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THE ROLE OF KAIZEN IN CREATING RADICAL PERFORMANCE RESULTS IN A LOGISTICS SERVICE PROVIDER

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ABSTRACT. **Background:** This study investigates the role of an incremental change in organizational process in creating radical performance results in a service provider company. The role of Kaizen is established prominently in manufacturing, but is nascent in service applications. This study examines the impact of introducing Kaizen as an ODI tool-how it is applied, how it works, and whether participants believe it helps service groups form more effective working relationships that result in significant performance improvements.
Methods: Exploring the evolving role of Kaizen in service contexts, this study explores a variety of facets of human communication in the context of continuous improvement and teamwork inter-organizationally. The paper consists of an archival study and an action research case study. A pre-intervention study consisting of observations, interviews, and submission of questionnaires to employees of a manufacturing and air-sea freight firm was conducted. A Kaizen intervention occurred subsequently, and a post-intervention study was then conducted.
Results: Radical improvements in both companies such as 30% financial growth, 81% productivity improvement and more are demonstrated in this paper.
Conclusions: Findings offer unique insights into the effects of Kaizen in creating radical performance improvements in a service company and its customer. Both qualitative and quantitative results of business, satisfaction, and productivity suggest time invested in introducing Kaizen into a service organization helps the companies improve relationships and improve the bottom line dramatically.

Key words: Kaizen, continuous improvement, collaboration, service organization, motivation.

INTRODUCTION

As the reader reads more about the companies involved later in the article, a better understanding will developed of how Kaizen helped creating radical performance results for both companies with very small incremental changes. For years, Logistica was researching a unique selling point to enter Sporty's list of logistics providers, with little success. It was difficult for Logistica to differentiate itself from competitors and gain needed trust in its capabilities beyond supply chain management solutions. The Kaizen ODI changed that radically.

Kaizen is a process of continuous improvement implemented in organizations worldwide. The original Kaizen philosophy was a Japanese life philosophy that suggests human life and lifecycle can be improved constantly. According to Colenso [2000], Kaizen means "change and good", suggesting that the philosophy of much of business is "if it ain't broke, don't fix it." Kaizen takes this concept and extends it to suggest, "If it ain't broke, don't ignore it because it will break one day." This attitude, with emphasis on fixing or modifying problems before they develop, has another corollary: bad business ignores signs of problems, but good business sees a train wreck coming and changes tracks. Businesses

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worldwide adopted Kaizen as a way of doing business, and the Kaizen-driven business looks down the track continually and makes corrections to avoid a potential train wreck; a traditional business waits until the train is visible and then takes steps to avoid a crash. This allegory suggests it is far easier to monitor and correct a track than wait until a train appears, and then try to avoid a collision and get back on track. Worldwide, businesses find that continuous improvement is much more beneficial, and certainly more cost effective, than belated corrections.

As Hammer, Champy, and Tathan [1993] describe, Kaizen leads to a process-oriented view of a system since processes must be improved before better results can be achieved. Improvement divides into two categories: continuous and innovation. Kaizen suggests small improvement steps are based on continuous efforts to sustain the status quo, and innovation requires large investments in technology or radical changes to processes; the two compare to evolution (Kaizen) and revolution (innovation). Although Kaizen was developed for use in manufacturing, it now appears in a variety of venues, including governments, banking, and healthcare [Bahensky, Roe, & Bolton, 2005]. Kaizen is characterized by daily actions that entail improvements to all aspects of an organization, and involves all employees from top to bottom. Laraia, Moody, and Hall [1999] suggest that Kaizen is all encompassing, and includes "participation of workers in the improvement". Without worker buy-in, Kaizen does not work. Organizational collaboration complicates issues related to Kaizen and continuous improvement exponentially. A system normally complex within the context of a single organization becomes far more intricate as other organizations are added to areas of operation. The best way to understand the complexity of this collaboration is to consider how difficult mergers between two companies can be. During a merger, two companies meld systems and methods of operation; if they do it correctly, the company survives and prospers, and if they do not, the joint company fails. During inter-organizational collaboration, companies work together as closely as merged companies, but do not officially meld systems. Instead, they work together in collaboration, keeping systems separate but overlapping.

During a merger, the new company decrees what types of systems will be used, whose method of operation will be utilized (and whose will be dropped), what procedures will remain the same (and which will change). Changes to the culture of one or the other of the merging companies are made so workers operate under one goal, vision, and mission. During collaboration, an air of unity does not exist because the companies remain separate, yet complexity is still present because the organizations must work together to succeed. Neither company has the capacity to order the other to comply with a directive. Instead, they must negotiate rights and responsibilities. In a sense, inter-organizational collaborations provide the requirement to achieve without providing the authority to make changes to meet the requirement. Inter-collaboration is complex, and cannot happen unless all companies involved agree to make the relationship work. Huxham [1993] states:

Collaborative advantage is achieved when something unusually creative is produced-perhaps an objective is met-that no single organization could have produced and when each organization is able to achieve its own objectives better than it could alone. In some cases, it should also be possible to achieve some higher-level…objectives for society as a whole, rather than just for the participating organizations.

Two goals of for-profit organizations are to make profit and achieve competitive advantages. The goals of collaborative advantage and competitive advantage are complementary, according with competitive advantage. Huxham [1996] points out that collaborative advantage results from synergy between collaborating organizations. Companies seek this synergy since they continually improve not only their own organizations, but also connections and collaborations between organizations.

COMPANIES UNDER STUDY

Since this study focuses on performance results of both logistics Service Company and its customer, more than one company was investigated. To protect confidentiality, all companies name are masked. The main company, Logistica, is a logistics company under a large group of companies. Logistica is one of the world's leading providers of freight forwarding and supply chain management services. For more than a hundred years, it has provided customers with transportation and logistics solutions that support the way they want to do business, wherever they are in the world. With more than 10,000 professionals in nearly 300 offices worldwide, Logistica manages more than 2.3 million containers of ocean freight and supply chain management volumes, and more than 230,000 tons of airfreight, annually.

The second company, Sporty, is a multinational cooperation engaged in design, development, outsourced manufacturing, and marketing of footwear and apparel, including sports equipment and services. Besides a focus on growing its business into a multi-billion-dollar cooperation, the company invests heavily in being environmental friendly; its environmental programs ranks among the top in the world. Since Logistica is one of the largest supply chain management service providers in the world, Sporty was one of Logistica's customers under this product. There was little trust in Logistica's logistics capabilities such as air or ocean freight. During the pre-ODI stage, Sporty was already a strong supporter and implementer of Kaizen and lean methodologies; as a manufacturer, the company benefited strongly from running continuous improvements techniques. Logistica did not use Kaizen; it used teams of process excellence (PEX) managers who examined processes and improved them without involving the people who ran those processes. The teams had a few successes, but no game changers. At that point, the companies had no more than simple customer/service provider relationships.

Throughout the course of Kaizen introduction as an OD tool at Logistica and to the services the company provided, relationships grew stronger and the companies started to cooperate and later collaborate on many projects. Joint training and workshops built trust, and results from Kaizen initiatives helped Logistica introduce its air and ocean logistics services and gain more confidence from customers. Many Kaizen projects grew beyond improving current services; it extended to helping customers achieve global goals (e.g., reducing CO_2 footprints the entire supply chain emitted). Simple steps of Kaizen intervention helped both companies achieve radical performance results. From Logistica's side, participants were customer service and operation staff members, and supervisors, in both Thailand and Vietnam offices. On Sporty's side, manufacturing employees in Thailand and Vietnam, and staff members and managers in European distribution centers, participated in the study. Figure 1 illustrates the various participants.

