

Original Paper

The Architectural Path of Collaborative Management in Performing Arts Organizations

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Received: June 03, 2023

Accepted: July 25, 2023

Online Published: July 31, 2023

doi:10.22158/assc.v5n3p54

URL: <http://dx.doi.org/10.22158/assc.v5n3p54>

Abstract

Under the background of the new era, performing arts organizations have become a cornerstone force in promoting the high-quality development of China's culture. "How to explore the development models and general rules that promote internal and external collaborative management within organizations?" and "How to achieve dynamic balance within organizations with diverse collaborative models?" These are all crucial questions that managers of performing arts organizations should consider in this era. Based on positioning theory and the logical perspective of organizational structuring functional types, this article proposes a "three-step" development strategy for the internal and external collaborative management of performing arts organizations from the value logic of arts management and the research perspective of history. The article also establishes an evaluation system for the internal and external collaborative management of performing arts organizations using the DEA method and explores the full-process management architecture of integrated collaboration within and outside performing arts organizations. The aim is to provide theoretical support for the collaborative innovation and high-quality development of performing arts organization management.

Keywords

Performing Arts Organization, Collaborative Management, Data Envelopment Analysis (DEA)

1. Introduction

In the context of the new era, performing arts organizations have become a key force driving the high-quality development of culture in our country. Research on performing arts organizations should be rooted in meeting the demands of the general public and aim to create high-quality artistic products with profound ideas, artistic excellence, and excellent production. Questions such as "How to explore the development models and general principles that promote collaborative management in organizations?" and "How to achieve dynamic balance in diverse collaborative modes?" have become

timely issues that performing arts organization managers should consider.

As the main force in the creation and production of Chinese cultural and artistic products, performing arts organizations are an important carrier of promoting cultural self-confidence. Whether their development and construction are scientifically sound and whether they achieve internal and external collaborative management are key factors directly related to the success or failure of national cultural and artistic development.

Literature research has found that scholarly research has expanded the research perspectives on performing arts organizations both vertically and horizontally, yielding fruitful results and laying a solid foundation for further research. This has made “research on internal and external collaborative management of performing arts organizations” possible across multiple dimensions such as comprehensive cultural systems, artistic organizations, artistic creation, and artistic talent cultivation. However, according to parallel reasoning from both horizontal and vertical dimensions, the current research mostly focuses on qualitative studies, with limited quantitative and empirical research from the perspective of internal and external collaborative management. Moreover, most studies concentrate on the internal management of specific performing arts organizations, which limits the research validity, reliability, and comprehensiveness. Therefore, conducting research on internal and external collaborative management of performing arts organizations using mixed research methods can play an important role in optimizing management, improving artistic production efficiency, ensuring artistic production quality, and providing beneficial precedents for government cultural policy development. There is still considerable and expandable research space in the field of internal and external collaborative management research in performing arts organizations.

From a practical perspective, although a complete theoretical framework for collaborative management of performing arts organizations has not yet been established, a few performing arts organizations have already explored it in practice. For example, the China National Traditional Orchestra has taken a unique position in the artistic market by adhering to its social positioning as a representative of the national image and promoting the culture of traditional Chinese music. The orchestra’s team organization has a tight and well-organized internal structure, consisting of departments such as the office, ethnic orchestras, ethnic choirs, performance centers, finance departments, and personnel departments, each with clear responsibilities and functions. The orchestra’s personnel management mechanism includes personnel establishment, talent mobility, assessment, and appointment systems to ensure that top talents enter the orchestra’s work and enhance the quality of the team. In its relatively well-developed internal management, functional types, artistic transferability, hierarchical structure, institutional structure, and cultural structure, the China National Traditional Orchestra is constantly embracing external voices and keeping pace with the times. Through a structured logic of internal and external collaborative management, it continuously promotes its spiral-like upward development. For instance, the orchestra collaborated with director Wang Chaoge to create a large-scale musical drama called “Rediscovering Chinese Music”, which is an ethnic innovation based on feedback from the

external perception that “the repertoire being played mostly consists of the ‘Three Old Pieces’”. Amid the continuous changes in the artistic and institutional environment and audience aesthetics, the musical drama, with the audience’s social relational network as its core and demand-driven innovative internal creative methods and internal management models, has appeared in an extraordinary form that integrates music with scenery, blending different scenes, and has become a music concert combining Western opera, drama, symphony, and musicals in a unique way. In the continuous “macro-micro-macro-micro” cycles of innovative management models and modern management concepts, scientific and standardized management approaches have been provided for the innovative development of the large-scale ethnic musical drama. Specific measures include leveraging external efforts to open markets and showcase the charm of ancient Chinese culture when the variable of “artistic transferability” is reduced, promoting win-win situations for productions and enterprises through innovative marketing models when the variable of “artistic environment” changes, portraying music stories in accordance with the audience’s perspective, and advancing promotion and sales to increase market acceptance, thus paving the way for the inheritance of ethnic music.

The exploration of internal and external collaborative management by the China National Traditional Orchestra underlines the importance of reevaluating traditional Chinese music not with outdated perspectives, but by appreciating it through the ingenious fusion of tradition and modernity. This has allowed traditional Chinese music to be showcased on the Western stage with innovative and classical art forms, promoting the progress and development of ethnic music. As the main body of performing arts organizations and through their artistic works, performing arts organizations have demonstrated the profound charm of Chinese traditional culture to the world.

