Abstract—The prevalence of resistance during change initiatives is well recognized in the change management literature. The implementation of the lean production system is no exception. It often requires substantial changes to processes and the way people work. As such, understanding how to manage this resistance is important. One view argues that the extent of resistance during change depends on the characteristics of the change process. This view posits that resistance can be reduced if organizations manage information flow, create room for participation and develop trust in management. In addition, this paper also proposes that is Leader-Member Exchange (LMX) and Role Breadth Self-Efficacy (RBSE) moderate the effect on the employees’ resistance to change.

Index Terms—change management, Lean Production System (LPS), resistance to change, Change Process Characteristics (CPC), NEED For STRUCTURE (NFS), Leader-Member Exchange (LMX) and Role Breadth Self-Efficacy (RBSE)

I. INTRODUCTION

The literature on change management has long been recognized on the role of resistance from the employees [1]. This is because change often creates uncertainty and requires new learning and behaviour. Resistance is even more profound in the complex change initiatives. The implementation of the Lean Production System (LPS) is one such complex process. This is because the LPS consists of many interconnected components (i.e. Total Quality Management, Total Preventive Maintenance, Human Resource Management and Just-in-Time) [2]-[4].

Besides difficulties in understanding a complex change process, change can also threaten the sense of security of individuals due to uncertainty. Past studies have found that perceived uncertainty affect support for change. People who experience uncertainty feel insecure of the changes [5]. As a result employees develop resistance to change. The same can also happen in the LPS implementation. In addition, resistance is the primary cause of failure in most change efforts [5]-[6]. Resistance to change can generally be divided into two forms. One is resistance due to organizational characteristics and another is resistance due to personal characteristics.

In spite of this, various models and prescriptions on how to deal with resistance have been offered by various authors [7]-[9]. However, the literature on the LPS has not incorporated these ideas in their discussion on the LPS initiatives. In this paper, we will address the role of a number of predictors and moderators on the employees’ resistance to change during the LPS initiatives. Specifically, we propose that individuals react differently to the change. Some may accept and embrace it while others may resist it [10]. The extent that employees resist to change is affected by the characteristic of the change process and by the personal predisposition of the employees. We also propose that these relationships are moderated by relationship employees have with their leaders and their self-assessment of their ability to learn new skills.

II. LITERATURE REVIEW

In spite of the high interest in the LPS, evidence shows that the LPS initiatives have had mixed results [11]-[13]. While some adopters of the LPS experienced success, others experienced failure.

Past studies on the LPS initiatives have been about the techniques adopted but have not treated it as a change management process [14]. It is argued that the rate of success of change initiatives mostly seen from technical perspectives instead of understanding how the change is managed successfully [14]. This paper proposes that there is a need to understand the LPS adoption as a change management initiative. This understanding will enable us to draw from the knowledge of change management to improve the LPS initiatives.

There is a considerable discussion in the change management literature about how change should be managed and various models to be approached that organizations can take [8]-[9], [15]. One model proposes that change management should have three elements. These are effective information dissemination, employees’ participation and a high level of trust in management [8]. The underlying arguments behind these are employees’ resistance to change which are usually
due to a lack of information [16]. For instance, in the case of OMV Petrom organization facing resistance to change due to a lack of information and misunderstood of information on the change [16]. This can be overcome through a good communication planning, and providing room for participation. Once these are in place, they will help to build trust in management. These three elements constitute the Change Process Characteristics (CPC) and should be incorporated in the LPS initiatives [8].

Perception of change and how people react to it is usually not uniform [14]. Even when the organization takes steps to manage the change process, employees’ reaction to it will be shaped by a number of variables. For instance, differences in preference for stability and predictability are also expected to shape the employees’ reaction to change. Indeed, people with a high for structure is difficult to deal with unstable and uncertain conditions such the changed situations [17]. This preference for stability is rooted in the personality of those affected by change [18]. The LPS initiatives require considerable change and adjustments to processes, routines and work behaviour. Not everyone will find these changes easy to cope with [18].

Organizational change interventions are experienced by employees through the agencies of their leaders [19]. Yet, leaders in the organization have different levels of effectiveness. As such, what the experienced employees have with their direct leaders can shape their understanding and attitude towards the change initiative [20]. It can also enhance or reduce their resistance to the change.

In addition, individuals’ reaction to change is affected by their assessment of their ability to cope and undergo the change expected of them [21]. Individuals equipped with multiple skills are more flexible and are more prepared to adapt to new skills requirements [22]. On the other hand, those who have a more limited skills base will find themselves ill-equipped to deal with change. This more positive self-assessment people with a broad skill set have of themselves is termed as Role Breadth Self-Efficacy (RBSE) [23]. This is a reason why multi-skilling is considered an important enabler in the LPS implementation [24].

We propose that an individual’s reaction to the LPS initiative will be affected by the quality of the relationship followers have with their direct leaders and their RBSE.

A. Change and Resistance

Resistance to change is more likely when the change process is seen as a complex and requires considerable adaptation. Individuals facing such change need to let go of their old habits and work patterns and adopts new ones [18]. There are many reasons as to why people resist change. Many of these reasons are due to personal characteristics. These characteristics include a reluctance to lose control, cognitive rigidity, intolerance with adjustment periods, a lack of psychological resilience, a preference for low level of stimulation and novelty, and a reluctance to give up old habits [18]. These characteristics discussed are mostly rooted in the personality of the followers and related to their Need for Structure (NFS). This paper proposes that an individual’s Need for Structure (NFS) shapes his reaction to change.