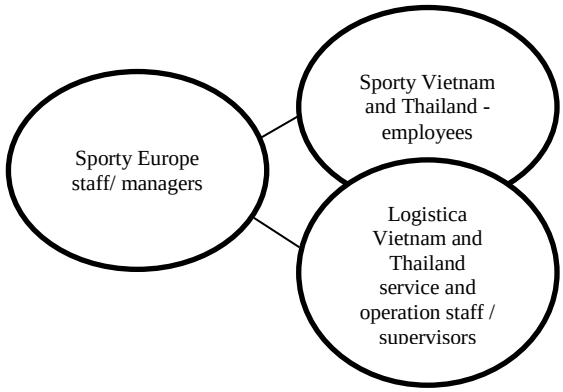

Fig. 1. Company participants
Rys. 1. Uczestnicy firmowi

RESEARCH PURPOSE, QUESTIONS AND OBJECTIVES

The purpose of this research is to determine the impact of Kaizen in creating radical performance results and whether it can be effective to service groups to form more effective working relationships. While planning this study, a number of general questions evolved and led to exploration. For example, the study questions what Kaizen is, and how it enhances performance in service companies. How is Kaizen applied best to services offered between companies? What is the meaning of quality? Research questions

developed from the initial study related to planning the final study:

1. To what extent does Kaizen influence business results of a logistics service company and its manufacturing customer?
2. Do participants believe the Kaizen methodology is effective in helping service groups form effective working relationships?
3. What does quality mean for the companies participating in the study?
4. Can Kaizen lead to improved collaboration?

In order to answer these questions, the following objectives set forward:

1. To determine the situation in the company before the Kaizen intervention in terms of financial and business growth, productivity and; customer and employees' satisfaction.
2. To design set of activities based on Kaizen that would be used as an OD intervention to engender high performance results.
3. To monitor the effect of the Kaizen activities on the company's financial and business growth, productivity and; customer and employees' satisfaction.
4. To determine observable differences between pre and post ODI on financial and business growth, productivity and; customer and employees' satisfaction.

Research Hypothesis is as follow:

The null hypothesis is H0: The Kaizen-based OD activities will not make much of a difference in the financial and business growth, productivity and customer and employees' satisfaction.

H1: The Kaizen-based OD activities will improve business results of the two companies,

H2: The Kaizen-based OD activities will improve customers' satisfaction,

H3: The Kaizen-based OD activities will improve employees' productivity.

LIMITATIONS OF THE RESEARCH

This study's limitations relate to the sample of workers. Within every organization, there are workers who believe in ways that are contrary to the opinions of managers. The same condition applies to this study. The inability of the researcher to participate without influencing behaviors and responses was a limitation. Other limitations relate to validity. In qualitative studies, validity is confirmed through triangulation [Bush 2002], and according to Denzin [1984], there are four kinds:

- Triangulation by multiple researchers
- Theory triangulation
- Data investigation for triangulation
- Triangulation by approach to data

Regarding triangulation by multiple researchers, multiple investigators research a phenomenon simultaneously. If the researchers achieve the same results, findings are valid. During theory triangulation, researchers who hold disparate perspectives review material and reach conclusions. If they reach the same conclusions, results are valid. In the third type, data from multiple sources are reviewed for consistency. This study uses this method. Another follows one approach to analyzing data. In determining validity by these methods, the question is whether the literature review supports findings. Results of a literature review are compared to reports from participants, both pre- and post-study, and in this manner, data are triangulated. If results agree, they are empirically valid [Denzin 1984]. The companies under investigation were only one set of companies, and might not have represented the complete picture of the context. This limitation was inevitable due to time constraints.

LITERATURE REVIEW

This literature review examines studies of Kaizen and inter-organizational collaboration, and implications to both, in supply chains.

Kaizen

As pointed out by Suárez-Barraza and Manuel [2014], Glover et al [2013] and de Silva [2014] process innovation and Kaizen remains important in today's controlling organizations efficiently in both manufacturing and service organizations despite the shortage

of studies in the field especially in service environment.

A distinction exists between Kaizen as practiced in Japan and its approach to change as implemented in the majority of businesses worldwide. Imai [1997] points out that Kaizen as practiced in Japan means continuous improvement, or as Colenso [2000] suggests: good change. In Japan:

[Kaizen] assumes that our way of life-be it our working life; our social life, or our home life-should focus on constant-improvement efforts. Although improvements under kaizen are small and incremental, the kaizen process brings about dramatic results over time. [Imai, 1997].

Imai continues, comparing disparities in Japanese Kaizen with the way of doing business in the West. Conducting business in the West relies on innovation, or major changes. "Innovation is dramatic, a real attention getter. Kaizen, on the other hand, is often undramatic and subtle" [1997]. Kaizen allows companies to make slow, subtle changes at very low cost, which translates to low risk. One advantage of Kaizen is that "Managers can always go back to the old way without incurring large costs" [1997]. Kaizen, then, is not about retooling, redeveloping, or investing heavily in the latest technologies. Kaizen is an overall business concept that entails a number of quality concepts developed steadily [Imai 1997]. It is a way of life in Japan, and thus not prone to dramatic change. Imai [1997] suggests three building blocks of Kaizen, encompassed in a concept known as QCD (quality control, cost control, and delivery system control):

- A quality assurance system that is continually improving and evolving;
- A cost management system that is continually improving and evolving;
- A delivery system that is continually improving and evolving.

The building blocks are based on the concepts of 5S: tidiness (Seiri), orderliness (Seiton), cleanliness (Seiso), standardization during cleanup (Seiketsu), and discipline (Shitsuke) [Imai 1997]. Imai asserts that if the five steps-based on housekeeping-are kept faithfully, work becomes less complex, and workers and stakeholders address the working process while saving money. Productivity, zero tolerance for defects, just-in-time production, and total quality control are aspects of Kaizen, and can be distributed among quality assurance, cost management, and delivery systems. According to Imai [1997], there are five steps to developing an excellent kaizen strategy. The first is for managers to understand they play a major role: to maintain the current system, and improve it. All current systems must be maintained, whether management, operations, or technological. Standard operating procedures (SOPs) are developed to help employees understand what they must do. Simultaneously, improvements must occur, and current standards must be honed constantly.

The second step is to emphasize process versus results. By planning, doing, checking, and acting (PDCA), a process of continuity is established. Planning embodies always having a plan for continuous improvement. Doing is the process of implementing the plan, and checking refers to determining whether the company is on track with continuous improvement. Acting involves performing new actions that are efficacious during planning and developing of new standards [Imai, 1997]. The SDCA (standardize, doing, checking and acting) cycle requires standardizing actions, conducting the actions to ensure standards are correct, checking them, and acting. It is managers' responsibility to formalize these steps.

According to Imai [1997], managers must always put quality first; if necessary rejecting deals that appear lucrative if they cannot be produced with high. This involves the case of whether a product is a good or process/service. Mangers "speak with the data" in a cycle of collection, verification, and analysis to ensure directions the company is taking are correct for productivity and profit. Both internal and external customers are given the opportunity to review a product and provide feedback [Imai 1997]. From Barraza, Smith, and Dahlgaard&Park [2009], three techniques relate to Kaizen that have a direct effect on the processes and management systems in public

service sector: 5S, gemba kaizen workshops, and process mapping. These techniques improve processes and quality of public services provided by public councils. According to Tye and Chen [2005], contemporary companies must capture and maintain competitive advantages. By cutting costs and increasing quality, Kaizen offers this opportunity. Dated but relevant, Friedman [1970] suggests that businesses have a moral imperative to shareholders to acquire and maintain profit. Companies are becoming increasingly global, and as the nature of business changes from local to national and finally to global, so must methods of conducting business. In the case examined in this study, inter-organizational collaboration is investigated as playing a role in Kaizen. Do participants believe it helps service groups form more effective working relationships?