In conclusion, collaborative management in performing arts organizations has been the subject of numerous attempts and explorations in practice, but it still requires further research on the theoretical level. Therefore, the introduction of mixed research methods is highly valuable in studying the collaborative management of performing arts organizations. It can play a significant role in optimizing management, improving artistic production efficiency, ensuring artistic production quality, and serving as a beneficial precedent for government cultural policymaking. As a result, this paper adopts a research approach that starts with the logical perspectives of positioning theory and structured functional types of organizations, combined with empirical studies using historical research perspectives and case investigations. The research follows a path of problem identification, problem deconstruction, in-depth exploration, examination of the current status, and problem resolution.

2. Method

The logical framework matrix facilitates a systematic and structured analysis of the internal and external collaborative management models of performing arts organizations. Due to the temporal characteristics of performing arts organizations, they must adapt to survive in the external environment. The external environment is considered a significant factor influencing the structural development of

performing arts organizations and has been a key focus of theoretical research since the 1960s and 1970s. The contingency theory (Perrow (Note 1), 1986) proposed in the 1960s and 1970s, followed by scholars suggesting the combined effect of external factors such as technological changes and institutional environments with internal factors such as life cycle, scale and scope, strategy, technology, knowledge level, and functional types, on the evolution of performing arts organizations (Massini (Note 2), 2002). All of this supports the conclusion that the internal and external collaborative management of performing arts organizations is the correct management approach for promoting their high-quality development.

Based on Coleman's (Note 3) (1990) three explanatory stages of social phenomena and the fundamental essence of organizational structuration, the author elaborates on the logical framework of internal and external collaborative management from the perspective of the structuralization of performing arts organizations (Figure 1).

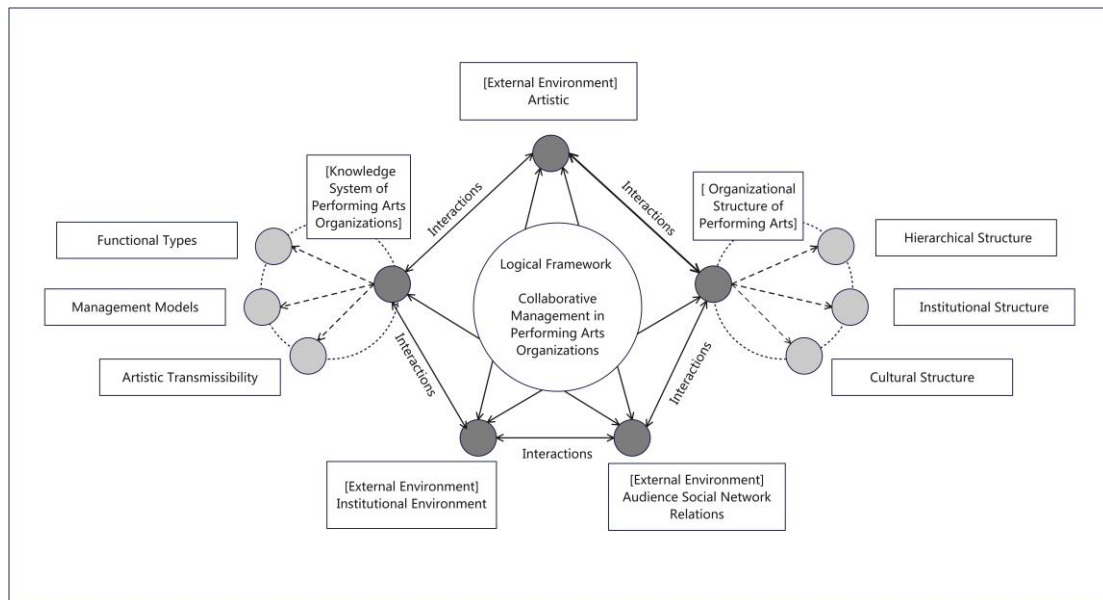


Figure 1. Illustration of the Logical Framework for Collaborative Management in Performing Arts Organizations

External environmental factors of performing arts organizations, by providing resources to the organizations, bring about changes in the artistic functional types, management models, and artistic transferability within the organizations. These changes in functional types, management models, and artistic transferability within performing arts organizations lead to adaptive changes in organizational hierarchical structures, institutional structures, and cultural structures. Over a longer period in the social scope, the transformation of the structure of performing arts organizations will in turn have a counter-effect on the external environment. In this way, the continuous cycle of “macro-micro-macro-micro” not only realizes the structuring of performing arts organizations but also

promotes a spiral upward development of internal and external environments as artistic resources and knowledge systems interact in a continuous cycle. This formation creates a structured logical closed loop of coordinated management between internal and external environments.

3. Result

Under the logic framework of coordinated management within and outside performing arts organizations, from the theoretical perspective of art management and with the value logic of art management as a profession, a comprehensive development strategy is proposed in a three-step process of focusing, consolidating, and improving the positioning for the promotion of coordinated management of internal and external aspects of performing arts organizations.

3.1 Focused Position

Focusing on positioning, constructing a model of factors influencing the transformation of performing arts organizations. From the perspective of management, an organization is an open social-technical system, and its operation entails a dynamic process of mutual interaction with various environments. Each organization has a multi-level, multi-factor, complex, and ever-changing background. In order to develop, organizations must continuously adjust and improve their structure and functions to enhance flexibility and adaptability in the changing context, which necessitates constant organizational transformation. Based on the changes in the internal and external environments of performing arts organizations, it is important to timely adjust, improve, and innovate elements within the organization, such as management philosophy, work methods, organizational structure, staff allocation, organizational culture, and technology. