

# Mediating Role of Organizational Commitment to the Lean Leadership and Job Satisfaction: Cases Study

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## ABSTRACT

This study aimed to explore the mediating effect of organizational commitment on lean leadership and job satisfaction in lean electronics manufacturing enterprises. This paper adopted descriptive research method. 19 lean electronics manufacturing companies in city A were selected as research objects, and 376 respondents were randomly selected from the employees of these enterprises for investigation. Finally, frequency, percentage, mean and quantile regression analysis were used in this study. The survey results showed that lean leadership had a significant impact on employees' job satisfaction under the mediating role of organizational commitment.

## KEYWORDS

Lean; Lean Leadership; Job Satisfaction; Organizational Commitment

## 1. INTRODUCTION

In today's dynamic marketplace, every sector contends with intense competition. In this unforgiving landscape, enterprises that fail to operate efficiently risk being phased out. To thrive in such an environment, industries must embrace innovation, streamline processes, and ensure swift, top-notch product delivery. The ethos of lean thinking was embraced by leading corporations, recognizing its transformative potential. As lean production principles evolve, domestic manufacturers become more aware of their broader use. It is more than just a manufacturing system; it is a comprehensive management approach that includes design, supplier relations, production, and sales.

Job satisfaction is an important factor in the success of an organization. High job satisfaction will have a positive impact on the company, so it is necessary for the company to correctly recognize the factors that affect the level of job satisfaction. Lean leadership is the influence or driving force to promote lean improvement. It is the words, deeds and efforts of the enterprise leadership to advocate, praise and promote the implementation of lean ideas on every occasion and every opportunity. Lean leadership is critical to lean implementation. Employees who perceive strong organizational commitment agree with the company's core values and corporate culture, understand the organization's goals, feel recognized and respected within the organization, and believe that they can still advance within the organization. This can improve the work efficiency and engagement of employees, so that employees are willing to stay in the company for a long time.

In City A, many enterprises are implementing lean management. There are many researches on lean management, which mainly guide enterprises how to implement lean leadership in different business departments and how to improve lean leadership. There are more studies on other forms of leadership. There are no studies on lean leadership, employee job satisfaction and organizational commitment on a global scale.

With this in mind, the researchers determined the impact of lean leadership on job satisfaction of lean electronic manufacturing companies in City A with organizational commitment as the mediating variable. In addition, this study also aims to provide suggestions for enterprises to improve employee job satisfaction, at last to improve performance of these lean electronic manufacturing companies in City A with organizational commitment as the mediating variable.

## **2. ORGANIZATION OF THE TEXT**

### **2.1. Background of the study**

In recent years, some companies in City A began to adopt lean management concept, and achieved good results in practice. As an important part of the capital's economy, some companies in City A have been relatively successful in lean management. Among them, the more well-known ZTE, Huawei, BAIC Group and other electronic manufacturing companies.

This article examines lean electronic manufacturing companies in City A, which place a high value on employee job happiness. By providing employee benefits, training programs and development opportunities, companies ensure that employees have a high level of satisfaction with the work environment and the overall feel of the company. Leaders praise employees, identify and acknowledge employees' work success, and implement reasonable rewards for employees; Encourage continuous improvement of team work; Encourage employees to innovate and so on. In recent years, lean electronic manufacturing companies in City A have had some problems. In these lean companies, the culture of continuous improvement prevails.

Every leader understands that criticizing and improving the present process is a manifestation of the Lean culture. However, frequent process improvement can generate problems for staff to some level. As a result, changes require employees to consistently adopt the new procedure, which increases their time spent learning the new process, resulting in unhappiness with the whole event. In lean companies, leaders must improve their lean leadership skills, and employees must be trained and developed, which inevitably requires employees to set aside more time for learning, which will inevitably affect their time spent on work, which is related to the enterprise's performance, so employees must still complete within a certain time frame.

In addition, lean leaders need to often go to the site to understand the situation, find out the root cause of the problem, and personally improve the process. When leaders do this thing, employees do not personally participate in the experience, which may lead to employees cannot fully understand the reasons for improvement, so employees cannot accept such improvement activities, resulting in the lack of enthusiasm of employees to participate in the negative attitude. In addition, because employees do not have a good understanding of these lean activities or behaviors of lean leaders, they will have a certain escape and aversion

These possible problems between lean leaders and employees will affect employee satisfaction. Recently, some Lean electronic manufacturing company in City A found that the survey result of employee satisfaction has decreased compared with the result of last year, and the data shows that the average value has decreased. Some companies also reported an increase in employee turnover. In addition to the problems of satisfaction and turnover rate, the specific performance of employees in these companies is reduced enthusiasm, negative coping, slow work, and slow progress. Given this series of problems, this study aims to determine the relationship between job satisfaction, lean leadership and organizational commitment of employees in these lean electronics manufacturing companies implementing lean management, to find out the existing problems and provide corresponding suggestions for these lean enterprises and similar enterprises in other regions.

