

INTEGRATING LEAN PROCESS IMPROVEMENT INTO EMPLOYEE PERFORMANCE MANAGEMENT: EVIDENCE FROM SRI LANKA'S APPAREL INDUSTRY

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Abstract

Sri Lanka's apparel industry is acknowledged as a key contributor to the Sri Lankan economy in terms of national GDP and providing employment. However, the sector continues to face operational challenges in relation to employee performance management (EPM), considering many areas like inconsistent evaluation criteria and having limited feedback mechanisms in PE processes. Thus, by conducting this study, the authors have attempted to address the underexplored potential of integrating Lean process improvement with a special focus on employing Value Stream Mapping (VSM) into EPM systems to enhance productivity and engagement of the apparel employees. The whole study was guided by three objectives, including exploring existing EPM processes, assessing the applicability of Lean/VSM, and providing practical recommendations considering the use of process improvement using VSM within PE processes. This study was conducted as a qualitative single-case study based on a medium-sized apparel firm in Bibila. The required data were collected through 12 semi-structured interviews with management and operational staff, complemented by document analysis of HR policies, appraisal forms, and training records. Thematic analysis and review of documents were used as the analysis tools. The thematic analysis results revealed five key weaknesses: lack of standardisation, narrow feedback channels, training gaps, process inefficiencies, and communication barriers in the existing employee performance management process. Findings indicate that VSM could streamline appraisal processes, reduce delays, standardise evaluation, and link performance outcomes to targeted training. The given recommendations through the study were included: baseline VSM mapping, phased implementation, digital feedback systems, and fostering a continuous improvement culture. These insights offer a replicable framework for Lean-based EPM adoption in labour-intensive sectors of developing economies.

Keywords: Apparel industry, employee performance management, lean process improvement, Sri Lanka, value stream mapping

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Introduction

The textile industry stands as one of the largest industrial areas in Sri Lanka, being the main contributor to export earnings and an important driver of economic activity. In 2024, the revenue from apparel exports was nearly USD 4.7 billion, a 5% increase from 2023 but still 10.3% below the pre-pandemic peak of USD 5.3 billion in 2019 (DailyFT, 2025). This apparel sector provides an approximate contribution to the national GDP of around 7%, while also directly engaging with about 350,000 people, and making up indirect employment of approximately another 350,000 people. Thus, this apparel sector is considered central to the rural livelihood and industrial growth contribution in Sri Lanka (EconomyNext, 2024; JAAF, 2024). The importance of this industry can be seen from its labour-intensive characteristics, where much of the production includes sewing and other manual jobs. Nearly 78% of the workers are women, and their work involves low-skilled, repetitive tasks. Although there have been attempts to improve gender equality, such as retention of women in supervisory and managerial roles largely remain minimal (IPS Policy Insights, 2019; Better Work IFC/ILO, 2023).

Even though this apparel sector in Sri Lanka is very important in many areas, the sector is functioning with many risks: pricing pressures with global buyers, which are aggravated by the lower-cost pristine producers like Bangladesh and Vietnam, threaten the competitiveness (Athawale et al., 2023). In fact, currency depreciation due to the previous economic downturn has raised wage costs in terms of USD, and compliance with labour and sustainability standards globally increases operational costs (Ramanayake, 2019). Add to these things, high employee turnover and absenteeism are typically related to scant welfare provision and participation (Global CEO Magazine, 2025).

Most of the Employee Performance Management (EPM) systems in the apparel firms in Sri Lanka are traditional, mainly based on annual or semi-annual ratings done by line supervisors. In addition to this, the performance appraisal systems lack mechanisms for continuous monitoring of employee behaviour during the appraisal period, comprehensive job descriptions, or structured paths for career development (Rathnakara & Arachchige, 2020). Training modalities are mostly irregular, and discussions about performance are very uncommon and rare; this results in low employee engagement and misalignment of individuals with the goals of the organisation. These gaps lead to inefficiency, increased defect rates, and very high turnover rates (Gammanpila & Kodisinghe, 2021). Structured training, regular feedback, and process-based performance management usually contribute greatly to increased productivity and employee job satisfaction, based on empirical evidence (Maduranga & Harshani, 2024).

