

DETERMINANTS OF COMPETENCIES FOR AN EFFECTIVE ORGANIZATION AT VISAKHAPATNAM STEEL PLANT

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ABSTRACT

This study delves into the essential qualities necessary for achieving success among executives operating within the steel industry sector. Three industries were taken into consideration for the purpose of performing this study. The primary objective was to conduct an empirical inquiry into the correlation between competency-based executive performance assessment and effective organizational outcomes. Additionally, the study aimed to examine the connection between executive competencies and their impact on executive effectiveness and organizational excellence. The primary focus was placed on the skill needs of middle and lower-level executives in the steel sector, as their role is crucial for effectively implementing organizational strategies. The degree of proficiency exhibited by individuals has a substantial influence on the overall effectiveness of an organization. The research aim was to develop a tool that would enable executives in the steel industry to identify the key abilities necessary for achieving the organization's present and future objectives.

Keywords: Executive Competencies, Organizational Effectiveness, Steel Industry, Performance Assessment, Middle-Level Executives, Lower-Level Executives, Strategic Implementation, Proficiency, Organizational Excellence.

INTRODUCTION:

Competency management is a deliberate strategy to identifying, developing, and improving the skills, knowledge, and behaviours required to achieve company goals. Competency management is critical in the steel industry because of its highly technical nature and competitive landscape. Competencies comprise a wide range of qualities, such as technical expertise, leadership skills, problem-solving abilities, and ingenuity. Effective competency management ensures that employees, particularly executives, have the skills needed to drive success and adapt to industry changes. This method not only improves individual performance, but it also aligns worker capabilities with the organization's strategic goals, resulting in increased organizational effectiveness.

Visakhapatnam Steel Plant (VSP), a leading entity in the Indian steel industry, exemplifies the importance of competency management. As one of the major producers of steel in India, VSP plays a pivotal role in the country's industrial and economic development. The plant's success is heavily dependent on the competencies of its executives, especially those at the middle and lower levels, who are responsible for executing strategies and managing operations. By focusing on the development and management of key competencies, VSP can ensure its workforce is equipped to meet current and future challenges, thereby maintaining its competitive edge and achieving long-term organizational excellence.

REVIEW OF LITERATURE:

¹**S.Deepthi, Dr.S.Mohammad Gouse,, Dr.T.Narayana Reddy(2019)**, This Study highlights key training practices at the Vizag Steel Plant, which might serve as a model for other industrial firms. Top management fosters a social ecology in which employees learn to integrate training knowledge into their daily work activities. Training strategies must be tied to the organization's goals.

Information Technology Support makes training more effective. Training is vital to the growth and survival of any company. Training activities must be well balanced and uniform across various units or levels within an establishment to promote equitable growth of its personnel and enable them to contribute to organizational goals by dealing with change.

² **Adari Tulasee Naidu(2018)**, The study's findings indicate a strong link between training and development and employee effectiveness in the workplace. In this view, there is a significant link between teaching, employee development, and success. Organizations that invest in training and development programs for their workplace capabilities would undoubtedly gain from the levels of productivity of their employees. Organizations must constantly develop staff capabilities in order to maximize employee performance. This is only achievable via continued training and development. Unqualified individuals are widely known for not meeting expectations, which will undoubtedly have an impact on the organization's overall success. Training and development activities play a crucial influence in employee performance and efficiency, so managing the environment.

³**K.Padmavathi Nageswaramma & DR.R.Padmaja,(2017)**, Organizations like VSP, SAIL, Tata Steel, and JINDAL are reconsidering their investments in training programmes as they recognize that knowledge, skill and attitude of employees give an advantage to face competitors and to meet changes in environment. Based on the information gathered from evaluating training programmes that they can make important decisions on modifying the training programmes by reducing the shortcomings and to come out with a better approach. The above companies can use appropriate employee surveys and propose models based on the ideas from Kirkpatrick's four levels for developing the employees to work in this challenging and highly competitive environment. Organizations like SAIL and VSP have marked considerable expense for the training programmes

whether provided by inhouse or off-the-job. They use training to facilitate the learning skill to retain employees, improve their culture and to create reward system for their good performance.

⁴**Mrs. K. Pavani and Prof. B. Mohan Venkata Ram (2024)**, This study aims to analyze previous research and highlight the significance of competency mapping in the manufacturing industry. This article discusses how firms use employee competency mapping to improve managerial efficiency. This study contained 31 studies over the previous 20 years, identified using a comprehensive literature review. The examination included 30 academic papers and a book. Numerous research studies have focused on competency mapping.

⁵**K S Ramanjaneyulu and Katta Rama MohanaRao(2023)**, The study specifically identified the dimensions of the effectiveness of the input procurement system. The study found that the input procurement system dimensions transparency, adaptability, ease of use and grievance redressal have a significant association with the supplier's demographics viz., range of annual turnover, type of organisation, number of branch offices, age of the organisation, and sector of procurement experience. However, the timely payment dimension does not have a significant association with the supplier's demographics. Accordingly based on the findings certain recommendations are made for increasing the effectiveness of the input procurement system in the steel sector. The suppliers/Vendors can be provided with easy access to participate in the e-tendering process without much difficulty in the input procurement system.

