



THE ROLE OF CREATIVE LEADERSHIP IN CHANGE MANAGEMENT

Myroslav KRYSHтанOVYCH^{1✉}, Yuliia BEKH², Tetiana ZHYZHKO³, Oksana POVSTYN⁴,
Oleksandr MOLNAR⁵

¹*Department of Pedagogics and Innovative Education, Institute for Law, Psychology, and Innovative Science, Lviv Polytechnic, V. Chornovola av. 57, 36–706 Lviv, Ukraine*

²*Department of Branch Sociology, Faculty of Sociology, Taras Shevchenko National University of Kyiv, Glushkova av. 4d, 03022 Kyiv, Ukraine*

³*Department of Management, Systems Analysis and International Relations, Institute of Public Management and Administration, National Pedagogical Drahomanov University, Pirogova str. 9, 01601 Kyiv, Ukraine*

⁴*Department of Social Capital and Organizational Management, Faculty of Management, AGH University of Kraków, Adama Mickiewicza av. 30, 30–059 Kraków, Poland*

⁵*Department of Economic Theory, Faculty of Economics, Uzhhorod National University, Universytetska str. 14, Transcarpathian Region, 88000 Uzhhorod, Ukraine*

Article History:

- received 9 September 2024
- accepted 21 July 2025

Abstract. The problem that exists today is that it is extremely difficult to assess the influence of a leader on the change management system, since a significant number of his individual character traits or abilities are unknown, which contributes to this. It is important to establish which factors of creativity are more important than others. The key idea of the article is to demonstrate a methodical approach, how to evaluate and select the most effective qualities of creativity in a leader in order to increase the effectiveness of the change management system. The purpose of the article is to determine the level of importance of the factors of the leader's creativity that influence change management in the organization. The object of the study is the level and structure of the leader's creativity in the organization. The research methodology includes the method of analytic hierarchy process developed by Thomas L. Saaty, the method of expert review, which was strengthened by the Delphi method. As a result of the empirical analysis involving 40 experts from Ukraine and Poland, four key factors of leadership creativity were identified and ranked by influence: 1) openness to new ideas, 2) risk-taking ability, 3) flexibility of thinking, and 4) social interaction skills. Risk-taking ability emerged as the most influential factor in effective change management. After that, we presented the key directions of how they can be developed. These findings provide actionable recommendations for enhancing leader creativity in practical organizational settings. Rather than offering general advice for similar research, future research should test the applicability of this factor structure across different sectors, organizational sizes, and cultural contexts to validate and refine the proposed model.

Keywords: change management, creative potential, creative strategies, creativity, innovative thinking, leadership creativity, method of analytic hierarchy process.

✉Corresponding author. E-mail: kryshthanovych.lpnu@gmail.com

1. Introduction

Creativity in the context of leadership can be defined as the ability to generate innovative and effective solutions in complex and unpredictable conditions. This is not only a talent for inventing new ideas, but also the ability to motivate a team, lead people, reveal and use their potential to achieve organizational goals.

A creative leader, accordingly, is a person who combines leadership and creative abilities, capable of not only formulating new ideas, but also implementing them in the form of specific changes in the organization's activities. Such a leader determines the vector of development, taking into account the trends of the external environment and stimulates innovative potential within the team.

The modern paradigm of leadership in an organization is simply impossible without the formation of an effective communication system, since it is through it that the generation of a strategic vision and support for the motivation of the team occurs. The integration of effective communication will facilitate the exchange of innovative ideas, ensure trust between the management and employees, while facilitating and optimizing the process of making management decisions. In this context, the integration of communication aspects into the leadership model allows for a prompt response to potential challenges and adaptation of the organization's activities to the external environment. In this regard, the combination of creativity and communication is a key factor in increasing the effectiveness of organizational change management.

Change management is a process that includes the development, initiation, and implementation of changes in an organization in order to improve its activities or adapt to external conditions. Effective change management requires a deep understanding of both the internal dynamics of the organization and external challenges. Effective change management necessitates a profound understanding of both internal organizational dynamics and external environmental challenges. The role of creative leadership in facilitating successful change management is thus pivotal. Creative leaders can swiftly adapt to new circumstances, devise original solutions to emerging problems, and ensure organizational resilience and prosperity in the long term (Bass & Riggio, 2006).

The importance of creative leadership in change management cannot be underestimated. Creative leaders are able to quickly adapt to new conditions, find original solutions to emerging problems, and thus ensure the survival and prosperity of their organizations in the long term.

The category of creativity plays a key role in ensuring the authority of the leader and his influence among subordinates. It is creativity that determines the speed and quality of the process of forming effective strategies for managing changes in the organization. At the same time, the role of the leader's creativity in the processes of change management in the organization is complex and requires additional study and analysis. The integration of creativity within leadership practices significantly enhances a leader's authority and influence among subordinates (Sternberg et al., 2004). Creativity determines the efficiency and effectiveness of formulating and implementing strategies for managing organizational change. However, the interplay between a leader's creativity and change management processes is multifaceted and warrants further exploration.

The process of change management in the organization under the leadership of a creative leader involves not only the formation and integration of innovative management ideas, but also the leader's ability to promptly adapt the structural and functional aspects of the organization, its key processes, strategies, and tactics of activity, in accordance with the dynamic and changing conditions of existence. This paradigm also includes an understanding

of the importance of identifying and further managing the risks and challenges arising from individual changes.

