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KNOWLEDGE MANAGEMENT IMPLEMENTATION AT HINDALCO INDUSTRIES LIMITED (ADITYA ALUMINIUM): A CASE STUDY APPROACH

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ABSTRACT

Purpose: This paper aims to explore Knowledge Management implementation at Hindalco Industries Limited. This study will further help future empirical research to have a deep understanding of successfully implementation Knowledge Management. **Design/methodology/approach:** An empirical study was done at Hindalco Industries Limited to understand the current practices are being adopted for successful implementation of Knowledge Management. **Findings:** This study have identified Organizational Culture, Organizational Structure, Strategy and Leadership, Human Resource, Information Technology are the key elements of Knowledge Management. **Originality/value:** This study is the first in kind, and one of the few that related Knowledge Management in Hindalco Industries Limited and more specifically in Aluminium industries.

INTRODUCTION

The entire world is filled with the volatility, uncertainty, complexity and ambiguity of general conditions and situations, every organization is competing hard against each other every day, every hour, every minute by using various technical methods to achieve competitive advantage in the market. Use of latest tool and technology always can give a competitive advantage. However, it is not always possible to be a leading organization only with the help of the technological advancement. Knowledge Management can be most effective area where the organization can focus to get the competitive advantages. It will help one with greater competencies to map with the future needs, Faster & accurate decisions making with minimal errors, collaborative innovation, and

knowledge sharing to enhance learning experience. Knowledge Management is one of the easier ways to expertise and improve understanding to the individuals, teams & Organization as a whole.

Hindalco Industries Limited is a US\$18 billion metals powerhouse and metals flagship company of the Aditya Birla Group. Aditya Aluminium Smelter & Power (a unit of Hindalco Industries Limited) was a Greenfield project started by the Aditya Birla Group and set up at a total financial outlay of approximately, Rs 14,000 crore. Aditya Aluminium has a state-of-the-art Aluminium Smelter (360,000 TPA) up with AP-36 technology from Aluminium Pechiney, France, which is the most cost-effective producer of primary aluminium along with its own captive power plant (900 MW). The first Metal Out was in January 2014. The average age of 90% local workforce is below 35 years. The major challenge was to produce world class product with highly sophisticated and automated processes and machines driven by the local workforce in a remote location like Lapanga, Odisha. As it was a new plant, employees are from different culture and organisations were working in a latest & critical technology, therefore challenge was to have a proper knowledge management system to bring the best out of the employees so that they can contribute towards the sustainable growth of the organization by having a clear focus on the 3Ps- People, Planet & Profit. Aditya Aluminium is having the AP 36 smelter technology which is among the only two smelter in India. Thus the experts to run such latest technology was very rare. There is always a huge threat of attrition of skilled employees due to surrounding industrial region. After the skill development, retention of the talent is also a challenging task. Therefore, there was an urgent need of a structured need of knowledge management process in place to address these challenges. The primary objective of this study is to understand the concept of Knowledge Management and its practices being adopted in Hindalco Industries Limited. The study focuses on understanding, exploring & defining the implementation of Knowledge Management. This study will offer a comprehensive platform for future Knowledge Management research and provides managerial implications for aluminium companies for successful Knowledge Management practices. The findings will help to understand the implementation of knowledge management and exemplify knowledge management practices conducted in Aluminium Industry of India.

LITERATURE REVIEW

The successful implementation of KM System in an organization can be possible with a holistic approach by keeping the influencing factors and having a control mechanism. Knowledge Management is one of the easier way to expertise and improve understanding to the individuals, teams & Organization as a whole. Aditya Aluminium has taken the following initiatives under knowledge management system implementation,

Strategy and Leadership

Strategy & Leadership brightens KM as a creator of value, which primarily indicates itself in improving firms' competitiveness. Based on this view, KM is treated as a "powerful competitive weapon", thereby embracing a resource-based approach which aims to reveal the motives of creating competitive

advantage. (Stankosky and Baldanza's KM Framework, Hedlund and Nonaka's KM Model & Frid's KM Model). The Unit Head, Functional Heads and Department Heads were the internal sponsors of these practices, and responsible for successful implementation of knowledge management.