## 2.2. Objectives

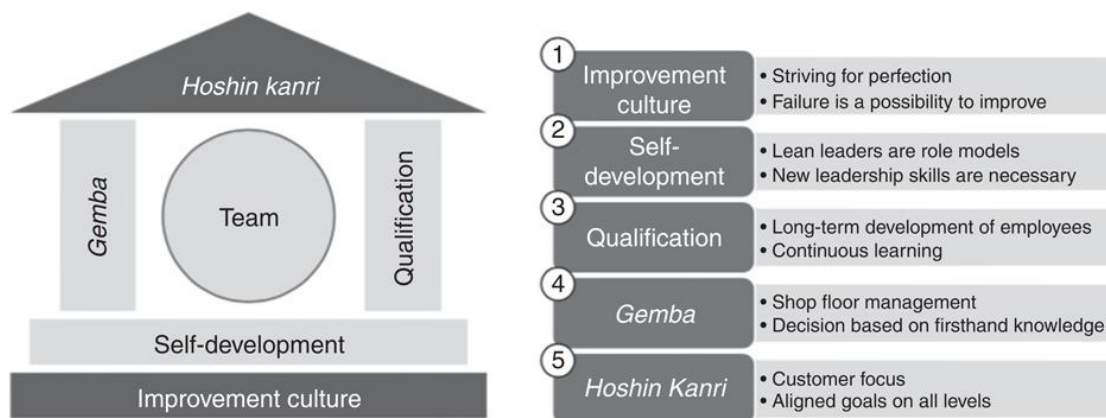
The study aims to determine the mediating effect of organizational commitment on lean leadership and job satisfaction of employees in lean companies in City A.

## 2.3. Theoretical Framework

The study intends to determine the mediating effect of organizational commitment to lean leadership and job satisfaction. The study is based on the research of Palupi [1]. Based on relevant research and literature, they adopted the method of sampling survey data analysis, and the research shows that leadership affects employees' organizational commitment, and organizational commitment in turn affects employees' job satisfaction. Therefore, organizational commitment plays a mediating role in the influence of leadership on employee job satisfaction.

In addition, the study also based on Herzberg's Two-factor theory: the important thing to learn from Herzberg's work is that he sees motivation and hygiene as factors that affect job satisfaction in two distinct dimensions [2].

Moreover, Dombrowski and Mielke proposed a conceptual model for an integrated lean leadership system. Their conceptual model includes five core principles of lean leadership: improvement culture, self-development, qualification, gemba, and hoshin kanri. See Figure 1. The five components all contribute to the core concept of the team as the central active unit in a lean environment. Improvement culture encompasses all attitudes and behaviors that create an ongoing striving for perfection [3].



**Figure 1.** Dombrowski and Mielke's lean leadership model

Furthermore, Organizational Commitment has been defined as a relative strength on the identification of individuals and their involvement in the organization. Allen and Meyer, conceptualized a multidimensional organizational commitment measure and proposed a three-component model of organizational commitment comprising, Affective commitment, Normative commitment, Continuance commitment [4].

## 2.4. Conceptual Framework

The study will utilize the input, process, and output models. This framework has been the most prominent tool for analyzing and interpreting variable relationships, and it continues to have a significant impact on team research today. It is based on basic systems theory, which holds that the overall structure of a system is as important as its components in determining how efficiently it operates. Similarly, the IPO model has a causal structure, with its output based on various group actions affected by a series of input variables.

The input box shows the inputs for this study, including job satisfaction, Lean Leadership, organizational commitment, and the components they contain. In addition, the arrows in the figure show the relationship between each box.

After describing the input, the researchers need to consider how to proceed with data collection and analysis. Process Box indicated that questionnaire survey was adopted in this study. The questionnaire was collected by informal interview, and the collected data were made into tables. Finally, the data are analyzed and interpreted.

Finally, the output box shows the expected output of the research, that is, the Lean Leadership Program is proposed.

## **2.5. Limitations and Significance of the Study**

There were also some limitations in the research, which only covers the lean company in City A. The verification of the authenticity of respondents' answers was also a limitation of this study. In addition, the company may want the results to look good and force employees to fill out biased data. It was minimized by asking questions based on facts without showing which data corresponds to which department of the company, or even which employee.

The study is believed to be of significant benefits to the following:

To managers of companies, this study can help recognized the current status of lean leadership in the company, improve the shortcomings, and promote lean leadership in a more effective way, so as to promote employees' organizational commitment and ultimately improve job satisfaction. This study can also help managers find the weaknesses of management and provide effective methods to help managers of lean companies.

To employees of lean companies, this study can help them clearly understand the level of lean leadership, organizational commitment and job satisfaction, and help them understand the behavior of leaders and the possible reasons for employees' own behavior, so that they can adjust themselves from weak points to improve job satisfaction.

To managers of similar companies, this study can help them realize the importance of lean leadership, and by focusing on the weaknesses in the study, adjust the management style and make improvements. In addition, it will help them provide improved directions for lean companies.

To business students, this research can help them better understand the importance of lean leadership in lean management organizations, as it is one of the factors that affect the level of employee satisfaction. The score for each question enables them to truly understand the relevant problems of the company, so that they can get some understanding of the internal situation of the companies.

To the researcher, this study may provide a relevant understanding of lean leadership, organizational commitment, and job satisfaction in employees. Through the analysis of the research results, find out the problem points, and give solutions to the problem points, so that researchers can get the exercise to solve the problem.

To future researchers, this research may be the basis for conducting research on lean leadership and employee satisfaction. By understanding the results of this study, it can be applied and extended to other fields and other research aspects.

## **2.6. Research Design**

Descriptive research endeavors to systematically, truthfully, and accurately depict a specific characteristic or condition existing within a study population. Its primary objective is to identify and articulate the current state of affairs. Employing a diverse range of methodologies such as surveys, interviews, life histories, direct measurements, and observational techniques, descriptive research

seeks to gather comprehensive data. These studies often involve comparing various subgroups, such as those categorized by gender, age, grade level, socioeconomic status, or race, with reported outcomes delineated for each subgroup as well as for the overall sample [5].

Descriptive correlation design is a type of research design that addresses the question "How are things related?" It involves studying the relationship between variables without manipulating them. Surveys and observational methods are often used to collect data for descriptive correlational research[30]. Descriptive correlation research, helps the researcher explore how one phenomenon was related to another in situations where its description has no control over independent variables that were thought to cause or influence dependent or outcome variables.

Descriptive Correlational Research describes currently existing phenomena and explores relationships between or among variables. If there is relationship exist, what extent relationship between or among variables, or to use these relationships to make predictions. In this study, it aimed to use survey method to figure out the existing level of variables and the relationship among Lean leadership, Job Satisfaction and Organizational Commitment without manipulating them, also what extent relationship among them. So Descriptive correlational design is the correct and suitable method for this study.

### **3. LITERATURE REFERENCES**

From the study of Palupi, Salajeghe and Lam, they studied the relationship between leadership, job satisfaction and organizational commitment. Palupi refers to leadership as an independent variable, while in the studies of Salajeghe and Lam, leadership style (supportive, participatory and directive), leadership style (transformational and transactional) and competence are respectively taken as independent variables [1, 6, 7]. In the study Hamid, leadership (transformational and transactional) has a positive correlation with job satisfaction and organizational commitment [8]; However, in the study of UpatanaR., leadership (transformational) has a positive direct impact on job satisfaction and organizational commitment respectively [9]. Based on the above references, various leadership styles are included in the research, but there is no research about the relationship between Lean leadership, job satisfaction and organizational commitment. Therefore, in my study will use lean leadership as the independent variable.

In the studies GhaziR. and AtalicCan, they were shown that hygiene factors and motivation factors contribute to job satisfaction, especially hygiene factors are more satisfactory for high school and university teachers [10, 11]. In the study MahzanZaini, a variety of motivation factors and a variety of hygiene factors are significant and dominant, and the study shows that career development is the most significant factor affecting the job satisfaction of navigators in the Royal Malaysian Air Force [12]. In the studies of Alfayad& Arif and GhanbahadurR.R., the positive correlation between motivators and job satisfaction was clarified [13, 14]. All the above studies are based on Herzberg's motivation -hygiene theory. This study will also be discussed from the perspective of the two-factor theory of motivation-hygiene.

In the study Dombrowskiand Mielke, a new definition of lean leadership was derived, five basic principles were determined, and a conceptual model of Lean leadership was created [3]. Subsequent studies AijH. and GrewanS. were conducted based on the theoretical model Dombrowskiand Mielke. AijH. developed a parallel lean leadership theory model for healthcare based on the Lean leadership conceptual model [15]. GrewanS. Research has confirmed that lean leadership behavior has a certain impact on employee engagement [16]. Lean leadership style has been analyzed in studies ReinerM., emphasizing the principles of respect and continuous improvement [17]. In the study Etemadi Hamzehpoor, it is found that the main factors affecting the modern construction of lean leadership include continuous improvement, vision, organizational culture, lean implementation, support structure, team performance, daily management and self-development [18]. All the above studies start

from the principles and influencing factors of lean leadership. This study will also be based on the five basic principles of lean leadership.