Implications to Supply Chains

Lia, Ragu-Nathanb, Ragu-Nathanb and Raob [2004] suggest that an effective supply chain helps company secure competitive advantages. An effective chain improves organizational performance because it shortens times between orders out and in, improves turnover, decreases space needed for supplies, and commits fewer assets to stock (Lia et al., 2004). The interrelationship of supply chain management and the overall ability of a company to compete influence the company's degree of global competitiveness [Su & Yang, 2010].

Interdependence, Coordination, and Collaboration

According to Ketchen and Giunipero [2004], interactions between supply chain management and strategic management represents an intersection of knowledge. This intersection benefits all parts of the organization, not just areas part of the supply chain. As the degree of complexity of interchanges between organizations increases, so do benefits to the organizations, and as interactions increase, so do structures processes [Rockwell & Bennett 2004]. From networking-representing the lowest common interactions between organizations-to collaboration-raising interactions to co-workers or partners-each additional degree of interaction offers increasing degrees of strategic advantages. Although companies sometimes fear cooperating with organizations they regard as competitors for fear of losing advantages, the opposite appears to be true; collaborating with other organizations, even within the same structures, increases competitiveness and offers strategic advantages by increasing the value chain [Gunasekaran, Lai, Cheng, 2008].

Various forms of interdependence might have different forms of coordination and commonality; Thompson [1997] suggests the interdependence might be pooled, sequential, or reciprocal. Pooled interdependence might involve mediating technology, while sequential interdependence long-linked technology and reciprocal interdependence might also involve intensive technology. Thompson further defines three types of coordination: standardization, planned, and mutual adjustment. During standardized coordination, there are rules to coordination, developed to improve the company's bottom line and reflect improved performance by unit cost since clear rules for how to deal with each other are established. Confusion is eliminated, and time and money are saved. Planned coordination accomplishes the same, but the planning is conducted based on circumstances of, for example, the production of a user's manuals. Finally, mutual adjustment can be used if neither of the other two techniques are appropriate. To be effective, mutual adjustment must be conducted in an environment of constant communication [Thompson 1997].

Thompson's discussion of interdependence also includes task processes. During pooled interdependence, every member of an organization (or the task) contributes to the whole, and information is then pooled. Although the product depends on each individual doing his/her own job effectively, individual pieces of the work do not depend on each other. Sequential interdependence means one person's work depends on correct finishing of another person's. During reciprocal interdependence, products relate and must be finished in a coordinated manner [Thompson 1997]. Task processes can be long-linked,

mediated, or intensive. Long-linking requires linking of various tasks over a period, for example, on an assembly line. The mediating process links people for mutual benefit such as groups that wish to sell diapers overseas. One group makes the diapers, another sells them. The mediating process is the link. Intensive processes are devoted to changing an item, and changes are made depending on feedback regarding the item. An example of an intensive process is a company's competition in a professional contest during which each level must be achieved before the company progresses to the next level. According to Thompson, a link exists between coordination and task, but the link to collaboration is less clear [Thompson, 1997]. Rockwell and Bennett [2004] suggest this might not be the case.

Relation to Supply Chain Performance

Extant research demonstrates that supply chains can be measured, but various forms of measurement must be applied to nodes of the chain [Niemi, Pekkanen, Huiskonen, 2007]. Since little empirical evidence exists that relates to supply chains, applying Six Sigma or Kaizen to a chain is more difficult since the concept behind these methodologies is measurement and improvement [Anthony, 2004]. Sheffi [2002] suggests that most of the savings or improvements that result from collaborative planning and forecast replenishment (CPFR) come from decreasing time inventory is decoupling, or between processes. Companies must ensure retailers do not face out-of-stock (OOS) situations, while keeping excess stock to a minimum. A number of collaboration processes were developed throughout the years, though emphasis on collaborative planning and forecasting began in the early 1960s and survives in one iteration or another today [Sheffi, 2002]. Daugherty et al. [2006] suggest that when companies are willing to take the time and effort to work together to develop supply chains, collaboration pays. Kimberly Clark, Tesco, Wal-Mart, Sara Lee, and others developed supply chains through collaboration [Daughtery et al., 2006]. In the airline industry, Southwest achieved continued excellence and profitability by collaborating with both employees and other organizations to organize flights and suppliers [Maxon, 2010, Southwest Airlines Cargo 2010].

To stay competitive, companies engaged in manufacturing must adapt to market changes quickly, and companies with close relationships with suppliers are better able to accomplish these changes. Companies that work collaboratively with partners that are experienced increase efficiency and decrease variability [Wu, Katok, 2006]. Sheffi [2002] points out that inventory, which refers to inventory held by a manufacturer or supplier, is either being processed or decoupled. Decoupled inventory (inventory between processes) takes up the most time. Decoupled inventory time decreases unless time to process the inventory through the chain decreases. The difficulty is determining how to decrease processing. Since decoupling time can occur anywhere in a chain, it is necessary to involve all parts of an organization when decreasing processing.

Collaborative planning, forecasting, and replenishment (CPFR) developed over the years. Bose was one of the first suppliers to establish collaboration with suppliers. The company freed employees and cut production costs when it moved suppliers in-house as part of a purchasing and materials team [Dong, Carter, Dresner, 2001]. An additional benefit was that in-house suppliers were better able to see customers' needs, and thus were in a better position to make not only practical suggestions, but suggestions that might result in direct benefits to customers [Sheffi 2002]. Bose's experiment was called JIT-II, or Just-in-Time II. Although results suggested success, the process did not become standard because companies were leery of full implementation. With contemporary technology, it is possible for companies involved in collaboration to view operations virtually, and make recommendations, in essence acting as interested consultants, without displacing existing staff members or adding to the home company's costs.

After JIT-II was developed, the efficient customer response (ECR) movement evolved, concentrating on better responses. From there evolved high customer service, with emphasis on product replenishment. The change was

termed continuous replenishment programs (CRP) [Sheffi, 2002], but was discarded quickly as the idea of quick response times rose. The overriding business goal at this point was to shorten the cycle time, and in doing so preserve corporate resources during the process of taking items from raw materials to end use. Companies gradually began to understand that any real improvement would necessarily include collaboration, in one form or another, with suppliers, transportation, and logistics suppliers, and even buyers. However, collaboration was difficult because logistics had to be calculated manually or through multi-step processes; at the time, there existed few logistics software [Sheffi 2002]. An added complication was that companies within the process clashed over priorities since each company struggled to accomplish its own ends. The solution appeared to be vendor managed inventory (VMI), in which a manufacture could provide a buyer with sales and order forecasts. The vendor received a great benefit: salaries for sales workers were lowered and suppliers/vendors were better able to predict cycles of sales and losses. However, manufacturing companies that used VMI received little real benefit. Although VMI pointed the way to collaboration, at the time it operated in one direction, from manufacturer to buyer. Claassen, van Weele, and van Raaij [2008] argue that a two-stage process, with communication down the supply chain and then back up, was more beneficial.

THEORETICAL FRAMEWORK AND CONCEPTUAL PROCESS DIAGRAM

Literature on Kaizen-how it works, its performance improvement role, how participants in supply chains regard use of Kaizen during supply chain manipulation, and how participants regard use of Kaizen during collaboration-was written within frameworks of total quality management, systems theory, and CPFR (Collaborative planning and forecast replenishment) Theories from Bertalanffy (1976) were investigated in relation to systems theory and supply chain management. As Brown [2010] mentioned there are many tools to build success in organization thru high performance systems (HPS), Kaizen was chosen from the various quality improvement tools be used during intervention. Its small improvement cycles were perceived as beneficial to identify radical performance changes. The diagram in Figure 2 represents potential tools for high performance systems under study, from which Kaizen was selected.

