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Assessment of the training of mid-level managers at a privately held limited liability business based in Colombo, Sri Lanka to enhance the efficiency

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Abstract

This study focused on improving the training of assistant managers and senior executives at a privately held limited liability business in Colombo, Sri Lanka. It is a leading software company listed on the London Stock Exchange Group. Despite its reputation, the company's human resources department has received negative feedback on the job productivity of its mid-level managers. To enhance their productivity, the company must provide adequate training and development opportunities for them. However, currently there is hardly any mechanism to identify how to improve the training for the mid-level managers and to analyze the needs of training (training needs analysis). The absence of such a mechanism has led to inefficiencies that hindered the achievement of organizational goals. The main research question was: "How the training need analysis of assistant managers and senior executives in this business can be improved to increase employee productivity?" Additionally, the study explored the impact of ineffective training needs analysis on management job effectiveness and organizational sustainability. Furthermore, the perception of senior executives and assistant managers regarding current training and development programs was examined. The research objectives were to assess the current efficiency of the 'training need analysis' for assistant managers and senior executives at the company and to identify the limitations of the current training process in the organization. Based on the results, this study proposed ways to improve the effectiveness of training and development programs and establish a sound mechanism for 'training needs analysis'.

Keywords: Training needs analysis, Employee productivity, Training and development programs, Organizational sustainability, Management effectiveness

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Introduction

The privately held limited liability business under investigation is based in Colombo, Sri Lanka. It is a subsidiary of the London Stock Exchange Group. Founded in 2016, the company operates as both a shared services and information technology infrastructure hub, supporting the London Stock Exchange Group. Despite its recent entry into the Sri Lankan IT industry, the company has established itself as a reputable organization with over 700 employees across two main pillars: shared services and IT infrastructure. The company's workforce is composed of senior managers, managers, assistant managers, and executives, with assistant managers and senior executives forming the middle management. Although many employees possess high levels of technical expertise, the human resources department has received repeated negative feedback about the job productivity of assistant managers and senior executives. As these roles are critical to organizational success, it is essential for those employees to have sufficient skills, knowledge, and attitudes. Thus, the company must ensure that training needs are systematically identified and addressed to improve productivity. Currently, the company lacks a structured process for identifying the training needs of assistant managers and senior executives, despite an annual performance appraisal system. This study seeks to establish a robust mechanism for training needs analysis, with a focus on improving the productivity of these mid-level managers. A clear and effective training process is vital, especially in a rapidly changing technological environment, and aligns with the company's investment in training and development programs.

Training and development programs are crucial for enhancing employee competencies, particularly of middle-level management, as their decisions significantly impact organizational performance. Though the company allocates substantial resources to training including overseas programs, the lack of a structured training needs analysis has hindered the effectiveness of these initiatives. Armstrong (2006) and Dessler (2006) emphasized the importance of a systematic approach to training, including need analysis, instructional design, validation, implementation, and evaluation. Accordingly, this study aimed to introduce a systematic mechanism for identifying and addressing training needs by assessing the current training programmed of the company.

Training, as defined by Goldstein and Ford (2002), is the systematic acquisition of skills, knowledge, and attitudes leading to improved performance. Armstrong (2006) distinguished between training, which focuses on short-term development, and development, which is geared towards long-term improvement. Both are necessary for employee growth and organizational success. This study further explored how an improved training needs analysis can enhance job productivity and align with a company's broader objectives.