In the studies of GeldenhuysLaba, Dobrini& Fabac, ArijantoA. and Amri& Ramdani, organizational commitment as an independent or dependent variable is studied. GeldenhuysLaba The results confirmed the positive correlation between psychological meaning, job engagement and organizational commitment [19]. Dobrini& Fabac confirms that organizational mission and vision are positively correlated with organizational commitment [20]. ArijantoA. research proves that organizational commitment has a significant positive impact on job satisfaction of automotive service employees in small and medium-sized enterprises [21]. Amri& Ramdani Results show that organizational commitment, work motivation and work discipline have partial and simultaneously significant positive effects on employee performance [22]. In the studies of AbdelmoulaL., Dobrini& Fabac and KasmoluM., three dimensions of organizational commitment are studied and discussed. AbdelmoulaL. found that the intrinsic determinants of satisfaction had a significant positive impact on the three dimensions of organizational commitment (Affective, normative and continuance) [23]. Dobrini& Fabac Research shows that there is a significant relationship between affective commitment, normative commitment and subjective career success [20]. KasmoluM. Perception of organizational commitment among health sector employees, where affective commitment is high and normative and continuance commitment is medium [24]. In the studies of WangWeng, the affective commitment of organizational commitment was studied. WangWeng's Research finds that there is a positive correlation between the three dimensions of organizational career development and subsequent voice behavior, which is partly regulated by affective organizational commitment [25]. Pepey's Research shows that there is no statistical significance between job happiness and job unhappiness in terms of continuance commitment [26]. The above studies are discussed from the perspective of organizational commitment and its three dimensions. This study will include organizational commitment and its three dimensions.

In the studies PalominoEspinoza, EnochO.K. and RamoriA., the importance of lean business is illustrated from the application of lean business models in lean manufacturing, lean accounting and health care industries. This study will be based on lean business [27, 28, 29].

#### **4. SUMMARY**

The descriptive research method is used because it is the most suitable research design to evaluate the impact of lean leadership on job satisfaction of employees under the intermediate role of organizational commitment in Lean Electronics Manufacturing Company in City A. It aims to obtain first-hand information from respondents, thereby creating rational conclusions and recommendations for research. In this study, 19 lean electronic manufacturing companies in City A were included, and respondents were randomly sampled from these companies. The creation, distribution and collection of questionnaires were all realized by agency companies. In the end, 380 data were collected by agency companies and 376 data were actually analyzed and used, and the data results met the requirements of reliability and validity. frequency, percentage, mean and quantile-regression analyses were finally used in this study. This research is limited to the investigation of lean electronic manufacturing companies in City A, and does not include other types of companies in City A, so this research has certain limitations in this aspect.

Based on the findings, the following conclusions were drawn:

- (1) Employees of lean electronic manufacturing companies in City A have a high level of employees' job satisfaction in terms of intrinsic motivation and extrinsic hygiene.
- (2) There is a great extent of manifestation of lean leadership in terms of improvement culture, self-development, qualification, Gemba and Hoshin Kanri of Lean electronic manufacturing companies in City A.

- (3) There is neutral level of organizational commitment in terms of affective commitment, normative commitment and continuance commitment of lean electronic manufacturing companies in City A.
- (4) Lean leadership of lean electronic manufacturing companies in City A significantly affects the employees' job satisfaction.
- (5) Organizational commitment mediates the effect of lean leadership to the employees' job satisfaction in the lean electronic manufacturing companies in City A with job satisfaction up to 50<sup>th</sup> percentile.
- (6) Based on the result of the study, Lean Leadership program were proposed.

The researcher recommended the following based on the conclusions drawn from the findings:

- (1) The leaders should understand that failure means the possibility of improvement and learning. Should have the ability to go to the site to get first-hand information to identify the root cause of the problem, improve and ensure that the problem does not happen again. Leaders should help develop employees and be customer-centric.
- (2) Lean electronics manufacturing enterprises in City A may consider participating in this lean leadership program to further promote the lean leadership of company leaders and make company management smoother.
- (3) The researcher may consider adopting the findings and proposing improvement activities with organization, as this will greatly help to educate them.
- (4) Lean electronic manufacturing companies may adapt their strategy according the gathering feedback from the participants, after proceeding lean leadership program.
- (5) The future researchers may use this as a basis and conduct another study that recommended to examined other factors that may contribute to job satisfaction of other companies or other type industry in other districts or cities.

## **CONFLICTS OF INTEREST**

The author declares that she is an independent author and that he is not influenced by any organization, institution or person at the time of writing this article and has no conflict of interest. The information provided in this article is based on personal experience, observation and research, and is not guaranteed to be absolutely correct. The views and recommendations expressed herein are those of the author and do not represent the views of any organization or institution.

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