A key element in ensuring the creativity of the leader in the matter of the latter's readiness to manage changes in the organization is effective theoretical education and practical training. Thus, ensuring investments in training and development of creative thinking of the leader and the possibility of a creative approach to problem solving can significantly increase the ability of the organization to integrate effective change management practices. In conclusion, a high level of creativity of a leader in the context of change management in an organization today is a key element in the ability and capability of an organization to survive and continue its development in an environment with a high level of uncertainty and competition. A leader with such qualities will not only effectively adapt to changes, but also becomes a key resource in ensuring the competitiveness of an organization.

It is important to note that creativity and innovation, although structurally related, have different vectors functionally. Thus, creativity is defined as the ability to generate new and original ideas, concepts, and approaches that form the basis for the implementation of further decisions. While innovation is defined as a complex process of practical implementation of these ideas in order to generate positive results of the organization's activities. In this regard, creativity determines the potential of innovation, and innovation ensures their implementation in order to achieve strategic goals.

At the same time, we distinguish between the terms *innovativeness* and *innovation*. Innovativeness should be understood as the existing potential of an organization or an individual employee to generate new ideas and concepts, while innovation is defined as the process of practical implementation of these ideas, with the aim of creating added value (Y. Wang & Y. Wang, 2022).

It is also important to note the difference between such terms as *creative leadership*, *creativity of leaders*, and *creativity in leadership* within the framework of the study. Thus, the concept of creative leadership should be interpreted as a holistic approach to the operational and strategic activities of a leader, integrating innovative thinking and effective integration of changes. Creativity of leaders is a reflection of the individual potential of leaders, in the context of which the generation of original ideas will occur, which will be the basis for making strategic decisions. While creativity in leadership is a fact of the emergence of creative tendencies in a separate management process, when innovative ideas are actively integrated into leadership practices, thereby contributing to the adaptation and development of the organization (Sousa Pereira et al., 2024).

Given this, the study of factors influencing the formation and provision of a leader's creativity is an important element of any organizational management strategy.

The purpose of this study is to define, systematize and analyze the level of significance of key factors of leader creativity that have a decisive influence on the process of change management in the organization and adaptation to the dynamics of the external environment. In this case, the object of the study is not only the level, but also the structure of leader creativity, which allows us to define this phenomenon in a comprehensive and multi-aspect manner in the context of the issue of change management in the organization.

The structure of the article includes the following sections: introduction, literature analysis, description of the methodology, calculation of results. The study ends with a discussion of the results and conclusions.

2. Literature review

Studying contemporary literature is crucial for the in-depth analysis of current issues. Contemporary literature provides important information on the latest methods, theoretical frameworks, and empirical data that help to identify knowledge gaps. Comparatively, existing reviews seldom juxtapose these frameworks to highlight their convergences and divergences, limiting the analytical depth of the theoretical discourse. Thus, actively engaging and analyzing contemporary sources is not only an indicator of academic diligence, but also a means of constantly updating knowledge and adapting to changing conditions in scientific disciplines.

Thus, the study developed by some authors (Ali et al., 2021) will focus on the role of transformational leadership in ensuring project success through the serial mediation of team building and teamwork. In comparison to others, these authors (Ali et al., 2021) propose a processual sequence that integrates structural (team building) and behavioral (teamwork) mediators. This study is important for our topic, as it highlights how leadership creativity can influence team performance, which is a key aspect of change management.

Another important study developed by other authors (Braun et al., 2013) examines the relationship between transformational leadership, job satisfaction, and team performance, emphasizing the mediating role of trust. Contrasting with the first authors (Ali et al., 2021), the second ones (Braun et al., 2013) find that trust – rather than structural processes – acts as the primary mediator of performance outcomes, demonstrating that leader creativity, which promotes trust and engagement among subordinates, can significantly increase overall performance and satisfaction in the team. This divergence indicates that trust and team-building mechanisms may play complementary roles in fostering team outcomes under transformational leadership.

The study developed by Chaubey et al. (2019) focuses on the relationship between transformational leadership and employee creativity and organizational innovativeness. The authors analyze the mediating and moderating effects in these relationships, highlighting how transformational leadership can facilitate or constrain creative outputs depending on the organizational context. Unlike the authors (Braun et al., 2013) who focus on trust, and those ones (Ali et al., 2021) who emphasize team processes, Chaubey et al. (2019) explore boundary conditions through moderating effects, revealing how contextual factors shape the efficacy of transformational leadership in innovation. The article by other authors (Feuls et al., 2021) focuses on creative leadership practices in the context of fine dining, which, like nothing else, requires continuous creativity and innovation. They use a qualitative meta-analysis to examine how leaders in this field cultivate and facilitate creativity. Comparatively, their (Feuls et al., 2021) qualitative approach diverges from the predominantly quantitative methods of prior studies, offering rich insights into contextualized leadership behaviors that enhance creative performance.

Some authors (Hughes et al., 2018) provide a critical review and practical recommendations on leadership, creativity, and innovation. They discuss current research and methodologies that can be used to enhance the creative potential of leaders and their teams. Synthesizing prior empirical findings, they identify methodological gaps in measuring leader creativity and propose integrative frameworks to bridge theory and practice.

The study developed by other authors (Strobel et al., 2025) focuses on the role of creative leadership manifestations in creativity and innovation in organizations. The authors examine how different aspects of leadership creativity can influence an organization's ability to generate new ideas and implement innovative projects. Building on the frameworks of Anderson et al. (2014) and some of the above-mentioned authors (Strobel et al., 2025), integrate behavioral and strategic dimensions of leader creativity to demonstrate their joint impact on organizational innovation.

Understanding the factors of leader creativity that influence change management is crucial for enhancing organizational effectiveness. Some authors (Chen et al., 2013) highlight the importance of multilevel motivational antecedents in fostering innovation within research and development teams. Their study emphasizes that leaders who promote intrinsic motivation and provide autonomy enhance team creativity, which is vital for successful change management. The leaders' ability to inspire and empower team members is a significant factor that directly impacts the team's innovative capabilities and adaptability to change. Hemlin and Olsson (2011) explore how creativity-stimulating leadership behaviors influence research groups. They identify that leaders who encourage idea generation, support risk-taking, and facilitate a collaborative environment significantly boost creative outputs. In contrast to some above-mentioned authors' (Chen et al., 2013) focus on motivational drivers, Hemlin and Olsson (2011) emphasize creativity-stimulating leadership behaviors – such as encouraging idea generation and supporting risk-taking – as direct boosters of research group output. Such leaders play a pivotal role in change management by driving the development of innovative solutions and promoting a culture that embraces change.

Some authors (Flocco et al., 2018) examine integrative creative leadership in the filmmaking industry, providing insights into how leaders manage complex creative processes. They find that leaders who can integrate diverse ideas, adapt their leadership style, and align individual contributions toward a shared vision are essential in navigating change. Comparing integrative model developed by these authors (Flocco et al., 2018) with the motivational and behavioral frameworks of some above-mentioned authors (Chen et al., 2013), including research made by Hemlin and Olsson (2011) reveals that contextual adaptation constitutes a third critical dimension of creative leadership.

Creative leadership has garnered significant attention in organizational studies due to its crucial role in fostering innovation and facilitating change management (Anderson et al., 2014). Creative leaders are characterized by their ability to inspire creativity in others, drive innovation, and navigate complex organizational dynamics. They are instrumental in shaping organizational cultures that embrace change and encourage the exploration of novel ideas. Creative leadership manifests through behaviors that promote creativity and innovation within teams and organizations. These manifestations include fostering an open environment for idea exchange, encouraging risk-taking, and providing support for the development and

implementation of innovative solutions. When synthesizing these frameworks, it becomes evident that strategic vision (Anderson et al., 2014) and behavioral manifestations intersect to form a comprehensive model of creative leadership.

A high level of creativity of a leader not only allows the latter to quickly generate new ideas and solutions, but also contributes to the formation of optimal and stimulating conditions for the work team.

Given the certain importance of the leader's creativity and its influence on the change management process, it is important to explore modern scientific views on this phenomenon and methods for improving it.

For example, the study developed by Andrej et al. (2023) analyzes the influence of key leadership styles and management techniques on organizational performance, focusing on moderating effects through partial least squares structural equation modeling. Defining the key creative qualities of a leader in this context provides a comprehensive understanding of how it is possible to improve the performance of an organization through the development of individual qualities of a manager. Similarly, Hon and Lui (2016) integrate employee and managerial creativity, concluding that creative qualities are key across all sectors; comparing these two studies highlights the bidirectional nature of creative influence within organizations.

Hon and Lui (2016) review and integrate the analysis of studies on the importance of creative qualities and innovative skills of employees, concluding that these qualities are key in all sectors of corporate activity. At the same time, the authors confirm the importance of a high level of creativity both among the top management and among ordinary employees.

At the same time, Mazur and Duchlinski (2020) determine the level of influence of creativity in the context of the development of a network society. The study conducted by the authors determines the direct influence of the level of creativity on increasing trust and innovative activity, which ultimately has a direct impact on the effectiveness of change management in an organization at different levels and areas of activity. In addition, the authors identified a strong and direct relationship between creative leadership and innovation management.

In the context of our study, the work of some authors (pei Lin et al., 2020) is interesting, studying the features of the modern influence of leadership on the effectiveness and well-being of employees, as well as the ability of the organization to adapt to dynamic environmental conditions. At the same time, the authors focus on the ability of leaders to play an optimization role in the work team in the context of counteracting stress factors through the use of creative approaches to organizing the work process, while promoting innovation and adaptation to change.

Wang and Shibayama (2022) in their study analyze the impact of mentoring on the activities and performance of the organization. Yes, the authors determine the direct influence between the level of creativity of the mentor, his management style on the level of creativity of ordinary employees and their capabilities and motivation in the process of adaptation of the organization to a variable and dynamic environment. Thus, the authors determine the importance of the creative potential of the management team in the overall effectiveness and competitiveness of the organization. This mentoring-focused perspective complements some authors (Huang et al., 2022), who integrate validated creative practices into team processes, demonstrating consistent performance gains across individual and organizational levels.

Similar to the study developed by lastly above-mentioned authors (Huang et al., 2022), analyzing the role of leadership in ensuring the creativity of the team and the formation of innovative activity of the organization. Thus, studying the experience of advanced organizations, the authors found that the performance significantly increased in conditions when modern creative practices, the effectiveness of which had been previously confirmed in scientific research, were integrated into the team's activities. Thus, all of the above sources confirm a strong connection and the presence of a positive influence of effective creative qualities of a leader on the success of the change management process of an organization, in the context of adaptation to a dynamic environment and counteraction to challenges and threats.

Anderson et al. (2014) provide a comprehensive framework for understanding innovation and creativity within organizations, emphasizing the importance of leadership in fostering an innovative climate. They suggest that leaders influence organizational creativity through strategic vision, resource allocation, and by modeling creative behaviors themselves. Building on this, a comparative analysis of these authors (Anderson et al., 2014), strategic emphasis and the behavioral and contextual dimensions identified in other studies underscore the need for a multidimensional theoretical model.

While existing studies have established the importance of creative leadership in fostering innovation and managing change, there is a need for empirical research that identifies and analyzes the key factors of leader creativity that significantly impact change management processes. Specifically, there is a gap in understanding how these factors can be systematized into a coherent theoretical model that organizations can adopt.

Despite considerable and robust research in the field of leadership creativity and its impact on change management in organizations, this area of research still remains understudied. There are numerous aspects and deep mechanisms of interaction between creativity and leadership skills that require further analysis. This indicates the importance of continued research in this area to better understand how leadership creativity can influence the successful implementation and change management in different types of organizations (Figure 1).

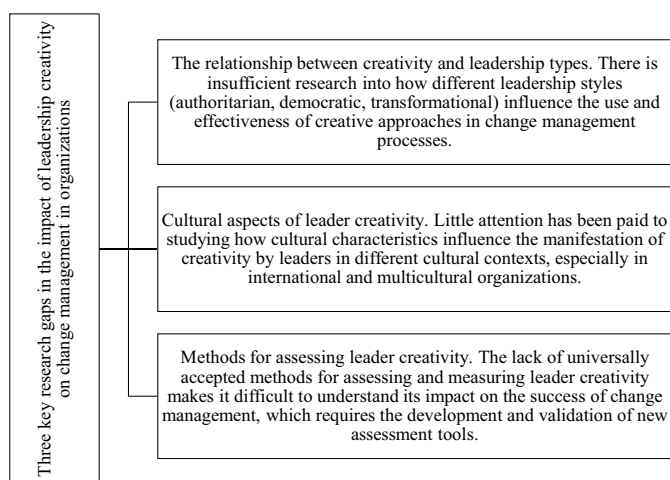


Figure 1. Key research gaps in the impact of leadership creativity on change management in organizations (source: created by authors)

Based on the results of the set goal and literature review, we set ourselves the scientific task of forming a methodological approach to assessing and organizing the factors of a leader's creativity that influence change management in an organization.

3. Methodology

In our research, we combined the analytic hierarchy process (AHP) and the Delphi method to systematically identify and prioritize the key factors of leader creativity that influence change management in organizations. We began by using AHP to structure the complex decision-making process hierarchically, setting our main goal at the top, defining evaluation criteria in the middle, and listing potential factors at the bottom. This allowed us to quantitatively and qualitatively assess each factor's importance. To refine and validate these factors, we engaged 40 experts from Ukraine and Poland – selected based on their extensive professional experience and relevant academic qualifications – in multiple rounds of anonymous surveys using the Delphi method.

In this study, 40 specialists from Ukraine and Poland with at least 10 years of practical experience in the areas of management, innovation management and creative leadership were selected as experts. The selection of experts was based on their professional achievements, scientific publications and practical experience.

This iterative process enabled experts to review and adjust their opinions after considering the group's feedback, reducing subjectivity and achieving consensus. Through statistical analysis of their responses, we identified and ranked four critical factors – 1) risk-taking ability, 2) openness to new ideas, 3) flexibility of thinking, and 4) social interaction skills – that leaders should develop to enhance the effectiveness of change management in organizations.

The key method that forms the basis of our study was the AHP method developed by Saaty. Today, this method is a key tool in the process of optimization and objectification of complex decision-making. This method is based on the use of mathematical principles to assess the value and importance of individual alternatives. This method is based on the process of constructing a specific hierarchical structure, where the goal is set at the top level, evaluation criteria are located below, and individual alternatives or options are placed at the lowest level.

The implementation of the AHP method is carried out in several stages. At the first stage, the key issues and the purpose of the study are determined. Based on the set goals, criteria and alternatives are formed. At the next stage, the hierarchical structure itself is structured. After the formation of the hierarchical structure, weighting coefficients for each alternative and criterion are determined through paired comparison methods. Thus, at this stage, the importance of each alternative or criterion for the final goal is determined. At the last stage, data are systematized and alternatives are ranked.

Using this method has a number of advantages. First of all, the key advantage is that it enables combining qualitative and quantitative criteria for research, thus evaluating complex and multi-aspect solutions.

At the same time, the AHP method has a number of disadvantages that should be taken into account and which can affect the effectiveness of the latter. The first disadvantage is the subjectivity of assessments in the process of even comparison.

In the context of our study, the AHP method can be useful and auxiliary for the complex process of structuring and systematizing the factors of leader creativity that affect the effectiveness of change management in the organization. In this context, this method allows to objectively assess the importance of each factor, forming a comprehensive understanding of how this or that factor affects the development of leader creativity and its role in the change management process in the organization.

The Delphi method, in particular, helps to reduce subjectivity and ensures greater objectivity in the results. This method involves several rounds of anonymous expert surveys, after each of which the responses received are analyzed. Following each round, experts are provided with a summary of the results, allowing them to review their preliminary responses in the context of the overall data. This approach helps to achieve consensus among the participants.

The advantage of using the Delphi method in our study is the ability to obtain more balanced and informed responses, since experts are able to become familiar with the views of other participants and correct their own answers accordingly. Our study involved 40 experts, including business leaders, psychologists, scientists, and creative industries professionals. It should be noted that we involved experts from Ukraine and Poland. The data were collected through an electronic questionnaire and organized and summarized by the Delphi method.

Experts were chosen based on clear inclusion criteria: they needed to have a minimum of 10 years of professional experience in leadership, creativity, innovation, or change management roles. Additionally, they were required to possess at least a master's degree in a relevant field such as business administration, psychology, or organizational behavior. Recognized expertise was confirmed through their professional positions, publications, or significant contributions to their fields. We ensured geographical representation by including experts from both Ukraine and Poland. Data from each round were analyzed using descriptive statistics to determine measures of central tendency (mean, median) and dispersion (standard deviation). Consensus was considered achieved when at least 75% of the experts rated a factor as 4 or 5 on the importance scale. Qualitative data from open-ended responses were coded thematically to identify recurring concepts and insights, which informed the development of the theoretical model.

The survey was conducted using questionnaires to collect expert opinions on the topic. This approach provided a broad overview of opinions and contributed to a deep analysis of the importance of leadership creativity factors in the change management process. So, we mark key factors of leader creativity that influence change management in an organization using this experts (Table 1).

To ensure the methodological validity, the selection of these methods was based on their established application in decision-making studies requiring prioritization under uncertainty. The Delphi method allowed the collection of expert consensus through iterative rounds, while the AHP enabled structured quantification of expert judgments. The initial pool of creativity factors was formed based on the literature review, from which the four most frequently cited and theoretically justified factors – 1) openness to new ideas, 2) risk-taking ability, 3) flexibility of thinking, and 4) social interaction skills – were selected for AHP analysis.

The choice of such a combination of methods is justified by the need to integrate both quantitative and qualitative approaches in order to fully analyze the influence of leaders'

Table 1. Key factors of leader creativity that influence change management in an organization (source: created by authors)

Key factor	Essence	Short name for modeling
Openness to new ideas	Leaders who exhibit high levels of openness are able to accept new concepts and ideas, which is critical in the context of change management.	X ₁
Risk-taking ability	Change management often requires leaders to take calculated risks. Leaders who can effectively assess risks and make important decisions outside the normal management process can effectively lead an organization through periods of transformation.	X ₂
Flexibility of thinking	This factor includes a leader's ability to quickly adapt to change and modify their approaches to meet new challenges and circumstances.	X ₃
Social interaction skills	Effective leaders have a high level of social interaction, which allows them to attract, motivate, and inspire others. This is especially important in the change management process.	X ₄

creativity and the change management process. Thus, the use of AHP method by the Saaty makes it possible to determine the level of importance of each criterion (factors) through the formation of mathematical models. While the use of the Delphi method through a series of anonymized expert surveys ensured the coordination of subjective assessments of specialists and the minimization of biases.

These factors of leader creativity are important to understand and develop in the context of effectively managing change in organizations, enabling them to achieve high results in a dynamic business environment.

4. Results

In order to carry out a proper assessment of the identified factors, the assessment is carried out in relation to the following factors:

- F1. Availability in making decisions about changes;
- F2. Quality of adopted changes;
- F3. Sufficient changes in the organization.

The assessment will be based on the initial model for determining the importance of creativity factors affecting change management in the organization (Figure 2).

By first comparing the calculations with each other, we will get the matrix:

$$\begin{pmatrix} 1 & 3 & 5 \\ 1/3 & 1 & 3 \\ 1/5 & 1/3 & 1 \end{pmatrix}$$

which makes it possible to determine the necessary vector of priorities, the relative importance and share of each of the F criteria (Table 2).

From this, each criterion F, each factor of creativity X is compared. We will summarize all this in a single Table 3.

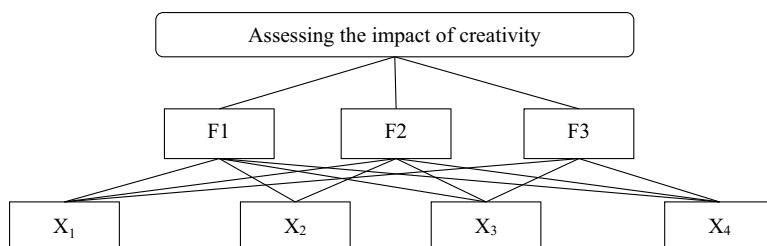


Figure 2. The initial model for determining the importance of creativity factors affecting change management in the organization (source: created by authors)

Table 2. Results of pairwise comparisons of creativity assessment criteria (source: created by authors)

Vector of priorities	Relative importance	Fraction
0.636	1.935	3.038
0.258	0.784	3.038
0.104	0.318	3.038
$\lambda_{max} = 3.038$	Consistency index: 0.019	Relative consistency: 0.033

Table 3. The results of pairwise comparisons of factors of leader creativity by each criterion (source: created by authors)

The results of pairwise comparisons of factors of leader creativity by criterion F1		
Matrix		$\begin{pmatrix} 1 & 1/3 & 1 & 1/5 \\ 3 & 1 & 5 & 3 \\ 1 & 1/5 & 1 & 1/3 \\ 5 & 1/3 & 3 & 1 \end{pmatrix}$
Vector of priorities	Relative importance	Fraction
0.009	0.427	4.287
0.507	2.183	4.301
0.099	0.398	4.000
0.293	0.259	4.295
$\lambda_{max} = 4.221$	Consistency index: 0.074	Relative consistency: 0.082
The results of pairwise comparisons of factors of leader creativity by criterion F2		
Matrix		$\begin{pmatrix} 1 & 3 & 1 & 7 \\ 1/3 & 1 & 1 & 5 \\ 1/5 & 1 & 1 & 3 \\ 1/7 & 1/3 & 1/5 & 1 \end{pmatrix}$
Vector of priorities	Relative importance	Fraction
0.580	2.428	4.182
0.181	0.726	4.004
0.181	0.762	4.202
0.056	0.236	4.171
$\lambda_{max} = 4.140$	Consistency index: 0.047	Relative consistency: 0.052

