

CHANGE MANAGEMENT BY MALAYSIAN PUBLIC SERVICE ORGANIZATIONS IN LEAN IMPLEMENTATION

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Abstract: *The Malaysian government stressed on the public service transformation, which requires the mind set change of all civil servants to provide high- performance services beyond the expectations of customers. However, the weaknesses that existed in the process and service delivery in Malaysian public services had caused numerous impact to the customers. Lean Management is believed to have helped public service organizations in improving their productivity and fulfil the needs of the public. Five public service organizations in Malaysia that had received recognition in practicing lean management from Malaysia Productivity Corporation were chosen as the case samples. The objective of the study was to investigate on how Malaysian public service organizations managed the transition into Lean management implementation. The study was a qualitative research using case study method. The methods of data collection used were interviews and document reviews. The data were analysed using Atlas. ti software. From the data analysis, three important elements in managing change were identified, which are training, monitoring and motivation. The study also revealed the process or the steps taken in lean implementation. The result from the study can benefit many other public service organizations that are interested to implement lean. It is hoped that they can focus on the change management aspects that has been identified and refer to the steps taken by the case organizations in order to successfully change into lean and ensure a continuous lean service implementation in their operations.*

Keywords: Lean Implementation, Change Management, Malaysia, Public Service, Qualitative

Introduction

The global and domestic challenges along with the increase in public aspiration require the need towards public sectors' transformation that is able to provide world- class services (Malaysian Administrative Modernisation and Management Planning Unit, 2009). However, the internal challenges in Malaysian public service such as centralized authority, bureaucracy, hierarchical reporting structure, low competency in strategic thinking, lack of mentoring and

coaching, comfortable with existing condition, less responsive and lack of sensitivity, and lack of consultations, restricted the public sectors' transformation efforts (Public Service Department of Malaysia, 2013). Besides, the increase in expectations of the Malaysians on a better public service delivery is one of the internal challenges, which has to be fulfilled (Public Service Department of Malaysia, 2013). The Malaysian government stresses on public service transformation which requires a mind-set change of all civil servants to provide high-performance services beyond the expectations of customers (Malaysian Administrative Modernisation and Management Planning Unit, 2009). However, the weaknesses in process and service delivery in Malaysian public services have impacted customers. Among them, long queues to get the service, requiring customers to return several times for the completion of the service process, uncertainty of outcome, excessive control (gatekeepers), requests for too much information, service is based "at mercy" - not at the people's rights for services and the need for discretion in many affairs (Malaysian Administrative Modernisation and Management Planning Unit, 2013). Based on the complaints' statistics from the Public Complaints Bureau in 2014, a large number of complaints towards the public organizations recorded were related to the performance of Malaysian public service. There were 2739 complaints recorded due to lateness/no action taken and 817 complaints due to unsatisfactory service quality provided including at service counters and through phone calls (Public Complaints Bureau, 2015). Therefore, the ability of the public service to provide quality services has to be enhanced. This requires the public service to change towards increasing their productivity and service effectiveness in order to face the challenges in national development.

In order to overcome the above issue, Lean Management, originated from the Toyota Production System and widely known as Lean Manufacturing, is believed to be able to help public service organizations to improve their productivity and therefore can fulfil the needs of the public. Lean management is one of the business improvement philosophies and performance improvement interventions used in the manufacturing and many service industries (Alagaraja, 2014). Implementation of Lean requires an organization to continually improve in reducing and eliminating waste. Lean describes three categories of wasteful practices, which are Mura, Muri and Muda. Mura (unevenness) occurs when there is work fluctuations or variations that cause wasteful resources such as cost of rework, overtime and testing (Damrath, 2012). Muri (overdoing) refers to the demand and design of work that is difficult to do and causes burden to people and equipment, while Muda (waste) comes from the non-value added activities (Damrath, 2012). Besides focusing on continuous improvement, the leaders in Toyota believe that investment in its people is the key to success. Lean is not just a set of tools and techniques, but at its heart are the people. Lean philosophy emphasizes on meeting customers' needs, and to fulfil the needs; government agencies have to give full effort to eliminate waste to save cost, improve quality and improve efficiency of service (Waterman & McCue, 2012).

Introducing the Lean concept to the public service organization is a new concept, which requires an organization to change their work culture and work operation. Resistance to change is the first problem that should be overcome because it can hinder the implementation process. The change should be well managed by the organization to make sure that everyone in the organization can accept the change. With the complexity and dynamic characteristic of change, change management is required to control and guide the process of change. Recently, the implementation of Lean in the service sector has also gained attention by previous researchers. Although more service organizations are interested to adopt the Lean principle in their operation, research on Lean services are still lacking (Malmbrandt & Ahlstrom, 2013). Previous studies were only focusing on the application of lean practices or improvement techniques in certain service sectors and the suitability of lean adoption on the sector involved and not focusing on the aspect of managing changes in transitioning to lean. (Arlbjørn, Freytag, and de

Haas (2011); Tang, Miao, and Xi (2010), 2010; Vlachos and Bogdanovic (2013), 2013; Chan (2012); Shazali, Habidin, Ali, Khaidir, and Jamaludin (2013). Therefore, this research aims to investigate on how Malaysian public service organizations manage the change in organization in Lean Management implementation.

Literature review

This section reviews the challenges and barriers related to change into lean, experienced by organizations that have implemented lean based on previous studies. Furthermore, this section explains about change management and its importance in lean implementation.

