Assessing Organizational Culture Influences on Performance

Andreea Adriana Cioabă
Silviu – Mihai Nițu-Granzulea
University of Craiova, Romania
cioaba.andreea.f7v@student.ucv.ro
nitugranzuleasilviu@gmail.com

Abstract

This research uses artificial neural network analysis to examine how organizational culture affects performance. The study uses a quantitative methodology based on questionnaire data to examine how important cultural factors—innovation orientation, cooperation and collaboration, leadership style, and value alignment—affect financial success, staff productivity, and customer satisfaction. According to this study's premise, a strong, cohesive organizational culture positively correlates with better organizational outcomes. The results emphasize the less significant but still significant impacts of cooperation and leadership while reaffirming innovation and value alignment's crucial role in boosting performance. These revelations highlight how crucial it is to cultivate a moral and cohesive culture to promote long-term organizational growth and efficacy. The study provides theoretical insights and real-world applications for leaders looking to improve organizational performance through cultural change.

Key words: organizational culture, performance measurement, value alignment, innovation
J.E.L. classification: M10, M14.

1. Introduction

Organizational culture is a distinguishing element that shapes both internal cohesiveness and external success in today's dynamic and increasingly complex corporate environment. Organizations form unique cultural identities that impact the actions, choices, and goals of their members, much as geographic areas and national groups do. In order to match individual motivations with group objectives and create a cohesive and effective working environment, these cultural foundations—formed through shared values, norms, and beliefs—are essential.

Beyond fostering harmony within the company, organizational culture significantly impacts how well a company can provide high-quality services and adjust to the shifting demands of its stakeholders. The interaction between corporate social responsibility tactics and culture becomes important. Employers who consciously develop cultural initiatives typically foster interpersonal trust, employee well-being, and individualized management techniques—all of which help to create a workforce that is more resilient and effective (Bocean, 2007a, 2007b, 2009, 2011. In addition to improving employee engagement, these cultural underpinnings provide stability and predictability in the workplace by reducing the negative consequences of stress and ambiguity.

Furthermore, organizational culture reduces risk and improves performance. In particular, ethical culture has become a strategic advantage that guarantees long-term sustainability, fosters trust and strengthens transparency. Research constantly emphasizes the beneficial relationship between organizational culture and performance outcomes, including profitability, productivity, and customer happiness, but it also cautions against possible distortions. For instance, when ingrained in company culture, earnings management techniques can inflate short-term metrics at the expense of stakeholder confidence and long-term integrity (Vărzaru and Vărzaru, 2015a, 2015b).

In light of this, the current study investigates how particular aspects of organizational culture affect important performance indicators. In order to determine the most significant cultural drivers of performance, the study analyzes data from a structured questionnaire using a structural neural network analysis. According to the central premise, superior organizational outcomes positively correlate with a robust, morally sound, and values-aligned organizational culture. In addition to validating current theoretical viewpoints, the study provides practical insights for organizational leaders looking to foster high-performance cultures in a setting that is becoming increasingly competitive by putting this link to the test using sophisticated modeling approaches.

2. Theoretical background

Similar to regions or countries, organizations have their own internal culture that significantly influences the attitudes and behaviors of their members. Organizational culture is a guiding mechanism that ensures congruence between individual and group objectives through the underlying norms, beliefs, and values. Such alignment is beneficial and necessary for businesses' effective operation and general performance (Vărzaru and Vărzaru, 2013a, 2013b).

The relationship between corporate social strategies and organizational culture is another important aspect. Employers who actively create and support cultural strategies typically see an increase in employee motivation. These tactics reduce risks associated with stress and personal uncertainty while favorably influencing interpersonal connections and individualized management inside the company. Consequently, a well-defined organizational culture fosters engagement and performance and creates a secure and predictable environment where members can thrive.

