A Comparison of Business Process Improvement Approaches between US and Japanese Firms: A Model Application

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Abstract

Building on prior case and field study work [1, 2, 3, 4, 5, 6], the author developed a process improvement model. The proposed model includes four interdependent components — a systematic methodology to guide quality efforts, an environment conducive to change, empowerment mechanisms for the people who do the work, and information technology (IT) to facilitate automation. The model was used to contrast the process improvement approaches between U.S. and Japanese companies. Results included differences between process improvement approaches, management/worker roles, creativity, change visions, and work environments.

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1. Introduction

In response to intensifying global competition, US organizations are looking for ways to redefine themselves. A popular management approach for facilitating rapid organizational transformation in the U.S. is business process reengineering (BPR). BPR calls for radical redesign of core business processes to add value to the business, improve quality, and dramatically improve customer satisfaction. At the core of BPR are the people who do the work. People closest to the business process should be empowered to make decisions and changes that improve the business [7]. Since people are the key, fostering individual creativity and problem-solving skills is paramount to BPR success [5].

The response by Japanese firms to recent globalization is not as clear. BPR is not, at this time, a popular management approach in Japan. One reason for this is culture. Empowerment is not as important because the corporate culture in Japanese firms is such that each individual employee naturally wants to contribute to the betterment of the company. Emphasis is placed on the “group” rather than the individual [8]. Group harmony is more important than individual innovation and creativity. Communication is actually easier because interpersonal relationships and mutual trust are the norm. Another reason is the philosophy of permanent employment. Since employees rarely change jobs, organizational security is high and the need for creativity and independence tends to be low [9].

In Japan, continuous process improvement is a way of life. According to a manager in strategic planning at NEC world headquarters in Japan, “Quality and customer satisfaction is a natural part of everyone’s work life” (M. Hasegawa, personal communication, May 29, 1998). Since Japanese workers naturally embrace a paradigm of teamwork and quality, it is easy for managers to tweak business processes. In other words, the idea of process integration across functional lines is not new to Japanese workers. Therefore, it might stand to reason that embracing BPR is not as critical to Japanese companies. Another reason that BPR is not popular in Japan is that workers are comfortable with gradual change. In the U.S., continuous improvement is not a natural part of work. “Our workers are not used to working in teams, tend to have little understanding of the overall business and customer
satisfaction, and are not used to thinking in interdepartmental process terms” (S. Dickinson, personal communication, June 25, 1997). However, customer expectations of high quality at competitive prices is forcing U.S. companies to change quickly. Since BPR touts quick results (at least in comparison to the Japanese paradigm of continuous improvement), many U.S. companies find it appealing.

2. Research Question

It is generally accepted that Japanese companies produce high quality products that meet or exceed customer expectations. It is also generally accepted that Japanese workers embrace a paradigm of continuous improvement. In the U.S., this is not necessarily the case. However, many companies are embracing BPR (and other methods) to quickly change the way they do work. We know that there are differences between Japanese and U.S. companies, but we only have a general idea of what these differences might be. The purpose of this research is to offer a deeper understanding of how Japanese and U.S. approach process improvement differently.

To help identify these differences, a process improvement model is used. The model has four interdependent components — process improvement methodology, environment, people, and information technology (IT). Each component of the model is used to bring out how Japanese and U.S. companies deal with process improvement. Data used for comparison include four Japanese and four U.S. companies.

3. Synopsis of the Participating Companies

Caterpillar Mossville Engine Center manufactures a variety of small-and-medium-sized diesel engines. The engine center employs approximately 5000 people with 1200 in management positions. Total revenue for Caterpillar Engine Division is approximately US $3.7 billion. Caterpillar has completed over a dozen BPR projects. It has adopted a systematic methodology to guide its reengineering initiatives.

Barnett Technologies is unique in that both IS and business managers work together to develop systems that meet business needs and are technically sound.

Safeco employs more than 7,500 people in the insurance industry. Its net income is approximately $439 million dollars and its total revenue is $4 billion. The top management vision incorporates a creativity paradigm for its employees.