End of Table 3

The results of pairwise comparisons of factors of leader creativity by criterion F3		
Matrix		$\begin{pmatrix} 1 & 5 & 7 & 3 \\ 1/5 & 1 & 5 & 1/3 \\ 1/7 & 1/5 & 1 & 1/5 \\ 1/3 & 3 & 5 & 1 \end{pmatrix}$
Vector of priorities	Relative importance	Fraction
0.558	2.339	4.189
0.132	0.571	4.307
0.047	0.206	4.303
0.260	1.084	4.157
$\lambda_{max} = 4.240$	Consistency index: 0.080	Relative consistency: 0.080

By substituting the corresponding values, we will get the following weight values for all creativity factors affecting change management in the organization:

$$U_1 = 0.636 \times 0.099 + 0.258 \times 0.580 + 0.104 \times 0.558 = 0.271;$$

$$U_2 = 0.636 \times 0.507 + 0.258 \times 0.181 + 0.104 \times 0.132 = 0.383;$$

$$U_3 = 0.636 \times 0.099 + 0.258 \times 0.181 + 0.104 \times 0.047 = 0.115;$$

$$U_4 = 0.636 \times 0.293 + 0.258 \times 0.056 + 0.104 \times 0.260 = 0.227.$$

Therefore, risk-taking ability is the most important. Risk-taking ability is often highlighted as a pivotal factor in leader creativity that significantly impacts change management within organizations. This quality is crucial because it encourages leaders to venture beyond traditional boundaries and explore innovative solutions, even when these may carry potential risks.

5. Discussion of results

After obtaining the final results of our study, the next important step is to compare the findings and results with relevant studies in this area. Such a comparison is critical in the context of confirming the relevance and scientific novelty of our results. Such a process will allow us to prove the high degree of uniqueness and significance of the contribution of our results, as well as an understanding of the expansion of understanding of such a complex and important topic as leader creativity and its impact on the success of the organization and its ability to adapt or resist change. Such a comparison will also help to identify potential areas for further research in this area, as well as the scope and limitations of our study, forming the vectors of subsequent research. One such study comparable to ours is the work of some authors (Majed Ceh et al., 2022), researching the factors of creativity of workers in an organization, while the authors assessed creativity among both management and ordinary employees. Our study also investigates the factors influencing creativity, while we focus our attention on the factors of creativity of the organization's leaders, which makes it possible to more accurately determine and analyze the latter. In our opinion, such specification is especially important, since the creative qualities of the leader and the work team as a whole differ, given their different vectors of activity.

In the work of Anderson et al. (2014) a comprehensive review and analysis of the characteristics of creative qualities and innovative activity in the organization is carried out. Thus, the authors in their work create a basis for a detailed study of these qualities among the different composition of the work team of the organization. Our study expands this analysis, offering a clear and objective methodology for assessing the importance of creativity factors and their influence in the process of change management in the organization.

Research developed by Ghosh (2015) also resorts to the use of a specific methodology that combines the analysis of such parameters as self-leadership, creativity of the workforce, creative climate, and innovativeness of the work process. While our study to a greater extent focuses on the factors of creativity of the leader, noting that they are the primary parameter for creativity of the workforce, innovation, and other positive processes in the organization, which allows the latter to maintain its competitiveness and the ability to adapt or resist changes. Unlike Ghosh (2015), our research empirically ranks creativity components rather than treating them holistically, providing a methodological advantage in isolating their effects.

Our interest also includes the study developed by some authors (Han et al., 2022), who investigate the influence of various factors of direct and inverse influence on the development of creativity. Thus, in their work, the authors emphasize the importance of different types of influence on creative qualities, and also suggest promising ways to improve the latter. In the context of our study, we also determine the factors influencing the development of creativity, but at the same time, our study was strengthened by the use of mathematical research methods.

At the same time, Lee et al. (2015) analyze creativity among teams in scientific studies of corporate development. Thus, the authors determined how the creativity of an individual will influence the overall creative potential of the team and the subsequent effectiveness of their activities in a strategic context. While our study relies more on a practical context, identifying and assessing the factors influencing the creativity of a leader in his management activities in an organization.

In a more practical context, the category of creativity is studied by Lin and Chang (2020) and Rosen et al. (2020), identifying key approaches to improving individual methods and mechanisms for improving the creative abilities of a team. In addition, the authors in their study determine how certain creative skills affect organizational activity and its effectiveness. Our study relies on a more specific area, examining specific factors influencing the creativity of a leader in his management activities in an organization. Such a specification makes the research results more understandable in a practical context.

Our study is innovative because it combines unique methodological approaches and new perspectives for investigating the creativity of leaders in the context of change management. The use of the Saaty AHP method, reinforced by the expert review and Delphi methods, allowed us to analyze the relationship between creativity and successful organizational change management in more depth. This interdisciplinary approach allows us to obtain more objective and structured results, which are rare in such studies.

