Service quality kaizen blitz: the road to improving customer satisfaction*

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Abstract

Purpose of the paper*: The purpose of this paper was to demonstrate that university faculty may rapidly deploy valuable ideas derived from academic research to assist in business improvement.*

Methodology*: Participatory action research.*

Findings*: This project determined that, at the retail level, ISO registered companies do not support the customer satisfaction measures required by the ISO quality standard. The researchers also found that developing a process map would yield a mechanism for capturing the voice of the customer within a few weeks using kaizen blitz.*

Research limitations*: The research was limited to one retail unit of a large national U.S.A. firm.*

Research and managerial implications*: The implications for replicating this research are almost limitless in a country as large as the U.S.A. Company success, economic vitality, and job growth are highly dependent on knowledge of customer requirements such as those revealed by this action research.*

Originality/value of the paper*: The value of this paper is one of scope: academics may assist businesses of any size.*

Key words: customer; service; quality; lean; ISO 9000

1. Introduction

Short, intense and direct interventions can provide companies with useful and sustainable improvements to their existing quality systems. Faculty may apply the findings of academic research to enhance the continuous improvement process even in organizations already certified to international quality standards. As faculty at a public, regional university, the authors' mission is to link the work, including

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research, with local business and industry. The authors identified a local unit of a national company supplying industrial components: Company KC. The management of KC graciously accommodated our proposal to help them to improve their quality system, already certified to ISO 9001 at the corporate level. In this specific context, faculty and "customer facing" employees and their managers worked for improvement within their corporate quality system consistent with ISO 9001 requirements and lean/six sigma corporate policies. Company KC improved their procedure for capturing the "voice of the customer".

2. Methodology

Participatory action research (PAR) can initiate and sustain improvement in customer service within a quality system already certified to ISO 9001:2008. According to Seddon (2005), nearly half of all service encounters between customer and service provider result in a failure as defined by the customer. The academic literature in service quality can prove highly utilitarian when applied to the endemic problem of poor service quality. Action researchers (Whyte, 1989) can rapidly introduce best practices in service quality and a methodology for systematically capturing the "voice of the customer". Whyte, 1989 "In that (PAR) model, the researcher is called upon -or arranges to be called upon - to carry out a study to answer questions posed by decision makers in the client organization-or suggested by the researcher. The aim of the project is to provide empirically based answers to the questions posed and to advise decision makers what course of action to take." (p. 368). Prybutok and Ramasesh (2005) also advocate action research for continuous quality improvement.

Action research can take the form of "tactical" versus "strategic" improvement initiatives (Hales *et al.*, 2006). Many organizations have adopted the overarching strategy of registration to ISO 9000, whereas many opportunities for improvement exist at the tactical level. This is particularly true when much of the company's income is tied to myriad, smaller customers. Only at the "retail" level are employees actually directly interacting with paying customers. Capturing the "voice of the customer" can only take place at the ultimate terminus of the supply chain.

Located in Michigan, Company KC operates a facility housing inside sales, business offices, and support for outside sales personnel. While the parent company is registered to ISO 9001 and offers training in lean/sigma on its corporate website, local offices are not typically engaged in compliance, audits, or other related activities. Local management is, however, very interested in continuous improvement particularly measures of customer satisfaction. Company KC is part of a global network with an inventory of products resulting in significant (stock keeping units) or SKUs to their customers. In this system the corporate office determines the local geographical sales area with ten employees at the local site made up of two managers and eight sales associates.

The improvement cycle (kaizen blitz) started with a lunch meeting (complimentary pizza provided) for all employees in the company lunchroom. Ten employees participated: one district manager, one branch manager, two inside sales, and six outside sales personnel. With management support and participation, the researchers initiated a kaizen blitz via a brainstorming session resulting in a customer-focused process map.

Much occurred during this two hour luncheon meeting including: process mapping; discussion of their business model; enjoying delicious pizza; brainstorming the type of customer feedback that might prove useful; their business metrics; an ad hoc sales pep talk as well as sales training. Yet the researcher/moderator never deviated from the central question: Are customers getting what they want and do you have a way to know this? Finally, the district sales manager summed up the session: "We do not know if customers are getting what they want." Seddon's (2005) definition of value demand versus failure demand requires that these data be made available from the actual customers.

The resulting process map did illuminate the actual practices of the sales force and current practices of their managers that had never been concretely documented before. The process map was sketched on a whiteboard in the company office while both researchers facilitated the brainstorming session, then it was photographed and transferred to the computer as a digital photograph. The process map photograph was transformed into an editable computer file with illustrative graphics and shared with KC managers the following day. After a few of iterations between KC managers and the researchers, a short list of "what customers want" was redacted consistent with ISO and company policies.