Human Resource

People are the heart of creating organizational knowledge as it is people, who create and share knowledge. Employees are the major contributors for business where all assets which results and depend ultimately on people for his or her continued existence. (Skandia Intellectual Capital Model of KM).

To achieve the world class manufacturing standard, all the departments across the organisation had collaborated towards the common vision to deliver superior value to our Internal & external Customers and other stakeholders. More than 90 internal knowledge partners were developed within the organisation for the effective sharing and collaboration of knowledge.

Organizational Structure

The structure of the organization impacts the ways in which organizations conduct their operations and in doing so, affects how knowledge is created and shared among the employees. The hierarchical structure of an organization affects the people with whom they frequently interact, are consequently likely to transfer knowledge. (Leavitt's Model of Organizational Change). The dedicated structure had been created under world class manufacturing, and knowledge management was the part of the same. The knowledge management team was having a cross functional members having very specific key performance parameters for implementing knowledge management in the organisation. The apex committee was also responsible to monitoring and guiding the team in the monthly review.

Organizational Culture

Knowledge culture comprises of the accumulation and combination of common expectation, implied rules, experiences and social norms that shape our attitudes and behaviors. Successful organizations empower employees to share and contribute intellectual information, by rewarding them for such actions. (Nonaka's KM Model, Skandia Intellectual Capital Model of KM & Stankosky and Baldanza's KM Framework). The encourage knowledge management culture, various reward and recognition scheme were introduced. Rigorous awareness sessions were conducted in various platform for an effective knowledge transformation culture in all grass root teams.

Information Technology

Knowledge building is dependent upon IT. In order to create knowledge sharing capabilities, the organization must develop a comprehensive infrastructure that facilitates the varied sorts of knowledge and communication. (Stankosky and Baldanza's KM Framework & An Applied Model for KM)

The advance IT infrastructure was ensured and deployed in the organisation. Employees were provided with Mobile Learning App for 24x7 knowledge exchange at finger tips. Artificial Intelligent Learning software were used by the employees to develop their competency for future tech skill building.

The following are the key drivers for the successful implementation of Knowledge Management. The following conceptual knowledge management model could able to help in the effective implementation of knowledge management in an structured way, which have been represented in figure 1.

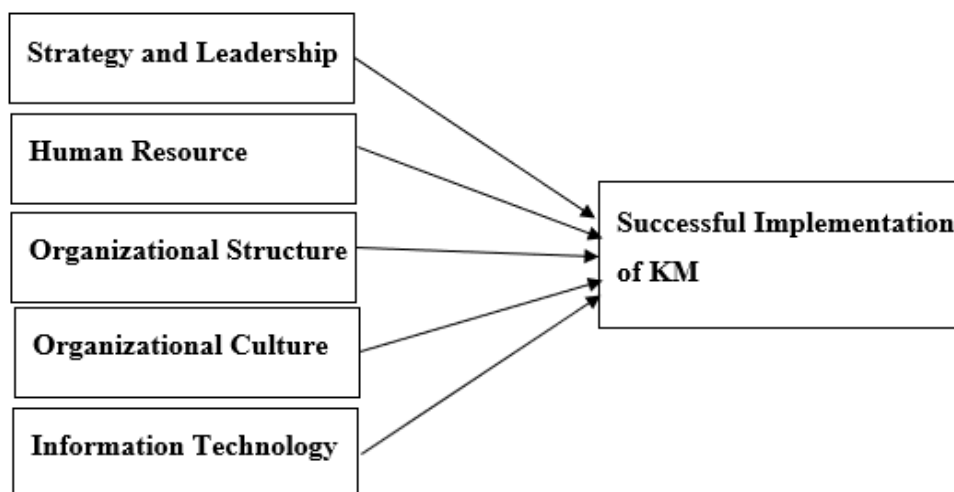


Figure 1: Conceptual Model of Factors influencing KM Implementation

Following are some KM models which were studied to identify factors influencing KM which has been mentioned in table 2.

