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## THE HUMAN RESOURCE SCORECARD AS A STRATEGIC PERFORMANCE MEASUREMENT TOOL AN EMPIRICAL STUDY OF VISAKHAPATNAM STEEL PLANT (RINL)

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### Abstract

Human Resource Scorecard (HRSC) has emerged as a contemporary performance measurement framework enabling organizations to evaluate the strategic contribution of human resources. Steel manufacturing companies in India are increasingly adopting HR metrics to align employee performance with organizational goals. This study empirically examines HR practices, HR alignment, workforce success, and the strategic relevance of HR scorecard implementation in the Rashtriya Ispat Nigam Limited (RINL), Visakhapatnam Steel Plant. Using a structured questionnaire administered to 300 executives selected through quota sampling, the study analyzes demographic, socio-economic characteristics and perceptions across 30+ HR dimensions using a 5-point Likert scale. Weighted averages were computed to evaluate employee perceptions regarding HR policies, performance appraisal systems, retention metrics, customer retention rate, punctuality, employee productivity, and HRSC implementation. Results indicate that employees strongly believe HRSC enhances workforce performance, organizational productivity, and strategic alignment. Elements such as working conditions (4.24), effective communication (4.23), perception of job (4.31), and overall organizational effectiveness (4.18) scored highly. HR cost data (2013–2018) further supports the need for strategic HR measurement tools. The study concludes that HRSC is a robust framework for reinforcing strategic HRM in large public-sector manufacturing enterprises. Recommendations for adopting HRSC-driven HR analytics, continuous performance tracking, and competency-based HR systems are highlighted.

**Keywords:** Human Resource Scorecard, HR Practices, Workforce Success, HR Alignment, Strategic HRM, Steel Industry, Performance Measurement.

### 1. Introduction

In contemporary global business environments, organizations increasingly recognize human resources as a strategic asset that significantly contributes to sustainable competitive advantage. The traditional administrative role of HR has evolved into a strategic partnership model wherein HR systems directly influence productivity, profitability, innovation, and long-term organizational success. The Human Resource Scorecard (HRSC), an extension of Kaplan and Norton's Balanced Scorecard, provides a structured framework to measure HR contributions in strategic terms.

Large public-sector manufacturing organizations in India—particularly integrated steel plants—face challenges related to workforce aging, technological modernization, skill alignment, productivity pressures, and competitive global markets. For such enterprises, the HRSC framework offers a comprehensive method to measure workforce success, HR professionals' effectiveness, HR practices, strategic alignment, and organizational capability.

Rashtriya Ispat Nigam Limited (RINL), popularly known as Visakhapatnam Steel Plant (VSP), is one of India's major steel producers with more than 16,000 employees, including 6,000 executives. The organization has implemented multiple HR initiatives including training systems, welfare measures, performance appraisal frameworks, HR analytics, and employee engagement practices. However, a structured measurement of HR effectiveness through the HRSC has not been empirically validated.

This study attempts to fill this research gap by systematically examining the perception of executives toward HR practices and the implementation of the HR Scorecard in VSP.



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## 2. Review of Literature

Ulrich (1997) emphasized that HR should evolve beyond administrative functions to become strategic partners in driving organizational effectiveness. HR professionals contribute by aligning workforce capabilities with strategic business needs.

Becker, Huselid & Ulrich (2001) introduced the HR Scorecard framework, arguing that HR performance must be measured based on strategic deliverables rather than activities. HRSC encompasses four pillars: workforce success, right HR practices, right HR professionals, and HR alignment.

Studies reveal significant relationships between HR practices and organizational performance (Delaney & Huselid, 1996). Elements such as training, communication, appraisal systems, compensation, and leadership strongly influence productivity and commitment.

Boudreau & Ramstad (2007) advocated the use of data-driven HR metrics to strengthen decision-making. HR analytics enhances strategic planning by measuring workforce efficiency and HR contributions.