Lean conceptual approaches within the area of process improvement have permeated the last few years into applications beyond manufacturing that include an entire spectrum of activities within human resources (HR) and administrative function performances (Mehta, 2023). By implementing these, the existing non-value-added activities in HR processes should be eliminated, workflow and process visibility tend to increase, and be streamlined through these Lean principles. Value Stream Mapping (VSM) is one of the core tools from Lean methodology whereby organisations visualise an entire process and, from there, identify what wastes are present and design more efficient workflows (Lyu et al., 2021). Practically, VSM is focused on production optimisation; it is also successfully applicable with HR processes like recruitment and onboarding, leading to cycle time reduction and enhancement of communication flows (Purdue Lean Six Sigma, 2024). When applied as an EPM practice, the use of VSM can help clarify performance expectations, standardise evaluation processes, and ensure continuous performance monitoring.

When focusing the existing literature relating to the global contexts, some studies are available which have explored Lean integration into HR and PM systems in manufacturing firms (Khatib & Pachorkar, 2015), healthcare (Mehta, 2023), and there are many studies only focusing how to use VSM for process improvements in different contexts (Tesfaye, 2021), but not focused on PM or any HRM processes. Like that, literature relating to the Sri Lankan context, researchers have largely focused on how lean applications can be used for production efficiency rather than HR or EPM improvements (Wickramasinghe & Wickramasinghe, 2017). Thus, there remains a clear empirical gap in understanding how Lean-based tools, like VSM, can enhance PM processes within labour-intensive apparel firms in developing economies like Sri Lanka.

Further, these Lean Transformations into the application of areas like PE in HRM still remain underexplored in terms of labour-intensive industries in developing countries (DiVA Portal, 2020). Most efforts on Lean adoption in Sri Lankan apparel concentrate on manufacturing efficiency alone rather than on HR process optimisations. The lack of empirical research on how VSM-based EPM improvement can offer clearer paths for further research into how Lean principles can eliminate systemic weaknesses in performance management while creating workplace productivity and retention gains.

Therefore, this study primarily assesses the existing EPM processes based on a selected apparel firm in Sri Lanka, evaluates the possibilities of the application of Lean process improvement, focusing on the VSM tool, to augment these systems to provide valuable insights to the firm and to the sector. The specific objectives expected from this study are:

RO1: To explore the existing employee performance management process in a selected apparel firm in Sri Lanka, identifying strengths and weaknesses.

RO2: To evaluate the applicability of Lean process improvement methods, particularly VSM, in enhancing EPM systems.

RO3: To provide practical recommendations for apparel firms on implementing Lean-based performance management to improve productivity and engagement.

Significance of the study

This study contributes to the relevant body of knowledge theoretically and practically. When discussing the theoretical contribution of the study, it attempts to extend the application of Lean process improvement concepts into the understudied area of EPM, particularly within labour-intensive industries of developing economies, such as Sri Lanka. When discussing the practical view, this research provides evidence-based insights relating to and helping industry professionals to integrate VSM into EPM systems. This would enable the development of a stage to demonstrate how Lean principles can mitigate inefficiencies in processes, promote employee engagement, and enhance organisational productivity in the apparel industry in Sri Lanka.

Literature Review & Conceptual Background

Employee performance management (EPM)

Employee performance management (EPM) encompasses all systematic processes through which organisations set work goals, monitor performance, provide feedback, appraise individuals, and plan employee development—always with a view to aligning individual contributions with organisational objectives (Armstrong, 2018; Aguinis, 2013). This is not a single event confined to an annual perspective but rather an ongoing eligible management practice that pervades human capital processes and contributes to overall success (Armstrong, 2018).

EPM work processes are fundamentally divided into goal setting, performance monitoring, feedback, appraisal, which is based on formal reviews of progress, and development planning. The distinguishing character of these processes is that goal setting ensures the primacy of alignment between individual and organizational objectives; monitoring involves the observation of behaviors and outcomes on an ongoing basis; feedback involves giving constructive and timely input to motivate and correct performance; appraisal involves formal review; and lastly, development planning involves training and development needs (Armstrong, 2018; CIPD, 2025; (International Labour Organization [ILO], 2018)).

The integration of EPM with strategic planning, in concert with employee engagement and the promotion of continuous, as opposed to intermittent, feedback has been recognised as an important hallmark of global best practice (CIPD, 2025). The innovative approaches also uphold as key principles: 360-degree feedback systems, real-time feedback technologies, fairness, and transparency. The International Labour Organisation (ILO, 2018) provides a structured performance cycle commencing with joint planning between the manager and employee, mid-term reviews for assessing progress against objectives as well as barriers, and end-of-cycle evaluations in order to inform future development planning.

Evidence suggests that performance management in labour-intensive industries enhances productivity, product quality, and employee retention. Positive performance appraisal experiences engender positive employee engagement, job satisfaction, and organisational commitment, thus bringing about operational excellence (Maseke et al., 2022).

