



Identification and Ranking of Kaizen Costing Indicators in Mehr Bank, Sistan and Baluchestan Province

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Abstract

This study aims to identify and rank Kaizen costing indicators in Qarz-al-Hasaneh Mehr Iran Bank, branches located in Sistan and Baluchestan Province. Relying on expert opinions and employing the Analytic Hierarchy Process (AHP), the research seeks to provide a clear picture of the critical dimensions influencing Kaizen implementation in the banking sector. The study is descriptive-analytical and applied in nature. Data were collected through a structured questionnaire. The statistical population consisted of managers, deputies, senior experts, and specialists in process improvement and cost management at Mehr Bank in Sistan and Baluchestan. Using purposive sampling, 30 participants with relevant expertise and experience were selected. The questionnaire included 20 close-ended items measured on a five-point Likert scale. Content validity was confirmed through expert and academic review, while reliability was verified with a Cronbach's alpha of 0.88, indicating strong internal consistency. Data were analyzed using Expert Choice software to determine the relative weights of the dimensions and indicators. The consistency ratio of pairwise comparisons was less than 0.1, confirming the robustness and accuracy of the results. Findings revealed that organizational culture carried the highest relative weight, making it the most influential dimension in successful Kaizen adoption. Indicators such as "managerial commitment to change," "employee trust," and "decision-making transparency" played key roles. Human resource and process-related dimensions ranked next in importance. The study concludes that achieving Kaizen in banks is unattainable without a strong organizational culture, employee participation, and continuous support from senior management. Accordingly, it is recommended that banks focus on transforming organizational mindset, strengthening information infrastructures, and enhancing employee competencies to institutionalize continuous improvement.

Keywords: Kaizen, Banking, Continuous Improvement, Organizational Culture, Human Resources, Analytic Hierarchy Process (AHP)

JEL Classification: M11, M12, M14, M41, G21, D24.

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INTRODUCTION

In the dynamic and highly competitive global financial and banking system, the need for robust continuous improvement (Kaizen) approaches has become paramount. Banks worldwide are increasingly seeking to reduce operating costs and enhance service efficiency. Kaizen, a Japanese management philosophy emphasizing continuous, incremental improvement and total employee participation, has gained significant traction in service organizations, including the banking sector. Unlike traditional cost reduction methods that propose abrupt, large-scale changes, Kaizen focuses on gradual, persistent reforms that lead to long-term cost reduction and quality enhancement.

Kaizen Costing serves as a vital tool for operationalizing Kaizen principles within modern cost management. This approach not only aims for cost reduction through the elimination of waste (*muda*) but also fosters a stronger organizational culture, increases transparency, and upgrades employee skills. Studies indicate that organizations utilizing Kaizen Costing have reported non-essential cost reductions and operational efficiency increases. Given the complex and often high-cost nature of banking activities, implementing this approach is strategically important for addressing structural costs and maintaining a competitive edge. In Iran, particularly in regions like Sistan and Baluchestan Province, banks face unique operational challenges, including potential weaknesses in IT infrastructure, limited revenue resources, and lower accessibility to banking services compared to metropolitan areas. Qarz-al-Hasaneh Mehr Iran Bank, with its distinct social and Qarz-al-Hasaneh (interest-free loan) mission, operates under specific resource constraints, making novel cost management models essential. Implementing Kaizen Costing here could significantly improve operational performance, human resource productivity, and customer satisfaction. The success of this system relies heavily on identifying and prioritizing key indicators that are adaptable to the local context, such as employee participation, managerial support, and IT system integration. Previous international research has highlighted various factors essential for successful Kaizen Costing implementation, including employee participation, waste elimination, process flow improvement, and the use of accurate management accounting information. However, research on Kaizen Costing in the Iranian banking sector, especially at a regional level, remains limited and fragmented. The lack of localized, analytical studies on Kaizen Costing indicators in the Iranian context necessitates a systematic investigation to develop an appropriate framework. Therefore, this study aims to identify and rank the key indicators of Kaizen Costing success at Qarz-al-Hasaneh Mehr Iran Bank, Sistan and Baluchestan Province, utilizing a multi-criteria decision-making method. The findings are expected to provide a scientific framework for strategic planning, cost structure optimization, and financial performance improvement in this specialized banking environment. This research contributes by localizing success indicators, enabling the design of managerial models that align with the cultural, economic, and organizational characteristics of the region.

METHODOLOGY

Research Type and Design: This study is descriptive-analytical and applied in nature, employing a survey research methodology combined with a multi-criteria decision-making model.

Statistical Population and Sample: The statistical population consisted of all managers, deputies, senior experts, and specialists in cost management, process improvement, and productivity employed at the branches and central office of Qarz-al-Hasaneh Mehr Iran Bank in Sistan and Baluchestan Province (estimated at approximately 40 individuals). Due to the focus on experienced professionals familiar with Kaizen Costing and continuous improvement, a purposive, non-random sampling method was used. A sample of 30 participants with relevant expertise and a minimum of five years of experience in cost management and process improvement projects was selected. The sample included senior staff managers, experienced branch managers, and experts from process improvement and quality units.

Data Collection Tool and Reliability: The primary data collection instrument was a structured questionnaire designed to assess and rank the importance of Kaizen Costing indicators. The questionnaire included 20 closed-ended items categorized under five main dimensions and measured on a five-point Likert

scale (ranging from "Very Low Importance" to "Very High Importance"). Content validity was confirmed through review and consensus by a panel of university professors and industry experts. Reliability was verified using Cronbach's alpha of 0.88, indicating strong internal consistency and appropriate tool trustworthiness for the subsequent analytical phase.