Indian PSUs, especially heavy industries, are progressively adopting modern HRM tools to overcome workforce rigidity, ageing employees, and skill deficits (Khandelwal, 2014). However, empirical evidence on HRSC implementation in PSUs remains limited.

## 3. Objectives of the Study

1. To analyze the demographic and socio-economic profile of executives in RINL, Visakhapatnam Steel Plant.
2. To assess employee perceptions on the strategic role of HR within the organization.
3. To evaluate the dimensions of the HR Scorecard workforce success, right HR professionals, right HR practices, and HR alignment.
4. To examine the perceived effectiveness of HR policies, performance appraisal systems, retention metrics, and customer retention rate.
5. To measure HR costs and evaluate the need for HR scorecard implementation for strategic advantage.
6. To suggest measures to strengthen HRSC implementation in RINL.

## 4. Research Methodology

This is a descriptive and analytical study based on primary data collected through a structured questionnaire. The organization has approximately 6,000 executives. Based on a 5% quota sampling method, 300 respondents were selected.

### Data Collection

- Primary data: Structured questionnaire (5-point Likert scale). Secondary data: Annual reports of RINL (2013–2018), HR manuals, published literature.

### Data Analysis

- Descriptive statistics (percentages, weighted averages).
- Comparative analysis across HRSC dimensions.
- Interpretation of HR cost trends.



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**Table 1. Gender-wise Distribution of Respondents**

Gender	Frequency (n)	Percentage (%)
Male	202	67.33
Female	98	32.67
<b>Total</b>	<b>300</b>	<b>100.00</b>

The gender-wise distribution reveals that a majority of the respondents are male (67.33%), while female respondents constitute only 32.67% of the total sample. This indicates a clear gender imbalance in the executive workforce of RINL. The dominance of male employees reflects the traditional nature of employment in heavy industries like steel manufacturing, where female participation at executive levels is relatively lower. However, the presence of nearly one-third female respondents suggests gradual improvement in gender inclusion. This trend highlights the need for strengthening gender diversity policies and promoting equal opportunities within the organization.

**Table 2. Age-wise Distribution of Respondents**

Age Group (Years)	Frequency (n)	Percentage (%)
20–25	35	11.67
26–35	97	32.33
36–45	42	14.00
46–55	77	25.67
Above 55	49	16.33
<b>Total</b>	<b>300</b>	<b>100.00</b>

The age-wise classification shows that the largest proportion of respondents (32.33%) falls within the 26–35 years age group, followed by 46–55 years (25.67%) and above 55 years (16.33%). The younger age group (20–25 years) accounts for only 11.67%, while 36–45 years represents 14%. This distribution indicates a mixed workforce with both young professionals and a significant proportion of experienced employees nearing retirement. The relatively high share of employees above 45 years suggests an ageing workforce, which may pose challenges in terms of succession planning, skill renewal, and adaptability to technological changes. At the same time, the presence of younger employees provides opportunities for innovation and long-term organizational sustainability.

**Table 3. Marital Status**

Marital Status	Frequency (n)	Percentage (%)
Married	247	82.33
Unmarried	53	17.67
<b>Total</b>	<b>300</b>	<b>100.00</b>



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The marital status distribution indicates that a vast majority of respondents (82.33%) are married, while only 17.67% are unmarried. This suggests that most executives are in stable family structures, which may positively influence job stability, commitment, and responsibility toward the organization. However, married employees may also face work-life balance challenges, especially in demanding industrial environments. This finding emphasizes the importance of family-friendly HR policies, flexible working conditions, and employee welfare programs.

Table 4. Perception toward HR as a Strategic Partner

Response Category	Frequency	Percentage (%)
Strongly Disagree (SDA)	16	5.33
Disagree (DA)	26	8.67
Neutral (N)	70	23.33
Agree (A)	150	50.00
Strongly Agree (SA)	38	12.67
<b>Weighted Average</b>	—	<b>3.56</b>

The perception analysis shows that 62.67% of respondents (Agree + Strongly Agree) believe that HR functions as a strategic partner in the organization, while only 14% express disagreement. About 23.33% remain neutral. The weighted average score of 3.56 indicates a moderately positive perception of HR’s strategic role. This suggests that while HR is increasingly recognized as a strategic contributor, there is still scope for strengthening its role in decision-making and organizational strategy. The neutral responses may indicate a lack of awareness or inconsistent HR practices across departments.

