Enhanced Productivity Through Lead Time Reduction of On-The-Job Training By L2 Level Training In Skill Development Centre

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Abstract- This initiative focuses on augmenting productivity by minimizing lead time in on-the-job training (OJT) through the implementation of L2 level training within a dedicated Skill Development Centre. The abstract encapsulates a comprehensive strategy involving the assessment of current training processes, the establishment of a specialized training facility, and the development of an advanced curriculum aligned with organizational goals. Leveraging technology(Strohmeier, 2020), upskilling trainers, and fostering collaboration with industry experts contribute to the program's success(Matope et al., 2022). Continuous monitoring, flexible learning paths, and a focus on employee recognition ensure adaptability and motivation. Also, it involves in the digitalizing the evaluation methodology. This will save an amount of papers in monthly basis that will save an amount of spending in the paper purchasing cost and also it will save the environment. The strategy is underpinned by a commitment to continuous improvement, measurement of key performance indicators, and effective communication and change management strategies. This abstract outlines a holistic approach to enhance workforce skills and efficiency, positioning organizations to thrive in a dynamic and competitive environment.

Keywords- Enhancing Skills of automotive industry employees, Paper saving in HR, HR Digitalization, Evaluation Digitalization, Skill Development, App development.

I. INTRODUCTION

In the contemporary landscape of rapid technological advancements and evolving skill requirements, organizations are confronted with the imperative to enhance workforce productivity swiftly and effectively. A critical component of achieving this goal lies in optimizing the lead time associated with on-the-job training (OJT). This paper delves into a strategic approach aimed at achieving accelerated skill development through the incorporation of L2 level training within a specialized Skill Development Centre.

The traditional paradigm of on-the-job training often encounters challenges such as prolonged learning curves and potential gaps in skill acquisition. The integration of L2 level training(Lekurwale& Raut, n.d.), representing an advanced stage in skill development, presents an opportunity to not only expedite the learning process but also to elevate the proficiency and versatility of the workforce.

This initiative is multifaceted, encompassing a meticulous assessment of existing training methodologies, the establishment of a dedicated Skill Development Centre,(Atigre et al., n.d.) and the formulation of a dynamic curriculum aligned with organizational objectives. The introduction of technology-driven training tools, coupled with the continuous refinement of training protocols, positions this strategy at the forefront of innovative workforce development.

As organizations embark on this transformation journey, emphasis is placed on a feedback-driven model, allowing for iterative improvements and the alignment of training methodologies with the ever-changing demands of the industry. Moving towards digital Industry(Jayabalan et al., 2021) accompany is focusing on digital way of training and assessments. In the next section we are going to see about the various review done based on this project scope.

II. LITERATURE SURVEY

1. The Impact of On-boarding on Employee Performance and Retention (2011, Bauer,T. N., & Erdogan, B.):

This study explores the connection between effective onboarding processes and employee performance and

retention. It emphasizes the importance of structured on-boarding in reducing the time it takes for new employees to become productive and how this contributes to their retention within an organization.

2. **Learning Management Systems (LMS) and Their Impact on Training Efficiency (2015, Brust, H., & Fong, C. L.):**

This research assesses the role of Learning Management Systems in enhancing the efficiency of training processes. It examines how LMS technology can streamline training, track progress, and reduce lead time in employee skill development.

3. **The Role of Technology in On-boarding: A Review of the Literature (2016, Dealy,C., & Fitzsimmons, M.):**

This literature review focuses on the use of technology, including Learning Management Systems, in the on-boarding process. It discusses how technology-driven on-boarding can accelerate training and make record management more efficient.

4. **Digital Learning Environments and Their Impact on Sustainability (2020, Johnson, M., & Smith, L.)**

While not specific to on-boarding, this study delves into the broader impact of digital learning environments, including Learning Management Systems, on sustainability. It examines how digitization can reduce the environmental impact of training and record-keeping processes

5. **The Use of Learning Management Systems in Compliance Training (2017, Hayes, J., & Moore, R.):**

This study explores the role of Learning Management Systems in managing compliance training, emphasizing the importance of an efficient and well-documented system for ensuring regulatory compliance. It highlights the potential for LMS to address compliance-related challenges.