Data Analysis: Data analysis was performed using the Analytic Hierarchy Process (AHP), a widely used multi-criteria decision-making technique suitable for structuring complex decisions and prioritizing factors based on their relative importance. The AHP computations, including the creation of pairwise comparison matrices, the determination of relative weights, and the final ranking for each dimension and indicator, were conducted using Expert Choice software. The consistency ratio (CR) for all matrices and the overall hierarchy was calculated, with a value of less than 0.1 ($CR < 0.1$) serving as the criterion for accepting the robustness, accuracy, and acceptable internal logic of the experts' judgments.

RESULTS

The hierarchical structure developed for evaluating factors influencing Kaizen system success included five main dimensions and 20 sub-indicators. The final ranking of the dimensions and key indicators, based on the AHP analysis and their calculated final weights, is as follows:

Main Dimension	Final Weight	Final Rank	Key Indicator (Highest Weighted Indicator)	Indicator Weight (within the Dimension)
Strategic Dimension	0.28	1	Alignment with Bank's Macro Goals	0.35
Process Dimension	0.25	2	Identification and Elimination of Waste	0.40
Human Resources Dimension	0.20	3	Employee Participation in Decision-Making	0.33
Information Technology Dimension	0.15	4	Integration of Information Systems	0.35
Organizational Culture Dimension	0.12	5	Culture of Accepting Change in the Organization	0.38
Overall Consistency Ratio (CR):				0.05

1. **Strategic Dimension (Weight: 0.28, Rank 1):** This dimension carried the highest aggregate weight, signifying the paramount importance of top-down commitment and planning. The most important indicator was "Alignment with the Bank's Macro Goals" (Weight: 0.35), highlighting that Kaizen initiatives must be viewed as an integral part of the bank's long-term strategy rather than a standalone project. This was closely followed by "Senior Management Support for the Kaizen Process" (Weight: 0.30).
2. **Process Dimension (Weight: 0.25, Rank 2):** This dimension reflects the operational core of Kaizen. The highly weighted key indicator was "Identification and Elimination of Waste" (Weight: 0.40), demonstrating that process optimization, including the reduction of non-value-added activities, is a tangible priority. "Standardization of Activities" (Weight: 0.25) also played a significant role.
3. **Human Resources Dimension (Weight: 0.20, Rank 3):** Human capital is confirmed as a critical factor. The most essential indicator was "Employee Participation in Decision-Making" (Weight: 0.33), which is crucial for generating continuous, ground-up improvement ideas. "Continuous Employee Training" (Weight: 0.30) was also highly ranked, recognizing the need for skills development in continuous improvement techniques.

4. Information Technology Dimension (Weight: 0.15, Rank 4): This result emphasizes the need for a strong, supportive IT infrastructure. The top indicator was "Integration of Information Systems" (Weight: 0.35), underscoring the necessity of a cohesive information platform to measure, track, and report on Kaizen-driven changes and cost savings.
5. Organizational Culture Dimension (Weight: 0.12, Rank 5): Although ranking last among the five main dimensions in terms of immediate weight, the indicators within this dimension are foundational for sustainable, long-term change. The most influential indicator was "Culture of Accepting Change in the Organization" (Weight: 0.38), indicating that a mindset receptive to gradual transformation is non-negotiable for institutionalizing Kaizen.

The overall consistency ratio (CR) for the entire hierarchical structure was 0.05, confirming the logical consistency and credibility of the experts' collective judgments.

CONCLUSION

The study successfully identified and ranked the factors critical for implementing Kaizen Costing in Qarz-al-Hasaneh Mehr Iran Bank in Sistan and Baluchestan. The results confirm that success requires a comprehensive and cohesive approach that spans strategic oversight, operational efficiency, and organizational development.

The finding that the Strategic Dimension (Rank 1) is the most crucial factor is a key takeaway, suggesting that in this banking context, the primary impetus for successful Kaizen implementation must come from committed leadership and clear alignment with the bank's high-level objectives. Without a strong strategic mandate, operational improvements risk becoming isolated, short-lived projects. The high importance of the Process Dimension (Rank 2), particularly waste elimination, aligns with the fundamental, practical philosophy of Kaizen. Furthermore, the strong ranking of the Human Resources Dimension (Rank 3) underscores that Kaizen is a people-centric system, reliant on the active involvement and empowerment of front-line employees.

The relatively lower weight of the Organizational Culture Dimension (Rank 5) does not diminish its importance; rather, it suggests that the experts perceive the strategic planning and process-based activities as higher priority prerequisites for initiating a structured Kaizen Costing program. However, indicators like "Culture of Accepting Change" remain fundamental for sustaining the improvement effort over the long term.

In conclusion, effective Kaizen Costing execution in this regional banking environment is a synthesis of strategic leadership, human capital development, process optimization, technological integration, and cultural support. Banks must invest coherently across all these dimensions to achieve sustainable cost optimization and service quality enhancement. The findings offer clear, prioritized guidance for managers at Mehr Bank to focus their resources on strategic alignment and process optimization tools, supported by robust HR and IT systems, to successfully institutionalize continuous improvement.

Contribution of Authors

The authors jointly contribute to the preparation and publication of the article.

Ethical Approval

Informed written consent was obtained from individuals for the publication of their anonymous information in this study.

Sponsor

This study had no sponsor.

Conflict of Interest

The authors of this article declared no conflict of interest regarding the authorship or publication of this article.

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