In 1993, Honeywell was rated as one of the best plants in the US. Its focus is to delight its customers with high quality products that are delivered on time to its customers. Honeywell has adopted a systematic methodology to guide its reengineering initiatives. It also has an architecture to facilitate teams in their quest to be innovative and creative.

The Toyoma plant of NEC generates sales revenue of approximately $4 million (US). The Toyoma plant is one of the manufacturing facilities of NEC products. It employs 1200 people in 10 departments.

Future System Consulting Corporation competes in the technology consulting industry. Its goal is to become the world’s number one technology consulting firm by leading in open systems integration. It employs over 80 people. It generates over $18 million dollars in sales revenue per year.

FIRST competes in the language education industry. Its goal is to assist Japanese people going abroad and foreigners in Japan with language and culture skills development. First employees over 25 people. Its sales revenue is approximately $1 million dollars per year.

JATCO employs 3000 employees in 32 departments. Its sales revenue is approximately $1.2 billion (US). JATCO manufactures transmissions for leading automobile companies. JATCO works in partnership with several U.S. automobile parts suppliers.

4. Case Research Methodology

The design of the research was based on an approach developed by Benbasat, Goldstein, and Mead [10]. The approach is divided into six steps — research theme, unit of analysis, type of case, site selection, data collection method, and data analysis and exposition.

Consistent with Yin [11] and this approach, the research question (theme) should be explored with the case study method. The reasons are that the phenomena of interest cannot be studied outside its natural setting, it focuses on contemporary events, subjects cannot be controlled, and there does not exist an established theoretical base.

The unit of analysis is the organization. The researcher is interested in exploring the process improvement philosophy of the organization rather than
individual projects. Since the "intent of the research is description ..." [9, p. 373], a multiple-case design is used. Obviously, the research question implies the need for multiple cases. Choice of sites was based on access to organizations. Three of the five methods of data collection suggested by Yin [10] were used — documentation, archival records, and interviews.

As suggested by Benbasat, et al., [9], the researcher outlined a data collection plan prior to site visits. He developed a "common" questionnaire that was used as a guide during interviews, identified the types of information to collected, and made of list of the people to be contacted. The researcher attempted to use his integrative powers to analyze the data. A process improvement model was developed (based on prior research and experiences with BPR professionals in industry).

5. Process Improvement Model

According to Fuglseth and Gronhaug [2], a "process view" assumes that every organization is built around a few core processes. The performance of a process is measured by the customer(s) it serves. In other words, the organization should not be not viewed as a set of functional departments, but as a set of cross-functional processes built to serve customers. The process improvement model is based on this process perspective.

The model has four interdependent components — a BPR methodology, an environment conducive to change, empowerment mechanisms for the people who do the work, and the enabling power of IT (depicted in Figure 1) — that support the process perspective.

Each component is grounded in existing BPR literature. A methodology to guide BPR has been advocated by many sources [4, 5, 13, 14, 15]. The idea of empowerment and autonomous teams has also been advocated as an important component of BPR success [2, 7, 14]. Another critical component is a "flatter" organizational structure [2, 7]. The assumption being that flat organizational structures are more responsive because management and workers have fewer structural barriers that might impede communication and information flow. The final component is IT. Some would argue that the tremendous advances in IT actually sparked the BPR revolution. The basis of this argument is that IT has the potential to facilitate the other BPR enablers [2, 7, 16]. For example, IT can help cross-functional work teams improve information flow. IT can also help flatten an organization by making communication between upper management and the people that do the work much easier.

The author posits that these four components provide the foundation for a holistic blueprint for solving business process problems. The BPR vision is the glue that holds the four components together. It should be communicated and visibly supported by top management. As top management becomes more active in the BPR effort, the chances for success greatly increase.