Barriers and Challenges in Lean Implementation

Lean manufacturing has been implemented not only in the automotive industry, but also in many types of industries comprising big or small organizations (Ghosh, 2013). Lean has been mainly used to improve the process in manufacturing since the last two decades and now there is an increase of lean application in various service processes as well (Alsmadi, Almani, & Jerisat, 2012). According to Piercy and Rich (2009), the first application of lean practices outside the manufacturing floor is in the supply-chain management. Then, the lean practices have been widened into all industrial sectors and in retail sectors, and followed by other service sectors such as banking, call centres, IT and healthcare (Alsmadi *et al.*, 2012). Although lean has been widely implemented, many problems and challenges during the implementation have been identified by previous studies. Most of the problems in Lean implementation arise during the transition phase to Lean (Angelis, Conti, Cooper, & Gill, 2011; Nordin, Deros, & Wahab, 2011; Lasonci, Demeter, & Jenei, 2011; Scherrer-Rathje, Boyle, & Deflori, 2009). The transition to Lean involves the early stages or beginning phases of Lean implementation as defined by previous researchers using different names such as preparation stage (Anvari, Zulkifli, Yusuff, Hojjati, & Ismail, 2010), conceptual phase (Mostafa, Dumraka, & Soltan, 2013), and preparatory phase (Drew, McCallum, & Roggenhofer, 2004). According to Anvari *et al.* (2010), preparation phase and design phase are the crucial phases to be focused. One of the most challenging changes experienced by enterprises is the transition to Lean (Dombrowski, Mielke, & Engel, 2012).

Sawhney and Chason (2004) stressed that the failure in implementing Lean is caused by human problems during the changeover to Lean. Many researchers have discussed the problems and barriers in Lean implementation (Ichimura, Arunachalam, & Jahankhani, 2007; Nordin *et al.*, 2011; Scherrer-Rathje *et al.*, 2009). Most of the barriers during the Lean transitions are from the workforce such as resistance to change, lack of necessary job skills and low morale (Sawhney & Chason, 2005; Sim & Rogers, 2009). The study by Radnor, Walley, Stephen and Bucci (2006) highlighted the factors that inhibit the change into Lean from happening, which are resistance to change from staff and management, lack of management commitment, lack of ownership, lack of resources to implement changes and slow natural pace of change in public sectors. They found that the key challenge during the early stages was to engage everyone in the process of change into lean while the key element of the successful Lean implementation is the commitment from the management. It would be difficult to engage the staff in the process if they resist change. Hence, the commitment from the management by providing support, empowerment, resources and the most important is their active involvement with the staff throughout the process (Radnor *et al.*, 2006). Besides, communication is needed to ensure that all staff is engaged by sharing the knowledge and spreading the achievement

because poor communication could quickly diminish the lean enthusiasm. Furthermore, the organization requires an ability to deal with change, a receptive culture and knowledge that could drive improvement (Radnor *et al.*, 2006).

One of the other main problems is the lack of a clear Lean understanding (Behrouzi & Wong, 2011; Worley & Doolen, 2006). The knowledge of lean is very important to be imparted in employees and management to overcome the issue of lacking clear understanding of lean, which will lead towards resistance to change. Pedersen and Huniche (2011) found that knowledge sharing between departments is limited and they did not have an overall strategy to implement lean. Even worse, the employees are unaware of the purpose of their department being chosen to undergo the transformation process. When this situation occurred, they were not motivated to give full participation since they did not know the motives and benefits of lean implementation. Bhasin (2012) stressed that a considerable push is certainly needed during the early stages because the lean progress does not occur by chance. Leaders must have courage to push the change agenda forward and demonstrate the way to embrace the change since change is about meeting and dealing with resistance (Adam, 2011).

From previous literature, lack of commitment from management and poor communication are the factors that cause resistance to change. Besides the commitment and communication, the other important element that must be present, especially during the transition is the lean knowledge. Lack of Lean knowledge and misunderstanding about Lean has been proven one of the main problems and barriers that hinder the successful change into Lean. While the focus on managing change should be given top priority in order to develop the Lean culture of accepting change and having the mind set to do continuous improvement for the organization. Since most of the problems are related to change, therefore, change management is required in order to properly plan for changes and manage the barriers from the resistance to change during the early stages.

Change Management

Change management is a systematic process of organizational change which involves the application of knowledge to define the strategies, procedures, structures and technologies in dealing with change (Human Resources Department, 2011). Change management is defined as a mean of transitioning people. It consists of activities to help people make the transition from their current way of working to the new way of working by leading, managing and enabling people to accept any types of change whether it is a change in values, processes, structures, systems and technology (Human Resources Department, 2011). From the above ideas, this study defines change management as the act by management that focuses on preparing and managing the process of change in the organization. Integrating the concept of change management into lean in a public service context is further interpreted as the management process that focus on managing the change towards lean implementation in public service organization, which might include preparing a change program to avoid resistance. The objective of change management is to assist individuals who have been impacted by change, using a systematic approach by addressing the resistance, providing necessary support, and developing the ability and knowledge required to implement change in the organization (Creasey, 2007). The function of change management is to support the movement of an organization to change from its current state, through a transition state, towards the desired future state (Creasey, 2007). The ultimate goal of change in an organization is the behaviour of everyone in the organization regardless if the change involves the process, structure or system. The people within the organization decide whether to embrace or resist the change.