The interdependence of social strategy and culture emphasizes that an organization's success depends not only on operational effectiveness but also on its capacity to foster its workforce's professional and personal growth. Alkhadra et al. (2023) believe an ethical organizational culture is crucial for long-term sustainability and a competitive advantage. It is commonly known that organizational culture plays a key role in influencing members' collective performance (Joseph and Kibera, 2019). Numerous studies have attested to the favorable relationship between performance and organizational culture (Wambugu, 2014; Aboramadan et al., 2020; Olan et al., 2019). These studies demonstrate how important corporate culture is to promoting effective and long-lasting performance. A deep understanding of this relationship affirms the importance of shared values and norms and offers clear directions for strategic interventions to unlock collective potential.

Earnings management can significantly influence how procedures and stakeholder relationships are managed, which can become ingrained in company culture. However, research shows these methods negatively affect performance metrics like return on equity (ROE) and return on assets (ROA). These actions have a detrimental impact on reported profits quality, eroding investor confidence and financial credibility. These negative consequences imply that, even while earnings management may temporarily raise financial metrics on the surface, it eventually undermines the organization's durability and integrity. This emphasizes the importance of a moral corporate culture that values openness and conformity to accounting standards to maintain stakeholder confidence and foster long-term success(Rotea et al., 2023; Georgescu et al., 2024).

Organizational cultures that encourage earnings management risk damaging economic performance and long-term reputation, undermining relationships with business partners, investors, and employees. Thus, fostering an ethical climate and transparent accounting practices becomes crucial for building trust and lasting performance.

3. Research methodology

The study employs a quantitative research method, using the questionnaire technique to examine the relationships between the research variables. These variables are detailed in Table no. 1.

Table no. 1 Research variables

Type	Code	Variables
Organizational corporate	OC1	Innovation Orientation
	OC2	Collaboration and Teamwork
	OC3	Leadership Style
	OC4	Value Alignment
Organizational performance	PERF1	Financial Performance
	PERF2	Employee Productivity
	PERF3	Customer Satisfaction

Source: Developed by the authors based on literature review

The study's central hypothesis states that organizational culture positively correlates with organizational performance. This hypothesis emphasizes organizational culture's critical role in fostering sustainable and effective development, particularly within sectors prioritizing high-quality services.

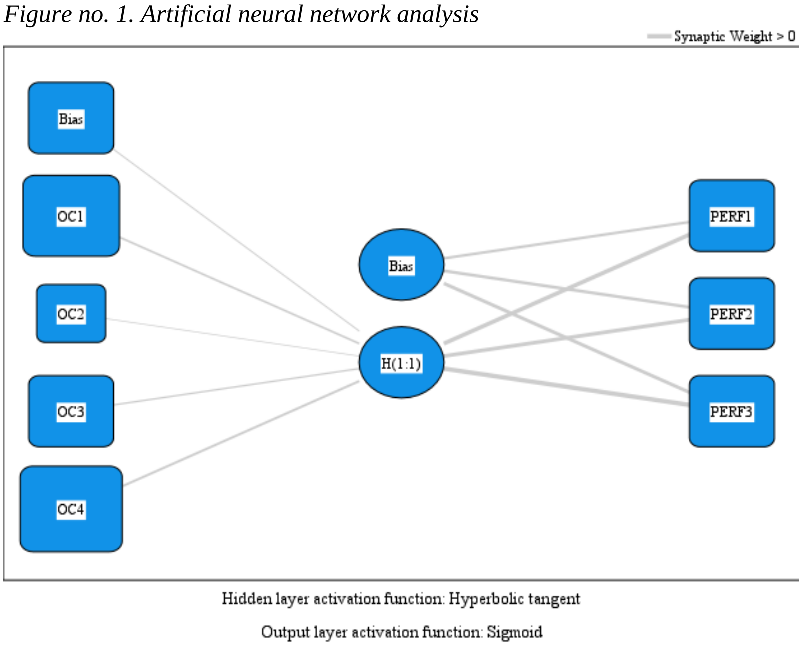
To assess the validity of this hypothesis, the research applies structural neural network analysis, following a methodology similar to that used by other scholars in the field (Vărzaru and Vărzaru, 2016; Nicolescu and Vărzaru, 2020; Vărzaru, 2024).

