.

Huntzinger, J. (2002), "The Roots of Lean - Training Within. Industry: The Origin of Japanese management and Kaizen", *Target,* Vol.18, No.1, pp.6-19.

Imai, M. (1986), *KAIZEN: The Key to Japan's Competitive Success,* Random House Business Division, New York.

Kayes, D.C., Kayes, A. B., and Yamazaki, Y. (2005), "Essential competencies for cross-cultural knowledge absorption", *Journal of Managerial Psychology,* Vol.20, No.7, pp.578-589.

Kenney, M. and Florida, R.L. (1993), *Beyond mass production: The Japanese system and its transfer to the US,* Oxford University Press, New York.

Kenney, M. and Florida, R.L. (1995), "The transfer of Japanese management styles in two U.S. transplant industries: autos and electronics", *Journal of Management Studies,* Vol.32, No.6,

pp.789-802.

Kondo, Y. (1990), Key points in quality control training courses for managers, *Total Quality Management,* Vol.1, No.3, pp.309-319.

Kono, T. (1982), Japanese management philosophy: can it be exported? *Long Range Planning,* Vol.15, No.3, pp. 90-102.

Lagrosen, S. (2002), "Quality management in Europe: a cultural perspective", *The TQM Magazine*, Vol.14, No.5, pp.275-283.

Lagrosen, S. (2003), "Exploring the impact of culture on quality management", *International Journal of Quality & Reliability Management*, Vol.20, No.4, pp.473-487.

Liker, J. (2004), *The Toyota way*. McGraw-Hill, New York.

Liker, J., and Morgan, J. (2006), "The Toyota way in services: the case of lean product development", *The Academy of Management Perspectives,* Vol.20, No.2, pp.5-20.

Mathews, B.P., Ueno, A., Kekäle, T., Repka, M., Pereira, Z.P., and Silva, G. (2001), "European quality management practices: The impact of national culture", *International Journal of Quality & Reliability Management*, Vol.18, No.7, pp.692-707.

Naor, M., Goldstein, S. M., Linderman, K. W. and Schroeder, R. G. (2008), "The role of culture as driver of quality management and performance: infrastructure versus core quality practices." *Decision Sciences*, Vol.39 No.4, pp. 671-702.

Nonaka, I. (1994), "A dynamic theory of organizational knowledge creation", *Organization Science,* Vol.5, No.1, pp.14-37.

Nonaka, I., and Takeuchi, H. (1995), *The Knowledge-Creating Company*, Oxford University press, New York.

Ohmae, K. (1985), *Triad power, the coming shape of global competition,* The Free Press, New York.

Oliver, N., and Wilkinson, B. (1992), *The Japanization of British industry : new developments in the 1990s*, Blackwell, Oxford.

Parry, M. E., and Song, X. M. (1993), "Determinants of R&D-Marketing integration in high-tech Japanese firms", *Journal of Product Innovation Management,* Vol.10, No.1, pp.4-22.

Pettigrew, A. M. (1987), "Context and action in the transformation of the firm", *Journal of Management Studies,* Vol.24, No.6, pp.649-670.

Pettigrew, A. M. (1990), Longitudinal field research on change: theory and practice, *Organization Science,* Vol.1, No.3, pp.267-292.

Recht, R. and Wilderom, C. (1998), "Kaizen and culture: on the transferability of Japanese suggestion systems", *International Business Review,* Vol.7, No.1, pp.7-22.

Savolainen, T. I. (1999), Cycles of continuous improvement: Realizing competitive advantages through quality. *International Journal of Operations & Production Management,* Vol.19, No.11, pp.1203-1222.

Schroeder, D., and Robinson, A. (1991), "America's most successful export to Japan: continuous improvement programs", *Sloan Management Review,* Vol.32, No.3, pp.67-81.

Shimada, H. (1990), *The Economics of Humanware,* Iwanami Shoten, Tokyo.

Sousa-Poza, A., Nystrom H., and Wiebe, H. (2001), "A cross-cultural study of the differing effects of corporate culture on TQM in three countries", *International Journal of Quality & Reliability Management*, Vol.18, No.7, pp.744-761.

Szulanski, G. (1996). "Exploring internal stickiness: Impediments to the transfer of best practice within the firm". *Strategic Management Journal,* Vol. 17, Winter Special Issue, pp. 27-43.

Tata, J., and Prasad, S. (1998), "Cultural and structural constraints on total quality management implementation", *Total Quality Management,* Vol.9, No.8, pp.703-710.

Triandis, H.C. (1994), *Culture and social behaviour,* McGraw-Hill Inc., New York.

van Wijk, R., Jansen, J.P. and Lyles, M.A. (2008), "Inter- and intra-organizational knowledge transfer: a meta-analytic review and assessment of its antecedents and consequences", *Journal of Management Studies,* Vol.45, No.4, pp. 815-38.

Vecchi, A and Brennan, L. (2011), "Quality management: a cross-cultural perspective based on the GLOBE framework", *International Journal of Operations & Production Management*, Vol.31, No.5, pp.527 -553.

Welch, D.E. and Welch, L.S. (2008), "The importance of language in international knowledge transfer", *Management International Review,* Vol.48, No.3, pp.339-360

Womack, J.P., Jones, D.T. and Roos, D. (1991), *The machine that changed the world: the story of lean production*. Harper Perennial, New York.

Yokozawa, K., Steenhuis, H.J. and de Bruijn, E.J. (2010), "Recent experience with transferring Japanese management systems abroad", *Journal of Strategic Management Studies*, Vol.2, No.1, pp.1-16.