While the transition has been proven important, however, most of the empirical work done by previous researchers did not focus on managing the transition process itself. Lean failure is the fundamental issue of corporate culture and change management (Atkinson, 2010; Bhasin, 2012). Moreover, Pedersen and Huniche (2011) found that the barrier and success factors of lean implementation in the public sectors are very much similar with general change management insight. Culture and change management are the hardest component in implementing lean in government (Furterer, 2004). The whole organization have to understand and deal with change to be successful in lean implementation (Ahmad, 2013). It is critical for an organization to develop their change strategy that consist of how to change into the culture of continuous improvement, organizational context of change, technical aspects and focusing on customer (Furterer, 2004). The leadership in the public service has to lead change and motivate the employees to see changes and make the execution become a reality although there are constraints in resources and there are resistance to that change (Adam, 2011). The success of lean greatly depends on the skills and ability of the implementer to manage the change (Furterer, 2004). Past studies stressed on the importance of managing change in lean implementation. The transition stage where the organization change and move from non-lean into lean has to be well managed by the organization for the successful lean implementation. The management must plan and prepare for the change. The success of lean implementation in an organization depends on its change management aspect. The next section discusses on the research methodology used in the study.

Methodology

In the context of this study, qualitative research using case study method was used. Case study was used for in-depth understanding of an issue in a case or multiple cases (such as event, program, or activity) which can be obtained using multiple forms of data collection (interview, observation, and document review) and analysed by describing the themes (Creswell *et al.*, 2007). Since the study is to explore on how the public service organizations manage the change into lean, the use of case study approach will provide an in depth understanding in the process taken by the Malaysian public service organization. The main data collection techniques used was interview. A semi-structured interview protocol was used as a guide during the interview session. Based on purposive sampling technique used, the study was conducted in public service organizations that have received certificates of recognition for excellent practices in lean management from Malaysia Productivity Corporation and still implementing lean in their operation. There were only five public service organizations in Malaysia that received the certificate in which consist of three local authorities, a statutory body and a state government agency.

The participants of the study are the managers/lean secretariat (P1) and the project leaders of the lean projects (P2) in the case organizations. The reason why the manager is chosen as the respondent of the study is that the study focuses on change management aspects, which are under control of the management and specifically led by the managers. While the project leader is the person that lead, plan and responsible in ensuring that lean project been implemented smoothly in the team.

The contamination of information in terms of misunderstanding and bias can be eliminated by using triangulation (Pinheiro, 2010). From four types of triangulation (data triangulation, researcher triangulation, theory triangulation and methodological triangulation) identified by Denzin (2006) , methodological triangulation and data triangulation were used in this study. Methodological triangulation involves different methods used to collect the data, which are interview and document review. The data triangulation process involves choosing

more than one representative to be interviewed for each organization by using the same interview protocol to all five different organizations. The respondents were asked on the steps taken in lean implementation and how they manage the transition to Lean Management implementation. The data from different participants and organizations was triangulated to enhance the validity through cross-case analysis.

The recorded data in audio form was transcribed into text form. The transcribed data was analysed using Atlas.ti software. The result of the data analysis will be discussed in the next section.

Data Analysis and Discussion

Out of five cases, only one case, which is Case E that received consultation from other external consultant on lean training. The other four cases signed a memorandum of understanding with Malaysia Productivity Corporation (MPC) to hire them as their consultant. MPC introduces lean and focuses on conducting workshops for Value Stream Mapping (VSM). The staffs were guided in using VSM for their lean project. Based on the document review during the interview session with Case E, the terms used in their project report is Business Process Re-engineering based on lean. Their project improvement shown is in the form of a simple flow chart instead of in the VSM form as shown by other four organizations trained by MPC. Before lean was introduced to all the public organizations, they have already implemented 5S, which is actually one of lean tool. The involvement of staff in lean was based on the lean projects. Every department/section/unit was required to form a group and prepare with a project. Therefore, each group has one project to be leanned. All organizations have lean projects for each department/ section/ unit except for Case A which only started with four groups and had completed the process for two groups. The background of lean implementation in all case organizations is shown in Table 1.

Table 1: Background of Lean Implementation in Case Organizations

Case	Start	Certificate Issued	Consultant	Involvement in lean project
Case A	2013	2014	MPC	4 groups
Case B	2012	2013	MPC	6 groups
Case C	2013	2014	MPC	12 groups
Case D	2011	2013	MPC	27 groups
Case E	2013	2014	X Consultancy	26 groups

During the interview session, the researcher asked about how they implement lean management in their organization. All the participants explained that they have formed the lean secretariat that was responsible to plan and manage the implementation of lean for the whole organization. According to Netland (2015), there is a continuous need to have proper planning, perform follow-up and provide resources for Lean programs. The main function of the secretariat is to prepare the implementation plan, which includes providing training, performing lean promotion, monitoring and reporting the progress, and motivating the staff. All the managers interviewed were the leader of the lean secretariat of their organization. As explained by the manager of Case A:

“So we are doing this entire plan. We are the secretariat, we monitor what they have to do and then we push. I think our secretariat is the one who mostly push them.”(AP1)

The secretariat provided a general Gantt chart to guide the implementation. It was their responsibility to move and monitor the progress of the projects. Each group of the section involved have their own specific planning according to their project, which will be closely monitored by the project leader and their section manager. The secretariat of Case B also monitors their staff progress regularly and after they had made sure that their staffs are well prepared, they will set an appointment with top management for progress presentation. The ideas and direction of change have to be clearly interpreted and negotiated to everyone in the organization (Langstrand, 2012). The project leader of Case C explained on the roles played by their lean secretariat in terms of providing the knowledge to them as in the quotation below:

“..He is the mastermind of all these. He is the one who arranges the training with MPC. He will distribute the lean booklets. The management also gives some explanation. He will give the explanation about the benefits. He does all the lean promotion, giving awareness, conduct workshops and teach us.”(CP2)

Based on the quotation above, ‘he’ is the manager of corporate department cum the lean secretariat of Case C. His responsibilities include arranging trainings, performing lean promotions, conducting workshops and motivating the staff. Furthermore, the lean secretariat’s functions include preparing lean information for the staff, conducting lean programs such as lean competitions and providing report regarding lean training for the auditor.