Training and development programs both aim to enhance employee competencies, but there are key differences between the two. Training focuses on short-term skill acquisition, helping employees improve their immediate job performance, while development is a long-term process designed to prepare employees for future roles. Goldstein and Ford (2002) described training as the systematic acquisition of skills, rules, concepts, or attitudes that result in improved performance. Armstrong (2006) similarly viewed training as a planned and systematic process aimed at promoting learning. These programs are essential for both new and existing employees,

providing them with the necessary skills to perform their jobs effectively. Development, on the other hand, is a more gradual process that enables individuals to progress from their current level of competence to higher levels of skills and knowledge. A well-structured training process, aligned with organizational goals, is essential. Dessler (2006) outlined five steps in the training process, namely need analysis, instructional design, validation, implementation, and evaluation. Armstrong (2006) supported a systematic approach for training identifying four key stages, namely identifying training needs, determining appropriate training, delivering the training with experienced trainers, and evaluating its effectiveness. As each step in the process of training is interconnected, any issues in one stage can negatively impact the overall process. The human resources department of an organization plays a critical role in ensuring that the training process is effectively managed. The first step in the training process is identifying and analyzing training needs. Rae (1997) emphasized the importance of specifying the training and development requirements of both individuals and the organization. Dessler (2006) highlighted that the approach to training needs analysis depends on whether the trainees are new or current employees. For new employees, needs can be identified through job descriptions, while for current employees, analysis of performance is critical. Training needs may arise from deficiencies in current performance or due to changes in the organization, such as technological advancements. Boydell and Leary (1996) pointed to two key types of information for identifying training needs, namely, information about current performance and about future changes. Those needs can be categorized into three levels: organizational, functional, and individual. It is important to assess needs at all those levels to design training programs.

Once training needs have been identified, the next step is designing the training program. Hackett (1997) suggested that competencies should be arranged in a logical sequence with clear learning objectives established to avoid misunderstandings. The financial and other resources required for the program must be determined, and the most suitable training methods should be selected. Effective monitoring and evaluation mechanisms must also be put in place to ensure the program's success. Various methods can be used for training employees, including on-the-job training, external courses, workshops, and computer-based learning. Lynton and Pareek (1990) recommended comparing the suitability of training methods with the objectives of training, the learning process, and available resources for training. Perera (2006) added that factors such as the trainees' educational level, cultural background, and time constraints should also be considered when selecting training methods. Depending on the objectives of the training, both on-the-job and off-the-job training methods may be employed. After designing the training program, it is crucial to focus on implementation. Anderson (2000) outlined two steps in this phase: making practical administrative arrangements and executing the training program. This includes communicating program details to employees, setting dates, preparing trainers, and arranging necessary equipment. During the execution of training, trainers play a key role in engaging participants and ensuring that the learning objectives are clear. Following the completion of the program, organizations must evaluate the training process to assess its effectiveness. Hamblin (1974), as cited by Armstrong (2006), defined evaluation as gathering feedback on the effects of training. Evaluation serves three main purposes. It provides feedback to trainers, ensures the training aligns with organizational goals, and identifies issues that may have affected the outcomes. Dessler (2006) categorized training outcomes into four areas: reaction, learning, behavior, and results. Those outcomes measure participants' feedback, skill acquisition, changes in behavior, and the final impact of training on organizational performance.

The independent variable of this research was the inappropriate 'training needs analysis' (X) of the current programs, while the dependent variable was the effectiveness of the current training and development process, which impacts the job productivity of middle-level management (Y). The study hypothesized that the relationship between those variables was $Y = F(X)$, meaning the effectiveness of training and development (Y) was a function of the quality of training needs analysis (X).

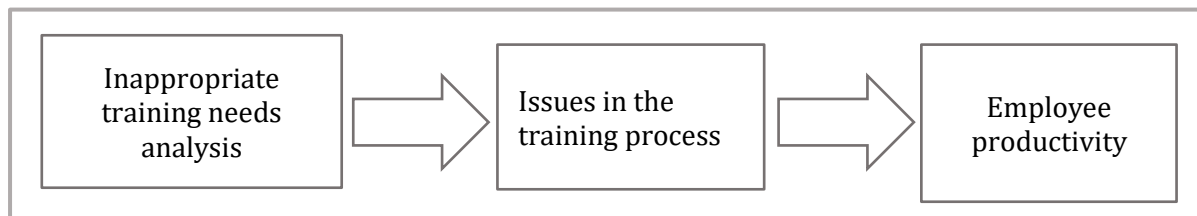


Figure 1. Conceptual Framework

The author has established a systematic mechanism for identifying training needs and improving training programs. Using a positivist philosophy and a combination of qualitative and quantitative research methods, the study tested three hypotheses:

- H1:** Problems in the current performance appraisal system positively relate to inappropriate training needs analysis.
- H2:** Inappropriate training needs analysis negatively impacts the training process, leading to inefficiencies.
- H3:** Issues in the training process led to reduced job productivity and effectiveness among senior executives and assistant managers.

Methodology

The research used a deductive approach drawing on multiple strategies, including action research. By analyzing both qualitative and quantitative data, the study was intended to provide insights on how to improve the effectiveness of the training and development programs, ultimately enhancing the job productivity of middle-level management of a privately held limited liability business in Colombo, Sri Lanka.

The study population consisted of 300 employees from the senior executive and assistant manager levels at the company distributed across three departments: Human Resources (60 employees), Finance (110 employees), and Capital Markets / IT Infrastructure (130 employees). Using a stratified random sampling method, the research selected a sample of 100 employees proportionally representing each department: 31 employees from Human Resources, 32 employees from Finance, and 37 employees from Capital Markets. The sample size was calculated using Saunders et al. (2007) formula, considering an expected response rate of 95% and an 8% margin of error. A minimum sample size of 75 was chosen resulting in an actual sample size of 100 employees. Moreover, this study gathered both primary and secondary data. Primary data was collected through semi-structured interviews using a questionnaire held with a sample of

100 employees. Secondary data sources included research papers, journals, books, and company reports. The main aim of the research was to assess the effectiveness of current training and development programs in improving job productivity and to establish a sound mechanism for training needs analysis for senior executives and assistant managers. The research was structured to validate three hypotheses related to training needs analysis, performance appraisal, and its impact on job productivity.

The questionnaire data were measured using Likert scales and covered several indicators including inappropriate performance appraisals, issues encountered in training processes, effects on organizational image, and job productivity. Each question was designed to capture relevant data for the hypotheses testing, with questions targeting employee perspectives on training effectiveness, limitations of training, and the impact of training on job performance. For example, questions 15, 19, and 23 measured the impact of performance appraisals on training needs analysis, while questions 8, 9, and 16 focused on job productivity. This study faced several limitations, including restricted access to company data and the COVID-19 pandemic, which required employees to work from home. Consequently, interviews had to be conducted online via Google Forms. Despite these challenges, this study was able to provide recommendations for improving training and development programs at the company, particularly through a more structured training needs analysis.

Results

SPSS software was used to test the reliability of the data and the three hypotheses outlined in the methodology chapter. Most respondents (51.2%) fell into the 33-40 years of age category, followed by 39.5% in the 26-32 years of age group, and 9.3% in the 18-25 years of age group. This demographic composition was relevant for understanding the perspectives provided in the study, as it informed the analysis of training needs and job productivity among senior staff members. Moreover, the analysis of the working experience distribution, as depicted in Table 1 reveals that a significant proportion of the sample (62.8%) had more than five years of experience. Specifically, 41.9% of employees had 5-10 years of experience, and 20.9% had more than 10 years of experience. In contrast, only a small fraction (1.2%) had less than one year of experience. This distribution indicated that most respondents possessed substantial industrial experience, which may have influenced directly their perspectives on training needs, job productivity, and organizational processes. Given their extended tenure within the company and accumulated expertise in their respective fields, their insights were valuable in this regard.