Methodology is the systematic (step-by-step) guide to help people solve business problems. The BPR literature typically depicts a five step methodology [6, 12, 13]. The purpose of the first step is to identify, evaluate, and prioritize critical "problem" processes. The purpose of the second step is to map existing processes to enable systematic examination of potential problem areas. During the third step, BPR teams can begin generating ideas for process improvement. The fourth step provides an opportunity to evaluate the best ideas for potential value-added and possible negative consequences on existing processes. In the fifth and final step, implementation of the new process(es) begins. Although the steps are presented in a sequential manner, BPR is meant to be an iterative exercise. In other words, moving back and forth between steps is encouraged when deemed necessary by the project team.

The methodology keeps the team focused on the proper tasks and activities required at a specific step of the project. Experience with the methodology helps project team members develop a process view of the organization. "As our people gain more experience with the methodology, they begin to develop a sense of how the overall process works to serve the customer and better understand how the
Caterpillar businesses work” (S. Dickinson, personal communication, June 25, 1997).

**Environment** includes the management and executive structures, employee reward structure, and team structure. A key enabler of BPR is a flattened organizational structure [2]. A flatter structure should make teamwork easier as there are fewer levels of managers to hinder communication between people and key decision makers. With less middle management in a flat organization, pushing decisions down to where the work is done (empowerment) should be ideal. An environment conducive to change requires a different kind of manager and executive. A structure should exist that defines new job roles — manager as facilitator, executive as leader, and worker as problem solver. The executive team is also responsible for removing political obstacles as work teams rarely have the power to do so. “Politics must be dealt with when redesigning cross-functional business processes. As the redesign effort crosses functional boundaries, it often invades political turf. It takes a competent manager with political savvy to effectively deal with such obstacles” (S. Dickinson, personal communication, June 25, 1997).

Employees should have a reward structure that compensates team effort over individual effort. “Traditional compensation and reward systems simply don’t cut it in a team environment ... a great premium is being placed on multiskilling, flexibility, teamwork, continuous quality improvement, self-management, and customer focus” [17, p. 326].

**People** includes direct involvement in critical decisions related to the project and freedom to approach problems in a creative manner. Worker empowerment is a key element of BPR [2, 7, 15]. Team members should have the authority to make critical process decisions where the work is really done. They should be empowered to take a “fresh look” at a process rather than modifying an existing design [18].

Another issue is creativity. The research suggests that creativity is present in everyone [19, 20, 21]. However, most people seem to use less and less of their creative ability as they mature [21]. If this is the case, it makes it harder for management to induce creativity in its employees. To stimulate creativity in people, both intrinsic and extrinsic motivation is important [22]. Intrinsic motivation is the anticipated satisfaction of generating creative ideas and putting them into effect. Intrinsic motivation can be stimulated by creating an environment conducive to creativity. Extrinsic motivation includes financial incentives, recognition, visibility, and encouragement [5].

The creative process can be nurtured by utilizing approaches that facilitate the process [23] such as training programs, creativity training, and creativity certification.

**IT** is a powerful tool for redesigning business processes because of its ability to facilitate information flow on an enterprise-wide basis [15, 16, 24]. IT is essentially an enabler of the other BPR enablers [2]. Empowered workers can use IT to model and redesign existing business processes, and implement new ones. People can use IT to enhance communication with each other and other people along the process path.

Traditionally, organizations used multiple layers of management to pass information between where the work was done and top management. Now, organizations can become flatter by using IT to speed communications and information flow, and enhance end-user capabilities. Many powerful IT tools are available for BPR such as process modeling, data modeling, prototyping, and simulation [14].

To enable BPR success, the four components should work together. To keep the components in sync, a BPR strategy is needed. The **BPR vision** or strategy can act as an overall guide to the reengineering effort. “... a well-defined business strategy is antecedent to a process innovation initiative ... (it) is a primary determinant in both the selection of, and development of process visions for, processes to be innovated” [15, p. 121]. “Creating vision involves understanding where you’ve been. Even more important, however, is recognizing where you are and where you want to go” [25, p. 62].