Besides, the steps taken from the beginning of the implementation until they have implemented their lean projects, and getting the certification of lean management implementation from Malaysia Productivity Corporation were explained. For every organization, the lean process duration took approximately a year to be completed. Based on the plan and steps taken, it can be seen that the plan mostly focuses on training. The talk or courses on lean management were initially given to introduce and provide awareness for the staff. It is then followed by a few series of training in the form of workshops, which focus on the tools and the projects. Besides the training, the monitoring process occurred through either discussions, meetings or project evaluation. The process of lean implementation was explained in the following quotations.

“.. our first step is we want to give an understanding of lean to the employees. They have to learn this new thing (lean). As an eye opener, we had conducted ‘executive talk program’ for the introduction so that the employees could accept it after we ask them to do it.” (CP1)

“ firstly, we gave talks for the awareness. After they have understood, then we had conducted the workshop. They have to form a group in each department and identify the problems to be solved during the lean workshop.”(EP1)

The organizations started lean program by providing the introduction talk on lean followed by group formation and project selection. Then, all the group members were required to attend for more detail training in a form of workshop with the consultant. The next steps can be seen in the excerpt below:

“ After we had completed our training, we received an order (memos) to implement the lean projects. Later, MPC had visited and evaluated all of our projects. They look at whether our projects have been implemented and established. Then we prepare for the new projects. MPC came again to assess the outcome of our lean project. Finally, we get the certificate valid for two years. Now we are in the process of renewing our

certificate based on our new projects” (BP2)

The implementation of lean project in Malaysian public service organization is a continuous process. As mentioned by the project leader of Case D:

“..for every completed project, it is still continuous. There always has a room for improvement. The improvements never end. They will continue with the new projects and we will focus on monitoring and updating the progress of the projects. For the existing project, we assess the impact continuously.”(DP2)

The organization continues to implement new lean projects every year. Although the implementation focuses on small-scale projects, it is being conducted holistically, where it involves the whole organization and the process is ongoing. The whole organization refers to the involvement of every department in the organization by most of the case organizations. Although some cases did not start with all departments during the first year, but the number of group and departments involve continuously increase. The implementation process was mentioned as an ongoing process because it is being conducted continuously and did not end after the projects were completed. They have continued to do improvement with the new lean projects. The steps involved that have been obtained from the interview and document review are summarized in Figure 1.

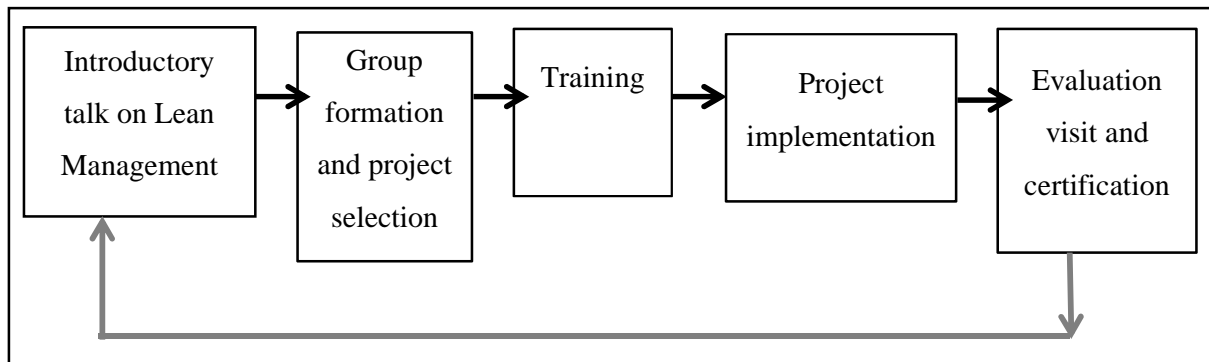


Figure 1: Steps in Lean Management Implementation in Malaysian Public Service Organization

Finally, to answer the main research question on how they manage the change in transition to lean, three important aspects in managing change towards lean have been mentioned which are training, motivation and monitoring. Referring to perspective from participants, ‘Monitoring’ is conducted regularly by the management to observe the progress and the status of lean projects. ‘Motivation’ is usually given by the management to the staff through words of encouragement and providing rewards while ‘Training’ is provided to give lean knowledge, which is conducted either internally or externally. The analysis based on the numerical output will be discussed next.

The number of quotations for each code can be displayed according to each organization as shown in Figure 2. From the graph, it can be seen that all three codes were found in every organization. This means that the monitoring, motivation and training are used by all of them in managing change towards lean transition.

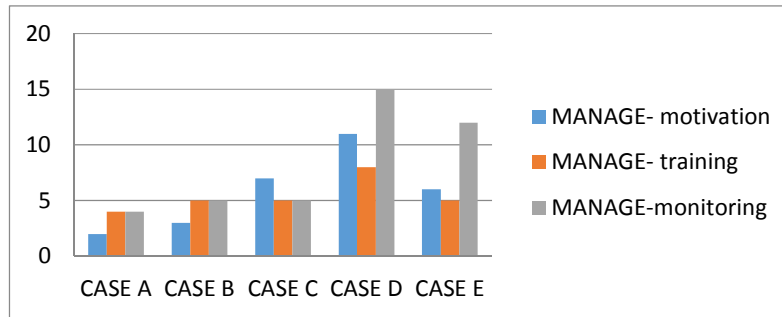


Figure 2: Managing change by all organizations

Based on the number of quotations recorded, the quotations from two categories of participants that are the manager (P1) and the project leaders (P2) were compared for each code. Figure 3 shows the number of quotations by manager and project leader for each of the three codes.