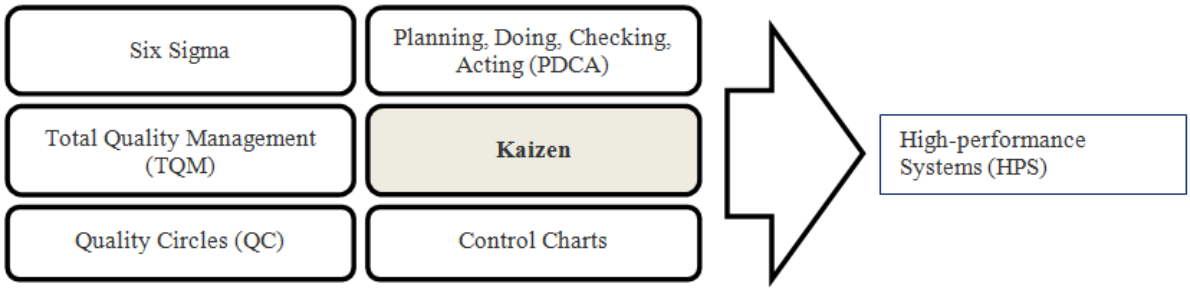

Fig. 2. Theoretical framework with Kaizen as the HPS tool
Rys. 2. Teoretyczny schemat Kaizena jako narzędzie HPS

Saunders, Lewis, and Thornhill [2009] characterize conducting research as similar to peeling layers of an onion. As each layer of an onion is peeled, more information is revealed until the core of a subject is reached. The layers include epistemological stances, ontological approaches, research strategies, timeframes, and data collection methods. The epistemological stance chosen for this study was positivist, with elements of interpretivism. This stance allowed the researcher to use scientific approaches to investigation while interpreting human actions involved in making business decisions. Positivism is used most frequently in quantitative studies, so a combination of positivism and interpretivism

is appropriate for mixed methodologies [Riley, Schouten, Cahill, 2003].

The ontological approach chosen was inductive reasoning, or analytic induction. Analytic induction allows a researcher to question what he/she knows constantly. It is used commonly with interpretivism, and allows a researcher to modify theories and hypotheses during research as new information is gathered. This factor makes analytic induction ideal for business applications in which the field changes rapidly [Saunders et al., 2009]. Yin [2006] suggests that a mixed methodology might be more appropriate; mixed methodologies allow for investigations within investigation, which leads to convergence of data. Thomas [2003] suggests that qualitative and quantitative studies can be mixed.

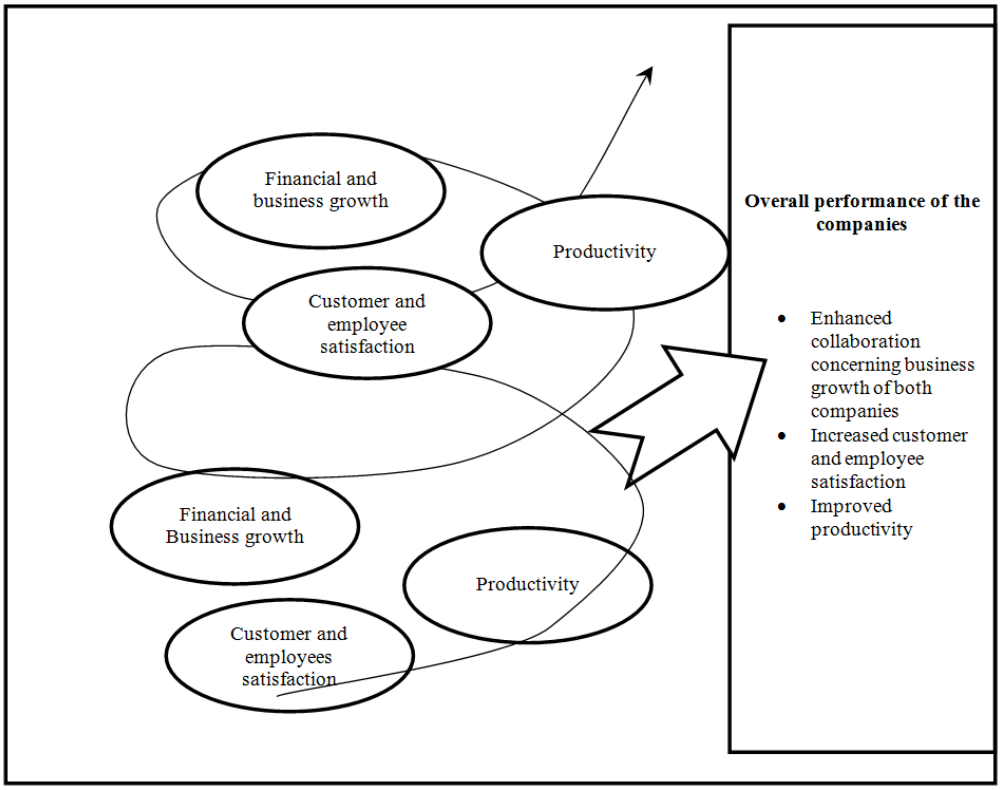

Fig. 3. Conceptual process flow of the action research
Rys. 3. Koncepcja przepływu procesu podlegającego badaniom

The research strategy defines the strategy used to investigate a question. The strategy can include experiments, action research ethnography, or case studies. The action research model of a pre- and post-ODI design in the context of a case study was chosen as the research strategy. Yin [2009] suggests that the case study be used to investigate a process or problem while searching for an explanation of information, so the case study is an appropriate research strategy [Yin, 2009]. By combining a case study, action research, and a literature review, study materials triangulate more easily. The timeframe addresses whether a study covers a single point in time or a situation over a period [McEligot, 2005]. Longitudinal research allows a researcher to conduct a study that reviews how a situation changes over time. This study included repeated observations of the same variable so as a short-term, longitudinal study it addresses more than one period since the case study began with a pre-ODI design and concluded with a post-ODI design. The company's situation was assessed prior to a development initiative, and a baseline was established. After a Kaizen intervention, a post-ODI review was conducted, and similarities or differences were compared. Changes were evaluated and

recommendations for future research were developed.

Data collection included a variety of methods, including observations, interviews, and secondary research. By combining a variety of data collection methods, materials triangulate more easily [Saunders et al. 2009]. Jeerapaet [2009] suggests that researchers conducting action research in the context of ODI should identify problem areas, develop and implement intervention techniques, and monitor and evaluate results. These were methods were used during this study. The diagram shown in Figure 3 shows the direction of each company before and after a Kaizen intervention.

Through a thorough evaluation of the financial and business results of both companies, employee productivity of the service provider, and satisfaction of both external and internal customers before and after the ODI, the researcher examined performance results resulting from Kaizen from the two collaborative companies.

ACTION RESEARCH FRAMEWORK

The pre-ODI investigation determined how Kaizen can be used as an intervention to create radical performance results among organizations in a supply chain. The company was expected to recognize that it needed to rework its supply chain to better use methods of Kaizen, combined with collaboration. The pre-ODI investigation was repeated as a post-intervention assessment to determine what changes occurred. Figure 4 shows the action research framework used in this study.