### 6. Comparing Companies with the Model

#### 6.1. Methodology

Caterpillar, Barnett Bank, and Honeywell have well established and systematic BPR methodologies. These companies believe that a BPR methodology provides a concrete road map for dealing with complex process improvement problems. At Caterpillar, the methodology acts as a rallying point to keep BPR team members focused and synchronized. At Honeywell, the methodology includes process improvement, quality, and extensive training to keep employees focused on a holistic paradigm of work. At Barnett, the methodology integrates enterprise data modeling and business management to deliver optimum customer satisfaction. Safeco has a methodology, but its focus is not as broad as the other U.S. companies. The IT department at Safeco is leading the effort with little support from top management. The lack of top management commitment is making cross-functional change very difficult.

Although Japanese companies may not embrace radical process change, they tend to be very committed to continuous process improvement. NEC and JATCO embrace enterprise-wide methodologies to guide continuous employee training and process improvement. NEC invests
heavily in formal and on-the-job quality training to keep its employees current and focused on the most important issues. When a manager spots a problem, resources such as formal training, on-the-job training, and extra employees are budgeted to solve it. These two companies may be more advanced than their U.S. counterparts because they have been dealing with process change for more than 20 years. Future Systems is a relatively new company with less than eighty employees. The interviews suggest that a systematic process improvement methodology is not in place. However, the organization is aware of a potential future problem and indicated that they will address it as the company grows. FIRST has no process improvement methodology and has no plans to introduce one.

In general, U.S. companies embrace either a formal or informal BPR methodology to guide efforts [24]. The methodology tends to be specific to reengineering efforts. In general, Japanese companies embrace an enterprise-wide methodology for guiding the overall quality effort which includes process improvement, work roles and activities, quality control, and training.

6.2. Environment

The methodology at Caterpillar includes a comprehensive structure (environment) for dealing with change. BPR teams must work within a process-oriented organizational structure to do their work. This structure refocuses employees on a business process problem rather than the narrow functional activities that they usually work on. The environment at Honeywell encourages change. Continuous training of all employees is its key for modifying older paradigms of work. The training is very holistic in that courses are integrated and focus on enterprise-wide issues. In addition, all employees are involved in the training programs. Barnett Bank decided to move business managers into the IT department to help lead its reengineering effort. This helps to keep IT system modifications and major changes focused on business and customer problems, and business process changes technically sound because business managers and IT people work together on the same BPR teams. The work environment at Safeco is very pleasant. People work together extremely well. The major problem is that enterprise-wide change is difficult because the environment is structured and not very flat. In addition, top management is not visibly involved in the BPR efforts.

Compared to their U.S. counterparts, Japanese companies are very structured. In Japan, eligibility for promotion is based on length of service which keeps a pyramidal managerial structure in place [9]. NEC invests heavily in training its employees to view customer satisfaction and quality as critical. Process improvement is a major part of this paradigm. As a subjective observation, the environment at NEC appeared serene and harmonious. Everyone seemed to know what they were supposed to do and worked diligently to accomplish their assigned set of tasks, but they never seemed to be hurried or in a hectic frame of mind. JATCO is similar to NEC in its commitment to quality and customer satisfaction. Training investments are generous and process improvement is encouraged everyday. The environment at Future Systems is much more like companies in the U.S. Employees are encouraged to be entrepreneurial and assertive. Of course, assertive does not mean aggressive because it would make Japanese customers very uncomfortable. The major difference (noticed by the researcher) is the role of women. Women served refreshments and translated. The researcher did not meet any women in managerial roles. This subservient role of women in Japan is consistent with the writings of Hofstede. Hofstede [26] ranked Japan at the top of the list in terms of clearly differentiated sex roles in the workplace. The environment at FIRST is authoritative and structured. Work environments in Japan tend to be structured. Group harmony is the norm. However, the “feeling of harmony” seemed to be stronger at the larger companies (NEC and JATCO). Moreover, the role of women is usually delegated to that of a secretary or office manager.