4. Results and discussions

The research investigates the connection between organizational culture and organizational performance through the modeling capabilities of an artificial neural network. At the heart of this inquiry lies the hypothesis that a strong and coherent organizational culture positively correlates with overall performance. The assumption suggests that when employees and leaders share values, foster collaboration, innovate, and adopt consistent leadership behaviors, the organization is more likely to thrive financially, operate efficiently, and satisfy its clients.

To test this assumption, the neural network analysis incorporated key cultural dimensions, innovation orientation, collaboration and teamwork, leadership style, and value alignment—as independent variables. These inputs were examined concerning three core performance indicators: financial performance, employee productivity, and customer satisfaction. The model's structure includes a hidden layer that processes the influence of cultural attributes on performance outputs, providing insights into the relative strength of each variable (Figure no. 1).

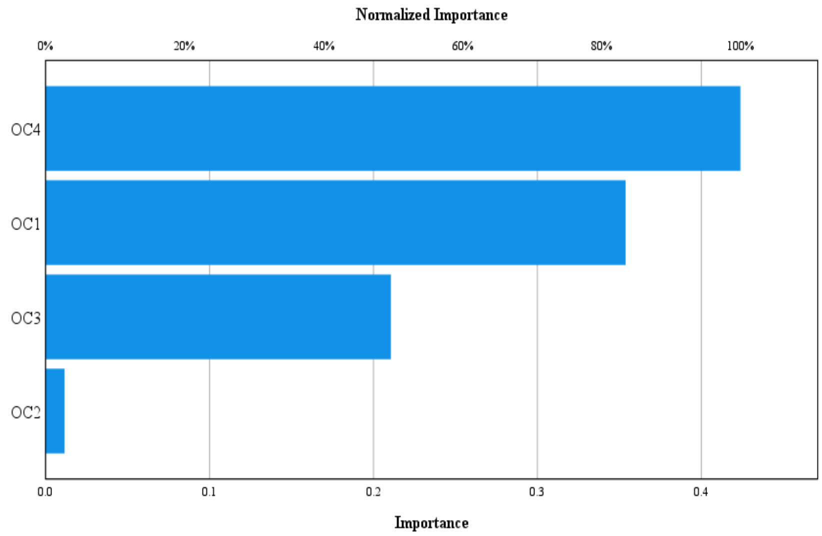
Figure no. 1. Artificial neural network analysis



Source: Developed by the authors based on data using SPSS v 27.0

The findings support the proposed hypothesis, although not all aspects of organizational culture contribute equally to performance. Value alignment (OC4) emerges as the most influential factor, carrying the highest normalized importance (100%). This result underscores how deeply integrated values between individuals and the organization can be a critical driver of success (Figure no. 2).

Figure no.2. Absolute Importance



Source: Developed by the authors based on data using SPSS v 27.0

Innovation orientation (OC1) also demonstrates a significant impact (83.5%), highlighting the importance of a forward-thinking, adaptable mindset within the company. In contrast, collaboration and teamwork (OC2) register a much lower influence (2.7%), suggesting that, within this dataset, the mere presence of collaborative behaviors does not necessarily guarantee measurable improvements in performance outcomes. Leadership style (OC3), while moderately important (49.7%), reinforces the idea that how leaders engage with and guide their teams still plays a considerable role, though not as decisively as shared values or innovation.

The neural network analysis provides further depth by examining parameter estimates, which reveal how each input variable contributes to the activation of the hidden and output layers (Table no. 2).

