

The Role of Leadership in Success of 5R Culture: A Systematic Literature Review

Fani Akmaliah Safitri, Achmad Husen, Dian Alfia Purwandari, Nida' Farah Abiyya, Hasnah Lidiawati

Universitas Negeri Jakarta, Indonesia

Email: fani.akmaliah@mhs.unj.ac.id, ahusen@unj.ac.id, dian-alfia@unj.ac.id, nida.farah@mhs.unj.ac.id, hasnah.lidiawati@mhs.unj.ac.id

Abstract

The 5R (Concise, Neat, Clean, Careful, Diligent) work culture is the foundation of modern work environment management that aims to create an efficient, clean, safe, and productive workplace. However, the implementation of this principle is highly dependent on the active role of the organization's leader. This study aims to examine the role of leadership in the success of the 5R culture through a systematic literature review of 16 academic articles from various sectors: manufacturing industry, MSMEs, health services, education, and SOEs. The method used is a thematical-narrative approach with classification based on sector, leadership style, implementation strategy, and successful implementation of the 5R. The results of the study show that the success of the 5Rs is strongly influenced by four key leadership roles: facilitator, role model, communicator, and evaluator. In the large industrial sector, the MSME sector, the education and healthcare environment, design implementation, local leadership play a role in the synchronization of work values and practices. The discussion emphasized the importance of contextual and transformational leadership to ensure the sustainability of the 5R culture. Many studies indicate that the 5R culture often fails to survive due to weak evaluation and inconsistency of leaders. A value-based leadership training approach and visual work design are also recommended to strengthen the internalization of the 5R principles. This article concludes that leadership has a crucial influence on the success of the 5Rs in various organizational contexts. The leadership role framework built in this study can be used as a guideline for training, organizational development, and evaluation of work culture policies. Further research based on primary data is needed to test the effectiveness of leadership interventions on the success of cross-sector work culture.

Keywords: leadership, work culture, 5R's, organization, literature review

INTRODUCTION

The 5R (Concise, Neat, Clean, Careful, and Diligent) work culture, which is an adaptation of the Japanese 5S method, has become a widely used approach to work environment management in various sectors (Priyanto et al., 2020). These principles aim to create a clean, orderly, efficient, and productive workplace (Tariq et al., 2016; Putri et al., 2021). The implementation of 5R is an important foundation for improving the quality of the production process, reducing waste of time and resources, and creating a safe and enjoyable work environment (Sari & Fathoni, 2017; Kurniawan & Sukarno, 2019). Many organizations, ranging from the manufacturing industry to public service and the

education sector, have adopted this principle as part of their quality and efficiency improvement strategies (Wibowo et al., 2019; Alghamdi et al., 2022).

However, in practice, the implementation of the *5R* culture does not always run optimally. One of the main obstacles is the lack of support and involvement from the organization's leadership. The *5R* culture is not only a matter of technical and systematic work, but more than that, it is a transformation of organizational culture (Mohamad Fazali, 2021). This transformation requires a strong commitment from all levels of the organization, especially leaders who serve as role models in building positive work habits (Maulana, 2023; Rohalfi et al., 2022).

In various field studies, it was found that although the *5R* program has been widely disseminated, its implementation has not shown maximum results. Examples of problems include work areas that remain cluttered, tools that are not stored in the right place, employees who are not disciplined in maintaining cleanliness and order, and a lack of maintenance of established work standards (Asyifa et al., 2025; Maria Nurhayaty, 2023). This problem often stems from the weak role of leaders in encouraging, monitoring, and internalizing the *5R* values.

Leaders who do not set an example in the implementation of the *5R* or do not make room for employee involvement are actually the main obstacles to successful implementation. A study by Asyifa et al. (2025) shows that passive leadership can decrease adherence to the *5R* principle in the field. On the other hand, active and participatory leadership has been proven to change organizational behavior as a whole. A study by Nugraha & Bagus (2025) also confirms the importance of the role of leaders in encouraging the practice of *5R* in small business environments.