Table 2: Review of KM Models	
KM Models	Factors
Boisot's Knowledge Category Model, 1987	Structure, Social Learning
Nonaka's KM Model, 1995	Organizational culture
Hedlund and Nonaka's KM Model, 1993	Organizational strategies
Skandia Intellectual Capital Model of KM, 1997	Organizational culture, Human Recourses
Demerits KM Model, 1997	Socialization
Frid's KM Model, 2003	Organization strategies, structure
Leavitt's Model of Organizational Change, 1965	Technology, structure, tasks and people
Stankosky and Baldanza's KM Framework, 2001	Organizational culture, leadership and Technology

At Hindalco, the results are clearly visible, where Aditya has not only able to control the attrition rate but also reduced it to 2%. There is a drastic

improvement of HR Assurance from 48% to 91% in L&D processes. Aditya Aluminium is now have added P0404 metal grade with addition to P0610, P0406, & P0405 grade metal in its portfolio subsequently by gradually improving its metal quality. They supply 90% of metal ingots to USA, Korea, Japan, European Union. Aditya Aluminium is the top in Productivity Worldwide among AP30 Smelters operating at <370 kA. Now Aditya Aluminium is one of the Top Aluminium Manufacturing Unit in Globe as per as metal purity is concern.

LIMITATIONS

The case study was limited to Indian Aluminium operations Units of Hindalco Industries Limited. Organisations need to enforce system to encourage Knowledge Management practices and availability of adequate infrastructure needs to ensure.

CONCLUSION

The current Knowledge Management practices at Hindalco Industries Limited are focuses upon setting up of a system for capturing all tacit & explicit knowledge to learn & improve processes. It emphasises on learning from external sources and share with others for them to replicate & benefit. This model further strengthens the internal knowledge management framework for managing the pool of knowledge available within the unit and outside. Moreover, it shall also focus on leveraging technology to enable knowledge management. Hindalco shall certainly look into developing a knowledge management Portal or use the business level portal. Collecting knowledge from various sources like employees, customers, suppliers, institutions, competitors etc. and further utilizing it to improve the KM processes is imperative. Collect of tacit knowledge like knowledge residing with retiring employees. Learn from other units & businesses of Hindalco through various sources like Knowledge Acquisition Point portal as well sharing best practices for others to replicate. Develop and / or participate in various knowledge sharing communities within Hindalco or outside organisation. The following are the key drivers for the successful implementation of Knowledge Management

Knowledge culture comprises of the accumulation and combination of common expectation, implied rules, experiences and social norms that shape our attitudes and behaviours. Successful organizations empower employees to share and contribute intellectual information, by rewarding them for such actions. The structure of the organization impacts the ways in which organizations conduct their operations and in doing so, affects how knowledge is created and shared among the employees. The hierarchical structure of an organization affects the people with whom they frequently interact, and to Communications or from whom they are consequently likely to transfer knowledge. Strategy & Leadership brightens knowledge management as a creator of value, which primarily indicates itself in improving firms' competitiveness. Based on this view, knowledge management is treated as a "powerful competitive weapon", thereby embracing a resource-based approach which aims to reveal the motives of creating competitive advantage. People are the heart of creating organizational knowledge as it is people, who create and share knowledge. People are the most valuable assets of an organisation where all tangible and

intangible assets are result of human intervention and depend ultimately on people for their continued existence. Knowledge building is dependent upon IT. Organization must develop a comprehensive IT infrastructure that facilitates, to build knowledge sharing capabilities and the various types of knowledge and communication. Knowledge Management strengthen organizational performance, competitive advantages and learning by radical improvements. It focuses on the use of information technology, business processes and human resources to develop and share knowledge within the organization with the intention of growth and sustenance. There are various models available to adopt knowledge management system, but there is a need to explore more knowledge management practices being adopted in manufacturing industries in India. A comprehensive model for Knowledge Management Implementation in Aluminium Industry can help to capture available implicit knowledge within the organization and convert it to explicit performance, for the benefit of the employees & the organization.

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