⁶**B. V. S. P. R. Vithal and Dr. Naga RajuBattu(2020)**, this study highlighted Involving employees in decision-making through Committees, Forums, and Groups fosters creativity and innovation while also providing a platform for them to express their needs and protests. Employee involvement fosters a sense of belonging, job satisfaction, commitment to organizational goals, psychological well-being, respect for human dignity, and positive engagement in organizational performance.

OBJECTIVES OF THE STUDY:

- To study existing competency frameworks in the steel industry and their relevance to executive performance at Visakhapatnam Steel Plant.
- To study the specific competency needs of middle and lower-level executives at Visakhapatnam Steel Plant and their impact on organizational effectiveness.

RESEARCH METHODOLOGY:

Primary Data: Surveys and interviews were done with middle and lower-level executives at the Visakhapatnam Steel Plant (VSP) to learn about their capabilities and performance. A sample size of 150 executives was chosen to ensure a representative viewpoint.

Secondary Data: VSP's organizational reports, performance appraisals, and training records were examined. Previous research and literature on competency management in the steel sector were also evaluated. This study is based on primary and secondary data.

Identifying key competencies for middle and lower-level management.

Identifying core competencies for middle and lower-level management is critical for the Visakhapatnam Steel Plant (VSP) to achieve effective operational management and strategic alignment in the steel sector. Middle managers play an important role in connecting upper management's strategy directions with day-to-day operations on the ground.

Middle-level management at VSP typically requires the following key competencies:

Technical Proficiency: Understanding of steel manufacturing processes, equipment operations, and industry laws.

Leadership and Team Management: The ability to effectively lead teams, delegate tasks, encourage employees, and settle disagreements in order to preserve productivity and morale.

Problem-Solving Skills: The capacity to detect problems, investigate root causes, and execute effective solutions to improve production processes and reduce risks.

Communication Skills: The ability to clearly and effectively communicate goals, expectations, and feedback across organizational levels and functional domains.

Lower-level management at VSP frequently requires the following core competencies:

Technical Competence: Ability to perform particular duties connected to steel production, maintenance, or logistics operations.

Adaptability and flexibility: The ability to adjust to changing priorities, work settings, and operational issues.

Attention to Detail: The ability to complete tasks with accuracy and precision is vital for operational efficiency and quality control.

Safety Awareness: A commitment to maintaining a safe work environment and following industry safety standards and procedures.

Relationship between Competencies and Organizational Effectiveness

The relationship between competencies and organizational effectiveness at Visakhapatnam Steel Plant (VSP) is fundamental to achieving sustainable growth and competitive advantage in the steel industry. Competencies encompass a broad range of skills, knowledge, and behaviors that directly impact how effectively individuals perform their roles within the organization. At VSP, the alignment of executive competencies with strategic objectives ensures that leadership at all levels possesses the necessary skills to drive performance and adapt to industry challenges. For example, competencies such as strategic thinking, decision-making, and innovation empower executives to make informed choices, anticipate market trends, and capitalize on opportunities.

Indirectly, these competencies foster a positive organizational culture and environment conducive to innovation, collaboration, and continuous improvement. Effective leadership competencies among executives set a tone for accountability, motivation, and engagement throughout the

organization. This alignment not only enhances individual and team performance but also strengthens VSP's ability to achieve operational excellence and meet customer expectations. By investing in competency development programs that enhance these skills, VSP not only enhances operational efficiency but also reinforces its position as a leader in the competitive steel industry landscape.

Direct and Indirect Effects of Executive Skills on Performance

The direct and indirect effects of executive skills on performance at VSP are critical for understanding how leadership competencies drive organizational success. Directly, executive skills such as effective communication, strategic planning, and financial acumen enable leaders to set clear goals, allocate resources efficiently, and navigate complex business challenges. These skills empower executives to make timely decisions that optimize operational processes and enhance productivity across departments.

Indirectly, executive skills contribute to a cohesive organizational culture that values transparency, collaboration, and innovation. For instance, strong leadership fosters a sense of purpose among employees, aligning their efforts with VSP's strategic objectives and fostering a commitment to excellence. This alignment not only improves employee morale and retention but also enhances customer satisfaction and stakeholder confidence in VSP's capabilities. Empirical research at VSP consistently demonstrates that investments in executive skill development yield tangible benefits, including improved operational performance, increased profitability, and sustained growth in market share. By cultivating a robust pipeline of leadership talent equipped with these essential skills, VSP positions itself for long-term success and resilience in the competitive global steel industry.

Hypotheses:

1. H1: There is a significant positive correlation between technical proficiency of executives and operational efficiency in the steel industry.
2. H2: Leadership and team management skills of executives significantly improve employee engagement.
3. H3: Problem-solving skills of executives have a moderate positive impact on safety records.

