

# Leveraging Online Learning for Jumping on the Bandwagon: Qualitative Study of Mega Steel Giant Organization

Syed Rizwan Naqvi<sup>1\*</sup>,

<sup>1</sup>Research Scholar, Amity University, Noida, India

Dr. Puja Sareen<sup>2</sup>

<sup>2</sup>Associate Professor, Amity University, Noida, India

Dr. Tanuja Sharma<sup>3</sup>

<sup>3</sup>Professor, MDI Gurgaon, India

## Abstract

In the current business scenario, it becomes crucial to comprehend the significance of the framework of e-training for re-skilling employees. This research aims to advance the understanding of the ADDIE model and the Kirkpatrick model. The research instrument utilized in the analysis is the case-based exploration of training instrumentality. We divided the study into two phases-analyzing the training needs in the current environment and straining evaluation. The data used for the analysis is secondary. The study's findings demonstrate the significant impact of the ADDIE model and Kirkpatrick model while revitalizing the training methodology in an organization. The strategy adopted by Jindal Stainless Steel for revamping the training mechanism resulted in the quality improvement and financial savings achieved from the application of the new skills by the employees.

**Keywords:** Stainless Steel, Online learning, Kirkpatrick, ADDIE

## 1. Introduction

The COVID-19 pandemic has compelled the practical shutdown of institutes, organizations, and companies worldwide, compelling all organizations to migrate to digital platforms. It appears to have quickly expanded the variety of digital learning provisions and avenues (ILO 2020). The plan suggests the widespread use of work-from-home that it has spawned and the unique training and development requirements that such circumstances necessitate (CIPD, 2021).

In the perspective of massive reskilling requirements and mandatory shift towards adoption of online learning, the company focuses on reskilling and training employees. However, determining the performance of such high-cost endeavors is critical toward any training approach's effectiveness (Giangreco et al., 2010). While accelerating investments in reskilling and training, it becomes vital to comprehend the e-training framework to enhance training effectiveness.

### 1.1 Relevance of Context

Researchers conducted the current study in the stainless steel sector in India. Countries with rugged steel industry blessed from the first-mover lead as economies fueled by industrialization emerged in the early twentieth century. India won independence in the mid-twentieth century, and under its recently adopted hybrid economy model, it wanted to become self-sufficient. To achieve this objective, the requirement of simultaneous development of all sectors requires the primary sectors producing crude materials, secondary sectors belonging to manufacturing, and tertiary sectors primarily providing services sectors exists. As a coarse matter and intermediary by-product, steel served as a coherent channel between the three industrial sectors. Apart from being an essential sector product, steel is possibly the most widely used ingredient in manufacturing (PwC, 2019), which explains why we have chosen India's stainless steel business for our study.

Moreover, India has always been a growing market for significant steel growth. As per Firoz(2017), based on simple observation, India is a massive country with a large population that will necessitate a lot of steel-intensive architecture for energy generation, transportation, housing and distribution, and urban living. India's raw steel production capacity will need to expand to 300 million tonnes by 2030-31, up from around 125 million tonnes presently, with domestic finished steel consumption expected to be approximately 225 million tonnes and exports expected to be about 20 million tonnes. The fact that India is a large country with enormous growth potential is one of the reasons for choosing the Indian steel business. Our results are not generalizable as we conducted the study explicitly in a steel giant in a growing economy.

### 1.2 Rationale of Study-

The rationale behind conducting a case study on steel giants in India is that most past researchers have analyzed planning training frameworks and measured training effectiveness under normal circumstances. Still, there is a lack of literature in a pandemic

situation. Businesses have responded to the COVID-19 crisis in various ways, ranging from actions that demonstrate a principled approach to the workforce based on an understanding of the value of human capital to activities that demonstrate the pitfalls of failing to prioritize workforce considerations properly. Adopting digital technologies is the best solution for organizations in the current COVID scenario because of its well-established rules for remote working and the expanding demand for digital collaboration tools and technologies to facilitate remote working. Hence, organizations need to plan training mechanisms while adopting digital technologies. The technology sector is supposed to be well-placed to tackle the challenges of COVID-19 ("Accenture," 2020). We have chosen Steel giant as a case study for their readiness for technology adoption. We found a case study on Steel giants as unique, which will add to the body of knowledge in the existing literature.

Moreover, the goal of this project was to use an instructional design method to create an e-learning package for re-skilling Mega Steel staff using the ADDIE (Analyze, Design, Develop, Implement, and Evaluate) framework and training evaluation through the Kirkpatrick model.