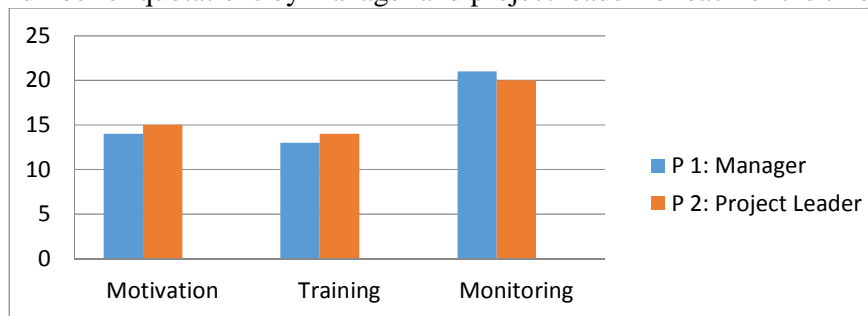


Figure 3: Number of Quotations for Managing Change separated by Participants

In terms of quotations about managing the change, the number of quotations from the Managers and The Project leader are almost equal. Among the three codes, which are Motivation, Training and Monitoring, no code shows that there is a slight difference in term of quotations from the managers and the project leaders. Both types of participants, which are the managers and project leaders, share the same responsibility in term of giving motivation, providing the training and do the monitoring to the employees. Monitoring was mentioned by all P1 and P2 from every organization. The highest total number of quotations among these three codes is also belongs to the ‘Motivation’ code. Motivation is important to be given to encourage and motivate the staffs to accept changes. Besides, the highest number of quotations from the manager (P1) is for ‘Monitoring’ code. The monitoring process was mainly conducted by the management as a whole while the project leaders perform monitoring specifically for their teams.

The textual output according to each case will be discussed in the following section.

Training

One way on how they manage the transition is by providing training. Training was given to provide knowledge on lean. Based on the interview, two types of training have been mentioned, which are internal and external training. Internal training refers to the training conducted by the organization and usually held inside the organization. External training is the training provided by outsiders such as the Malaysia Productivity Corporation or other external consultants. The quotations regarding the internal and external training are listed below:

“.. We don’t have a problem to provide training because we collaborate with MPC. We can’t give training by ourselves, but we provide awareness... They are being guided

because we pay to MPC. They (MPC) teach them about how to do it. So we are in constant learning. We have never given up on helping our staff to do it.” (AP1)

“.. When I attended the lean seminar in Sunway, I learnt new things from the lean champion masters around the world. I found that there are many other tools that relate to lean, but in the scope of lean project that we did, we never thought that the scope is wider. So we got information from there. It was organized by MPC and lean applied.” (AP2)

The above excerpts were taken from the manager and the project leader of Case A. They mentioned about the training by the consultant from Malaysia Productivity Corporation which was delivered to the staff. While the project leader shared the experience that he gained from the external training which he had been sent by the company to gain more knowledge of lean. The participants from other cases also mentioned about the training that had been given to the staff either internally and externally. Both the manager and the project leader believed that training is very important to give knowledge and understanding for everyone before they can implement lean.

The training that was conducted internally was to introduce lean that focused more on theory. For the practical knowledge, the organizations usually hire consultants to conduct training for the staff. Radnor et al. (2006) had conducted a survey, which figured that 90% of the respondent saw the effectiveness of using external support or consultant. Four out of five organizations were trained by MPC. Only Case D used another external consultant. Training is very important to be conducted especially during the transition to lean. The main purpose of training is to provide lean knowledge so that they understand and can accept it. It can be seen from the quotation from the manager of Case A:

“..At first they don't know what is lean. After we have sent them for training and they acknowledged what is it and then it makes their work easier. So they accepted it.”(AP1)

Providing the training will not only deliver the knowledge on lean implementation, but it is also required at the beginning to increase their acceptance towards a new way of doing things which at the same time can prevent resistance to occur. The other purpose of training is to cultivate a lean culture in the organization through deep understanding of lean knowledge. As explained by the manager of Case C:

“..At first, the staff thought that it is a work load. How we changed their thinking is through civilizing. We did many lean promotions, many training, we asked outside experts to come and give talks. We use all the training sessions to guide them. We also send them externally to give them experience, exposure, training and seminars.”(CP1)

The series of training were conducted to provide better understanding and to ensure that the lean culture is developed within the organization. Meanwhile, the project leader of Case C also shared the same thought with the manager where she stressed that a few number of training is needed to give an understanding of the technical aspects and its practicality.

The third purpose of training is to act as a platform for discussion and to gain knowledge from lean consultant. As explained by the project leader of Case E in the following quotation:

“.. Firstly, we give talks. Then we ask them to find projects so that we can discuss during the consultation. He (consultant) will discuss with us and provide suggestions. We tell him what our problem is and how we want to solve it. And then he suggested ways for us to do it so that our problem is settled. That is what's special about the consultant; he is able to visualize the most suitable approach.”(EP2)

Besides, the training session can act as a discussion session among the group members and with the consultant where they can focus on their lean project without any distraction. The training is given continuously from the start and during the implementation process. It is not only for the new staff but it is also for existing staff to improve their knowledge on lean. This has been done as mentioned by Puvanasvaran, Megat, Hong, Razali, and Magid (2010) that for the best way, the training should be conducted regularly and not only be given at the first time. By obtaining enough knowledge through training, the staff is ready to accept the change. Besides, the project leader/ manager will personally train the staff that does not have the chance to attend outside courses in order to share the knowledge that they have gained. The project leader of Case D quotes:

“.. Usually, the training and announcement are made during section meeting. Therefore, when they are involved in lean, during the lean discussion they can also learn new things. In every project, we have a champion, facilitator and team leader. All of them are knowledgeable because they have been exposed with lean courses. They will share their knowledge with low level staff who is not involved in the courses.”(DP2)

Lean champion, facilitator and team leader share knowledge with other staff during section meeting. Not all staff can be sent for all kinds of training. Thus, this platform is used by them to share the knowledge that they have gained with other staff that do not have the chance to attend the trainings. For case B, they have a unique approach regarding the training. Before focusing on lean workshop and project, team-building approach is used to create bonding between staff, provide knowledge on lean and motivating them. The team-building approach is used to create teamwork among the staff because they believe that lean is about teamwork. During that time, the project leader approached them closely and explained to them in a simple way so that they understand on the need to do lean. It is also one way of giving exposure and knowledge on lean. From the interviews with the participants in all cases, the quotations regarding the training approach show that they prioritize on training as the basis that is required to change into lean management implementation in their organization.

Monitoring

For the project leaders and the managers, the monitoring means keeping track of the progress and the status of the lean project. Both, the manager and the project leader do the monitoring. The only difference is in terms of whom they monitor. The project leader closely monitors the project of his/her group, while the manager has to monitor the progress of all groups in the organization. As the lean secretariat, the manager has to report the progress to the top management. Staats and Upton (2011) exposed that the chairman of the organization must personally review the lean projects and consistently meet with the project leaders to ensure continuous lean program in the organization. This action can also be seen in Malaysian public service organization that has been interviewed where the participants explained that their top management meet them regularly and closely monitors their progress.

In Case B, they have conducted two separate presentations for the staff to present their progress. One of the presentations is for staff to present their progress to the lean secretariat, lean champion and the project leaders. Once they were ready, the manager will set the second presentation that will be attended by the top management. The following quotation revealed their monitoring approach:

“..After they have completed their presentation, the project leaders and the lean champion will give comments and provide them with the input for improvement. Then we will present to Datuk (top manager)” (BP2)

As the top man of the organization, he will spend time attending the presentation session to monitor his staffs' progress on lean projects and the work process involved. The project leader also closely keeps track of the project that has been implemented in the work process to trace where the project stalled and will take actions to solve it. The project leader observes the work process and monitors the status using the project file. He will make sure that everyone does well and the process will run smoothly. Besides, the project leaders will guide and give order to their staffs on what need to be done. The project leader mentioned that although they have the awareness, it does not mean that they do not have to be monitored. Sometimes probably, they do not know what to do so the direct order is important. As a leader, they have to know what is to be done. Their staff will follow their orders.

For Case C, both the manager and the project leader stated that their management monitors the progress of work process that are involved in lean during the meeting, and they follow-up the project closely so that the staffs will see that they are committed. The project leader mentioned that in terms of subordinate, if the top manager and the intermediate staff work on it, they will also follow and do it. The manager will also visit the office to check the file and see the status of every work process. As for Case D, they also use meeting and presentation session to monitor the progress of lean project. The manager of Case D mentioned that the secretariat must report the progress of the lean projects to the management every four months. The section leader and the section manager have to monitor the implementation of projects within their section while the top management uses presentation session to monitor the progress and provide the platform for the staff to learn from other groups.

“We make presentations so that everybody can see and learn. If they have questions, they can ask. They have to update on their progress. If they do not do it, they will feel embarrassed in front of other staff and Datuk (top manager). He will ask why it was not done. So by hook or by crook, they have to do it. We have our plan. We control based on that. So we have no problems to move it.”(DP1)

Besides monitoring through meetings and presentations, they use the online portal to monitor the staff. For example, it is used by the training section to handle and monitor the training of every staff so that they fulfil the number of training required by the organization. The staff needs to fill their training evaluation form online after every training session. For Case E, they also use meetings to monitor the progress of each group. The coordination meeting is held every month so that the secretariat will get the feedback and status of the project from every head department. The main purposes of monitoring are to keep track of the project status and make sure that the project move well. It is in correspondence with the purpose of monitoring in public service stated by Radnor (2010) which is to monitor and evaluate the improvement process and its impact.

Motivation

Another approach on how the organizations manage the transition to lean is through motivation. Motivation was given by the top management, the lean secretariat and the project leaders for the staff to encourage them to participate in lean implementation. Few approaches are found to be used by the organizations to motivate the staff. It is given from the beginning of lean introduction to make them feel motivated to attend lean training. It has been done by conducting

the training outside the organization such as in a hotel. The manager of Case B and Case C explained on how this approach has made them feel motivated to attend the lean courses:

“..The staff will also feel bored if they always attend training in the office. So when we go outside, the environment is different. Besides, at the office there are many distractions, in the middle of training sometimes they are being called to meet someone. There is no disturbance when we do training outside the organization. We can be more focus.” (BP1)

The manager of Case C said that the staff were happy to attend the training outside the organization because at the same time they can travel and feel encouraged to open their mind for lean. Another motivation given is by conducting a study visit as mentioned by the manager of Case A, Case D and Case E. An example of quotation related to study visit is as below:

“.. In terms of incentive, we don't have direct incentive. We send the group for the study visit so that they can learn some knowledge from it.”(EP2)

For Case D, they organized many lean competitions and prepared award and incentives for the winners as a motivation for the staff. The motivation given is shown in the next quotations:

“ ..We have Innovation day. We conducted many lean promotions to provide encouragement for the workers to seriously be involved in lean movement. So we have prepared some budget for it. We organized many lean competitions to encourage participation from everyone.” (DP1)