Table 5. Summary of Weighted Average Scores for HR Scorecard Components

Key Element	Weighted Average Score	Rank
Working Conditions & Work Environment	4.24	1
Effective Communication	4.23	2
Leadership	4.22	3
Employee Relations & Work Culture	4.22	3
Salary & Perks	4.21	4
Employee Engagement & Involvement	4.20	5
Workforce Excellence	4.17	6
Organizational Culture	4.15	7
Strategy Alignment	4.13	8
Performance Appraisal	4.11	9



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The ranking of HR scorecard components shows that “Working Conditions & Work Environment” (4.24) is the most highly rated factor, followed closely by “Effective Communication” (4.23) and “Leadership” (4.22). Other important factors include employee relations, salary and perks, and employee engagement, all scoring above 4.0. This indicates a high level of employee satisfaction across key HR dimensions. Lower-ranked factors such as “Strategy Alignment” (4.13) and “Performance Appraisal” (4.11), although still positive, suggest areas requiring improvement. Overall, the results confirm that HR practices at RINL are effective but need better alignment with strategic goals and more transparent appraisal systems.

Table 6. HR Cost and Productivity Indicators (2013–2018)

Year	Revenue per Employee (₹ Lakhs)	HR Cost per Employee (₹ Lakhs)	Profit per Employee (₹ Lakhs)	Healthcare Cost per Employee (₹ Lakhs)
2013–14	7741.62	1004.94	315.08	28.70
2014–15	7005.28	1100.78	591.14	31.57
2015–16	7042.01	1103.65	976.81	34.44
2016–17	7292.25	1241.97	969.93	37.30
2017–18	9534.20	1655.76	1096.76	40.17

The HR cost and productivity indicators show a steady increase in revenue per employee from ₹7741.62 lakhs in 2013–14 to ₹9534.20 lakhs in 2017–18, indicating improved productivity. HR cost per employee has also risen significantly, reflecting increased investment in human resources. Profit per employee shows a substantial upward trend, especially after 2014–15, suggesting improved operational efficiency. However, healthcare costs per employee have consistently increased, which may be due to ageing employees and rising medical expenses. Overall, the data highlights a positive relationship between HR investment and organizational performance, reinforcing the importance of strategic HR management.

Table 7. Cross Tabulation of Designation and Key Socio-demographic Variables

Designation	Up to 25	26–35	36–45	46–55	Above 55	Total
Junior Manager	20	30	4	0	0	54
Assistant Manager	10	16	4	0	0	30
Deputy Manager	1	24	9	7	0	41
Manager	0	19	23	27	6	75
Senior Manager	0	0	8	10	6	24
AGM	0	3	6	30	12	51
DGM	0	0	0	0	23	23
GM	0	0	0	1	1	2



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The cross-tabulation reveals that lower-level designations such as Junior Manager and Assistant Manager are concentrated in younger age groups (up to 35 years), while higher positions like AGM, DGM, and GM are predominantly occupied by employees above 45 years. This reflects a traditional hierarchical progression system within the organization. The absence of younger employees in senior roles indicates limited fast-track career advancement opportunities. Additionally, the concentration of top-level management in older age groups signals potential succession challenges in the near future. This underscores the need for leadership development programs and succession planning strategies.

### Conclusions:

The overall analysis clearly demonstrates that RINL has a structured and experienced workforce with generally positive perceptions toward HR practices and the Human Resource Scorecard framework. While HR initiatives are effective in improving productivity and employee satisfaction, challenges such as ageing workforce, gender imbalance, limited strategic alignment, and succession planning remain significant. Strengthening HR analytics, competency development, and inclusive policies will be crucial for enhancing long-term organizational performance.

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