### 1.3 Objective

By developing a methodology, the researcher hoped to identify a process and contribute to the corpus of study, which L&D professionals can utilize when creating e-learning programmes for their employees in organizations. By re-validating the Kirkpatrick model in training evaluation of online training delivered in emerging organizations, the research presented here fills a gap in the existing HR literature.

Q1. How can the ADDIE process be utilized to help an organization re-skill its employees?

Q2. How can the Kirkpatrick model be used for training evaluation in an organization?

## 2. Literature Review

In the late 1980s and early 1990s, computer-based training (CBT) developed, and it was the first kind of electronic education that lays the foundation of today's eLearning (Eger, 2005). The usage of the world wide web and other significant technologies to set up learning programs, deliver training, and govern a programme is known as online learning (Fry, 2001). Efficient online learning proved to result from rigorous instruction planning and design and a systematic strategy for establishing and designing online courses (Branch & Dousay, 2015). To drive the development of e-learning programmes, we employed two frameworks, ADDIE, a framework, and the Kirkpatrick model, to provide tips and methods adopted from talks and interviews with HR officers in Jindal Stainless Steel. Past studies have used the ADDIE model for instructional design and the Kirkpatrick model to evaluate the training outcomes.

### 2.1 ADDIE model as Training Framework

Many instructional designers use the shortness of instructional design models to aid in creating effective materials. Educators can utilize the ADDIE Model, the Dick and Carey Model, and Kemp's Instructional Design Model, among many others, to produce instruction directed by a structured approach. On the other hand, previous instructional design methods may become less successful due to new technology, out-of-date learning approaches, and novel methodologies to online learning in institutions and companies (Khodabandelou & Samah, 2012). Based on the ADDIE framework, the instructional design comprises five steps: analysis, design, development, implementation, and evaluation. According to Therefore the present study adopts the model for the current study.

### 2.2 Kirkpatrick Model as Training Evaluation Framework

Another crucial aspect of using the ADDIE method to build courses is evaluation, which starts in the first stage and remains until the fifth stage (Boulet, 2009). Evaluation refers to 'Any endeavour to acquire information (feedback) on the impacts of a training programme and assess the training's usefulness in light of that information in terms of its potential to offer feedback' (Topno, 2012). Kirkpatrick's evaluation levels consist of four layers: reactions, learning, behaviours, and outcomes (Mowry & Crump, 2013).

## 3. Research Methods

### 3.1 Case Study Method

Research topics, theoretical propositions, units of analysis, logic tying facts to these theoretical premises, and criteria for evaluating these assertions are the five primary components of a case study (Yin, 2014). The current study advises these five constituents to be considered "appropriate." The first component, the "research question," is mentioned in Section 1. The second ingredient, 'theoretical propositions,' is presented in Section 2 and is relevant to the current investigation. The third component, 'unit of analysis,' should correspond to the investigated phenomenon. Researchers have chosen 'organization' as the unit of analysis for our study. We employed the study's specialized methodology to obtain the fourth ingredient, 'logic relating facts to theoretical notions. This strategy entails using data collection techniques to address research questions or theoretical test hypotheses. The fifth component, "criteria for evaluating these claims," will be discussed next.

### **3.2 Data Collection**

The research is exploratory. The data for this study comes from secondary sources such as the internet, websites, journals, and magazines. For the case study, Jindal Stainless Steel is a legitimate unit of analysis.

#### **Context of Study**

Choosing Jindal Steel as a case study was that Jindal Steel's Human Resources department has made learning and development a priority. Jindal Steel tries to improve staff learning capacities by implementing learning programmes to "build a strong learning culture. JSL's growth into a powerful and likable company is due to its high-performing personnel. Although we conducted the study in Jindal Stainless Steel, the same applies to any organization with a motive to create a strong learning culture. Jindal Stainless Steel was an excellent example of a movement in the emphasis placed on human capital, moving away from jobs and employees and toward work, skills, and people. Jindal Stainless Steel is a leader in human capital decision-making. We have chosen Jindal Stainless Steel as a case study for these reasons.

## **4. Empirical Data and Analysis**

After obtaining data from the literature, we built the case study on Jindal Stainless Steel as the unit of analysis in this case study. We learned a lot about the organization's experiences with e-learning technology adoption.

### **4.1 Background**

Jindal Stainless is India's leading stainless steel producer, with a market capitalization of \$3.2 billion and 15,000 people worldwide. Shri O.P Jindal created Jindal Stainless in 1970, and it is one of India's most extensive stainless steel corporations and one of the world's top ten stainless steel organizations. The magnitude of their activities shapes their legitimacy and reputation and their desire to innovate and improve people's lives. The Jindal Stainless Group produces 1.9 million tonnes of crude steel per year and revenue of 2.70 billion dollars (as of March 31, 2021).