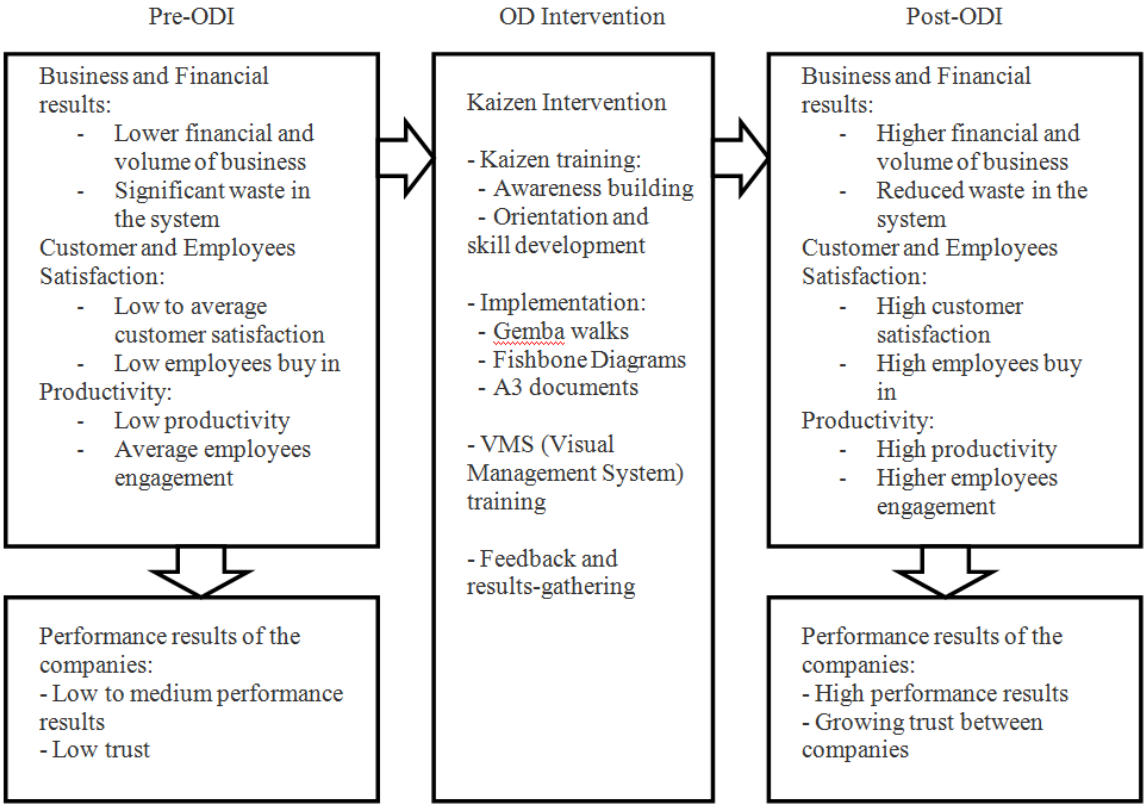

Fig. 4. Action research frameworks
Rys. 4. Schemat badań

To allow the organization to embrace the needed change, the intervention lasted one year, starting with two days of Kaizen training, which included the theory and need of Kaizen, and hands-on exercises in a form of Gemba walks in groups and individually. Teams were asked to work together with the manufacturing company to identify needed improvements monthly. Two months after initial training, the teams underwent visual management system

(VMS) training to provide them with another tool to identify and present problems to be solved. Regular Gemba walk, Fishbone diagram, and A3 documents were expected and delivered by teams to document PDCA cycles of improvements.

The ODI framework's actions are very much in line with the traditional "8 steps for organizational development interventions". Setting teams of people to run the Kaizen events is a strategic intervention with interim measurements of control that helps eliminate the hierarchical decision making and shift the decision to the team. It also helps ensuring a focus on the group rather the individual. The small changes at a time that Kaizen introduces benefit building trust as if mistake happen, it is easy to roll back with minimal effect. Working in teams assist to reduce unnecessary competition and ensure active participation of all team members. Building the skills of Kaizen and reducing waste in the team's work is a direct investment in employees.

RESEARCH METHODS

This study used mixed qualitative and quantitative methods to evaluate the role of using Kaizen to boost performance results, including how it is applied, how it works, and whether it is effectiveness. A pre-intervention study consisting of observations and interviews, and submission of questionnaires to employees of the manufacturing firm and the firm's freight forwarder, was conducted. An intervention was conducted, and a post-intervention study was repeated. Pre- and post-intervention interviews and questionnaires were the same.

A purposive sample, or total population of 10 people of the involved teams, has been selected from employees of Logistica's staff and supervisors from its Thai and Vietnamese branches. From Sporty, the research conducted with 28, randomly selected, participants from their management and employees in Vietnam and Thailand factories as well as European distribution center. Questionnaires, reports and internal documentations have been reviewed and compared before and after the ODI.

AS previously established, participants have been observed as the research participates alongside them in day to day operation. Worker attitudes and opinions have been determined during the daily work as well as in the interviews or questionnaires. All workers who participate have been asked the same questions, using a script and have been asked to fill out a questionnaire that is the same as the script. The flexibility is necessary because some of the workers in supply chain partners may be accessible only by phone or internet while workers who are known to the participant may feel more comfortable answering the questions in a verbal fashion.

Instruments

Two types of data were used in this study: interviews or questionnaires submitted to employees of subject companies, and secondary data consisting of archival materials and materials provided by the companies under studied. A number of resources were used when conducting searches for secondary data. Academic websites, governmental websites, and peer-review journals, and current technical and news sites, were used. Primary instruments included a variety of notebooks, reports, and questionnaire answers. Archival materials and the interviews were evaluated separately. Statistics have been used to run Cronbach Alfa validity test as well as Student t-test on the appropriate data results. For other results, statistics were inappropriate since the action research undertaken in this study used an intervention to assess whether change was significant. Thus, construct validity was expected to suggest multiple sources of evidence in triangulation verified an explanation of causality. Data were available for review by another researcher to determine whether the researcher arrived at the same conclusions. Table 1 summarizes the research instruments, tools, and techniques for each data type (i.e., qualitative and quantitative).

As part of the ODI implementation the set of instruments and techniques that have been used to identify the needed change were the Kaizen tools: Gemba walks, A3 documents and fishbone diagrams.

Table 1. Research Instruments, Tools, and Techniques
Tabela 1. Instrumenty, narzędzie i techniki badań

Research Topic	Data Type	Research Instruments, Tools, and Techniques
Business Results	Quantitative	**For service provider:**
		1. Financial results of the business compared before ODI and after ODI
		2. Total volumes received from the manufacturing customer compared before and after the ODI
		For manufacturing customer:
		Any available business results compared before and after ODI. Examples of business results include CO_2 emissions, document waste, etc.
	Qualitative	Open-ended questions given before and after ODI for both service providers and manufacturing employees to determine how they view the benefits to each company
Customer Satisfaction	Quantitative	Likert-style questionnaires given to both sides before and after ODI
		Customer satisfaction survey (CSS) results compared before and after ODI
	Qualitative	Open-ended questionnaires given as part of the CSS; analyzed before and after ODI
Productivity	Quantitative	The amount of files per person and work waste compared before and after ODI
	Qualitative	Results of employees engagement surveys (EES) compared before and after ODI

DISCUSSION OF THE FINDINGS

Based on the conceptual framework, the researcher identified three aspects to assess: business results, customer satisfaction, and productivity. So the researcher understood the influence of ODI on the organizations, similar aspect assessments using same tools were conducted after ODI was complete. In all three aspects, the small cycles of change that Kaizen introduced created radical performance improvements. Subsequent sections discuss findings from those assessments.