Lean process improvement

Lean describes a management philosophy focusing on maximum value delivery to customers with minimum waste; it is driven by five core principles: defining value, mapping the value stream, creating flow, establishing pull, and pursuing perfection (Womack & Jones, 1996). This philosophy originally derived its roots mainly from manufacturing but has now begun to extend toward other contexts such as HR, healthcare, and administrative services (Lopez, 2025).

In an HR environment, Lean principles standardise workflows, increase visibility and transparency of the process while eliminating wasteful non-value-adding activities, thereby shortening cycle times and enhancing service quality (Vorecol HRMS, 2024).

An application of Lean methods within the Toyota HR department reported a 30% turnover reduction, while a Fortune 500 company achieved a 30% time-to-hire reduction, alongside a 25% decline in recruitment cost (Vorecol HRMS, 2024; SHRM, 2024). These figures illustrate Lean's potential to optimise HR functions, including performance management, securing both process efficiency and strategic alignment.

Value stream mapping (VSM)

Value stream mapping (VSM) is recognised as a supreme Lean tool that is designed to visually map existing process flows while differentiating value-adding activities from non-adders so as to detect bottlenecks, delays, and waste (Kumar et al., 2024). A current state map shows the present process steps and inefficiencies, while a future state map is drawn up to indicate the newer, redesigned and streamlined process. The entire VSM process also encompasses systematic identification of waste coupled with the development of improvement plans that aim to increase flow and efficiency (Kumar et al., 2024).

Currently, VSM is widely applied to non-production activities, including HR processes such as recruitment, training, and performance appraisal (Wang et al., 2022). The use of VSM is to identify processes with bottlenecks, minimise feedback cycle delays, and raise the synergy of performance management with strategic organisational goals. In EPM, VSM could clarify the performance cycle and its different stages, enhance transparency, eliminate redundancies, and improve communication between managers and workers in order to optimise performance monitoring and development planning (Lyu et al., 2021).

Integration potential of lean tools with EPM

Integration of lean tools, particularly VSM, with EPM, generates enormous gains in productivity, cost reduction, and employee engagement. Quantitatively, the surveys reveal increases in productivity by 20–30% and a cut-down turnover by 15-30% against the Lean-EPM integration (Deloitte, 2024). Qualitatively, evidence has emerged in support of cultural advantages ingrained in the Lean acceptance of increased staff participation in solutions, subsequent enhancement of dialogue, and drift toward a continuous improvement mentality (SHRM, 2024). However promising these results may be at the international level, a distinct research gap remains in the local context of Sri Lanka. Given that Lean adoption in the garment industry in Sri Lanka has often been quite focused on production efficiency, an empirical study on the application of Lean tools to HR processes, with particular focus on EPM, appears to have received limited attention.

Methodology

Research design

This study followed a qualitative single case study approach, as it provides deeper explorations on how Lean process improvement can be integrated into Employee Performance Management (EPM) in Sri Lanka's apparel industry.

Case selection

The selected company is a medium apparel manufacturing organisation named Randi International Private Limited, where the operational employees employed around 400, and staff members, including supervisors, 30, work in the production process, which is also based in the Bibila district in Sri Lanka. This firm was purposively selected for this study considering three criteria: (1) it represents a typical labour-intensive apparel operation in Sri Lanka; (2) it operates with an aforesaid traditional EPM system; and (3) this firm has internal institutional aspirations for Lean-based HR process improvements. Therefore, the associated EPM statutes could provide insight into the operational difficulties with conventional EPM practices and their opportunities for Lean transformation.

Data collection

Data were collected using semi-structured interviews complemented by document review. The interviews were conducted with 12 participants, comprising six management/supervisory level staff (HR managers, production managers, and line supervisors) and six operational level employees. Purposive sampling ensured that the participants had direct experience of the organisation's EPM processes and were therefore considered to have had informed perspectives of the experiences. The approach was preferred to capture rich context-specific insights rather than data with a statistically generalizable significance. Moreover, internal HR policy documents, performance appraisal forms, and training records were reviewed as a contrasting source to the interviews, allowing for a blended view in understanding the current EPM situation.

Methodological clarifications

According to internal HR records (2024), the total workforce population of this selected apparel firm was with of 430 employees, including around 400 operational workers and 30 managerial and supervisory staff members. Based on this known population, twelve employees were purposively sampled to collect multiple perspectives on EPM. Six of those participants were from the management and supervisory category, representing HR managers, production managers, and line supervisors, while the other six were operational-level employees. This helped to ensure the use of both managerial and employee perspectives regarding performance practices.