The management of Case D allocated a large amount of budget for the purpose of lean management implementation. They conducted competitions to cultivate lean to all staff and give awards and incentives to motivate them. Moreover, the project leader of Case D explained that motivation is given by their top management through praising and recognition during the meeting. She gave an example as in the quotation below:

“..Even in the management meeting, the top management always gives acknowledgement ‘ this department is good’. He praised and he recognized them. When he role-modelled that, it's like a rolling ball. Everybody else will say ‘ we too can do it, better’. He developed the competitiveness. If they seem to be slow, he will say, “I challenge you to do it”(CP2)

When the top management gives awards to the winners and praises them for their good effort, it has developed the competitive attitude among the staff. They also feel motivated to try their best and get recognition from their top management. The recognition through words from the top management can motivate the staff to do their best. Pamfilie et al. (2012) highlighted that motivation can lead towards continuous development in an improvement project because when the employees feel the management values and appreciate their work; they will strive towards putting their best effort on their job. It can also be seen in Case B where the word of encouragement is one way of giving motivation to the staff. The project leader said to the staff that they are not allowed to only be in the office and just face their existing job. He encourages them that they need to contribute to their department. He explained the need of doing lean management to make sure that everybody understands and is willing to contribute. The motivation given by the management shows that they are committed to lean and thus can increase the willingness of staff to accept the change into lean and contribute in the lean initiatives. It is supported by Čiarnienė and Vienažindienė (2014) who suggested that consideration should be given to personal related issues such as providing motivation, developing trust and showing commitment to the employees instead of focusing only on lean

tool and techniques to avoid unsuccessful implementation. The manager has to show their long-term commitment through provision of resources, time and performance appraisal (Maalouf & Gammelgaard, 2016).

All the three elements mentioned above should be considered along the lean implementation process. From the case study, it is found that the public service organization focused on training in managing transition to lean. It is because they believed that knowledge is very important to avoid resistance and make sure that everyone understand lean well and can accept change toward lean. The ideas and direction of change have to be clearly interpreted and negotiated to everyone in the organization (Langstrand, 2012). Besides, they focus on monitoring to ensure that the staffs continuously implement lean and to show that the management is committed in lean initiative. Furthermore, the role of motivation given by the management before and during the implementation is important to change into lean in order to encourage the staffs to participate and strive together in improving their organization.

Conclusion

Most of the challenges are related to change and the success of lean implementation mostly depends on the people. Thus, the organization needs to focus on change management aspect before implementing lean to ensure that the people are ready to accept change and can continuously implement it in their operations. The study revealed how the public service organizations manage the changes in lean transition. The lean implementation starts with forming a lean secretariat that is responsible in planning and managing the whole implementation process. The study found three important elements that are required to manage the changes in lean, which are motivation, training and monitoring. The lean secretariat and the management of the organizations manage all these elements. The focus that has been given on motivation, providing training and performing continuous monitoring has helped all five public service organizations to manage the change into lean management implementation. In managing the transition to lean, it is recommended that the public service organization could focus on the three elements and could follow the steps taken by the public service organizations that have implemented lean management in their operation. The first thing to be done is to assign a lean secretariat that is responsible to plan and manage the implementation. Furthermore, based on the steps taken by the organizations interviewed, the author suggest on the steps to be taken, starting with giving the lean introduction courses to the staff, followed by developing team and finding lean projects, conducting training in terms of workshop for practical knowledge on applying lean tools on the projects and finally implementing and reviewing the project. It is hoped that the result from the study can benefit many other public service organizations that are interested to implement lean, to focus on the change management aspects that has been identified and refers to the steps taken by the case organizations in order to successfully change into lean and ensure a continuous lean service implementation in their operation.

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References

- Adam, I. (2011). *Outcome-Based Public Service Delivery*: Universiti Tun Abdul Razak, Kuala Lumpur.
- Ahmad, S. A. S. (2013). Culture and Lean Manufacturing: Towards a Holistic Framework. *Australian Journal of Basic and Applied Sciences*, 7(1), 334-338.
- Alagaraja, M. (2014). A Conceptual Model of Organizations as Learning-Performance Systems: Integrative Review of Lean Implementation Literature. *Human Resource Development Review*, 13(2), 207-233.
- Alsmadi, M., Almani, A., & Jerisat, R. (2012). A comparative analysis of Lean practices and performance in the UK manufacturing and service sector firms. *Total Quality Management & Business Excellence*, 23(3-4), 381-396.
- Anvari, A. R., Zulkifli, N., Yusuff, R. M., Hojjati, S. M. H., & Ismail, Y. (2010). A Comparative Study on Journey of Lean Manufacturing Implementation. *Asian International Journal of Science and Technology in Production and Manufacturing Engineering*, 3(2), 77-85.
- Arlbjørn, J. S., Freytag, P. V., & de Haas, H. (2011). Service supply chain management: A survey of lean application in the municipal sector. *International Journal of Physical Distribution & Logistics Management*, 41(3), 277-295.
- Atkinson, P. (2010). Lean is a culturel issue. *Management Services*, 54(2), 35-41.
- Behrouzi, F., & Wong, K. Y. (2011). Lean Performance Evaluation of Manufacturing Systems: A Dynamic and Innovative Approach. *Procedia Computer Science*, 3, 388-395.
- Bhasin, S. (2012). An appropriate change strategy for lean success. *Management Decision*, 50(3), 439-458.
- Chan, C. K. (2012). Applying Lean Management to Improve the Pre-Consultation Patient Journey in Outpatient Services: a Hong Kong case study. *Asia Pacific Journal of Health Management*, 7(1).
- Čiarnienė, R., & Vienažindienė, M. (2014). How to Facilitate Implementation of Lean Concept? *Mediterranean Journal of Social Sciences*, 5(13), 177-183.
- Damrath, F. (2012). *Increasing competitiveness of service companies: developing conceptual models for implementing Lean Management in service companies*.
- Denzin, N. K. (2006). *Sociological methods: A sourcebook* (5th ed.). New York: McGraw-Hill.
- Dombrowski, U., Mielke, T., & Engel, C. (2012). *Knowledge Management in Lean Production Systems* Paper presented at the 45th CIRP Conference on Manufacturing Systems
- Drew, J., McCallum, B., & Roggenhofer, S. (2004). *Journey to Lean: Making operational change stick*. New York: Palgrave Macmillan.
- Furterer, S. L. (2004). *A framework roadmap for implementing Lean Six Sigma in local governmental entities*. University of Central Florida Orlando, Florida.
- Ghosh, M. (2013). Lean manufacturing performance in Indian manufacturing plants. *Journal of Manufacturing Technology Management*, 24(1), 113-122.
- Langstrand, J. (2012). *Exploring organizational translation A case study of changes toward Lean Production*. (Doctor of Philosophy), Linköping University, Linköping, Sweden.
- Maalouf, M., & Gammelgaard, B. (2016). Managing paradoxical tensions during the implementation of lean capabilities for improvement. *International Journal of Operations & Production Management*, 36(6), 687 - 709.

