Applicability of Lean Concept in Improving the Human Resourcing Practice in the Context of Sri Lankan Apparel Industry

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Abstract

Today Apparel Industry accounts for the largest portion of total exports of Sri Lanka and its biggest challenge is the existence of higher labour turnover resulting from the ill effects of labour recruitments. Research focuses upon enhancing efficiency and effectiveness of Human Resourcing Practice eliminating waste and creating high value addition component of the Apparel Industry as a whole on the foundation of the application of Lean Concept. We have identified the Human Resourcing Best Practice of the Apparel Industry through past literature and expert opinions and focused upon five medium and large-scale apparel manufactures in Sri Lanka to identify inefficiencies and ineffectiveness of Human Resourcing Practice by comparing their current Practice with the industry Best Practice. As a result, we identified that non-existence of value adding activates and existence of non-value adding activities mainly contributed to the higher labour turnover in Apparel Industry. Finally, study recommends that Hoshin Kanri Lean tool can be used to eliminate the waste in Human Resourcing Practice.

Keywords: Lean, Human Resource Management, Lean for Human Resource, Sri Lanka, Apparel Industry, Hoshin Kanri

Introduction

Sri Lanka’s apparel industry has grown to be nation’s one of the leading contributors to the export revenue. Being the single largest employer in the manufacturing sector the apparel trade grants close to 75% of Sri Lanka’s employment either directly or indirectly (Dheerasinghe, cited in Ranaweera 2014). It is estimated that average labour turnover worked out per factory is about 60 percent per annum. Taking the labour migration within the apparel industry into account, the net number of persons leaving the industry each year is estimated as 25 percent (Liyanage & Galhena 2012)

Business environment has dramatically changed in the recent years. These changes have had a significant impact on organizational efforts to be successful. Practically in every instance, organizations have tried to more clearly identify and then focus on factors that impact their success. What organizations realize is that their likelihood of sustained success is mostly dependent on learning to get the maximum out of their employees. Such a realization has had a significant impact on the Human Resource Management Practices (Sims 2002).
Human Resource Management is the part of the organization that is concerned with the “people” dimension (DeCenzo & Robbins cited in Ali 2013). It is a staff, or support, junction in the organizations. Its role is to provide assistance in HRM matters to line employees, or those directly involved in producing the organization’s goods and services. HRM is one of the important factors that are critical to business success. Without it, resources will be wasted and a workforce's full potential will remain woefully untapped (Ali 2013).

A major challenge for all organizations is to improve efficiency and to ensure continuous improvement. For the HR department, this is a double challenge, as the HR department itself should meet the requirements of the organizations it serves in an efficient way, and the HR department should be an active partner in promoting and training improvement actions in relation to the main tasks of the organization (Byfuglien et al. 2012).

One set of management practices that can be useful in helping with, reducing cost and improving both efficiency and the quality of products and services is lean management (Radnor 2012). A popular misconception that lean is suited only for manufacturing. Not true. Lean applies in every business and every process. It is not a tactic or a cost reduction program, but a way of thinking and acting for an entire organization. Businesses in all industries and services, including healthcare and governments, are using lean principles as the way they think and do (Assefeso 2014). After revolutionizing operational functions worldwide for the past 20 years, lean is now rapidly moving into the office support functions including Human Resources (Lean for HR 2016).

So how can lean improve a Human Resources organization? There are two different approaches. “Lean for HR” consists of holding breakthrough kaizen events to identify waste and non-value added activities that are inherent in most processes. For maximum impact, apply lean tools to all HR driven processes to streamline them and gain additional capacity to take on more value added activities (Frampton 2009).

The other avenue to be pursued, “HR for Lean,” transforms HR into a function that provides flexibility and support to the company’s lean efforts. By adjusting policies to address the lean work place, HR enables greater efficiency and adds value throughout the organization. In this new state, HR serves as an integral part of the enterprise’s Lean journey. HR no longer stands on the sidelines waiting to be invited to the party. Instead, HR is a proactive partner in moving an organization towards its lean future state. Partnership includes using lean tools to adjust policies to enable worker flexibility and mobility as well as lean-centric investments in employee education and retraining. It requires creative compensation schemes that reflect the operational changes being adopted by the organization while still providing needed incentives. Performance management will need to be modified to include behaviors as well as accomplishments (Frampton 2009).

The bottom line is that every organization requires to lower costs. Removing waste and inefficiencies within Human Resources and adjusting HR policies to help optimize the lean workplace will result in less time spent by employees on each process and thereby, lowering
costs. This is a net compounding gain going forward that must be led by HR’s active participation in the company’s lean journey (Frampton 2009).

Research Problem
In Sri Lanka biggest challenge of Apparel Manufacturing is the existence of Higher Labour Turnover in relation to the labour recruitments. It is attributed to the non- existence of a proper recruitment policy.

Objectives

Overall Objective
To determine the applicability of Lean Concept for improved Human Resourcing Practice.

Sub Objectives
1. To identify Human Resourcing Practice with their inefficiencies and ineffectiveness.
2. To investigate Lean process improvement method practically applied in industry.
3. To recognize the applicability of Lean Concept for improving Human Resourcing Practice.

