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Investigating the Relationship Between Kaizen and Organizational Performance: A Conceptual Framework for Police Agencies

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Abstract

Past studies about Kaizen have been inconclusive in clarifying the role of Kaizen implementation in organizations. The Kaizen literature indicates a mixed and ambiguous linkage between practices of Kaizen and organizational performance. Some case studies even reported that Kaizen has failed to accomplish the needed improvement in the organization. Some scholars reasoned that the mixed understanding of the Kaizen implementation could be due to the failure to consider the culture of the organizational performance. In developing the model, the paper is located within the context of police agencies/services where Kaizen implementation is limited.

Keywords Kaizen, Organizational Performance, Innovation Culture

1. Introduction

The principles of Lean management have been employed effectively in manufacturing for many years (Womack, Womack, Jones, & Roos, 1990). Lean is an approach for improvement that seeks to identify and eliminate wasteful and non-value added activities (Tague, 2005). Fundamentally, Lean underscores continuous improvements by changing the thinking of people in the organization about what they value, ultimately leading to a change in the thinking of the entire organization (Martin & Osterling, 2007; Smith, Poteat-Godwin, Harrison & Randolph, 2012; Womack et al., 1990). Lean integrates the idea of redistributing an organization's resources to achieve worthy tasks and authorizing an organization to accomplish more with the same resources (Smith et al., 2012). Kaizen is one of the most effective Lean techniques (Smith et al., 2012), which usually requires a short time to conduct and apply projects for improvement. Several investigators asserted Kaizen as a method to improve organizational performance, meet customers' requirements, and as the source of sustainable competitive advantage (Ee Shuang, 2012; Zarinah, Farhana, & Nadiah, 2017).

The main objective of this paper is to develop a conceptual framework that displays the linkage between Kaizen and organizational performance. Mixed results have been reported on the effect of Kaizen. While some studies found that Kaizan had achieved good results, others revealed that Kaizen had failed due to the neglect in preparing a suitable culture. Since culture was given less focus in the past, this study seeks to propose the mediating role of innovation culture to explain the relationship between Kaizen and organizational performance in policing. Also, being a new concept in policing, little is known about the applicability of Kaizen in this field. Therefore, a conceptual model is developed to postulate the impact of Kaizen on the performance of police agencies.

2. Literature Review

2.1 Kaizen in Policing

Public agencies confront many challenges from the internal community to deliver quality services (Suarez-Barraza & Miguel-Davila, 2014). The services of such agencies are varied and heterogeneous and subject to rules and regulations that hinder them from performing their tasks properly (Speller & Ghobadian, 1993). To address such challenge, numerous public organizations are considering Kaizen as a tool to eliminate errors and wastes in creating value for their clients (Suarez-Barraza & Miguel-Davila, 2014). In fact, since the early 1990s, increasing attention had been given to the importance of applying Kaizen in public organization because of its capability to improve management efficiency and effectiveness through waste reduction (Pedersen & Huniche, 2011).

The primary task of any police agency is to detect and prevent crimes and maintain law and order as well as protecting the community and properties (Luen & Al-Hawamdeh, 2001). Tasks and activities primarily focus on community policing, crime detection, investigation, and incident management (Luen & Al-Hawamdeh, 2001). The police agencies have pledged to provide superior services to the community. One of the pledges is to keep improving its services. To achieve this objective, each police officer is responsible for improving his/her workplace and processes. In this regard, Kaizen is a valuable approach to be used by police agencies to improve

all aspects of the tasks and activities. As a continuous improvement tool, Kaizen enables organizations to make their business processes responsive to changes in both economic and social conditions (Radnor, 2010).

Despite its purported effectiveness as continuous improvement tool (Barton, 2013; Cohen, Plecas, McCormick, & Peters, 2014), the Kaizen implementation in public sector is limited (Suarez-Barraza & Miguel-Davila, 2014), in particular in the policing context and lacks empirical proofs (Antony, Rodgers, & Cudney, 201). Even when implemented, it is on a limited scale with short-term successes (Barton, 2013).

2.2 Organisational Performance Indicators

Effective performance is a measure of success for many organizations (Randeree & Al Youha, 2009). Organizations employ useful tools and techniques and coordinate resources to accomplish their goals (Barney, 2001). However, defining and measuring performance is a difficult task especially of public organizations because of the different expectations of stakeholders, various outputs, and multi-factors of socio-political imperatives (Ammons, 2018; Corvellec, 2018; Mayne, 2017). The police agencies are no exception in this regard. Hence, some police agencies are turning to management strategies, such as Kaizen, to improve their performance.

A comprehensive review of organizational performance in management research proposes several indicators of performance (Carton & Hofer, 2006). While some of these indicators focus on operational performance or financial performance, others emphasize efficiency and effectiveness (Carton & Hofer, 2006). According to Sondakh, Christiananta, and Ellitan (2017), organizational performance is a multi-dimensional construct, which means that all the dimensions have to be considered for a balanced and reliable assessment.