In general, U.S. companies are beginning to embrace a paradigm of teamwork and empowerment. However, a legacy of individualism is making the transition to teams difficult. In Japan, change comes very gradually. Keeping the organizational structure intact is very important because many Japanese companies embrace the idea of “lifetime employment” [9, 27]. However, some Japanese companies like NEC and JATCO are beginning to look at U.S. models of organizational structure. They believe that competition in the global marketplace will be directly related to a company’s ability to serve customers all over the world. In order to serve all customers, individual creativity and innovation will be much more important in the near future. It appears that both countries are changing their existing paradigms of work — U.S. companies are moving toward teams, cooperation, and an enterprise sense of quality and customer satisfaction. Japanese companies are beginning to examine to potential value added of individual creativity and innovation as long as it doesn’t erode group harmony.

6.3. People

The idea of teamwork and empowerment is key to successful reengineering at Caterpillar, Honeywell, and Barnett Bank. At Caterpillar, the BPR team is responsible for all major decisions associated with the project. Of
course, the team must be able to justify major changes to top management prior to implementation. Honeywell embraces a holistic management paradigm. While teamwork and empowerment are pushed by management, front-line employees receive extensive training in dealing with change, working in teams, conflict resolution, and process improvement initiatives. All employees at Honeywell receive training in enterprise-wide communication issues and process improvement methods to help integrate ideas. At Barnett, empowerment is very important because the IT department must make critical decisions as it leads the BPR effort. However, formal training is not extensive. Barnett makes up for lack of formal BPR training by charging managers and IT people within the same department to create systems that meet or exceed customer expectations. Safeco allows a moderate amount of empowerment within a strict organizational structure. Cross-functional teams are formed for BPR projects, but are dismantled after projects are completed or dissolved. People work together well, but in a functional rather than cross-functional sense.

Creativity training is very extensive at Caterpillar and Honeywell. Both companies train employees in the basics of applied creativity techniques and managing creative teams. Both companies reward creativity by awarding special compensation and recognition. Although creativity is a major concern, the results of training vary because existing “functional” habits are very difficult to break. Barnett Bank and Safeco encourage creative output from employees, but do not budget for formal training or award special compensation.

Japanese companies are well known for teamwork. Japanese people tend to be very comfortable working in groups. However, the idea of worker empowerment is not generally embraced. Worker empowerment suggests that individual employees are be encouraged to make important business decisions. This does not preclude the idea of groups of individuals making decisions, but the western definition of empowerment is usually focused on individuals. To keep the paradigm of permanent employment and group harmony in place, the idea of empowerment is threatening. The harmony of the group appears to be based on consensus within the group and the group’s willingness to completely accept decisions from superiors. Allowing individuals to make decisions on their own or create innovations is perceived as a threat to harmony because it goes against thousands of years of tradition. Their is a common saying in Japan that translates into “the nail that sticks up, gets hammered down”.

Large companies like NEC and JATCO have problems fostering creativity because the culture of the group has been in place for so many years. Since culture is a collective phenomenon and slow to change [26], patience is the only answer. Both of these companies are beginning to experiment with creativity training and worker empowerment to enhance their ability to compete in the future. NEC has invested in an innovative program of venture capitalism and other innovative schemes to unearth hidden creativity in its people [28]. Future Systems reported that individual decision making is actually encouraged. However, group consensus is still the norm. Its small size and management philosophy appear to make it more flexible regarding the traditional Japanese culture of working in groups. Although FIRST is a small company, it is still very traditional. Empowerment and creativity are not encouraged.

In general, U.S. companies are moving toward teamwork, empowerment, and creativity. They have a long way to go, but their intention to move in this direction is clear. Some Japanese companies are beginning to see the value of empowerment and creativity, but are finding it difficult to change because these paradigms clash with traditional Japanese culture.

6.4. IT

In U.S. companies, IT is considered one of the most important enablers of BPR success. Honeywell, Safeco, and Barnett Bank make use of extensive IT to promote process redesign. In the cases of Safeco and Barnett Bank, their IT departments lead BPR efforts. At Honeywell, IT is integrated into the many processes required to deliver quality products to its customers. Caterpillar is the exception. Caterpillar focuses almost exclusively on redesign of its core business processes independent of its enterprise IT infrastructure. IT is used to complete tasks, but the IT department has no part in the BPR projects. Despite the emphasis of the BPR literature on the criticality of IT as a facilitator of reengineering [24, 29, 30], Caterpillar has been very successful with its approach.