Using the information gained from the process mapping as well as brainstorming with the management/employee team, the researchers designed a simple survey instrument with 7 questions to measure customer feedback about this central question: Are customers getting what they want? The iterative dialogue process between KC managers and the researchers produced a short list of items about "what customers want" which was revised to be consistent with ISO and company policies; it also met the Seddon (2005) definition of "value demand versus failure demand" made available from the actual customers.

Next, a simple one-page survey for customers to anonymously fill out and return to KC employees in an envelope was provided to the KC Company. The employees distributed and collected the surveys within seven days in sealed envelopes. The sealed surveys were provided to the researchers for tabulation. Respondents answered the 7 fixed response questions on a 5-point Likert scale. Managers and researchers had agreed on a target sample size of 30; however a total of 36 were collected. The tabulated results were provided to Company KC managers as a result of the kaizen blitz to be used for improvement consistent with ISO 9001 and corporate policies.

3. Literature review

Lean Thinking - Using lean principles from Hines *at al.* (2004), Seddon (2005) and others, the interface between the company and the customer should be the locus of our efforts on determining *value creation as determined by customers.* Using this stratagem, the authors developed a mechanism for capturing data relevant to value and failure demand as per Seddon (2005) and his view of "outside-in" analysis of flow. In this system "outside-in" means starting with what the customer wishes from the system (pull), rather than what the producer has to offer to the customer (push).

Hines *et al.* (2004) suggest in their review of lean thinking that: "organizations … miss the strategic aspect (value creation, and understanding customer value)" of lean while focusing on cost and lean tools. Nominally, the parent company (as shown on the corporate website) embraces lean/six sigma strategies; however, little of this was evident at the local office. Maleyeff (2006) states that in (lean) service organizations "information is likely to be the key component of value provided to customers" (p. 688). Under the heading Quality, Company KC's corporate website documents numerous mechanisms for ensuring product quality, nevertheless service quality seems to be largely overlooked.

Womack and Jones (1994) brought lean thinking to the attention of the global business world and consider flow as a central tenet of all lean systems as does Seddon (2005) in the smaller service context. Company KC links their end user customers with a global supply chain involving many nodes of exchange. Each node on the supply chain defines a point at which one organization "hands off" goods and information to another. The goal of lean "flow" in this supply chain is actually a series of intra- and inter-organization intermittent interruptions. Jones *et al.*, (1997) state "The point that this value stream concept extends both upstream from the product assembler into the "supply chain" and downstream into the "distribution chain"… A natural starting point is with value creation - from the customer's perspective the only reason for a firm to exist…these remedies do not dig deep enough really to transform the ways companies operate - they have too often been seen as bolt-on extras." p.154. The authors sought to employ these concepts of lean logistics in the creation of the Company KC process map, working backwards from the customer and continuing up the supply chain. Company KC actually delivers to the (paying) end user. This payment is the sole reason for the existence of the supply chain.

Kaizen Blitz - The concept of quick, contained improvement activities dates back to Japanese quality systems in the 1970s (Imai, 1997). With characteristic American disdain for foreign languages - kaizen (kanji for good change in Japanese) was combined with blitz (German for lightning) and had become part of the lean lexicon by the 1990s. Continuous improvement is urged by ISO 9001: 2008. Use of the Plan Do Check Act (PDCA) is emphasized and articulated in Section 0.2 Process Approach. p. *v*. An obvious focus of PDCA is "Monitoring of customer satisfaction requires the evaluation of information relating to customer perception as to whether

the organization has met the customer requirements." (ISO 9001:2008 p. *vi.*) Any improvements should then be incorporated into the quality system.

McNichols *et al.* (1999), Montabon, (2005) as well as many others tout the advantages of kaizen and the kaizen blitz methods for improvement. A quick search of Google Scholar returns 35, 200 "hits" for kaizen and 735 for kaizen blitz. Company KC is a small unit with active managers, thus the kaizen blitz was a good fit for this continuous improvement intervention.

Improving (Lean) Service - As countries get richer, the percentage of their economies classified as service grows. World service GDP is about 64% with richer countries approaching 80% (IMF, 2012). Not surprisingly, 'Improve Service" in Google Scholar returns more than 4,000,000 entries while 'Improve Lean Service" returns almost 300,000. However, the transfer of lean improvement techniques from manufacturing pioneered by Toyota to service is slow and uneven (Ahlstrom, 2004; Seddon, 2005). A particularly useful list of service quality improvement propositions are listed by Edvardsson (1996). Central to this study is Edvardsson's advice to engage in "improvement based on facts". Neither Company KC nor its parent organization had previously gathered information on what the (end user) customer actually desires. Teehan and Tucker (2008, 2009, 2010, 2012) have explored this problem extensively in small firms.