A number of studies have indicated that leadership factors make a major contribution to the successful implementation of the *5R*. Pelani et al. (2023) stated that the implementation of *kaizen* and *5R* becomes more effective when leaders are concerned with continuous improvement and play an active role as facilitators. Another study by Maria Nurhayaty (2023) mentions the importance of visual storage and communication system design as part of a leader's strategy for encouraging order. Iqbal Maulana (2023) adds that the implementation of *5R* is not enough with commands alone, but must be supported by training and the internalization of values through active supervision.

Eko Poerwanto et al. (2024) underline that without a consistent leadership role, the *5R* culture is difficult to sustain in the informal sector, such as metal SMEs. Meanwhile, Sandya & Wardhana (2023) show that integrating the *5R* concept into organizational design and branding requires strict supervision from leaders as a symbol of organizational behavior change.

Many studies have addressed the effectiveness of implementing the *5R*, but not many have explicitly examined the role of leaders in the success of this culture. The main focus of previous research is still on technical aspects or the results of field observations, not on the synergy between leadership style and work culture (Gunawan, 2021; Izzazulqaq et al., 2022). There is no robust conceptual framework to explain how leadership dimensions affect the success of the *5R* program, including how to measure the effectiveness of leadership intervention.

This study offers a new contribution to the organizational management literature, namely by building a thorough understanding of the strategic role of leadership in the implementation of the *5R* culture. This research will examine the literature from various sectors to identify successful leadership patterns, principles, and models in shaping a *5R*-based work culture. With a systematic review approach, this article also seeks to develop

a framework that can be a reference for the development of leadership training modules in the future. The results of this review are expected to be a conceptual basis for improving the effectiveness of 5R implementation in a sustainable and comprehensive manner in various organizations (Asyifa et al., 2025; Poerwanto et al., 2024; Sandya & Wardhana, 2023).

This research aims to analyze the role of leadership in the implementation of 5R culture in various organizational sectors. Theoretically, the research contributes to the management literature by developing a conceptual framework of leadership relationships and work culture. Practically, the results of the research can serve as a guide for leaders in optimizing their roles and helping organizations design 5R value-based leadership training to improve productivity and the sustainability of work culture.

RESEARCH METHODS

1. Research Methods

The methodology of this study uses a systematic literature review with a thematic-narrative approach applied to 16 selected articles that meet the inclusion criteria. Data collection was conducted through literature searches in various academic databases such as Google Scholar, ScienceDirect, *SINTA*, *Garuda*, and *Neliti* using a combination of keywords related to 5R and leadership. The research population includes scientific articles on 5R leadership and culture published between 2016 and 2025, with a sample of 16 selected articles representing various sectors, including industry, MSMEs, healthcare, and education. Through this approach, the research is expected to provide a comprehensive understanding of the strategic role of leadership in building an effective 5R culture in various types of organizations.

2. Inclusion and Exclusion Criteria

Criteria are set to ensure the focus and relevance of the study results.

a. Inclusion:

- 1) Articles published in 2016–2025
- 2) Focus on the linkage between leadership and 5R culture
- 3) Case studies or literature reviews in the industrial, service, education, or MSME sectors
- 4) Articles in Indonesian and English

b. Exclusion:

- 1) Non-academic, non-peer-reviewed articles
- 2) Focus only on 5R technicalities without leadership discussions
- 3) Duplication or no empirical data

3. Keywords and Search Strings

Keyword combinations are developed from the articles in the previous summary table:

- a. ("5R" OR "5S") AND ("leadership" OR "leadership") AND ("implementation" OR "implementation")
- b. ("Work Culture") AND ("5S") AND ("transformational leadership")
- c. ("Kaizen") AND ("participatory management") AND ("leadership influence")

This approach is in line with topics from Gunawan (2021), Pelani et al. (2023), and Poerwanto et al. (2024), who examined the relationship between leadership style and the quality of 5R implementation.

The strategy is carried out with snowballing techniques from key articles such as Maria Nurhayaty (2023), which refers to 5R research based on visual management, and Sandya & Wardhana (2023) which explores the integration of 5Rs and workspace design. Strict screening is carried out through abstract analysis and article content.