As mentioned earlier, employees may also resist change when there is a lack of information and involvement and their trust level in management is low. It is therefore important for the organizations to manage the change process diligently by incorporating the three elements of CPC. Therefore, this paper proposes that Change Process Characteristics and Need for Structure affects the employees’ resistance to change.

Communication of information involves managing the flow of information on the need for change and includes issues such as the rationale for change, anticipated events and new work roles [15]-[16]. An improvement of information flow will provide employees with a better understanding of the change initiatives and reduce uncertainty about the change. In an LPS initiative, the employees need to understand the goals of the program, learn new tools, and change their work habits. All these require for a quality communication planning, as emphasized by many authors as having a vital role in the change process [9], [25]-[26].

Increasing employees’ involvement is another important factor for success in the change initiatives. In every change initiative, there is a need to generate employees’ support for the change program [8], [15], [27]. One key mechanism for doing this is by getting them involved in the planning of change process. For instance, Bill Smith, the ISC’s Americas manufacturing manager, allowed and encouraged his employees to participate in implementing a new approach such as the Lean Production System (LPS) practice [12].

As argued earlier trust in management is a vital element in gaining the employees’ confidence in management. This includes trusting management’s integrity, reliability and credibility in handling the organizational change [28]. The development of trust involves building a positive relationship with employees in order to gain their support in the change process [8]. Employees need to trust the motive for management in introducing the LPS and their ability to lead the transformation. Communication and involvement can help to build this trust [15], [25]. These three elements are part of a triangle that can enhance change effectiveness and reduce resistance during the LPS implementation. Therefore, this study will examine the relationship between Change Process Characteristics (CPC) and resistance to change. We therefore propose:

Proposition 1:
The three elements of Change Process Characteristics (CPC) are negatively related to the level of employees’ resistance the in the LPS initiatives.

Proposition 1a:
The presence of effective information dissemination is negatively associated on the level of employees’ resistance in the LPS initiatives.

Proposition 1b:
The level of employees’ participation is negatively related with the level of employees’ resistance in the LPS initiatives.
The components of Change Process Characteristics (CPC) are basically steps that can be taken by the top management of the organization in ensuring the success of their LPS initiative. However, employees deal with their direct leader on a more frequent basis than with members of top management [34]. It is the direct leaders whose presence is more tangible and felt by the employees. Therefore, the quality of the LMX that an employee has with his or her direct leader can affect the perception as well as the ability to undergo change. For instance, a lot of information on the LPS initiative is discussed by employees with their direct leader. It is their direct leader who translates the communication from top management into specific actions. A key element in managing change is mobilizing people to execute change [11]. Thus, direct leaders are the focal persons in mobilizing team members during change.

Likewise, room for employee participation and access to information during the LPS initiative is affected by the behaviour of the direct leader. This is depends on the way the direct leaders leads the change. It means that the direct leader is the translator, facilitator, and implementer [35]-[36] to create the willingness of the employees to adapt to the changes. We therefore expect that the quality of Leader-Member Exchange (LMX) between employees and their direct leaders will influence the extent to which Change Process Characteristics (CPC) can reduce the resistance. Consequently, the trust employees have to top management will be affected by the information and interpretations they receive from their direct leaders. We therefore propose:

Proposition 3a:

The relationship between presence of an effective communication and employees’ resistance to change in the LPS initiatives is moderated by the LMX quality.

Proposition 3b:

The relationship between level of employees’ participation and employees’ resistance to change in the LPS initiatives is moderated by the LMX quality.

Proposition 3c:

The relationship between trust in management and resistance in the LPS initiatives is moderated by the LMX quality.

LMX can also overcome the impeding effect of high NFS when the leader offers a high quality of LMX. Employees who enjoy a high quality LMX are more likely to feel assured in spite of the uncertainties they may experience during the LPS implementation. This is due to the greater assess of information provided by the leader in order to develop trust with the employees [32]. Henceforth, their direct leaders can help allay any fears they may have. We therefore propose:

Proposition 4:

The relationship between Need for Structure (NFS) and resistance in the LPS initiatives is moderated by the LMX quality.

B. Role Breadth Self- Efficacy and Resistance

Self-efficacy is defined as the individuals’ belief in his capability to perform tasks [37]. This belief can include one’s assessment of his ability to cope with new
effective by managing initiatives failed due to various reasons. However, change therefore requires them to succeed when dealing with a changing situation \[38\]. As a result, this response will show an acceptance towards change. It is therefore expected that high RBSE individuals are less likely to resist towards changes than those with low RBSE.

Hence, the positive effects of the Change Process Characteristics (CPC) components are more likely to be even more profound among employees with high RBSE. We therefore propose:

Proposition 5a:
The relationship between presence of an effective communication and employees’ resistance to change in the LPS initiatives is moderated by RBSE.

Proposition 5b:
The relationship between the level of employees’ participation and resistance in the LPS initiatives is moderated by RBSE.

Proposition 5c:
The relationship between trust in management and resistance in the LPS initiatives is moderated by RBSE.

Likewise, individuals with high NFS will feel confident when dealing with uncertainties during LPS initiatives because their RBSE enables them to seek and develop structure. We therefore argue:

Proposition 6:
The relationship between NFS and resistance in the LPS initiatives is moderated by RBSE.

IV. CONCLUSION

Change management is vital for a successful LPS implementation. Nevertheless, many of the LPS initiatives failed due to various reasons. However, change management can be made more effective by managing change process effectively (i.e. improving information dissemination, increasing employees’ involvement and developing trust in management) \[8\].

We propose that by linking the discussion on the LPS implementation with models and theories of organizational change, we improve our understanding of how make the organizations more ready for the LPS implementation.

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