Table 1: Work Experience

Working Experience		
	Frequency	Percentage
Less Than 1 Year	1	1.2
1 - 3 Years	13	15.1
3 - 5 Years	18	20.9
5 - 10 Years	36	41.9
More than 10 Years	18	20.9
Total	86	100.0

When the characteristics of the sample were observed closely, it showed a slight majority of males with 51.2% of the respondents being male and 48.8% female. This balanced gender representation suggested diverse perspectives within the company. Additionally, 57% of the employees in the sample were married, indicating a more socially established workforce, while 43% were unmarried. In terms of educational qualifications, the majority (57%) of employees were found to be graduates, reflecting the presence of an educated workforce. 23.3% were Diploma holders while 18.6% had postgraduate qualifications. This distribution suggested that most employees had a high level of formal education, which may have positively influenced their views on professional development and training effectiveness within the organization. The high percentage of graduates and postgraduate degree holders implied a workforce that values continuous learning, and they were likely to benefit from well-structured training programs. However, the analysis of the sample response rates revealed that the response rates were below the expectations of the researcher. It was expected to receive at least 50 samples from the Finance department and 25 each from Human Resources and Capital Markets, but the actual response rates varied. The Finance department accounted for 46.5% of the total responses, indicating considerable participation. The Capital Markets department too showed a higher level of participation with 30 employees responding. However, the Human Resources department had a lower-than-expected response rate, with only 16 employees responding.

These discrepancies between the planned and actual response rates highlighted varying engagement levels across departments. The lower response from Human Resources indicated the possible presence of some barriers to participation, while the higher response from Capital Markets reflected greater interest or availability. Those response patterns could have influenced the overall research findings, as certain departments may be over- or underrepresented in the analysis, potentially affecting the generalizability of the results across the organization.

The analysis of the descriptive statistics (Table 2) revealed distinct patterns across the independent variables. The mean value for the current performance appraisal system was 3.77, indicating a generally positive evaluation on a Likert scale of 1 to 5. With a standard deviation of 0.48, responses were relatively consistent. The training needs analysis variable held the highest mean value at 3.83, suggesting it was perceived as the most positively regarded among the variables. However, it also showed a moderate variability with a standard deviation of 0.50. The training process variable had the lowest mean value at 3.07, indicating that respondents may have perceived some shortcomings in the current training processes. Additionally, it had the highest standard deviation (0.72), signaling more variation in responses, which could indicate differing experiences or perceptions about the process.

Finally, job productivity and effectiveness showed a mean value of 3.60 and a standard deviation of 0.61, suggesting a generally positive assessment, albeit some variability. The higher standard deviation in training processes suggested greater disparities in opinion, which could reflect varying implementation or effectiveness across different departments. The lower deviation in the performance appraisal system suggested more uniformity in how this system was experienced across the organization. These findings pointed to areas where more attention may be needed, particularly in refining the training processes to meet broader employee expectations.

Table 2: Descriptive Statistics

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Standard. Deviation
Current Performance Appraisal System	86	2.67	5.00	3.77	0.48
Training needs analysis	86	2.25	5.00	3.83	0.50
Training process	86	1.83	4.50	3.07	0.72
Job Productivity/Effectiveness	86	2.18	5.00	3.61	0.61

This analysis confirmed that there was a significant relationship between these variables, as indicated by a p-value less than 0.05 based on ANOVA (Table 3). Thus, the alternative hypothesis was accepted, and the null hypothesis was rejected, confirming a relationship between the training process and job productivity.

Table 3: Anova Table

	ANOVA				
	Sum of Squares	df	Mean Square	F	Sig.
Regression	21.22	1	21.22	174.83	.00 _b
Residual	10.20	84	0.121		
Total	31.42	85			

Under the Model Summary (Table 4), it showed an adjusted R² value of 0.67, meaning that approximately 67.5% of the variation in job productivity could be explained by the issues in the training process. This indicates a substantial impact of the effectiveness of training on job productivity for senior executives and assistant managers at the company.