Data Analysis:

Competency Assessment Scores

Competency	Average Score (1-5)
Technical Proficiency	4.3
Leadership and Team Management	4.1

Competency	Average Score (1-5)
Problem-Solving Skills	3.9
Communication Skills	4.0

Performance Metrics

Performance Metric	Improvement
Operational Efficiency	15% increase
Employee Engagement	20% improvement
Safety Records	10% reduction in accidents

Correlation Analysis

Competency	Performance Metric	Correlation Coefficient
Technical Proficiency	Operational Efficiency	0.65
Leadership and Team Management	Employee Engagement	0.72
Problem-Solving Skills	Safety Records	0.58

Regression Analysis

Dependent Variable	Variance Explained by Competencies
Operational Efficiency	65%
Employee Engagement	70%

DISCUSSION:

Analysis and Findings:

- **Technical Proficiency and Operational Efficiency:**
 - Average Score: 4.3
 - Correlation: 0.65

The data supports H1, indicating a strong positive relationship between technical proficiency and operational efficiency. Executives with higher technical proficiency contribute significantly to improved operational outcomes.

- **Leadership and Team Management and Employee Engagement:**

- Average Score: 4.1
- Correlation: 0.72

The data supports H2, demonstrating a significant positive impact of leadership skills on employee engagement. Effective leadership fosters a motivated and committed workforce, enhancing overall organizational performance.

- **Problem-Solving Skills and Safety Records:**

- Average Score: 3.9
- Correlation: 0.58

The data supports H3, suggesting a moderate positive relationship between problem-solving skills and safety records. While these skills are beneficial, other factors such as organizational policies and safety training programs also play a crucial role.

Regression Analysis:

- **Operational Efficiency:**

- Competencies explained 65% of the variance.
- The competencies of executives have a substantial impact on operational efficiency. Enhancing these competencies through targeted development programs can lead to significant improvements in production output and quality control.

- **Employee Engagement:**

- Competencies explained 70% of the variance.

Investing in leadership and team management skills has a profound effect on employee morale and commitment. These competencies are essential for maintaining a positive organizational culture and high levels of employee engagement.

The data analysis shows a substantial association between middle and lower-level executive competencies and organizational effectiveness at VSP. The high degree of technical proficiency among executives has a direct impact on operational efficiency, supporting the idea that technical skills are critical in the steel sector. Leadership and team management abilities have a substantial impact on employee engagement, emphasizing the importance of soft skills in developing a motivated and engaged workforce.

Problem-solving abilities, while vital, have a moderate link with safety records, implying that while these abilities are good, other elements like as organizational rules and safety training programs are equally critical. The regression analysis emphasizes the necessity of competency development programs. By investing in improving these skills.

Conclusion: This study highlights the importance of executive competences in generating organizational effectiveness at the Visakhapatnam Steel Plant. The empirical evidence supports the hypothesis that technical competency, leadership, problem-solving, and communication abilities are significantly associated with better organizational outcomes.

By focusing on the development and maintenance of these essential abilities, VSP can ensure that its workforce is prepared to face current and future problems, maintain high levels of operational efficiency, and build a positive corporate culture. The findings emphasize the importance of ongoing investment in competency development programs to ensure long-term organizational excellence and competitive advantage in the steel sector.

REFERENCES:

1. S.Deepthi, Dr.S.Mohammad Gouse,, Dr.T.Narayana Reddy(2019), An Empirical Study On Training And Development In Vizag Steel Plant, April 2019, Volume 6, Issue 4 www.jetir.org (ISSN-2349-5162), Pp611-615.
2. Adari Tulasee Naidu(2018), Training and Development: Its Influence on Employees Performance and Productivity – A Case Study of Visakhapatnam Steel Plant (RINL), Visakhapatnam, Vol XI Issue I 2018, Issn No : 0090-5674, PP 66-68.
3. K.padmavathi Nageswaramma & DR.R.Padmaja,(2017), A Study On Evaluation Of Effectiveness Of Training Programme In Indian Steel Industry, International Journal of Research in Business Management (IMPACT: IJRBM) ISSN (P): 2347-4572; ISSN (E): 2321-886X Vol. 5, Issue 9, Sep 2017, 75-86.
4. Mrs. K. Pavani and Prof. B. Mohan Venkata Ram(2024), Competency Mapping On Manufacturing Sector: Literature Review, CASIRJ Volume 15 Issue 3 , ISSN 2319 – 9202, Pp103-105.
5. K S Ramanjaneyulu and Katta Rama Mohana Rao(2023), A Study On The Vendor's Opinion On The Effectiveness Of Input Procurement System At Vizag Steel Plant, Volume 11, Issue 6 June 2023 | ISSN: 2320-2882, Pp605-606.
6. B. V. S. P. R. Vithal and Dr. Naga Raju Battu(2020), Impact of employee involvement on organizational performance – A study of Visakhapatnam Steel Plant, ISSN: 2454-132X Impact factor: 6.078 (Volume 6, Issue 2), Pp293-295.