Creative leadership and rapid adaptation are becoming critically important, as during the COVID-19 pandemic and the Russo-Ukrainian War, for example, healthcare institutions,

information technology companies, and charities have implemented creative leadership to adapt their business processes to rapidly changing conditions. Using innovative strategies allows these organizations to quickly reorganize, ensuring uninterrupted operations and supporting employees in crisis situations.

The innovativeness of our work also lies in the systematic approach to identifying the key factors of creativity that influence leadership qualities. We not only identified the most important elements of creativity, but also ordered them by level of influence, which allows us to better understand which aspects of creative thinking are crucial for change management. Such an in-depth analysis allows the study to offer new ways to develop creativity among leaders. Our study is innovative because it combines unique methodological approaches and new perspectives for researching the creativity of leaders in the context of change management. The use of the Saaty AHP method, reinforced by the expert review and Delphi methods, allowed us to analyze the relationship between creativity and successful organizational change management in more depth.

6. Conclusions

The conducted research provides an original empirical model for evaluating creative leadership factors relevant to change management. Among four analyzed variables – openness to new ideas, risk-taking ability, flexibility of thinking, and social interaction – risk-taking ability was identified as the most critical determinant.

This conclusion offers scientific value by empirically validating the hierarchical structure of creativity factors through a multi-method approach (AHP and Delphi methods), which has rarely been applied in leadership creativity studies. Moreover, it reveals that decisional courage may serve as a catalyst for implementing adaptive changes in uncertain organizational environments.

The research contributes to the theoretical advancement of leadership studies by refining the definition of creative leadership to include quantifiable components prioritized by expert consensus. It also offers a structured tool that practitioners can apply in leadership assessment and development programs. Unlike traditional conclusions that merely summarize the research path, our results demonstrate that leadership creativity is not a homogeneous phenomenon, but rather a structured construct with distinguishable and rankable elements – each playing a different role in managing organizational change. The scientific novelty lies in integrating hierarchical modeling with expert-driven factor validation in the context of creativity – resulting in actionable insights for leadership development. This model can be expanded in future research to include cross-sectoral and cross-cultural samples for broader generalization.

The proposed directions for improving the creative qualities of a leader can be effective both in the context of increasing the creative potential of a leader and ensuring the ability of an organization to better ensure its own effectiveness in the conditions of instability and dynamism of external environmental factors.

Thus, in the course of the study, we were able to obtain important theoretical and practical results that allow us to deepen our understanding of the role of creative qualities of a

leader, in particular in the process of change management in an organization exposed to the active impact of challenges and risks of the external environment.

The use of the obtained results has significant practical significance and relevance in the current dynamic and changing environment of the organization's existence, ensuring its competitiveness.

It should be noted that we presented a methodological approach based on taking into account the opinion of experts, which involved determining which factors of creativity in a leader can directly affect the change management system in the organization. At the same time, it was not enough just to determine those factors, also through a pairwise comparison to establish which ones have a more significant influence and which ones have less. This makes it possible to improve control over creativity when making managerial decisions.

The practical significance of the results of this study lies in a deep understanding of the influence of a leader's creativity on effective change management in organizations. Identifying the key factors of creativity that contribute to adaptation and innovation can help organizations develop more effective change implementation strategies. This is especially important in the context of an ever-changing market environment, where the ability to quickly adapt and respond to new challenges becomes a critical success factor.

The relevance of the study indicates the need to understand how exactly a creative approach to leadership can contribute to effective change management. The results of the study provide organizations with tools for assessing and developing the leadership qualities necessary for creating sustainable innovation processes. This allows organizations not just to react to changes, but to actively shape the conditions for their development and prosperity.

Additionally, the results of the study are important for theoretical development in the field of creative leadership and change management. They contribute to a better understanding of the relationship between leadership qualities and organizational change, enriching the scientific literature with valuable insights into the internal mechanisms of the influence of creativity on leadership practices. This, in turn, may lead to the development of new, more effective methods for training and developing leaders in the future.

Taking the above into account, the study not only contributes to the theoretical foundations of leadership and management, but also points to practical ways of applying this knowledge in real organizational contexts. The results can be used to design training and leadership development programs that focus on creativity as a key element of effective management.

Future research in the field of creative leadership and change management offers great opportunities to better understand the dynamics of these processes in different organizational contexts. One direction could be to expand the sample of organizations, which would allow for greater generalizability of the results. It is important to include different types and sizes of organizations operating in different industries and cultural settings to determine how cultural and structural factors influence the role of creativity in leadership.

References

- Ali, H., Chuanmin, Sh., Ahmed, M., Mahmood, A., Khayyam, M., & Tikhomirova, A. (2021). Transformational leadership and project success: Serial mediation of team-building and teamwork. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.689311>