BUSINESS RESULTS

The effect on business results was a key element to measure and evaluate. Financial and volume results, working waste and CO_2 emissions, and the opinions of participants involved in the study were revisited and measured. When the researcher examined various company reports, the following details were observed: revenue of the service provider from the manufacturing customer business was USD$21.503 million, airfreight yearly volume was at 3,819 tons, SCM income was documented at 1,901,000 million cbm per year, and the ocean business recorded 2,668 TEUs for that year. Comparing results after ODI to results before ODI yielded an interesting observation: revenue grew from USD$15 million to USD$21 million, 30% growth. The airfreight volume grew from zero to the substantial amount of 3,819 tons. SCM, which was already identified by the customer as a strong cooperation point, developed from 1.6 million cbm to 1.9 million cbm, and the ocean freight business advanced from 675 TEUs to 2,668 TEUs. Table 2 compares business results before and after ODI.

Table 2. Business Results Comparison before and after ODI
Tabela 2. Porównanie rezultatów biznesowych przed i po ODI

	Pre-ODI results	Post-ODI results	Percent change	% Industry level during same period
Revenue (USD M)	15.106	21.503	30%	
Air freight volume (tons)	0	3,819	-	3.1%
SCM volume (000 cbm)	1,596	1,901	16%	
Ocean volume (TEUs)	675	2,668	75%	-9.9%

The increase of business given to the service provider demonstrates greater trust of the customer in the service provider's capabilities. Since ODI focused on the air and

ocean warehousing departments, there is only one conclusion that an increase from zero to 3,819 tons and 75% in air and ocean volumes, respectively, suggests: direct connection between Kaizen implementation and growth of business. Considering the manufacturing customer's related business results, the researcher found that the number of shipments with irrelevant documents was 1%, documents were filed at the office for an average period of 3 months, and only 1 document per shipment was stored in a warehouse for later retrieval if needed. Electronic messages between systems, EDI, resulted in 99.6% on-time deliveries, and from the manufacturing sustainability report, the researcher found that CO_2 emissions were at 0.87 million tons per year (Table 3).

Table 3. Manufacturing Customer-related Business Results
Tabela 3. Rezultaty biznesowe produkcji zorientowanej na klienta

	Pre-ODI results	**Post-ODI results**	**Percent Change**
Amount of shipments with extra or non-required documents	10%	1%	90%
Filing time of document is the office (months)	9	3	-67%
Documents to be processed into a storage warehouse	All documents (averaged to be 12 pages per shipment)	Only Certificate of Origin (C/O) (1 page)	-92%
CO_2 emission (Million tons)	1.4	0.87	-38%
EDI transmission within timeline	87.3%	99.6%	14%

There is a clear indication that Kaizen events created a more efficient working environment, and waste was removed from the system in a form of fewer non-essential documents, faster document filing, and fewer documents sent to long-term storage. Errors reduced so EDI transmission grew to an accuracy of 99.6%. One of the greatest achievements was analysis of the manufacturing supply chain using new tools that brought life to the service provider's slogan: "We want your air cargo, because we want to help you reduce it." By finding new solutions, some of the air freight business shifted to less-polluted ocean freight or combined sea-air solutions. The last step to evaluating the business report was to confirm whether these results accorded with participants' opinions. Staff members from both companies completed similar questionnaires.

The first question, regarding benefits to the manufacturing company, was described in participants' answers as a business advantage that helped the company dominate the market due to less risk and more competitiveness. The second question, regarding advantages for the service provider company, received replies such as improved standards, longer partnerships with customers, reduced costs, identified as best-in-class in the market, and improved productivity. When asked about the degree of collaboration between the companies in relation to the Kaizen implementation, participants described it as high, moving forward with high commitment from both sides. To a question concerning beliefs that Kaizen can be used to improve inter-organizational collaboration, participants responded affirmatively.

When replies were compared with the pre-ODI assessment, the researcher noticed that people started to use stronger words to describe the benefits to both companies. To growth and save money words they added business advantage, market domination, and best-in-class. Their views on the degree of collaboration changed from mixed reactions of good and needs improvement to still growing and high commitment between the companies. This indicates that participants felt that introducing Kaizen helped both companies and improved collaboration. There was no change in feelings regarding the impact of Kaizen; both before and after ODI, people felt Kaizen could advance collaboration. Table 4 shows a comparison of answers.

The business results are clearly indicating that the working hypothesis H1 is valid.

Table 4. Pre- and Post-ODI People's Opinions
Tabela 4. Opinie przed i po ODI

Question	Pre-ODI Reply Summary	Post-ODI Reply Summary
In your opinion, what is the advantage to the manufacturing company regarding whether the service provider company is part of process improvement and the Kaizen initiative?	- Save money - Improve supply chain - Higher level of service - Better efficiency	- Business advantage - Reduced risk - competitiveness - Market domination
In your opinion, what is the advantage to the service provider company regarding whether it is part of process improvement and the Kaizen initiative?	- Business and income growth - Increase productivity - People development	- Standards improvements - Longer partnership with customers - Cost reduction - Better productivity - Become best-in-class in the market
From your point of view, what is the current degree of collaboration between the companies in terms of moving forward with implementing Kaizen?	- Mix reactions from good to needs improvement	- High level and moving forward - High commitment from both side

Table 5. Pre-and Post-ODI CSS Results
Tabela 5. Wyniki przed i po ODI CSS

		Extremely likely									Not at all likely	
Question		10	9	8	7	6	5	4	3	2	1	0
Based on your experience with the logistics company, how likely are you to recommend them to a business associate or colleague?	Pre-ODI	22%	35%	22%	13%	4%	4%	0%	0%	0%	0%	0%
	Post-ODI	18%	45%	27%	6%	0%	4%	0%	0%	0%	0%	0%
Question		Strongly Agree		Agree		Don't Know		Disagree		Strongly Disagree		
I consider the logistics company an expert in global transportation/supply chain design and optimization.	Pre-ODI	50%		45%		0%		5%		0%		
	Post-ODI	43%		52%		0%		4%		0%		
I can trust the logistic company to deliver consistently on their commitments.	Pre-ODI	41%		59%		0%		0%		0%		
	Post-ODI	18%		64%		0%		18%		0%		
I see opportunities for doing more business with the logistic company.	Pre-ODI	59%		32%		0%		9%		0%		
	Post-ODI	64%		36%		0%		0%		0%		
Compare to competitors, how would you rate the logistic company in airfreight?	Pre-ODI	0%		9%		18%		73%		0%		
	Post-ODI	0%		91%		0%		9%		0%		
Compare to competitors, how would you rate the logistic company in ocean freight?	Pre-ODI	27%		32%		9%		32%		0%		
	Post-ODI	45%		36%		0%		19%		0%		
Compare to competitors, how would you rate the logistic company in customs brokerage?	Pre-ODI	8%		32%		5%		55%		0%		
	Post-ODI	9%		36%		0%		55%		0%		

CUSTOMER SATISFACTION

Both external customer satisfaction results and internal customer voice were re-examined to identify changes in reactions after intervention. Similar questions were chosen from the new yearly Customer Satisfaction Survey (CSS) and results are presented juxtaposed with pre-ODI results in Table 5. As the survey has been given to the external customer, Sporty, 28 randomly selected employees and managers were selected to answer the same questions before and after the ODI.

As Sporty working with more than one logistics provider, its employees and managers could answer the questions comparing the service level of the different products to competitors with the right point of view independently.

When the researcher compared results before and after ODI, the following was observed: The service provider was more likely to be recommended to other colleagues

or business associates; Answers to few of the questions grew from 79% to 90%. Capabilities of the service provider as a supply chain expert and its portfolio remained neutral on "agree" and "strongly agree," with 90% and 95%, respectively. Under primary products that received attention during the Kaizen intervention, the air and ocean products, the researcher observed improvements in best-in-class and industry level. Air products moved up by 82% from 9% to 91%, and ocean products moved from 59% to 81%. This aligns with the trust the customer gave to the service provider by increasing business in these two products. For customs brokerage product that was not part of the Kaizen ODI, we can barely see any improvement; the fact that not all products gone thru the Kaizen ODI also influenced two other questions.