6. **HR Digitalization - According to Stefan Hauptmann and Thomas Steger, (2012):**

"We have demonstrated how organizational and individual activities may alter when taking place in virtual environments. First, the design, i.e., the technical configuration of social media, restricts but also enables certain activities. It sets the organizational structures that determine how everyday activities are coordinated.

In the next section it is explained that how this project is taking forward towards implementation methods and also the various steps of implementation are clearly explained.

III. METHODOLOGY

The total training days for a single candidate is 6 days of L1 Training where the particular candidate will be given training on theory concept in the 1st day and basic cognitive and dexterity exercise in the next 2 days and shop specific training in the next 3 days. Reducing the lead time of On-the-Job Training in shop floor will need various methodologies(Bodh et al., n.d.) to driven and also the whole HR department to work together to achieve. Likewise, the recruitment team, training and development department and also the production team to work together in this lead time reduction of training by doing this we can save 2 days of lead time(Jogarao & Naidu, 2023). Also, the training methodology to be change to parallelly driving towards the digitalization path. Implementing this for all the production shop will acquire a huge change so we are focusing on Axle production shop as trail one.

Levels of training:

L1 – Can work under guidance
L2 – Can work independently
L3 – Can troubleshoot
L4 – Can teach
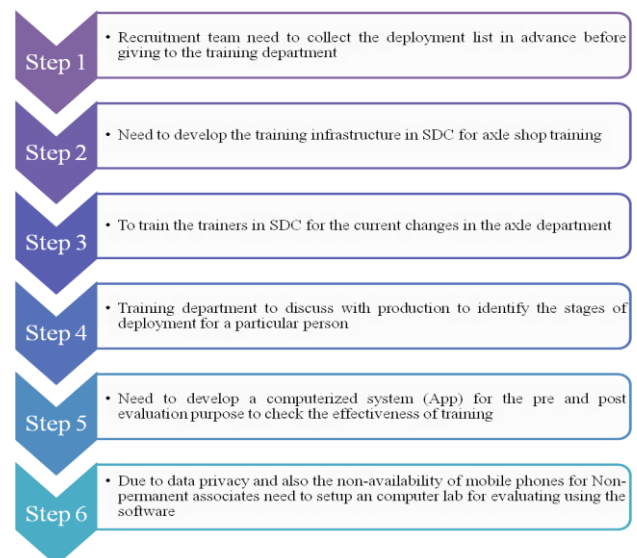
3.1 Recruitment team need to collect the deployment list in advance before giving to the training department:

In this step, there are different team for both the recruitment and also for training it is different department

where the recruitment department knows the deployment status, they need to provide it to the training team that how many candidates are going to deployed in the axle shop. Then the particular candidates will be trained in the respective department.

For example:

Sl. No	Month	Total candidates recruited	No. of candidates given to axle shop
1	January	289	12

The above example will clearly explain that the 12 candidates are going to be deployed in the axle shop out of 289 candidates this will be provide clear count to train the candidates in the axle area by the training team.

3.2 Need to develop the training infrastructure:

The next step is to develop the training infrastructure to accommodate the axle training in skill development centre where the people are able to train in the various stages. The materials are required for ex: Front axle, Rear axle, Brake drum, Greece bearings, Hammers Sockets, Guns, Torque wrenches etc. by having these things the candidates can be easily trained.

3.3 To train the trainers in SDC for the current changes in the axle department:

After the infrastructure has been developed the trainers need to be trained in all the activities where they are competent to train the newly joined trainees. By undergoing various test, the trainers can be able to act like an axle shop supervisor to train the candidates. Also, they should be certified by the shop supervisors.

3.4 Training department to discuss with production to identify the stages of deployment for a particular person:

After the persons were given for the training the training instructor to speak with the axle shop supervisors to identify the stages where the persons are going to be replaced. For the particular stage the candidates were trained and assessed in various criteria and then they give for the deployment. After training the batch of 12 members were returned to the recruitment team where they allocate the particular batch to the axle shop based on the training given, they further deployed to the respective stages by the line executives

For example:

Sl. No	Stages	Total candidates trained
1	Stage 1	2
2	Stage 3	2
3	Stage 6	2
4	Stage 9	2
5	Stage 13	2
6	Stage 26	2

The above example will clearly explain that the 12 candidates are going to be deployed in the axle shop in various stages which is trained by the training team and they will be directly start their work without any delay this will reduce the 3 days of On-the-Job training time.