Error Recovery - Eccles and Durand (1998), Edvardsson (1996) and many others cite research on the importance of error recovery in service operations. In fact, Eccles and Durand estimate that failure to recover from service failure creates a perception of low service quality and state that a 2% increase in customer retention results in a 10% reduction in costs. Surprisingly, they also determined that a customer whose complaint is acted upon becomes more loyal than customers who have no complaints. Such empirical research reinforces the authors' contention that actual data on what customers want is central to improving service.

ISO 9001:2008 - The following scholars address the economic value of registration (Van der Wiele *et al.*, 2005; Janas and Luczak, 2002; Psomas *et al.*, 2013) and note a general positive association between registration and financial and operational success. Since Company KC is a local branch of a large U.S. company registered to the ISO 9001:2008 standard. Dick *et al.* (2001 and 2002) explore ISO 9000 implementation in front-room versus back-room service industries; their insights proved useful in informing this study as to how a branch (front-room) organization works within the context of a large (back-room) firm registered to ISO 9000. Poksinska *et al.*, (2006) document the frequent disassociation of practice and documentation in small units of registered firms. Prajogo *et al.*, (2012) found that ISO 9000 does not typically assist "organizations develop a greater level of customer focus" p. 315. All of these findings are consistent with what the researchers found at Company KC. Brown *et al.* (1998) discuss ISO 9000 compliance and the unique issues facing smaller enterprises. Finally, Ab Wahid, (2012) asserts that maintaining ISO 9000 beyond certification in the service sector is difficult. Communication between management and employees after certification may wane and the value and importance of the quality system may seem to be de-

emphasized to employees. This is consistent with what the researchers found with front-line employees who are aware of ISO, but uncertain of how to implement it in their day-to-day work with customers.

4. Data collection and analysis

The data was collected from 36 completed questionnaires with that all data complete and usable. Once were entered into an Excel spreadsheet, a simple statistical analysis was performed. The authors acknowledge that the ordinal Likert scale data should not be analyzed with parametric analyses such as mean and standard deviation. However, the action research goal was to quickly provide an integrated system of measuring customer satisfaction and loyalty which could be easily used and adopted by the KC Company staff. Should this project continue, the authors intend to use more appropriate non-parametric statistical analysis.

Respondents were asked:

Are, you, the customer getting what you want from Company KC?

#1 = 0% of the time
#2 = 25% of the time
#3 = 50% of the time
#4 = 75% of time
#5 = 100% of the time.

Customers were asked to answer the following questions by circling the number that best matched for their opinion each question. Mean and standard deviation for each question were then computed using Excel functions as well as the mean of responses.

The seven questions were:

1. Face to face interaction between the service representative and you the customer? Mean = 89.58, SD = 15.09
2. Reduction of total cost of ownership?
   Mean = 85, SD = 18.39
3. Inventory reduction?
   Mean = 85.61, SD = 16.61
4. Consumption reduction?
   Mean = 80.88, SD = 20.47
5. Reporting capabilities/reviews?
   Mean = 87.12, SD = 16.68
6. Product consolidation and vendor consolidation?
   Mean = 88.24, SD = 15.37
7. Lead time control/predictable material flow?
   Mean = 84.03, SD = 14.82

The mean of all responses was 85.48, quite high from the perspective of value demand = providing customer what they want.

Although the company and researchers did not identify any subsets there are *three* major areas of identification seen by the KC Company as most important and congruent from their perspective and their business model.

First was the "face-to-face interaction between their representatives and customers". This question scored the highest mean of 89.58, suggesting that the personal interaction of the representative was indeed successful for the customer and the Company. Clearly, they provided high value demand according to the Seddon (2005) definition of "value demand versus failure demand".

Second was the "reduction of total cost of ownership" with a mean of 85, suggesting that the customer valued the unique services offered by the KC Company because they enabled them to manage product flow and ownership.

Third was the construct of "product and vendor consolidation" which is closely tied with value added service. Company KC views this service as a competitive advantage because it reduces costs and time for the customers in dealing with multiple vendors for products and service. This was the second highest mean at 88.24, suggesting that KC Company was indeed meeting a majority of the customers' supply needs.

5. Conclusion

By employing the ISO-approved Shewhart/Deming Plan Do Check Act (PDCA) improvement cycle, the project was completed within 30 days of inception. By using simplified findings of research in measuring and improving service, strategies were developed and deployed to capture the voice of the customer among current and recently active customers. The numerical responses proved very useful in validating the value demand of services provided by Company KC.

At least two significant but unanticipated positive developments resulted from the kaizen blitz. One researcher met with the branch manager to retrieve the anonymous customer responses. In a short debriefing session with the branch manager after the results were collected but not yet tabulated, the manager indicated that apart from the (as yet unknown) numerical responses, he believed that reaching out to customers to solicit their views had already encouraged dialogue between Company KC and their customers. He also reported that the parent company was initiating new approaches to solicit customer feedback.

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