Table no. 2 Model parameters

		Hidden Layer 1	Output Layer		
		H(1:1)	PERF1	PERF2	PERF3
Input Layer	(Bias)	0.077			
	OC1	0.206			
	OC2	0.010			
	OC3	0.171			
	OC4	0.312			
Hidden Layer 1	(Bias)		0.446	0.805	0.943
	H(1:1)		1.836	1.449	1.906

Source: Developed by the authors based on data using SPSS v 27.0

In the input layer, value alignment (OC4) stands out with the highest weight (0.312), reinforcing its dominant role in shaping internal dynamics that ultimately impact performance. Innovation orientation (OC1) also displays a relatively strong connection (0.206), further validating its critical influence. Leadership style (OC3) holds a moderate weight (0.171), while collaboration and teamwork (OC2) appear to exert minimal influence, with a notably low weight (0.010). These values indicate how each cultural trait activates the hidden layer, an intermediary stage in the neural network's learning process.

Within the hidden layer, the transformation of cultural inputs into performance outputs becomes even more evident. The bias terms, 0.446, 0.805, and 0.943, account for baseline activations in the model, allowing for nuanced learning beyond linear relationships. More importantly, the strength of the connection from the hidden node (H1:1) to each performance outcome reveals the model's internal prioritization: customer satisfaction (0.1906) receives the highest connection weight, followed by financial performance (0.1836) and employee productivity (0.1449). These weights suggest that the cultural variables included in the model most powerfully influence customer satisfaction, which in turn may ripple through to other performance outcomes.

The data affirms the validity of the initial hypothesis, albeit with nuances. Organizational culture can enhance performance across multiple dimensions when shaped around aligned values and a strong orientation toward innovation. These results not only validate the theoretical framework but also offer practical implications for organizations aiming to strengthen their internal culture as a means of improving overall effectiveness.

5. Conclusions

This study investigated the connection between organizational culture and performance using a neural network model as an analytical framework. According to the research, organizational culture significantly impacts performance results. In particular, cultural traits like innovation orientation and value alignment are important indicators of success in customer happiness, employee productivity, and financial performance.

Value alignment stood out among the cultural variables examined for its strategic significance, highlighting the coherence of individual and organizational beliefs and the strategic relevance of shared principles. Innovation orientation emerged, emphasizing how flexibility and foresight contribute to competitive advantage. Leadership style continued to have a moderate impact, confirming its role in performance when it aligns with moral and developmental goals. On the other hand, despite being considered crucial in the past, cooperation and teamwork had little effect in the current model, indicating that their influence might be more indirect or context-dependent.

The study's analytical approach, which was based on structural neural network analysis, provided a nuanced view of how cultural characteristics result in quantifiable consequences. By going beyond linear relationships and providing more dynamic modeling of organizational behavior, this technique made it possible to gain a deeper grasp of variable interactions and predictive strength.

Practically speaking, the findings highlight how important it is for businesses to make deliberate investments in developing a cohesive, moral culture that encourages creativity and a standard set of values. Leaders should prioritize internal cultural alignment as a fundamental strategic tool to improve performance, particularly when service quality and flexibility are essential.

The study advances theory and practice by confirming the relationship between culture and performance and providing fact-based perspectives on the most important cultural elements. Organizations that successfully negotiate the intricacies of contemporary marketplaces and match their cultural identity with strategic objectives stand a better chance of achieving long-term stakeholder trust, employee engagement, and sustainable growth.

6. References

- Aboramadan, M., Albashiti, B., Alharazin, H., Dahleez, K., 2020. Organizational culture, innovation and performance: A study from a non-western context. *Journal of Management Development*, 39(4), pp.437–451. https://doi.org/10.1108/JMD-06-2019-0253
- Alkhadra, W.A., Khawaldeh, S., Aldehayyat, J., 2023. Relationship of ethical leadership, organizational culture, corporate social responsibility and organizational performance: a test of two mediation models, *International Journal of Ethics and Systems*, 39(4), pp. 737–760. https://doi.org/10.1108/IJOES-05-2022-0092
- Bocean, C.G., 2007. The Impact of Active Labour Market Policies in Romania, [online] Available at: < https://mpra.ub.uni-muenchen.de/10397/> [Accessed 9 March 2024].