- Anderson, N., Potočník, K., & Zhou, J. (2014). Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal of Management*, 40(5), 1297–1333. <https://doi.org/10.1177/0149206314527128>
- Andrej, N., Breznik, K., & Natek, S. (2023). Managing knowledge to improve performance: The impact of leadership style and knowledge management on organizational performance with moderation effects via PLS-SEM. *Journal of the Knowledge Economy*, 14, 1672–1701. <https://doi.org/10.1007/s13132-022-00957-4>
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. Laurence Erlbaum Associates, Publishers. <https://doi.org/10.4324/9781410617095>
- Braun, S., Peus, C., Weisweiler, S., & Frey, D. (2013). Transformational leadership, job satisfaction, and team performance: A multilevel mediation model of trust. *The Leadership Quarterly*, 24(1), 270–283. <https://doi.org/10.1016/j.leaqua.2012.11.006>
- Chaubey, A., Sahoo, Ch. K., & Khatri, N. (2019). Relationship of transformational leadership with employee creativity and organizational innovation: A study of mediating and moderating influences. *Journal of Strategy and Management*, 12(1), 61–82. <https://doi.org/10.1108/JSMA-07-2018-0075>
- Chen, G., Farh, J.-L., Campbell-Bush, E. M., Wu, Zh., & Wu, X. (2013). Teams as innovative systems: Multilevel motivational antecedents of innovation in R&D teams. *Journal of Applied Psychology*, 98(6), 1018–1027. <https://doi.org/10.1037/a0032663>
- Feuls, M., Stierand, M. B., Dörfler, V., Boje, D. M., & Haley, U. C. V. (2021). Practices of creative leadership: A qualitative meta-analysis. *Haute Cuisine, Creativity and Innovation Management*, 30(4), 783–797. <https://doi.org/10.1111/caim.12471>
- Flocco, N., Canterino, F., Cirella, S., Coget, J.-F., & Shani, A. B. R. (2018). Exploring integrative creative leadership in the filmmaking industry. In Ch. Mainemelis, O. Epitropaki, & R. Kark (Eds.), *Routledge studies in leadership research. Creative leadership: Contexts and prospects* (pp. 244–258). Routledge. <https://doi.org/10.4324/9780203712214-14>
- Ghosh, K. (2015). Developing organizational creativity and innovation: Toward a model of self-leadership, employee creativity, creativity climate and workplace innovative orientation. *Management Research Review*, 38(11), 1126–1148. <https://doi.org/10.1108/MRR-01-2014-0017>
- Han, J., Long, H., Ge, M., & Pang, W. (2022). Perspective-taking feedback: A new feedback affecting creativity. *Creativity Research Journal*, 34(2), 228–243. <https://doi.org/10.1080/10400419.2021.1973708>
- Hemlin, S., & Olsson, L. (2011). Creativity-stimulating leadership: A critical incident study of leaders' influence on creativity in research groups. *Creativity and Innovation Management*, 20(1), 49–58. <https://doi.org/10.1111/j.1467-8691.2010.00585.x>
- Hon, A. H. Y., & Lui, S. S. (2016). Employee creativity and innovation in organizations: Review, integration, and future directions for hospitality research. *International Journal of Contemporary Hospitality Management*, 28(5), 862–885. <https://doi.org/10.1108/IJCHM-09-2014-0454>
- Huang, Z., Sindakis, S., Aggarwal, S., & Thomas, L. (2022). The role of leadership in collective creativity and innovation: Examining academic research and development environments. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1060412>
- Hughes, D. J., Lee, A., Wei Tian, A., Newman, A., & Legood, A. (2018). Leadership, creativity, and innovation: A critical review and practical recommendations. *The Leadership Quarterly*, 29(5), 549–569. <https://doi.org/10.1016/j.leaqua.2018.03.001>
- Lee, Y.-N., Walsh, J. P., & Wang, J. (2015). Creativity in scientific teams: Unpacking novelty and impact. *Research Policy*, 44(3), 684–697. <https://doi.org/10.1016/j.respol.2014.10.007>
- Lin, pei Ch., Xian, J., Li, B., & Huang, H. (2020). Transformational leadership and employees' thriving at work: The mediating roles of challenge-hindrance stressors. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.01400>
- Lin, Sz.-Y., & Chang, H.-I. (2020). Does open-plan office environment support creativity? The mediating role of activated positive mood. *Creativity Studies*, 13(1), 1–20. <https://doi.org/10.3846/cs.2020.10332>
- Majed Ceh, S., Edelmann, C., Hofer, G., & Benedek, M. (2022). Assessing raters: What factors predict discernment in novice creativity raters? *Journal of Creative Behavior*, 56(1), 41–54. <https://doi.org/10.1002/jocb.515>

- Mazur, P. S., & Duchlinski, P. (2020). Credibility and creativity in network society. *Creativity Studies*, 13(1), 53–63. <https://doi.org/10.3846/cs.2020.6585>
- Rosen, Y., Stoeffler, K., & Simmering, V. (2020). Imagine: Design for creative thinking, learning, and assessment in schools. *Journal of Intelligence*, 8(2). <https://doi.org/10.3390/jintelligence8020016>
- Sousa Pereira, M., Faria, S., Cardoso, A., & Cairrão, Á. (2024). Personal leadership and communication abilities: Impacts on organizational performance. In H. El-Farr (Ed.), *The changing landscape of workplace and workforce* (pp. 67–86). IntechOpen. <https://doi.org/10.5772/intechopen.1002647>
- Strobel, L.-Th., Strobel, M., Welp, I. M., & Korsgaard, M. A. (2025). The role of creative leadership manifestations in creativity and innovation. *Creativity Research Journal*, 37(3), 358–376. <https://doi.org/10.1080/10400419.2024.2321734>
- Sternberg, R. J., Kaufman, J. C., & Pretz, J. E. (2004). *Creativity and leadership: A human systems approach*. Psychology Press.
- Wang, J., & Shibayama, S. (2022). Mentorship and creativity: Effects of mentor creativity and mentoring style. *Research Policy*, 51(3). <https://doi.org/10.1016/j.respol.2021.104451>
- Wang, Y., & Wang, Y. (2022). Developing creative leadership in the use of digital communication tools: A psychological perspective. *Sustainability*, 14(19). <https://doi.org/10.3390/su141911796>