4. Data Selection and Extraction Process

The selection is carried out in stages:

- 1) An initial search yielded 109 articles.
- 2) The initial selection (titles and abstracts) left 50 articles.
- 3) The full content selection resulted in 16 relevant articles.
- 4) Including studies by Gunawan (2021), Maulana (2023), and Rohalfi (2022) for variations in organizational contexts.

Data extraction is focused on:

- a. Sectors and types of organizations
- b. Leadership style (transformational, participatory, directive)
- c. Form of implementation of 5R
- d. Supporting and inhibiting factors
- e. Impact on performance and work culture

5. Analysis and Synthesis Methods

Using a thematic-narrative approach. The analysis is classified based on:

- a. Sectoral context: large industries (Pelani, 2023), MSMEs (Nugraha, 2025), public institutions (Rohalfi, 2022)
- b. The role of leaders: facilitator, role model, evaluator (Maulana, 2023; Gunawan, 2021)
- c. The linkage of training, supervision systems, and sustainability (Asyifa, 2025; Poerwanto, 2024)

Validity is guaranteed through the selection of reputable sources and cross-validation between articles. Primary sources such as the journals Pelani et al. (2023) and Sandya & Wardhana (2023) are used as the main reference because they contain empirical data and complete theoretical concepts. The literature is limited to studies that explicitly mention the role of leadership in the 5R's. Gray literature and industry reports are not included. These restrictions reduce potential bias but can bypass non-publication managerial practices. With this approach, the study provides a systematic and comprehensive mapping of how leadership influences the success of the 5R work culture in various sectors. This review framework reinforces the synthesis of results in the following sections.

RESULTS AND DISCUSSION

The results of the search and synthesis of 16 selected articles from various sectors show that the role of leadership is very significant in determining the success rate of the

5R work culture. These findings are grouped into several major themes based on sector, leadership style, implementation strategy, and impact of the implementation of 5Rs on organizational performance.

1. Differences in the Success of 5R Implementation in Various Sectors

In large manufacturing industry sectors, as shown by Pelani et al. (2023), Izzazulqaq et al. (2022), and Asyifa et al. (2025), the success of 5R implementation is highly dependent on the training system prepared by management as well as the consistency of supervision. At PT NT Piston Ring Indonesia, leaders who integrate the principles of kaizen and 5R are able to create an efficient work culture and significantly reduce the number of defective products. On the other hand, at PT Wilmar Nabati Indonesia, the low socialization from superiors caused the implementation of the 5Rs to not run optimally even though there was a formal structure.

In the context of MSMEs, such as VINO Cake MSMEs (Nugraha & Bagus, 2025) and a study by Poerwanto et al. (2024) at Yogyakarta metal SMEs, business owners who also play the role of leaders have a direct influence on changes in work behavior. With a participatory descriptive approach, leaders who actively lead by example and build two-way communication are able to increase staff understanding and commitment to the 5R principles. Support in the form of UPT assistance has been proven to increase work efficiency and consistency in the implementation of 5R procedures in the field.

Public service institutions such as the Margo Mulyo Health Center (Rohalfi, 2022) show that despite regulations and SOPs, the non-involvement of unit heads causes the implementation of the 5R culture to be hampered. This is exacerbated by the low score of implementing the 5R principle (below 50%) which indicates weak internal controls. Maria Nurhayaty (2023) study in the retail sector also shows that despite the shelf design and visualization of 5Rs, without supervision from direct supervisors, violations of the Neat principle still reach 34%.

2. Leadership Style and Implementation Effectiveness

Transformational leaders as studied by Sandya & Wardhana (2023) at PT Petrokimia Gresik are able to build synergy between the 5R culture and space design and company values. A visionary and communicative approach creates cross-departmental engagement in maintaining the regularity of the work environment and facilitating ongoing maintenance. On the other hand, authoritarian leadership styles tend to cause resistance and unsustainability of the 5R program (Gunawan, 2021).

Meanwhile, Poerwanto et al. (2024) and Maulana (2023) said that participatory leadership styles in small and medium business environments are effective in forming new work habits because they are able to foster a sense of belonging to the workspace. This intervention is accompanied by technical training, monitoring, and empowerment that creates a more organized and productive work environment.