- Bocean, C.G., 2009. Managementul performanţelor personalului [Personnel performance management]. București: Tribuna Economică.
- Bocean, C. G., 2011. Project-based organization-an integrated approach, *Management & Marketing-Craiova*, 9(2), pp. 265-273.
- Bocean, C. G., 2007. Echilibre şi dezechilibre pe piaţa muncii din România: managementul pieţei muncii [Equilibriums and imbalances on the Romanian labor market: labor market management]. Craiova: Universitaria.
- Georgescu, I., Bocean, C. G., Vărzaru, A. A., Rotea, C. C., Mangra, M. G., Mangra, G. I., 2024. Enhancing Organizational Resilience: The Transformative Influence of Strategic Human Resource Management Practices and Organizational Culture. *Sustainability*, 16(10), 4315. https://doi.org/10.3390/su16104315
- Joseph, O.A., Kibera, F.N., 2019. Organizational culture and performance: Evidence from microfinance institutions in Kenya. *International Journal of Business and Social Science*, 10(6), pp.123–132. https://doi.org/10.1177/2158244019835934
- Nicolescu, M.M., Vărzaru, A.A., 2020. Ethics and disclosure of accounting, financial and social information within listed companies. Evidence from the Bucharest stock exchange. 2020 *Basiq International Conference: New Trends in Sustainable Business and Consumption*, pp. 73-80.
- Olan, F., Liu, S., Neaga, I., Chen, H., Nakpodia, F., 2019. How cultural impact on knowledge sharing contributes to organizational performance: Using the fsQCA approach. *Journal of Business Research*, 94, pp.313-319. https://doi.org/10.1016/j.jbusres.2018.02.027
- Rotea, C. C., Ploscaru, A.-N., Bocean, C. G., Vărzaru, A. A., Mangra, M. G., Mangra, G. I., 2023. The Link between HRM Practices and Performance in Healthcare: The Mediating Role of the Organizational Change Process. *Healthcare*, 11(9), 1236. https://doi.org/10.3390/healthcare11091236
- Vărzaru, M., Vărzaru, A.A., 2013a. Knowledge management and organizational structure design process. *Annales Universitatis Apulensis: Series Oeconomica*, 15(2), pp. 716-724. http://dx.doi.org/10.29302/oeconomica.2013.15.2.35
- Vărzaru, M., Vărzaru, A.A., 2013b. Leadership Style and Organizational Structure in the Context of Mintzberg's Vision. *Proceedings of the 7th International Management Conference: New Management For The New Economy*, pp. 466-475
- Vărzaru, M., Vărzaru, A.A., Albu, C.C., 2013. Knowledge Management and Organisational Structure: Mutual Influences. *Proceedings of 13th European Conference on Knowledge Management (ECKM)*, Univ Politecnica Cartagena, Spain, pp.1255-1261.
- Vărzaru, M. Vărzaru, A.A., 2015a. Design and implementation of a management control system. *Finance: Challenges of the Future*, 17, pp.195-200.
- Vărzaru, D.C. and Vărzaru A.A., 2015b. Adjusting the human resources information system to the balanced scorecard requirements. *Annals of the University of Craiova, Economic Sciences Series*, 2, pp.222-238.
- Vărzaru, D.C. and Vărzaru, A.A., 2016. The Contribution of the Human Resources Information System to Human Capital Performance Management within the Organization. *Ovidius University Annals, Economic Sciences Series*, XVI(1), 2016, pp.429-434.
- Vărzaru, A. A. 2024. Unveiling Digital Transformation: A Catalyst for Enhancing Food Security and Achieving Sustainable Development Goals at the European Union Level. *Foods*, 13(8), 1226. https://doi.org/10.3390/foods13081226