Literature Review

What is Lean?
The core idea of Lean is to maximize customer value while minimizing waste. Thus, lean means creating more value for customers with fewer resources, and has a strong focus on the processes for creating the results and the need to be systematic and to measure and report on results of improvement (Byfuglien et al. 2012).

Lean beyond Manufacturing
In the 1990s, lean was mainly viewed as a plant level manufacturing approach, including a set of operational tools that assisted in the identification and elimination of waste (muda), improving quality and reducing costs. This attracted criticism for its narrow application on the shop-floor and the lack of strategic perspective. As the lean concept developed, its focus and scope has greatly changed and now lean embraces wider concerns and is more comprehensive in its scope (Wang & Huzzard 2011).

Hines et al. cited in Wang & Huzzard (2011) suggest that there are now two levels of lean approach: the operational level and the strategic level, which are different in terms of objectives, focuses, ways of achieving results, and how the results are measured, etc.

The operational level of lean stresses efficiency improvements and cost reductions in the manufacturing process with short-term goals focusing on improvements in current manufacturing (Hines et al. cited in Wang & Huzzard 2011).

At the strategic level, lean has a more comprehensive and wider content. It is viewed not as a tool but a way of thinking, going beyond the pursuit of production excellence and emphasizing customer value and the entire system flow. Focusing solely on manufacturing
efficiency is not enough to create long-term success for a business, therefore the objective is to build not just a “lean organization” but also “lean solutions” to achieve long-term success (Womack & Jones cited in Wang & Huzzard 2011). “Lean thinking” and “lean solutions” both entail a collective awareness of lean across the organization: its advocates call for collective cognition about lean that is commensurate with the notion of organizational culture. The development and establishment of such a culture is equivalent with what some see as organizational learning (Cook and Yanow cited in Wang & Huzzard 2011).

**Lean HR**

Applying Lean to the Human Resources (HR) function can provide a roadmap for how your organization can avoid the common mistake of leaving HR on the sidelines while you develop and execute your strategies. Building performance based strategies into all your people-related processes, such as recruitment, training, performance management and rewards, is not only the best way you can achieve new levels of success, but it prevents failure from leaving the HR out of the equation (Sinocchi & Bernstein 2010).

In addition, the positive impact of involving employees in the daily goals of your organization and understanding the needs of your customers generates noticeably more motivated employees. This enthusiasm creates a positive momentum that generates even more productivity and better customer service on all levels. In addition, more involved employees are great candidates for enlarging their job content to include more of their skills, such as teamwork, problem solving, and process improvement (which are often left untapped). Lean HR provides methods for putting more into job responsibilities in a step-by-step manner, including what processes must be changed to allow employees to participate more fully on a daily basis (Sinocchi & Bernstein 2010).

Lean HR is not a program to run through your organization, but a whole new way to utilize the talents inside your organization. Your customers will be quickly able to see that your organization is one where everyone is involved and on the same page about 'the customer comes first.' The results will also reflect satisfied customers who are willing to pay more for products and services from an organization that accesses their people more effectively” (Sinocchi & Bernstein 2010).

**Methodology**

The team focused on actual facts of research domain and tried to understand what is happening by considering the totality of each situation or industrial phenomena and develop ideas through induction from collected data. Multiple methods such as Literature, Interviews, Discussions, Questionnaires and insights of Human Resource Industry Personnel focus upon different views of phenomena in real Industry.

The research contains qualitative data collection and it supports in-depth analysis concerning issues and challenges, value addition, non-value addition activities and ways and means to overcome waste in order to enhance efficiency and effectiveness in Human Resourcing Practice. We focused upon sample of five medium and large-scale apparel manufactures in
Sri Lanka and identified their Human Resourcing Practice. Findings were arrived after matching the identified their Human Resourcing Practice with foregoing the Best Practice.

Figure 1: Human Resourcing Best Practice

Note: The data are from A guide to strategic human resource planning (Workinfo.com) & (Mr K Kodithuwakku 2014, pers.comm., 10 November)

Findings of the Study
According to data gathered from the overall industrial studies, five main findings as follows.

1. There is an effect of value adding activities of soft approach (activities which are not physically appeared) to the hard approach (activities which can be easily seen) of Human Resourcing Practice.

Lean Manufacturing makes manufacturing process efficient by eliminating the waste in the manufacturing environment including the supportive surroundings such as machines and equipment however, in Human Resourcing Practice it is shown that the hard approach highly dependent on value adding dependability resulting in the soft approach.

2. Non-adoptions of value adding activities properly has led to ineffectiveness of the process (process quality).

In the soft HR approach, it is evident that process ineffectiveness is due to the absence of the value adding activities, not by having non-value adding activities which could be eliminated.
3. Absence of value adding activities can be seen mostly in the soft approach of the Human Resourcing Practice. According to the analysis of case studies, it is proven that process inefficiency and ineffectiveness can occur due to not adopting value adding activities and this scenario is seen mostly in the soft approach of the process.