Table 4: Model Summary Table

Model Summary			
R	R Square	Adjusted R Square	Std. Error of the Estimate
.82 _a	0.67	0.67	0.35

According to the coefficients table (Table 5), the regression formula could be expressed as: Y (Job Productivity) = 1.473 + 0.695 (Training Process Effectiveness)

Table 5: Model Summary Table

	Coefficients				
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.47	.17		8.88	.00
Current Training process	.69	.05	.82	13.22	.00

This formula demonstrated that a one-unit improvement in the effectiveness of the training process increases job productivity by 0.69 units. The coefficient of 0.69, along with the high significance value (0.00), suggested that the effectiveness of the training and development process plays a critical role in enhancing the job productivity of senior executives and assistant managers at the company. This analysis underscored the importance of addressing and refining the current training process to achieve better performance outcomes.

Discussion

The correlation analysis used in this study measured the strength and direction of the linear relationship between variables, ranging from -1 to +1. Positive correlations denoted positive associations, while negative values indicated inverse relationships. The interpretation of correlation strength was categorized into various ranges, as outlined by Rumsey (2020).

Hypothesis 1 (H1) tested whether problems in the performance appraisal system positively correlated with inappropriate training needs analysis. The analysis yielded a Pearson correlation of 0.41 and a significance value of 0.00. Given the statistical significance, the alternative hypothesis (H1) was accepted, meaning there was a moderate positive correlation between the performance appraisal system and inappropriate training needs analysis at the company. Thus, issues in the appraisal system were moderately linked to deficiencies in training needs identification. Hypothesis 2 (H2) examined whether inappropriate training needs analysis negatively impacted the training process. The findings from Hypothesis 1 revealed a moderate positive correlation between deficiencies in the performance appraisal system and issues in identifying training needs. This relationship suggested that the current appraisal practices may not be effectively pinpointing areas for employee development, thereby limiting the potential impact of training initiatives. Theoretically, these results supported the idea that robust performance appraisal systems are essential for accurately assessing training needs. Practically, this indicated that the company could enhance its training effectiveness by refining its appraisal methods to better capture specific developmental requirements. Improving these systems could lead to a more focused and productive training approach, ultimately enhancing job performance among middle level managers. Hypothesis 2 further highlighted the negative impact of inadequate training needs analysis on the overall training process. In the context of the company, this finding underscored the importance of establishing a systematic and accurate approach to training needs identification. From a practical perspective, addressing inadequacies could significantly improve the training process, leading to better-equipped managers and increased the organizational productivity. This not only reinforced the value of targeted training interventions but also emphasized the need for a strategic alignment between employee development and the company's long-term goals.

The Pearson correlation for this relationship was -0.29 with a significance value of 0.01. The result showed a negative relationship between inappropriate training needs analysis and the training process. This indicated that the poor identification of training needs leads to problems in the overall training process at ABC Business Services, as reflected by the inverse association. Hypothesis 3 (H3) investigated the relationship between issues in the training process and job productivity, which impacts job effectiveness. The Pearson correlation was 0.82 with a significance value of 0.00, demonstrating a very strong positive relationship. This result indicated

that problems in the training process significantly affect job productivity and effectiveness, emphasizing the critical role of an effective training process in driving performance outcomes at the company. Therefore, those findings provided valuable insights into how performance appraisal systems, training needs analysis, and training processes interact to influence overall job productivity and effectiveness. The moderate and strong correlations identified suggested areas where improvements in appraisal and training systems could lead to better organizational performance. Moreover, the regression analysis was applied to assess the relationship between the training process and job productivity, using the training process as the independent variable and job productivity as the dependent variable.