Jindal Stainless has recently hired Mr.Nitin Thakur, a Learning and Development (L&D) expert, to lead the company's L&D operation on February 18, 2020 (BW Online Bureau, 2020).

Mr. Thakur, a Harvard alumnus with more than 19 years of Leadership Development and Talent Management experience, will organize and spearhead the Corporation's leadership development initiatives. As Jindal Stainless Steel (JSL), a well-known name in India's steel-manufacturing business, was redesigning its learning function to prepare its employees for the future better. Thakur's hiring is crucial since learning and re-skilling will be a primary priority for JSL's people and workspace in 2020. What implication Thakur can have on the steel titan's L&D programme will be closely observed in this regard. The major challenge found by Mr. Thakur was to develop a better learning culture and employee growth in the primary steel giant. Above all, the firm was migrating all processes to meet the COVID-19 restrictions.

### **4.2 Findings**

According to Nitin Thakur, JSL's head of learning, the organization has been developing skills for staff at all levels and systems. JSL recently analyzed specific primary training and skill development areas at the organizational and functional stages to prepare its staff with future capabilities via various learning initiatives. However, L&D professionals told employees about effortless training areas like joining a zoom call to improve employee perception of online learning (DigitalHRNews Network). L&D professionals explained the creation of a learning module with corresponding short elements filled with meaningfulness and fun to enhance the employees' perception of inadequate online training.

#### **4.2.1 Analyse Phase**

JSL started the learning enhancement journey by aligning the learning modules to the current business needs. Therefore organization began by analyzing and assessing role-specific learning needs, individual development needs, and company-wide business needs.

Thakur explained in an interview delivered to Kashyap, a writer in HR Katha, on September 15, 2021, about gathering information in various ways by the L&D team. Each individual has particular critical and emerging role-specific learning demands. Thakur found HoDs (Heads of Department) the perfect individuals to talk to predict the future capabilities of the current workforce needed in the future. Thakur consulted the company's HoDs on industry trends, including the business direction and futuristic skills required for workers to remain relevant. Earlier, JSL used the performance appraisal method to analyze learning needs, followed by a discussion on ordinary behavioural skills and other generic abilities. In the perspective of current L&D challenges, Thakur started applying a variety of technology tools to assess current skill requirements for a specific function following worldwide standards. As a result, JSL's L&D team gathered data on impending learning requirements for each of the company's HoDs separately. In this way, the team was able to assess the learning requirements of each function in this manner. For example, in the customer service position, the individual should be able to manage inquiries and be able to serve as the customer's single point of contact, capable of addressing any difficulties, a true trouble-shooter.

Another example is the HR function of data governance as one of the top competencies needed or required. Thakur took advantage of e-technologies for assessing role-specific needs. JSL employed an AI crawler technology given by one of their learning

providers to analyze the learning needs for each job role individually, aligning the competencies worldwide with the role's present KRA. After prolonged discussion with HoDs and digital technology tools, JSL came out with a significant gap in several vital skills to maintain its employees and business competitiveness in the present and future.

## Key Skills

After careful analysis of training needs, JSL started focusing on essential skills, including advanced Excel, SAP, data analytics, strategic thinking, and subject expertise, which Thakur discusses with HR Katha.

Thakur gives examples of many functions lacking in topic expertise, such as corporate communication, where website management was one of the primary talents required. Another example he gives is the supply chain, where contract management has evolved as a skill that could benefit from more attention.

Thakur identified cross-skilling as a critical talent to be acquired by the employees at the organizational level. With the enhanced learning portfolio, employees are also becoming cross-skilled in numerous areas outside of their primary talents critical at the corporate level. "Cross-skilling will become more important because organizations will require a backup for each person, and enterprises will operate with fewer employees to achieve cost efficiency," Thakur says. "After gathering all of these data points, we saw that the skills that emerged as the company's learning needs not considered earlier," Thakur says.

### 4.2.2 Design and Development Phase -

Before proceeding to the design and development phase, JSL took extra care of the analysis phase. Since development becomes easy if we correctly complete analysis and design phases. The design phase covers learning goals, tasks, materials, preparation of learning module, and selection of media through a design document that acted as a template for setting up the training programme (Patel et al., 2018). In the third step, the instructional designers combine technological tools with the educational context and procedure. The programme designer received the validated design document during the development phase and utilized scripting tool software to produce multimedia e-learning modules following the design document.