In Japan, NEC, JATCO, and Future Systems place a major emphasis on systems integration to promote successful process improvement. At NEC and JATCO, IT systems integration has been a part of their process improvement efforts for decades. Both NEC and Future Systems are in the business of systems integration. They help other companies integrate disparate legacy systems. FIRST is not an IT-oriented business and therefore tends to place less emphasis on IT. However, FIRST employees make extensive use of hand-held calendaring systems to find out about meetings and report on progress. While this tool is useful, it doesn’t appear to contribute to any overall process improvement initiatives. It does, however, help to improve the process of communication between employees.

In general, IT is an important contributor to BPR efforts. Most U.S. and Japanese companies use IT to
facilitate BPR and help integrate enterprise-wide systems. In some cases, like Caterpillar, IT is not a factor. Hence, the use of IT as a facilitator should depend on the process problem to be solved. In other words, IT should not be viewed as a panacea to solve all process problems.

6.4. BPR Vision

All four of the U.S. companies have a written BPR vision as part of their process improvement initiatives. However, Honeywell is the only company to embrace a truly integrated enterprise-wide plan. Its vision includes manufacturing processes, IT, employees, world-wide communications, and customer delivery. The vision attempts to integrate all of these resources into a “one plant” paradigm of delivering exceptional quality, on time, to its customers. The Caterpillar vision is focused mainly on the manufacture of small to medium engines at one of its major manufacturing plants. While BPR is moving toward integration at this plant, the company-wide state of BPR is in its infancy. At Barnett Bank, the vision is focused primarily on one critical project — direct consumer loans (DCL). While DCL is critical and sprawls across the organization, the scope of BPR does not encompass the entire enterprise. At Safeco, the BPR vision is primarily isolated to the IT department. While BPR projects cross many functional lines, its vision is not focused on an enterprise-wide basis.

NEC and JATCO embrace an enterprise-wide process improvement vision. Organization of resources at all levels of both organizations are integral parts of their overall visions. These companies have world-class manufacturing plants and outstanding customer service which are lead by their process improvement and quality visions. The vision at Future Systems is focused primarily on expansion because the organization is very small at this time. However, quality and continuous improvement are an important part of the overall organizational plan for success. The vision and execution of the vision at FIRST is not in the same class as the other Japanese companies in this sample. FIRST is very small and has no real plans for expansion. While quality is important, the idea of continuous process improvement is not a major focus.

7. Discussion and Conclusions

The purpose of the research was to explore the differences between U.S. and Japanese approaches toward business process improvement. A process improvement model was introduced, based on prior MIS research, to help the researcher systematically compare companies across the two countries. The model enabled a parsimonious view of these differences by contrasting process improvement methodologies, work environments, people mechanisms, IT, and process improvement vision.

The research suggests that U.S. companies are moving toward more organized and systematic treatment of BPR projects. They realize that competition will continue to increase and global customers will only become more demanding in the future. To be successful, companies understand that their business processes will have to be lean and focused on customer satisfaction. The value added being achieved from empowerment, teamwork, creativity, and innovative thinking is quickly removing the connotation of BPR as a fad or a buzz word. When approached systematically and comprehensively, BPR works. The U.S. companies in this sample realize many of their shortcomings. They understand that BPR should be approached on an enterprise-wide basis. The problem being that change is difficult and takes time. They realize that the key to BPR success involves incorporating a long-term plan and being very patient. Of course, Caterpillar and Honeywell have more mature BPR programs than Barnett and Safeco. However, Barnett and Safeco appear to be heading toward a more enterprise-wide vision of process improvement.