3. Supporting and Inhibiting Factors

The main factors supporting the success of 5R culture based on synthesis analysis include:

- a. Leadership exemplary and action suitability with 5R values (Maulana, 2023; Gunawan, 2021)
- b. The existence of an incentive system and employee recognition for best practices (Pelani, 2023; Nugraha, 2025)
- c. Standard operational procedures that are socialized and followed up with evaluation (Asyifa et al., 2025)
- d. Supporting infrastructure such as storage shelves, visual boards, and workspace layouts (Nurhayaty, 2023; Sandya & Wardhana, 2023)

Inhibiting factors generally are:

- a. Lack of leadership commitment and absence of role models (Izzazulqaq, 2022; Rohalfi, 2022)
- b. Absence of periodic evaluations and follow-up training (Gunawan, 2021; Rohalfi, 2022)
- c. Lack of integration of 5R culture in work systems and performance appraisals (Poerwanto et al., 2024)

4. The Impact of Implementing a Led 5R Culture Effectively

The literature concludes that effective leadership produces real impacts on organizations, including:

- a. A cleaner and more organized work environment (Asyifa, 2025; Nugraha, 2025)
- b. Productivity increases due to time and space efficiency (Pelani, 2023; Gunawan, 2021)
- c. Reduction in the potential for work accidents due to unhindered work areas (Izzazulqaq, 2022)
- d. Job satisfaction and employee motivation increase due to active involvement (Poerwanto, 2024)

5. Comparison of Sectors and Implementation Complexity

Studies show that the complexity of implementation differs in each sector. Large companies need reporting and auditing systems, as well as leaders who are able to manage large and medium-sized teams. The MSME sector depends on the personal proximity of leaders and informal management. In the public service and education sectors, as shown in the studies of Rohalfi (2022) and Nurhayaty (2023), the effectiveness of the 5Rs is highly dependent on the bureaucratic system and policies of unit leaders.

The thematic framework compiled from this synthesis confirms that the role of leadership in the 5Rs can be classified into:

- a. Facilitator: providing training, tools, and supporting facilities (Poerwanto, 2024; Sandya & Wardhana, 2023)
- b. Role Model: showing consistency and exemplary in daily practice (Maulana, 2023; Scott, 2025)
- c. Communicator: conveying vision, values, and expectations on a regular basis (Gunawan, 2021)

- d. Evaluator: auditing and improving the implementation of 5R periodically (Izzazulqaq, 2022; Pell, 2023)

Adaptive, communicative, and visionary leadership has proven to be most effective in shaping a 5R-based work culture. Studies show that leadership style is inseparable from the success of a 5R program. Cultural intervention without the involvement of leaders results in resistance and dysfunction of the work system, as seen in some cases of organizations that only apply the 5Rs ceremonially.

The discussion in this study aims to integrate findings from various sectors regarding the role of leadership in the success of the 5R culture. The approach used is a thematic discussion of the synergy dynamics between leadership, organizational character, and the application of the 5R.

1. Synergy of Leadership Roles and 5R Culture

Effective leadership is not just about direction, but about active involvement in shaping the work culture. Maulana (2023) emphasized the importance of direct involvement of leaders in implementing and exemplifying the 5R's, especially in a work environment that does not yet have strong SOPs. This is in line with Poerwanto (2024) who underlines that leaders function as 5R "value cultivators" in informal contexts such as SMEs. Gunawan (2021) and Izzazulqaq (2022) also said that leaders who set an example have a significant influence on the work habits of subordinates.

Asyifa (2025) and Nurhayaty (2023) show that without strong leadership support, the application of the 5R principle is often not consistent. Participatory leadership has been shown to be effective in internalizing the 5Rs into daily work behavior, as seen in the Nugraha & Bagus (2025) study on MSMEs and Rohalfi (2022) in the health sector. Meanwhile, Sandya & Wardhana (2023) added that leaders play a role in connecting work culture, company image, and interior design as part of an integrated work system.