### 4.2.3 Implementation phase -

For usability testing, L&D professionals deployed e-learning modules to the learning management system (LMS) throughout the deployment phase. Following the pandemic, JSL moved all of its training online and certified all its teachers to lead virtual sessions. JSL being a manufacturing industry, the adoption was not easy as people were unfamiliar with Zoom, Google hangouts, or any other online communication tool. The majority of the company's learning content is bite-sized, and 70% of it involves experiential learning.

### 4.2.4 Evaluation Phase -

In the ADDIE process, we used qualitative formative and summative evaluation methodologies. When the employees have completed the learning subject, they practice it by working on real-world projects. They will be able to retain more information this way. "We started breaking down our employees' learning experiences into tiny adventures," Thakur says, describing how JSL utilizes mobile learning resources and gamifying its learning experience. The organization uses the Kirkpatrick model to measure the learning outcomes of each learning intervention, which comprises four levels of measurement.

**4.2.4.1 Reaction level** -The first level is the reaction level, which includes questions about content, involvement, and facilitators.

**4.2.4.2 Learning Level**-At the second level, the corporation uses pre-test scores, on-the-job assessments, and supervisor reports to determine the difference between before and after the training.

**4.2.4.3 Behaviour Level**-The team evaluates how employees use newly acquired abilities at the third level, using peer feedback, customer feedback, self-assessment surveys, and supervisors' reports.

**4.2.4.4 Results Level**-Finally, the final report is created through an action learning project that asks all participants to apply their newly gained skills and behaviours to a real-world assignment.

At this stage, L&D professionals evaluated the learning's business outcomes. In reality, JSL has digitized learning outcome monitoring, allowing participants to update their action learning reports using software that tracks each employee's progress. The company can assess the financial outcomes of continual learning through action-learning projects. "The level of the quality improvement measures the efficacy and the cost savings realized as a result of the employees' application of new abilities," Thakur explains.

JSL has managed to save Rs 500 crore so far and counting.

## 5. Results

JSL is maximizing the potential of technology and digitization to fulfill its learning goals, having launched on this road to create a culture of continuous learning. "We don't start learning initiatives if we can't quantify the impact," Thakur confesses. The annual report of JSL 2020-21 improved employees' competency programmes by targeting Learning & Development based on needs assessment and meeting behavioural compliance, employee wellness demands, and functional and operational excellence. Through the online AROHAN – Capability Development Portal, all SMS workers, and supervisors completed their knowledge

examinations, and skill evaluations have begun. In FY 2020-21, JSL received the most significant number of kaizen ever, totaling 900. Annual report 2020-21.

## 6. Discussion

Our experience with this study yielded some takeaways and suggestions for execution for researchers and practitioners. The ADDIE model's analytical phase, which occurs early in the training development process, necessitates an examination of multi-stakeholder demands and circumstances. To formulate and strengthen the training's ecological validity, we suggest examining and involving ultimate users and beneficiaries. Furthermore, using the Kirkpatrick model to evaluate training mechanisms allowed us to assess training effectiveness and plan future implementation tactics. With digital technologies, L&D professionals deployed the ADDIE and Kirkpatrick models as complementary approaches in the renewal of learning processes (Patel et al., 2018).

The formulation of explicit and measurable learning objectives was critical during the design phase, as it aided in the emphasis and assessment of skill and knowledge acquisition. The clarity in learning objectives is vital for the ultimate product's practicality and usage.

## 7. Conclusion

The current study successfully demonstrates applying the ADDIE framework and the Kirkpatrick model in organizational training. This strategy supports the translation of knowledge into practice that considers the learner's context and leverages technology for a broader reach and potential approaches for workforce development and re-skilling (Chambers et al., 2016).