Some studies suggest the Balanced Scorecard (BSC) as a useful measure of organizational performance because it covers all aspects of an organization's activities. The BSC model was developed by Kaplan and Norton (1992) to address the limitations of previous measures which only focus on financial indicators. Hence, the BSC model integrates both financial and non-financial measures (Agyeman, Bonn & Osei, 2017; Sondakh et al., 2017). The traditional BSC model contains four perspectives: finance, customer, internal process, and learning and innovation (Kaplan & Norton, 1992). Each perspective focuses on specific activities, and when considered collectively they could provide a comprehensive measure of organizational performance. Hence, in this paper, the BSC model with the four perspectives is used to measure organizational performance.

2.3 Kaizen and Organizational Performance

Kaizen is a continuous improvement approach that can be used in all aspects of work and social life (Imai, 1986). Kaizen is deemed as an approach for solving problems (Imai, 1986) and improving organizational performance (Zarinah et al., 2017). Numerous studies found that Kaizen had a positive and significant impact on organizational performance (Asaad, Rohaizah, & Yusoff, 201; Shah, Ganji, & Coutroubis, 2017; Zarinah et al., 2017). It is also argued to be able to improve the performance of organizations members (Aurel, Andreea, & Simina, 2015) and reinforce an organization's productivity, which in turn contributes to the attainment and sustenance of competitive advantage (Shuang, 2012). However, some scholars questioned the success of Kaizen (Garcia, Maldonado, Alvarado, & Rivera, 2014; Rink, 2005). Rink (2005), for example, reported that the implementation of Kaizen in the US did not achieve the intended results since the percentage of success did not exceed 10% (Rink, 2005). Similarly, in Mexico, companies there failed to achieve the targeted results (Garcia et al., 2014).

2.4 Kaizen and Innovation Culture

Kaizen is a structured project within a given timeframe conducted by a team with the purpose of achieving improvements in a specific process or work area (Farris, Van Aken, Doolen, & Worley, 2008). As in other sectors, the Kaizen method is not only used to improve the work area, but also assist in developing the capabilities of employees to solve problems (Poksinska, Fialkowska-Filipek, & Engström, 2017) and enhance their attitude continuous improvement (Danese, Romano & Boscari, 2017; Sobek & Smalley, 2008). It is considered a practical approach to instituting changes in employees' experience and organizational culture (Hashim, Zubir, Conding, & Jaya, 2012) by removing wastes and non-added value activities (Venkataiah & Sagi, 2012). Kaizen seeks to involve all members of an organization to improve their activities (Mishra & Gupta, 2010) and develop a culture where the members of the organization share the same habits, symbols, values, etc. (Schein, 1983). That is, a dominant culture will be established when all members adopt similar habits and values (Schein, 1983). In other words, establishing a culture of Kaizen happens with small, steady, incremental and sustainable changes in the organization (Mishra & Gupta, 2010).

According to Oki (2012), studies that investigated the relationship between Kaizen and organizational performance appeared to report inconsistent results. Oki (2012) reasoned that such conflicting results happened because the culture was not considered (Oki, 2012). For Kaizen to be successful, a culture that supports Kaizen activities has to be established (Imai, 1997). In this regards, an innovation culture could buttress the effective implementation of Kaizen because innovation is inherent in the Kaizen method. Similarly, scholars asserted the

importance of using Kaizen in the innovation process to improve the efficiency of tasks (Anand, Ward, Tatikonda, & Schilling, 2009; Suárez-Barraza, Ramis-Pujol, & Estrada-Robles, 2012) and encourages continuous innovation (Boer & Gertsen 2003). According to Satsomboon and Pruetipibultham (2014), there is a positive relationship between Kaizen and innovation.

2.5 Innovation Culture and Organizational Performance

Innovation culture plays an essential role in attaining and sustaining a competitive advantage of an organization (Barney, 1986). Culture, in general, shapes the habits, beliefs, and values of an organization's members, and it is the glue for organizational success (Kuratko & Welsch, 2004). Indeed, past studies observed a positive effect of innovation culture and organizational performance (Lee, Woo, & Joshi, 2017; Stock, Six & Zacharias, 2013).

3. Proposed Research Model

Based on the review of the relevant literature earlier, a conceptual framework is developed. The framework postulates that Kaizen could enhance organizational performance through its effect on innovation culture. Through Kaizen an innovation culture will be promoted, allowing the organization to achieve its goals and objectives. The relationship is depicted in Figure 1.



Fig. 1. Proposed Kaizen, Innovation Culture, and Performance Relationship

4. CONCLUSION

This paper intends to develop a conceptual framework on the purported impact of Kaizen on organizational performance through the institution of innovation culture. Even though past studies on Kaizen and organizational performance had been undertaken, the results were reportedly mixed in that some case studies indicated that Kaizen had failed to achieve the intended outcome. The conflicting results could be due to the neglect to consider the organizational culture. Thus, the framework proposes to bridge the gap in the literature. It proposes that Kaizen will help an organization to develop an innovation culture where innovative thinking and processes permeate the organization's operations, contributing to the accomplishment of the organization's goals and objectives. To what extent the model could apply to the police, a scientific investigation is justified. If it is valid, the model could have a worthwhile utility to the police in delivering its services to the community.

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