The researcher used two statistical tools to verify this questionnaire: Cronbach Alfa and Student t-test. To determine the consistency and reliability of the questionnaire the researcher test it by Cronbach Alfa validity test and got a results of $\alpha = 0.943$, a clear indication of high level of internal consistency.

Table 6. t-Test: Paired Two Sample for Means
Tabela 6. Test t par średnich

	Variable 1	*Variable 2*
Mean	106.5714286	119.7143
Variance	281.3650794	179.3968
Observations	28	28
Pearson Correlation	0.335237963	
Hypothesized Mean Difference	0	
df	27	
t Stat	-3.949108129	
P(T<=t) one-tail	0.000253137	
t Critical one-tail	1.703288446	
P(T<=t) two-tail	0.000506274	
t Critical two-tail	2.051830516	

In order to reject the null hypothesis for the small sample of 28 informants, and due to the fact that same group received the questions before and after the ODI, the researcher also used the paired t-test method on the results. Results of the t-test are shown in table 6. We can see that t = -3.949 meaning that the post ODI results has higher mean than the pre ODI; and that the p-value of the results, P (two-tail) = 0.0005 which is much smaller than the chosen significant level of 0.05 (or 5% variance) meaning that the t value is significant enough to reject the null hypothesis.

By the survey results, the null hypothesis H0 is rejected and H2: The Kaizen-based OD activities will improve customers' satisfaction, is proven to be valid working hypothesis.

PRODUCTIVITY

Pre- and post-ODI investigations of the last element suggest productivity divided into two parts: looking at average files per person per month and EES results. The number of files after ODI was 56 per person per month, a growth of 81% from the 31 files before ODI (Table 7). The high increase of 81% in productivity by itself validating the working hypothesis H3: The Kaizen-based OD activities will improve employees' productivity.

Table 7. Pre- and Post-ODI Productivity
Tabela 7. Produkcyjność przed i po ODI

	Pre-ODI	Post-ODI	Change
Average Files/Person/ Month	31	56	81%

The researcher chose the same questions from the new yearly employee engagement survey to identify changes in perceptions regarding employees' satisfaction with work and the company. A small increase in satisfaction from employees toward the company (the first 3 questions) was identified, and a larger increase of 24% was observed when employees compared the company to competitors. There was also an increase in satisfaction regarding employees' daily work environment, and a decrease was observed in perceptions toward policies and practices, attributable to the fact that pre-ODI participants previously worked as they wish, and after ODI there was more structure that required them to work in certain ways. Table 8 details results of pre- and post-ODI.

Table 8. Pre- and Post-ODI EES Results
Tabela 8. Rezultaty ESS przed i po ODI

Item	Pre-ODI satisfactory %	Post-ODI satisfactory %
Overall, I am extremely satisfied with my company as a place to work.	81%	86%
I would gladly refer a good friend or family member to my company for employment.	67%	79%
I am proud to work for my company.	81%	86%
My company is better than our competition at responding rapidly to changes in the market.	42%	66%
I have access to the resources (e.g., materials, equipment, technology, etc.) I need to do my job effectively.	68%	74%
There is good teamwork and cooperation between different teams.	54%	67%
My company listens to and understands our customers.	76%	87%
My company is innovative and seeks out new ideas.	67%	73%

OBSERVATIONS AND REFLECTIONS ON THE PROCESS

Initially, participants were curious of whether a way of life such as Kaizen benefits them and the organization, but were also enthusiastic to implement it. Team members took intense learning steps, and when they noticed the results, they were proud of both themselves and their work. The researcher had to identify various elements that isolated the situation as much as possible, and conclude whether Kaizen plays a role in the collaboration between companies to improve performance. Based on post-ODI results, the researcher answered the original questions asked during the preparation stage:

1. To what extant did Kaizen influence the performance of a logistics service company and its manufacturing customer? Kaizen helped transform both companies' results to a much higher degree; financial growth was recorded for both companies, better productivity was observed, and large reductions in waste, CO2 emissions, and errors were achieved.
2. Did participants believe that the Kaizen methodology was effective in helping service groups form more effective working relationships? Although not all questions resulted in higher satisfaction due to the fact that not all services run under the Kaizen ODI initiative, participants indeed demonstrated support and beliefs in Kaizen's capabilities to help grow trust and relationships between the companies.
3. What did quality mean for the companies involved in the study? Based on participants' answers, the meaning of quality was reduction in waste and fewer mistakes that lead to repetitive work. Better financial and business results were also viewed as better quality.
4. Did Kaizen lead to improved collaboration between companies? By engaging in Kaizen, the companies began to improve performance and reduce both mistakes and waste in the system, leading to greater trust between companies and allowing the relationship to move from customer/service provider to collaboration.

Going back to the original null hypothesis that Kaizen-based OD activities will not make a difference in the three elements of financial and business growth, productivity and customer and employees' satisfaction, the researcher found that based on observable differences in the results of these elements before and after the ODI, the null hypothesis is rejected as the finding marks significant observable impact.

Improvements appear in two forms: small, continuous improvements (Kaizen) or drastic changes of innovation. This study examines how Kaizen, with minimal effort and small changes, influences performance radically. During ODI, the companies learned to identify what quality means to them, and how Kaizen can improve each of their objectives.

SUMMARY OF FINDINGS

The most salient finding was how Kaizen-with its small change cycles that create an evolution in the process and eliminate waste and unnecessary work-produce radical performance. Kaizen transformed relationships between the companies from customer/service provider to collaboration, and built trust between the companies that led to more interactions and more business between them. Both companies benefited from Kaizen; they achieved better financial results, fewer errors that lead to delays and business advantages for both companies. The purpose of this study was to determine the role of Kaizen in creating radical performance for a service company and its customer. The researcher identified 3 business elements that point to conclusions: business results of the two companies, customer satisfaction, and productivity.

The first element of business results involved comparing financial results, volume, working waste, and opinions. The researcher found that revenue increased by 30%, and volume by 100% for airfreight, 16% for SCM, and 75% for ocean freight, all far above industry level. This validates increasing trust of the manufacturing customer regarding the ability of the service provider to service it, confirming Kaizen actually creates radical performance results. Looking at the manufacturing customer's business results, the researcher found a reduction of 9% in unnecessary documents, and the filling time of documents improved 300%, saving space in long-term storage (120% improvement). EDI transmission errors improved by 12.3%, and CO2 emissions reduced by 62%. These positive results helped the manufacturing customer see the benefits from Kaizen that the service provider implemented during ODI. Participants shared beliefs and perceived greater benefits for both companies, and they believed collaboration improved after the ODI.

Both external and internal customers were assessed regarding satisfaction toward the company and new context. Manufacturing customer satisfaction results showed an increase of 11% in questions related to the ability of the service provider, and its likelihood to recommend the provider to others. Results from a question concerning views of the provider's capabilities suggest an increase in airfreight (82%) and ocean (22%) products. These results accord with business growth, trust, and increased collaboration. Internal customers reported better knowledge and understanding concerning how to use Kaizen as a tool to improve work processes, and demonstrated greater beliefs in Kaizen as a tool to improve performance dramatically.

The third element, employee productivity and engagement, suggests 81% improvement in the average number of files processed per person per month. The researcher observed an increase of 24% in perceptions that the service company is better than competitors, and an increase in satisfaction from daily work environments.