## Bibliography

- [1] Accenture (2020, April 8) COVID-19: Mitigating the impact in the High Tech industry. Available at <https://www.accenture.com/in-en/insights/high-tech/coronavirus-mitigating-impacts-high-tech>
- [2] Boulet, G. (2009). Rapid prototyping: An efficient way to collaboratively design and develop e-learning content. Retrieved from [http://www.guyboulet.net/site/docs/Rapid\\_prototyping.pdf](http://www.guyboulet.net/site/docs/Rapid_prototyping.pdf)
- [3] Branch, R. M., & Dousay, T. A. (2015). Survey of instructional development models (5th Ed.). Association for Educational Communications and Technology.<https://aect.org/docs/SurveyofInstructionalDesignModels.pdf?pdf=SurveyofInstructionalDesignModels>
- [4] BW Online Bureau (2020, Feb 18). Jindal Stainless Appoints Nitin Thakur As New L&D Head. Available at <http://bwpeople.businessworld.in/article/Jindal-Stainless-Appoints-Nitin-Thakur-As-New-L-D-Head-/18-02-2020-184421/>
- [5] Chambers DA, Feero WG, Khoury MJ. (2016). Convergence of implementation science, precision medicine, and the learning health care system: a new model for biomedical research. *JAMA* (2016) 315(18):1941–2. doi:10.1001/jama.3867
- [6] CIPD. (2021) Digital learning in a post-COVID-19 economy: a literature review. London: Chartered Institute of Personnel and Development. Available at [https://www.cipd.co.uk/Images/digital-learning-literature-review-report-2\\_tcm18-89290.pdf](https://www.cipd.co.uk/Images/digital-learning-literature-review-report-2_tcm18-89290.pdf)
- [7] DigitalHR News Network(sep 14, 2021) We redesigned the methodology and got our people trained with online learning: Nitin Thakur, the Head of L&D- Jindal Stainless. Available at <https://www.thedigitalhr.com/interviews/we-redesigned-the-methodology-and-got-our-people-trained-with-online-learning-nitin-thakur-the-head-of-l-d-jindal-stainless/>
- [8] Eger, L (2005). Technologievzdělávání dospělých. 1.vyd. Plzeň :Západočeskáuniverzita, 2005. 171s. ISBN: 80-7043-398-1
- [9] Firoz, S.A. (2017, Dec) Opportunities and Challenges of the Indian Steel Industry in the Context of Future Growth. available at [https://www.posri.re.kr/files/file\\_pdf/59/338/6862/59\\_338\\_6862\\_file\\_pdf\\_1514350979.pdf](https://www.posri.re.kr/files/file_pdf/59/338/6862/59_338_6862_file_pdf_1514350979.pdf), Asian Steel Watch, Vol 4 pp.
- [10] Fry, K. (2001). E-learning markets and providers: Some issues and prospects. *Education+ Training*, 43(4/5), 233–239. <https://doi.org/10.1108/EUM0000000005484>
- [11] Giangreco, A., Carugati, A., & Sebastiano, A. (2010). Are we doing the right thing? Food for thought on training evaluation and its context. *Personnel Review*, 39(2), 162–177.
- [12] ILO (2020) E-discussion on continuing online learning and skills development in times of the COVID-19 crisis. International Labour Organization. Available at [https://edmsp1.ilo.org/KSP/en/Details/?dn=EDMSP1\\_261026](https://edmsp1.ilo.org/KSP/en/Details/?dn=EDMSP1_261026)
- [13] Jindal Stainless Steel (2020, Feb 17) nitin-thakur-joins-jindal-stainless-as-head-of-learning-and-development .Available at <https://www.jindalstainless.com/press-releases/nitin-thakur-joins-jindal-stainless-as-head-of-learning-and-development/>
- [14] Kashyap, K. (2019, June 13). How companies are leveraging technology to build candidate relationship. Available at <https://www.hrkatha.com/features/how-companies-are-leveraging-technology-to-build-candidate-relationship/>
- [15] Khodabandelou, R., & Samah, S.A. (2012). Instructional design models for online instruction: from the perspective of Iranian higher education. *Procedia - Social and Behavioral Sciences*, 67, 545-552.
- [16] Lin, A.B., Nadarajah, G., Sharif, M.Y., Bhuiyan, A.B., & Islam, A. (2015). The factors that affect the effectiveness of training: a study at Silterra Malaysia Sdn. Bhd., a semiconductor company in Malaysia. *IJMS* 22, 33–46.

- [17] PwC(2019, Nov)The Indian steel industry: Growth, challenges and digital disruption available at <https://www.pwc.in/assets/pdfs/consulting/technology/the-indian-steel-industry-growth-challenges-and-digital-disruption.pdf>
- [18] Mowry, M. J., & Crump, M. D. (2013). Immersion Scenarios Bridge the EducationPractice Gap for New Graduate Registered Nurses. *Journal of Continuing Education in Nursing*, 44(7), 319-325
- [19] Patel, S. R., Margolies, P. J., Covell, N. H., Lipscomb, C., & Dixon, L. B. (2018). Using Instructional Design, Analyze, Design, Develop, Implement, and Evaluate, to Develop e-Learning Modules to Disseminate Supported Employment for Community Behavioural Health Treatment Programs in New York State. *Frontiers in public health*, 6, 113.<https://doi.org/10.3389/fpubh.2018.00113>
- [20] Topno, H. (2012) Evaluation of training and development: An analysis of various models. *IOSR J. Bus. Manag.*, 5, 16–22
- [21] Yin, R. (2014) Case Study Research Design and Methods, Sage Publications, Thousand Oaks, CA.