2. Leadership Role Framework in Fostering a 5R Culture

The results of the synthesis form a framework of four key leadership roles in the success of the 5R culture:

- a. Facilitator: provides training and support for work facilities. Nurhayaty (2023) and Izzazulqaq (2022) show the importance of the role of leaders in providing infrastructure such as shelves and visual systems to support order.
- b. Role Model: shows the 5R work behavior. Pelani (2023) stated that success in the QC division of PT NT Piston Ring is greatly influenced by the discipline of leaders in implementing the principles of 5R and Kaizen.
- c. Communicator: conveying a vision and instilling value. Sandya & Wardhana (2023) emphasized the importance of cross-departmental and interlevel communication as a means of building common cultural perceptions.
- d. Controllers (Evaluator): ensure compliance, provide feedback, and make periodic corrections. Studies by Maulana (2023) and Rohalfi (2022) show that a lack of evaluation and supervision leads to the failure of the implementation of basic principles such as Neat and Care.

3. Sustainability of the 5R Culture Through Leadership

The implementation of 5Rs that is purely instructional tends not to last long. There needs to be continuity between the leader's long-term vision and the supporting internal system. In this context, the Kaizen approach is important (Pelani, 2023) because it encourages continuous improvement. On the other hand, Maulana (2023) highlights the importance of continuous training and maintaining SOP consistency to maintain the implementation of the 5R.

Nugraha (2025) emphasizes that sustainability can be maintained if leaders strengthen a culture of appreciation, encourage employee participation, and provide regular feedback. Meanwhile, Poerwanto (2024) noted that consistency in socialization and technical assistance by leaders has an impact on increasing staff compliance with the 5R principles.

4. Sector Comparison and Practical Implications

Large industrial sectors such as PT Wilmar Nabati (Izzazulqaq, 2022) and PT NT Piston (Pelani, 2023) require a structured reporting and audit system. On the other hand, a personal approach is indispensable in MSMEs such as Vino Cake (Nugraha, 2025), where leaders often concurrently have many functions. In public institutions such as the Margo Mulyo Health Center (Rohalfi, 2022), success is highly dependent on internal drivers, namely the head of the work unit.

The practical implication of this is the importance of a contextual leadership approach. Contextually appropriate leadership strategies will result in higher effectiveness than a uniform approach. In large companies, audits and SOPs are the main instruments; in MSMEs, social relations and communication are more decisive.

5. Recommendations for Strengthening Leadership Roles

- a. Organizational leaders need to be trained to become cultural agents, not just administrators (Pelani, 2023).
- b. Integration of 5R values into the reward system and employee career development (Nugraha, 2025).
- c. Strengthening the 5R audit mechanism involving all levels of the organization (Izzazulqaq, 2022).
- d. Redesign the workplace to support the visualization and practice of the 5Rs (Nurhayaty, 2023; Sandya & Wardhana, 2023).
- e. The application of practice-based periodic training and sectoral case studies to form value-based leadership (Gunawan, 2021).

6. Theoretical and Policy Implications

Theoretically, these findings reinforce the understanding that contextual and transformative leadership plays a major role in fostering a work culture based on efficiency and quality. The framework of the four leadership roles (facilitator, role model, communicator, evaluator) can be used as a tool for work culture analysis in future research. In terms of policy, these results show the urgency of cross-sector leadership training based on organizational cultural values and the application of the 5R principle as a cross-industry quality standard.

CONCLUSION

This study aims to examine the role of leadership in the successful implementation of 5R work culture through a literature review approach. The results show that leadership has a central role in forming, instilling, and maintaining a 5R culture across various sectors. A visionary, communicative, and participatory leadership style has proven to drive the overall success of the 5R program. From the synthesis of the articles, a leadership role framework consisting of four elements was identified: facilitator, role model, communicator, and evaluator. These roles appear consistently in various studies, including in large organizations (Pelani, 2023), *MSMEs* (Nugraha, 2025), and public service institutions (Rohalfi, 2022). The difference in the success rate of 5R implementation is highly dependent on the existence and consistency of these roles. Strong leadership is the foundation of a successful organizational culture. In the context of 5R, leaders are not just technical steers but also value bearers, change facilitators, and stewards of sustainability. Without an adaptive and committed leader, the 5R culture becomes only a symbol, not a practice. Therefore, 5R value-based leadership development is a strategic need for organizations that want to grow sustainably.

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