The study was conducted using a single-case design method. The use of this method can be justified with its benefits since it has the ability to enable an in-depth exploration of contextual and process-specific dynamics within one apparel firm. This can allow the researcher to make a detailed examination of how Lean principles can be integrated into EPM systems, considering a real organisational setting.

A self-prepared semi-structured interview guide has been developed by the researchers based on key literature relating to EPM (Armstrong, 2018; CIPD, 2025) and Lean process improvement (Womack & Jones, 1996; Lyu et al., 2021), and it developed as comprises open-ended questions considering existing appraisal processes, feedback mechanisms, training and development, process efficiency, and communication effectiveness in the selected firm. After the interview guide had been prepared, two HR experts were consulted before data collection to assess its clarity and relevance to the study objectives.

Data analysis

Thematic analysis was used for the main data analysis based on the interview insights, as it allowed for a systematic identification and interpretation of patterns arising from the qualitative data. An inductive coding approach was utilised, allowing for thematic emergence from the data while concurrently being guided by the objectives of the study. The developed themes for the study are summarised as Lack of Standardisation of PE criteria, Limited Feedback Mechanisms, Training and Development Gaps, Process Inefficiencies and Communication Barriers.

Ethical considerations

Both the data collection and reporting were carried out in compliance with standard ethical research practices. For conducting the research process, including collecting data and doing interviews based on the Randi International (Pvt) Ltd, the relevant permissions were gained from the company management before conducting the study and also for the use of the organisation's name and to collect relevant data for academic purposes. The objectives of the study were explained to all participants, along with voluntary participation and confidentiality of their responses. Informed consent was obtained verbally and in writing before each interview. No sensitive or proprietary data beyond the approved scope was released.

Analytical technique justification and thematic findings

The primary method used for analysing this research work was thematic analysis. The use of this thematic analysis would allow researchers to conduct a systematic identification, organisation, and interpretation of patterns considering the qualitative data collected from the respondents (Braun & Clarke, 2006). This method was ideal for the present exploratory case study, investigating process-level weakness areas and improvement opportunities in EPM. The analysis revealed five main themes: lack of standardisation, limited feedback channels, training and development gaps, process inefficiencies, and communication barriers. This set of themes aligns with earlier literature insights within the scope of this study, which identified the same qualities in non-standardised appraisals (Rathnakara & Arachige, 2020; Gammanpila & Kodisinghe, 2021). Concurrently, Armstrong (2018) and CIPD (2025) have highlighted that gaps in linking performance reviews with training and ineffective communication act as barriers to engagement and productivity. Thematic insights thus corroborate the existing literature while extending it further by showing how Lean principles of VSM can help address the identified problems through process visibility, standardisation, and continuous improvement.

Analysis and Discussion

Examining the existing employee performance management process

The current EPM of the selected apparel company really relies on the process of annual performance appraisals done by an immediate supervisor; thus, there is very little monitoring of mid-year performance. This is captured in HR policy manuals as part of understood operations at the lower level, but inconsistency was witnessed across departments.

Strengths also encompass the fact that there is a formal appraisal system in place, that appraisal periods correspond with the production calendar, and that there is some connection between performance results and incentive payments. These features show partial alignment with best-practice EPM principles enunciated by Armstrong (2025) and the ILO (2018), which emphasise structured planning, feedback, and development cycles.

Several weaknesses, however, emerged through the interview and document analysis:

- a. Absence of standardisation: Different supervisors had distinct criteria for rating their employees, leading employees to feel biased and inconsistent regarding evaluation.
- b. Narrow feedback channels: Basically, there is feedback only during annual appraisals, which leaves employees hanging for the rest of the year as to whether they are on the right track. This is against the continuous feedback model argued within global best practices (CIPD, 2025).
- c. Training and development gaps: Performance reviews seldom ended with prescribed training plans, thus severing the relationship between appraisal outcomes and skills development.
- d. Process inefficiencies: Due to documentation delays, most of the time, results are finalised after weeks of review, rendering the findings less relevant to an immediate performance improvement.
- e. Communication barriers: As most interviews indicated poor communication between employees and supervisors when it comes to goal clarity and expectations, this finding is also in line with the same results of other studies done in Sri Lanka concerning apparel EPM studies (Gammanpila & Kodisinghe, 2021).

