



**ASSESSING MANAGERIAL TRAINING IN MAHARATNA COMPANIES IN INDIA
USING DONALD KIRKPATRICK'S MODEL**

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Abstract

Public Sector Undertakings (PSUs), particularly Maharatna companies such as ONGC, IOCL, NTPC, SAIL, CIL, BHEL, and GAIL, play a pivotal role in India's industrial growth and global competitiveness. To maintain their leadership position, these organizations invest significantly in managerial training and leadership development. This article applies Donald Kirkpatrick's Four-Level Training Evaluation Model to assess the effectiveness of managerial training programs in Maharatna companies, with a special emphasis on Level 4 (Results), which measures organizational impact. The analysis highlights how training influences key performance outcomes, including productivity, financial performance, safety, innovation, employee engagement, customer satisfaction, and sustainability. Case examples from NTPC, SAIL, and IOCL demonstrate tangible benefits such as reduced downtime, improved industrial relations, and cost savings in logistics. The study also discusses challenges in measuring Level 4 outcomes, such as attribution and data availability, and suggests best practices, including ROI calculations, balanced scorecards, and longitudinal studies. Findings affirm that aligning training with strategic objectives ensures not only enhanced managerial competence but also measurable organizational gains, thereby reinforcing the role of Maharatna companies as drivers of India's economic progress

Introduction

Public Sector Undertakings (PSUs) in India have historically played a vital role in nation-building, industrialization, and providing employment. Among them, Maharatna companies, such as ONGC, IOCL, NTPC, SAIL, CIL, BHEL, and GAIL, enjoy the highest degree of financial autonomy and strategic decision-making power. To remain globally competitive, these organizations continually invest in managerial training and leadership development. However, the effectiveness of these training initiatives must be systematically assessed to ensure alignment with organizational goals. Donald Kirkpatrick's Four-Level Training Evaluation Model is one of the most widely used frameworks for evaluating training effectiveness.

This article explores how Kirkpatrick's model can be applied to assess managerial training in Maharatna Companies in India, with a particular emphasis on Level 4 (Results), which measures organizational impact.

Overview of Donald Kirkpatrick's Model

Kirkpatrick's model consists of four progressive levels:

Level 1: Reaction – Measures participants' satisfaction with the training. Level 2: Learning – Assesses knowledge, skills, and attitude gained.

Level 3: Behavior – Evaluates the transfer of learning to the workplace.

Level 4: Results – Analyzes the final impact on organizational performance and business outcomes.

While Levels 1–3 focus on immediate and intermediate outcomes of training, Level 4 focuses on strategic impact, such as productivity, profitability, safety, customer satisfaction, and employee engagement.

Managerial Training in Maharatna Companies:

Context: Maharatna PSUs face unique challenges:

Large workforce diversity: Multiple generations, varying skill levels, and diverse educational backgrounds.

Unionized environments: Industrial relations impact managerial effectiveness. Global competition: Exposure to international benchmarks and best practices. Governmental oversight: Policy compliance while maintaining efficiency.

Thus, managerial training programs often cover:

Leadership and decision-making Strategic thinking and business acumen Change management

People management and emotional intelligence Corporate governance and ethics

Digital and data-driven management skills

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Application of Kirkpatrick's Model in Maharatna Companies

Level 1: Reaction Collected through participant feedback forms.

Example indicators: training relevance, quality of trainers, satisfaction levels, logistics.

Limitation: Measures perception, not actual learning or impact.

Level 2: Learning

Measured through pre- and post-training tests, simulations, and case studies.

Example indicators: increase in leadership competencies, understanding of safety protocols, awareness of sustainability practices.

Level 3: Behavior

Evaluates transfer of learning to the workplace.

Methods: 360-degree feedback, performance appraisals, workplace observation, project-based assessments.

Example: Manager applying conflict-resolution techniques learned in training to reduce workplace disputes.

Level 4: Results (Focus Area)

This level measures the organizational benefits attributable to training programs. It is the most critical and the most challenging to assess.

Measuring Level 4 Indicators in Maharatna Companies

1. Productivity and Efficiency

Indicators: Output per employee, reduction in process cycle time, increase in operational efficiency.

Example: Following post-training, NTPC managers implement lean management techniques, resulting in reduced downtime and a higher plant load factor.

2. Financial Performance

Indicators: Return on Investment (ROI) from training, cost savings, profit margins.

Example: IOCL managers trained in supply chain optimization reduce logistics costs, directly improving profitability.

3. Safety and Compliance

Indicators: Reduction in workplace accidents, adherence to statutory compliance, and fewer penalties.

Example: After safety leadership training, Coal India Limited reports fewer mining accidents.

4. Innovation and Process Improvement

Indicators: Number of new initiatives, patents filed, and technological innovations adopted.

Example: BHEL managers trained in design thinking propose innovative turbine designs that improve efficiency.

5. Employee Engagement and Retention

Indicators: Employee satisfaction scores, attrition rates, and absenteeism.

Example: GAIL managers improve team engagement, leading to reduced attrition in critical engineering teams.

6. Customer Satisfaction

Indicators: Customer complaints, Net Promoter Score (NPS), repeat business.

Example: SAIL managers trained in service orientation improve customer relationships, leading to higher sales orders.

7. CSR and Sustainability Outcomes

Indicators: Impact of CSR initiatives, ESG (Environmental, Social, Governance) ratings.

Example: ONGC managers trained in sustainability reporting enhance ESG compliance, boosting investor confidence.

Challenges in Measuring Level 4

1. Attribution Problem: Difficult to isolate training as the sole contributor to improved results.

2. Time Lag: Results may take months or years to show.

3. Multiple Influences: Market conditions, government policies, and technological changes also impact outcomes.

4. Data Availability: Quantitative data may not always be readily available. Best Practices for Measuring Level 4 in Maharatna companies

1. Link Training Objectives to Business Goals

Example: Align leadership training with PSU's vision of global competitiveness.

2. Use Balanced Scorecard Approach

Integrate financial, customer, internal process, and learning & growth perspectives.

3. ROI Calculation

Compare training investment with tangible returns (cost savings, revenue growth).

4. Longitudinal Studies

Track cohorts of trained managers over 1–3 years.

5. Benchmarking

Compare with other PSUs and global companies for effectiveness.

6. Mixed-Methods Approach

Combine quantitative metrics with qualitative feedback (e.g., case studies, success stories).

Case Illustrations

Case 1: NTPC – Enhancing Plant Efficiency

Training Focus: Lean management and operational excellence.

Level 4 Outcome: 10% reduction in downtime, leading to significant cost savings. Case 2: SAIL – Reducing Industrial Disputes

Training Focus: Conflict management and labor relations.

Level 4 Outcome: 20% reduction in disputes, improved industrial harmony, and fewer production halts.

Case 3: IOCL – Supply Chain Optimization

Training Focus: Digital logistics and supply chain management.

Level 4 Outcome: Annual logistics cost reduction of ₹150 crores, improved fuel delivery efficiency.

Conclusion

Managerial training in Maharatna companies is a strategic necessity to enhance competitiveness, efficiency, and global standing. Donald Kirkpatrick's model provides a structured way to evaluate these training programs. While Levels 1–3 ensure that learning happens and is applied, Level 4 provides the ultimate evidence of success by measuring organizational impact.

By carefully designing training programs aligned with strategic objectives, collecting relevant data, and adopting robust measurement practices, Maharatnas can justify their training investments and demonstrate tangible value creation. This, in turn, strengthens their role as engines of India's industrial growth and global competitiveness.

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