With the exception of FIRST, Japanese companies embrace an enterprise-wide vision of continuous improvement. Japanese companies understand the fundamentals of BPR, but their culture of group harmony and lifetime employment makes it hard to implement. Nevertheless, these companies have been very successful institutionalizing a paradigm of incremental process improvement. Since Japanese companies have been involved with process improvement for many more years than their U.S. counterparts, radical change may not be as important to maintain a competitive advantage. In other words, Japanese companies have already refined their processes to the point that BPR may not be needed. Their does exist a new movement to experiment with individual creativity and empowerment in large companies like NEC and JATCO, but the emphasis is definitely on a small scale with a select group of employees.

Differences in corporate culture might explain many of the differences between process improvement paradigms between the two countries. First, U.S. companies expect quick results. In Japan, change is gradual and the tendency is to except short-term losses in lieu of long-term gains. This cultural difference seems to explain the popularity of BPR in the U.S. as opposed to incremental process improvement in Japan. Second, group harmony is a major aspect of corporate life in many Japanese organizations. In the U.S., individual performance and reward is still the norm. Empowerment and individual creativity are perceived as threats to group harmony in Japanese companies, whereas American employees tend to
want more freedom of expression and decision-making responsibility. This is why empowerment and creativity are much harder to implement and less common in Japan. The organizational structures (environments) in Japan are very rigid in support of lifetime employment and group harmony. It is interesting to note that communication flow is very effective even within a strict hierarchy. Maybe group harmony is such that people understand their roles and work together more seamlessly than their U.S. counterparts making radical process improvement unnecessary. The push for “flat” organizations in the U.S. may be directly linked to the inability of U.S. employees to communicate across groups and/or functional lines.

The evidence from the study appears to support the idea that BPR is more effective in companies with poor lines of communication and little real integration between people across functional lines. Incremental process improvement may be all that is needed if people already work very well together and the chain of command does not interfere with smooth communication between people.

8. Limitations

1. BPR is a “western” concept. It was introduced in the U.S. and is built around assumptions taken from U.S. companies. Therefore, it may not be useful to assume that BPR is a valuable philosophy for companies in other countries.

2. Creativity is viewed differently by the two countries. In Japan, creativity is important, but it must fit within a “group” paradigm. Individual creativity may be perceived as a threat because it has the potential to interfere with group harmony. For instance, if one group member tends to be individually creative, he (she) will stand out from the rest and will be perceived as an “outsider” to the group. In contrast, individual creativity is not perceived as a threat in U.S. organizations (if the culture is accepting of this type of behavior). Americans are raised in a society that embraces individuality and individual creativity. However, the corporate culture can be such that individual creativity is not nurtured and/or rewarded.

3. The sample is relatively small. Four companies from each country is not enough to attempt to generalize the results. However, case study research is an excellent research method to uncover real issues.

4. The sample incorporates a wide mix of industries. It may be better to study companies in the same industry to improve the capacity for generalization.

5. The sample incorporates a wide mix of size. Small companies tend to do work very differently from large companies. In this sample, small and large companies varied widely in their approaches in both countries. Site selection was based on access to organizations.

6. The researcher is from the U.S. and does not speak Japanese. This is a built-in bias because he lacks a deep understanding of the Japanese culture and has never worked in a Japanese company. However, the case study method enabled the researcher to speak directly (in English) with executives and employees from all of the Japanese companies in the sample.

9. Theoretical Contribution

The study makes a unique contribution to the BPR literature in that no studies exist that compare organization using an enterprise process improvement model. In addition, few BPR studies exist that use in-depth cases to draw insights. The study introduces several philosophical differences between U.S. and Japanese approaches that would not be easily uncovered by any other type of research method. Finally, very few studies explore Japanese practices because of the difficulties associated with data collection abroad. However, this study is very important because Japan has several world-class organizations that should be studied because they are using state-of-the-art management techniques that their U.S. counterparts are just beginning to understand.

10. Practical Contribution

The model can help organizations better understand their existing approach to BPR or continuous process improvement. By understanding what they are currently doing and contrasting that with what they should be doing, they can improve. For instance, the model can help uncover deficiencies such as lack of an enterprise-wide methodology. The model is also helpful because it is divided into four components which makes it easier to analyze a BPR program. This study shows how easy it is to analyze programs from eight different companies and two very different countries by organizing with the model.

11. References