Applicability of lean process improvement methods, particularly VSM, to EPM systems

The evidence from the thematic analysis pointed out that Lean process improvement principles, particularly VSM, as mentioned above, would be very much appropriate for addressing the identified weaknesses. The first aspect of lack of standardisation has to do with Lean's interest in the consistency of processes. The VSM of appraisal processes should uncover inconsistencies in terms of rating criteria and documentation flows. This, in turn, may provide a common evaluation framework across departments. In other words, the Process Inefficiencies theme goes along with Lean's elimination of waste. The appraisal documentation presently passes through all the human handovers that eat time and also pose the risk of data loss. VSM-based redesign would be a streamlined framework of these flows with reduced cycle time and real-time recording of appraisal results-highlighting similar HR efficiencies documented in non-manufacturing contexts with Lean application (Vorecol HRMS, 2024; Lopez, 2025). Another two flow and pull principles of Lean could be set in attitude for improving feedback mechanisms. At present, the feedback is "pushed" toward employees once a year; whereas suggested Lean-informed, process-enabled feedback would allow for more frequent, "pulled" feedback as a function of employee or supervisor request, thus enhancing responsiveness and engagement (SHRM, 2024). Lean's intent to serve continuous improvement really gets taken up a notch when we think of Training and Development Gaps. Current-state performance-to-training pathways mapped through VSM will expose where feedback does not convert into competence, thereby creating closed-loop systems wherein performance gaps trigger automatic targeted training interventions.

This definitely proves that VSM is well-suited for addressing procedural inefficiencies and under-engagement by the EPM system of the firm.

Practical recommendations for apparel firms on lean-based EPM implementation

Now, after analysing the existing PE process and assessing the applicability of implementing VSM, the study gives these actionable recommendations to apparel firms for embedding Lean into EPM:

Conduct Baseline VSM of Current EPM Processes:

By involving cross-functional teams including HR, production supervisors, and line employees to capture the whole process landscape, while using the mapping exercise for waste identification-categorized such, unnecessary approvals, duplication of record keeping, and delayed feedback.

Adopt a Phased Implementation Approach:

Standardisation of evaluation criteria, moving on to digitisation and real-time feedback tools and also leveraging to pilot Lean EPM in one department before broadening its scale.

Linking EPM to Training and Development Plans:

Every performance gap to have a direct training intervention, and there should be monitoring mechanisms to post-training performance improvements for validating the training effectiveness.

Develop a Feedback Culture:

Teaching supervisors how to give timely and constructive feedback. Encourage upward feedback from subordinates about managerial performance.

Development of Continuous Improvement Mindset:

Incorporate regular review meetings to evaluate EPM process efficiency and adapt based on employee and manager feedback. Recognise and reward teams or individuals contributing to process improvement initiatives.

These recommendations not only address the inefficiencies and gaps present in the case study but also have the potential to be replicated for other apparel firms facing similar challenges.

Implications of the study

The research has several important implications for managerial, practical and policy implications. First, managerially, it offers important insights for clothing firms into how they can create or refine their employee performance management systems around and using Lean tools, which promotes an efficient, feedback and engagement approach to performance management. Second, practically, this study illustrates how a series of process improvements can help to bridge HR functions and organisational production goals and performance. Finally, considering the important policy implications, it shows how frameworks for continuous improvement and externally standardised performance systems can support labour welfare, maintain organisational competitiveness and promote standards for the Sri Lankan apparel sector as a whole, contributing to the construction of a regulatory framework that can enhance practices across the industry.

Conclusion

In this study, the researchers have examined how process improvement principles that lean contextualise, particularly in the area of VSM, could enhance employee performance management systems in Sri Lanka's apparel industry. As per the findings, this study has exposed significant weaknesses in the current practices towards EPM, ranging from the absence of standardisation to infrequent feedback and poor alignment between training and performance evaluation. Lean could address the inefficiencies from its own precepts, which streamline workflows, clarify performance expectations, and maintain continuous feedback and learning. The integration of VSM creates a clearly structured framework for non-value-adding activity identification and enhances communication and transparency in HR processes, resulting in improved employee engagement and productivity.

However, this study has a few weaknesses as well. The use of the single-case design of the study restricts its applicability to other areas of the broad apparel sector. Data were only collected from managerial and supervisory areas, and hence, they may not cover the 360-degree perspectives of the HR processes. Further, future researchers could use a multi-firm or longitudinal approach and include qualitative and quantitative sources of information to validate the effects of Lean-based EPM interventions. A broader inquiry across diverse manufacturing contexts will offer deeper insight into how lean principles could systematically transform HR processes in developing economies.

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