3.5 Need to develop a computerized system (App) for the pre and post evaluation purpose to check the effectiveness of training:

This step is the most important that to develop an application to conduct the pre and post-test for the candidate where they need to write the pre-test on the 1st day and the post test on the 6th day. Where the huge amount of paper will be used and also the correction of paper will be done by manually. For this the best method of creating an app can be reduce the time and save the paper a lot. So, the most preferred Microsoft PowerApps to be used to develop the app based on the company policy which is really an user friendly to create an application.

3.6 Need to setup a computer lab for evaluating using the software:

Due to data privacy and also the non-availability of mobile phones for non-permanent associates needs to setup a computer lab for evaluating using the software. And also, the candidates don't have the company mail id requires a computer lab to do the evaluation.

Findings:

Before:

SDC Training	OJT Training	Total
48 Hours	24 Hours	72 Hours

After:

SDC Training	OJT Training	Total
48 Hours	8 Hours	56 Hours

Which will reduce 2 days of lead time. Per day cost of Training on an **Average/Person = 1000 Rs (Trainee +Trainer).**Hence, monthly an average of 300 Candidates undergo training. Estimated training cost works out to **(300*1000 = Rs.3,00,000).**

In the next section we are going to see the result for the above methodology and the findings.

IV. RESULTS & DISCUSSIONS

By doing this project we can be able to save the training time and also, we can be easily provide the replacement manpower within the time and also there is an saving of training cost and also by doing this digitalization we can be easily save the time of evaluating the answer sheets and also there will be an human errors in the counting also will be eliminated and also it will saves the cost of paper in a huge way which will also save the environment.

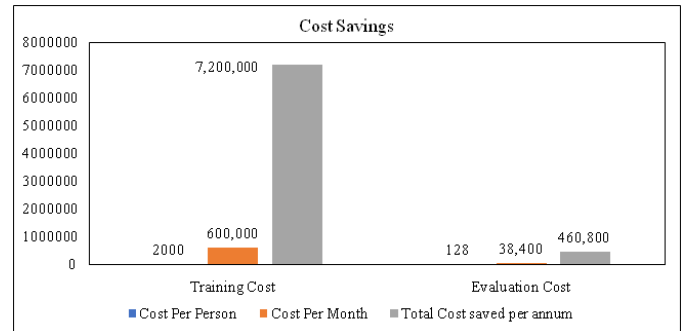**Before implementing the project:**

Paper	Cost	Total	Per Month
8	24	Rs. 128	Rs. 38,400

After implementing the project:

Paper	Cost	Total	Per Month
0	0	0	0

Total Cost Saved after implementing the project:

	Cost Per Person (Rs)	Cost Per Month (Rs)	Total Cost saved per annum (Rs)
Training Cost	2000	6,00,000	72,00,000
Evaluation Cost	128	38,400	4,60,800

Graph:

In the next section we are going to see the conclusion of this paper where we can see the most benefit obtained by the organization.

V. CONCLUSION

In conclusion, the outlined initiative presents a holistic approach to revolutionize on-the-job training (OJT) by minimizing lead time and maximizing productivity. Through meticulous assessment, establishment of a dedicated Skill Development Centre, and crafting an advanced curriculum aligned with organizational objectives, this strategy promises to elevate workforce skills and efficiency. Leveraging technology, upskilling trainers, and collaborating with industry experts are pivotal in achieving success. Embracing continuous monitoring, flexible learning paths, and employee recognition ensures adaptability and motivation. Additionally, the transition to digital evaluation methods not only saves costs but also contributes to environmental sustainability. With a commitment to continuous improvement, measurement of key performance indicators, and effective communication, this initiative is poised to empower organizations to thrive in today's dynamic and competitive landscape.

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