4. Identified a new type of waste in the soft approach.
Shigeo Shingo founder of Toyota Production System (TPS) stated, “The most dangerous kind of waste is the waste we do not recognize.” Waste in Lean is defined as “any activity which absorbs resources, but creates no value, that does not add any value to a product or a service” (Womack et al. 1990). How the identified new type of waste differs from waste in Lean explained as given below. In both definitions, some terms are the same.

<table>
<thead>
<tr>
<th>Lean Waste Defined</th>
<th>New Waste Defined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any activity</td>
<td>Any activity</td>
</tr>
<tr>
<td>Absorbs resources</td>
<td>Avoids value adding dependability</td>
</tr>
<tr>
<td>But, creates no value</td>
<td>Hence, creates no value</td>
</tr>
<tr>
<td>That does not add any value to a product or a service</td>
<td>That does not add any value to a product or a service</td>
</tr>
</tbody>
</table>

*Note. The data in column 1 are from The machine that changed the world (Womack, Jones, & Roos, 1990)*

5. Identified four categories in new waste type.
Usually soft approach is not visible and thereby directly waste of the soft approach not visible. Researchers could recognize the untouched or not seen new waste category in soft approach as the forth finding. As last finding researchers found that identified waste in soft approach has categories such as:
- No inter-dependability among soft-hard activities.
- Not having proper communication between the activities.
- Not having proper tolerance level (how often activities performed) of each activity in practice.
- Not having proper measurements (target vs. actual) to measure output of activities.

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No inter-dependability among soft-hard activities.</td>
<td>Set the appropriate KPIs to measure how far the set goals achieved by the HR department without identifying and align the mission's outcomes with strategic goals.</td>
</tr>
<tr>
<td>2. Not having proper communication among the activities.</td>
<td>Absence of conducting proper environmental scans and evaluates its impact on organization. Not having identified and align the mission's outcomes with strategy.</td>
</tr>
</tbody>
</table>
4. Not having proper measurements (target vs. actual) to measure output of activities.

Output of the human resourcing practice is to “Recruit right number of competent employees at right time.” This can be measured by matching determine the need of carder requirement but output of the current human resourcing practice cannot measure by matching determine the need of carder requirement, because in practice carder requirements were not determine systematically.

**Recommendations**

According to the analysis of industrial case studies, it is proven that process inefficiencies and ineffectiveness can also occur due to the new category of waste. Since researchers had to determine the best possible Lean approach to eliminate particular waste in soft approach. Researchers found that Hoshin Kanri as the best possible Lean approach for eliminating new category of waste in soft approach of Human Resourcing Practice hence it eliminates the categories of identified waste.

**What is Hoshin Kanri?**

Hoshin Kanri is a method for ensuring that the strategic goals of a company drive progress and action at every level within that company which align the goals of the company (strategy), with the plans of middle management (tactics) and the work performed by all employees (Operations) (Harrington & Voehl 2012).

<table>
<thead>
<tr>
<th>Identified Category</th>
<th>Waste</th>
<th>Characteristics of Hoshin Kanri</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Inter-dependability</td>
<td>Cross-functionality - Strategies turn into specific responsibilities for various functional leaders. The unified approach to strategy development keeps groups aligned. (ensure Inter-dependability)</td>
<td></td>
</tr>
<tr>
<td>No Communication</td>
<td>Catchball - Senior leaders should talk to each other and to their subordinates to create a solid plan (ensure Proper Communication)</td>
<td></td>
</tr>
<tr>
<td>No Tolerance level</td>
<td>Closing the loop - Using regular follow-up to keep progress on track (ensure Tolerance)</td>
<td></td>
</tr>
<tr>
<td>No Measurability</td>
<td>Cascading goals - Top level strategy should turn into KPIs at the frontline and links all the goals and objectives together.(ensure Measurability)</td>
<td></td>
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</tbody>
</table>

*Note. The data in column 2 are from Hoshin Kanri (Velaction Continuous Improvement LLC)*

**Conclusion**

Research aims at enhancing the efficiency and effectiveness of Human Resourcing Practice of apparel industry by identifying and eliminating waste, thereby reducing costs through Lean Concepts. We focused upon five medium and large-scale apparel manufactures in Sri Lanka to identify inefficiencies in the Human Resource Management Practice and apply Lean Concepts to boost efficiency and effectiveness.

When we visualized the hard approach of the Human Resourcing Practice, it is well maintained by most of the selected organizations, but expected output of the Human
Resourcing Practice is not at the expected level due to non-existence of value adding activates and existence of non-value adding activities in the soft approach.

A review of academic and practitioner literature on the subject indicated that applicability of Lean Concept in improving the Human Resourcing Practice has hardly begun to explore. Our research work on “Applicability of Lean Concept in Improving the Human Resourcing Practice in the Context of Sri Lankan Apparel Industry” will lay a foundation for enhancing the efficiency and effectiveness of apparel manufactures in the future also for future researchers conducting their research on Application of Lean in Human Resource Management.

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Reference
iv. Frampton, J 2009 ‘Lowering Costs with Lean HR’.


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