- Malaysian Administrative Modernisation and Management Planning Unit. (2009). Memacu Transformasi.
- Malaysian Administrative Modernisation and Management Planning Unit. (2013). Inovasi dan Kecemerlangan Proses ke Arah Transformasi Penyampaian Perkhidmatan. *Seminar Pemantapan Transformasi Perkhidmatan Awam Melalui Pengurusan Lean* Retrieved 21 December, 2014, from <http://www.intanbk.intan.my/i-portal/ms/component/jdownloads/finish/25-lean-management/289-mampu.html>
- Malmbrandt, M., & Ahlstrom, P. (2013). An instrument for assessing lean service adoption. *International Journal of Operations & Production Management*, 33(9), 1131-1165.
- Mostafa, S., Dumraka, J., & Soltan, H. (2013). A framework for lean manufacturing implementation. *Production & Manufacturing Research: An Open Access Journal*, 1, 44-64.
- Netland, T. H. (2015). Critical success factors for implementing lean production: the effect of contingencies. *International Journal of Production Research*, 7543(October), 1-16.
- Piercy, N., & Rich, N. (2009). Lean transformation in the pure service environment: the case of the call service centre. *International Journal of Operations & Production Management*, 29(1), 54-76.
- Pinheiro, R. E. (2010). *Organizational Change And Employee Empowerment-A Grounded Theory Study In Lean Manufacturing Integration Into A Traditional Factory Environment*. (Doctor of Philosophy), Capella University.
- Public Complaints Bureau. (2015). Statistik Aduan Tahun 2014. Retrieved 5 Mac, 2015, from [http://www.pcb.gov.my/STATISTIK/2014/Laman%20Web%20Statistik%20Aduan%20Tahun%202014%20BM%20\(Janaan%20Muktamad\).pdf](http://www.pcb.gov.my/STATISTIK/2014/Laman%20Web%20Statistik%20Aduan%20Tahun%202014%20BM%20(Janaan%20Muktamad).pdf)
- Public Service Department of Malaysia. (2013). Perantaraan Ke Hadapan: Pelan Tindakan "Perlaksanaan Deskripsi Tugas-Job Description (JD) Sektor Awam". *Seminar Pemantapan Transformasi Perkhidmatan Awam Melalui Pengurusan Lean*. Retrieved 21 December, 2014, from <http://www.intanbk.intan.my/i-portal/ms/component/jdownloads/finish/25-lean-management/291-jpa-bpo-2nd-pengurusan-jd.html>
- Puvasvaran, P., Megat, H., Hong, T. S., Razali, M. M., & Magid, H. A. (2010). Lean process management implementation through enhanced problem solving capabilities. *Journal of Industrial Engineering and Management*, 3(3), 447-493.
- Radnor, Z. J. (2010). Transferring lean into government. *Journal of Manufacturing Technology Management*, 21(3), 411-428.
- Sawhney, R., & Chason, S. (2005). Human Behavior Based Exploratory Model for Successful Implementation of Lean Enterprise in Industry The Human Element in Lean Enterprise. *Performance Improvement Quarterly*, 18(2), 76-96.
- Shazali, N. A., Habidin, N. F., Ali, N., Khaidir, N. A., & Jamaludin, N. H. (2013). Lean Healthcare Practice and Healthcare Performance in Malaysian Healthcare Industry. *International Journal of Scientific and Research Publications*, 3(1), 1-5.
- Sim, K. L., & Rogers, J. W. (2009). Implementing lean production systems: barriers to change *Management Research News*, 32(1), 37-49.
- Tang, Y.-h., Miao, X., & Xi, B. (2010). *E-government based lean public management: A case study*. Paper presented at the International Conference on Software Engineering and Service Sciences (ICSESS).

- Vlachos, I., & Bogdanovic, A. (2013). Lean thinking in the European hotel industry. *Tourism Management, 36*, 354-363.
- Waterman, J., & McCue, C. (2012). Lean thinking within public sector purchasing department: The case of the uk public service. *Journal of Public Procurement, 12*(4), 505-527.
- Worley, J., & Doolen, T. (2006). The role of communication and management support in a lean manufacturing implementation. *Management Decision, 44*(2), 228-245.