Conclusions

This study set out to accomplish four key objectives focused on improving the training needs analysis and training effectiveness for assistant managers and senior executives at a privately held limited liability company in Colombo, Sri Lanka. The results from interviews and surveys revealed that many employees perceived the current training and development programs as ineffective due to lack of training facilities, insufficient experienced trainers, and inadequate training hours, coupled with unclear training goals. These issues highlighted the need for a more structured and focused approach to training needs. According to the employees, the key limitations were insufficient facilities, a lack of experienced trainers, and limited training hours. The absence of a clear framework for identifying and addressing training needs also posed a significant challenge, leading to inefficient use of the available resources. Those limitations underscored the critical need for improvement in training infrastructure and methodology. The results, based on online questionnaires, indicated that training needs analysis plays a substantial role in determining job effectiveness. Employees agreed that proper training aligned with their roles and responsibilities would significantly improve their job performance. This finding suggested that a focused training needs analysis could bridge the gap between the skills employees possess and the skills required to meet organizational goals. The study revealed several ways to enhance the efficiency and the quality of current programs. Key recommendations included introducing a "Have Your Say" online survey alongside the existing performance appraisal process. This survey would give employees a platform to express their specific training needs and align their development with organizational goals. Additionally, post-training evaluations and feedback mechanisms were suggested to gauge the effectiveness of training. These processes would provide tangible data on how the training process impacts employee performance and ensure that the training programs are continuously refined.

This study made several important contributions to the field of human resource development and organizational training. One of its main contributions was the proposal for improving the training needs analysis' mechanism by integrating it with performance appraisals. The study demonstrated a significant correlation between ineffective training needs analysis and lower job productivity, thereby highlighting the importance of addressing gaps in the appraisal system to improve training outcomes. Moreover, the research introduced actionable insights, such as using digital tools like the "Have Your Say" survey and emphasized the value of involving employees in the design and evaluation of training programs. By recommending in-house training programs and peer-learning strategies, the study contributed to the literature on employee-driven training processes and organizational learning. Those findings will have practical implications not only

for this company but also for the other organizations seeking to improve their employee development strategies. Similarly, this study offered a pathway for enhancing the current training and development processes at the company under investigation, with broader implications for future research. Implementing the "Have Your Say" online survey would enable the organization to better align its training programs with the specific needs of employees, fostering greater engagement and accountability. Moreover, involving senior executives and assistant managers in the design of training programs would boost their motivation and ensure that the training is relevant to their roles, further improving job productivity and organizational performance. Post-training evaluations, such as performance tests and surveys using platforms like SurveyMonkey or Google Forms, would be crucial for tracking the effectiveness of training programs over time. Those evaluations would help organizations to gather data to determine how training impacts performance and to identify areas for improvement. Increasing the financial allocation for training, coupled with the establishment of in-house training facilities, would ensure that the employees have adequate access to training resources and opportunities for skill enhancement. Peer-learning programs, where employees train one another, could further strengthen the learning culture within the organization, offering a cost-effective solution for continuous professional development. While this study successfully addressed the training needs and development gaps at a single company, several areas for future research remained. One notable gap was the need for long-term studies to track the effectiveness of the proposed training initiatives over extended periods. Future studies could assess how the implementation of tools like the "Have Your Say" survey and post-training evaluations impact not just job productivity but also employee retention and satisfaction. The study focused mainly on senior executives and assistant managers, leaving out lower-tier employees. Future research could explore how similar training needs analysis mechanisms could be applied across all levels of an organization, ensuring a more holistic approach to employee development. Additionally, the effectiveness of peer-learning programs, particularly in the context of specific industries like technology or finance, could be further investigated to understand their long-term impact on organizational learning and innovation. Lastly, this study, beyond the use of surveys, did not delve deeply into the role of digital technologies in training. Future research could examine the integration of advanced digital learning platforms, such as AI-driven personalized training programs or virtual reality (VR) training modules, which could offer innovative solutions for employee development in an increasingly digital workplace.

In conclusion, it could be ascertained that this study successfully accomplished its objectives by identifying key gaps in the current training process at the company investigated and proposing practical solutions to enhance training effectiveness. The recommendations, including the "Have Your Say" survey, post-training evaluations, and peer-learning programs, were aimed at aligning training programs with employee needs and improving job productivity. Future research would rely upon on those findings to explore the long-term impact of those interventions and to address the gaps related to digital learning tools and lower-level employee development. By doing so, privately held limited liability organizations would create a more agile and responsive workforce, better equipped to meet the evolving demands of the modern workplace.

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