CONCLUSION

This paper assesses the power of Kaizen regarding relationships between companies and its effectiveness in creating drastic performance improvements. Findings offer unique insights into the effects of Kaizen in creating radical performance improvements in a service company and its customer. Both qualitative and quantitative results of business, satisfaction, and productivity suggest time invested in introducing Kaizen into a service organization helps both companies improve relationships, and subsequently improve the bottom line. Kaizen-with its simple way of life, improving small problems continually-influenced results of both companies greatly. Such small fixes and improvements resulted in radical performance shifts.

There was a direct relationship between Kaizen and financial/volume results of the two companies. There was also a direct impact on waste reduction, productivity, and satisfaction of both customers and employees. With simple steps and training, companies can benefit greatly. Two companies evolved from having a simple customer/service provider relationship to collaboration, through a shared vision of how the future needed to look and how it could be achieved. Both companies defined the

meaning of quality, and were able to improve it.

The answer to the question "What is the role of Kaizen in creating radical performance results, and can it be effective to service groups to form more effective working relationships?" is clearly yes for the second part of the question. The role of Kaizen is to guide the mindsets of both companies toward one direction; improvement of processes, waste reduction, and efficiency are ways forward to improve the bottom line, and through them, radical performance can be achieved easily for both companies. Although many companies in the logistics industry focus on creating their own performance improvement techniques (e.g., PEX teams at Logistica) or building only an ISO capable organization, research suggests that organizations in the service industry, and logistics especially, should add Kaizen to their toolboxes.

RECOMMENDATIONS

Recommendations for the companies

During intervention, small Kaizen event changes led to results improvements. It would be wise to extend the scope of the study to include more departments and customers. Kaizen should continue to be the method of improvement and waste reduction in the company. Participants could also benefit from Kaizen as a personal development tool that leads to a personal mindset of Kaizen, or change for good. It is also recommended to further explain Kaizen methods with examples of savings to employees not involved to achieve buy-in and spread change faster. The Gemba walk interval can be conducted more frequently and with more people, even people who are unrelated to a job or process, offering fresh insights into process evaluations.

Recommendations for Future Research

Although this study identifies Kaizen as a tool to enhance collaboration between companies, it also creates opportunities for future research:

- Prioritizations of improvement projects during the study appeared as subjective conclusions from each individual. Although selection of the right project is crucial for success of Kaizen, especially during early stages, only a few tools exist to assist with it.
- This study examines specific business results and productivity measurements. It is important to identify and add more elements to verify the correctness of conclusions.
- Non-standardized Kaizen training leads to varying capabilities of people, and to varying degrees of results. It is important to search for and identify a base line for Kaizen training that includes service companies and processes that intersect multiple companies.
- Kaizen has been researched in relation to manufacturing processes greatly, but in much less volume universities teach Kaizen in service industries. More research on Kaizen in service companies is needed, and focus on companies' collaboration under Kaizen's influence would benefit the literature.

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ROLA KAIZENA W TWORZENIU RADYKALNYCH WYNIKÓW DZIAŁALNOŚCI U DOSTARCZYCIELA USŁUG LOGISTYCZNYCH

STRESZCZENIE. **Wstęp:** W pracy zaprezentowano badania nad postępującymi zmianami w procesie organizacyjnym dla otrzymania radykalnych wyników działalności dostarczyciela usług logistycznych. Znaczenie stosowania systemu Kaizen jest szeroko znana i stosowana w procesie produkcyjnym, ale nie w usługach. Praca bada wpływ wprowadzenia Kaizena jako narzędzia ODI, sposobu pracy i jego wpływu na polepszenie oferowanych usług dla grup docelowych i w rezultacie wpływu na wzrost efektywności pracy.
Metody: Badając ewolucyjną rolę Kaizena w obszarze usług, przeanalizowano wiele aspektów komunikacji w kontekście ciągłej jej poprawy oraz wpływu na poprawę organizacji pracy grupowej. Praca składa się z dwóch części: analizy zrealizowanych wcześniej prac na ten temat oraz analizy przypadku. Dane były zbierana poprzez proces obserwacji, przeprowadzania wywiadów i ankiet wśród pracowników produkcji oraz firmy oferujące przewozy morskie i powietrzne. Następnie wprowadzono zasady Kaizena i przeanalizowano ich wpływ.
Wyniki: W obu przedsiębiorstwa zaobserwowano wzrost 30% w obszarze finansowym oraz 81% wzrostu produktywności.
Wnioski: Otrzymane wyniki dają unikalne obraz efektów Kaizena dla poprawy efektywności działalności u dostawcy usług logistycznych. Otrzymane jakościowo i ilościowe wyniki finansowe, poprawy zadowolenia klientów oraz wzrostu produktywności po wprowadzeniu Kaizena pozwalają firmom na istotną poprawę stosunków biznesowych oraz opłacalności działalności.

Słowa kluczowe: Kaizen, ciągłe udoskonalanie, współpraca, usługi organizacyjne, motywacja

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DIE ROLLE DES KAIZEN-SYSTEMS BEI DER ERZIELUNG RADIKALER BETRIEBSERGEBNISSE BEI LIEFERANTEN VON LOGISTISCHEN DIENSTLEISTUNGEN

ZUSAMMENFASSUNG. Einleitung: Im Rahmen der vorliegenden Arbeit wurden die Forschungen zu fortschreitenden Veränderungen im Organisationsprozess für die Erzielung radikaler Betriebsergebnisse bei Lieferanten von logistischen Dienstleistungen projiziert. Die Bedeutung der Anwendung des Kaizen-Systems ist in Produktionsprozessen durchaus bekannt und es wird auch dort sehr oft in Anspruch genommen, dagegen aber nicht innerhalb des Dienstleistungsbereiches. Die Erforschung ermittelte den Einfluss der Betätigung des Kaizen-Systems als eines ODI-Tools, dessen Funktionsweise und dessen Einfluss auf die Verbesserung der angebotenen Dienstleistungen für unterschiedliche Zielgruppen und letztendlich den Einfluss auf die Erhöhung der Arbeitseffektivität in Unternehmen.
Methoden: Indem man die evolutionsmäßige Rolle des Kaizen-Systems im Bereich der Dienstleistungen erforscht hatte, analysierte man viele Aspekte der Kommunikation hinsichtlich deren ständigen Verbesserung sowie des Einflusses auf die Verbesserung der Organisation von Gruppenarbeit. Der betreffende Beitrag setzt sich aus zwei Teilen zusammen, nämlich aus der Auswertung der zu diesem Schwerpunkt früher realisierten Forschungsarbeiten sowie einer Fallstudie. Die betreffenden Daten wurden durch die Verfolgung von Betriebsprozessen, durch Interviews und Umfrage-Untersuchungen unter den produktiven Mitarbeitern und innerhalb von Firmen, die die See- und Luftfrachtdienstleistungen anbieten, erfasst. Demzufolge wurden die Kaizen-Prinzipien eingeführt und deren betreffende Beeinflussung ist auch einer Analyse unterzogen worden.
Ergebnisse: In den beiden Unternehmen wurde ein Anstieg von 30% im finanziellen und von 81% im produktiven Bereich wahrgenommen.
Fazit: Die erzielten Ergebnisse ergaben ein eigenartiges Bild der Kaizen-Effekte für die Verbesserung der Unternehmungsleistung beim Lieferanten logistischer Dienstleistungen. Die nach der Einführung des Kaizen gewonnenen, quantitativen und qualitativen Finanzergebnisse, die Erhöhung der Zufriedenstellung der Kunden und die Produktivitätssteigerung ermöglichen den Firmen, die geschäftlichen Verhältnisse und die Rentabilität ihrer Geschäftstätigkeit wesentlich zu verbessern.

Codewörter: Kaizen, ständige Vervollkommnung, Zusammenarbeit, organisatorische Dienstleistungen, Motivation

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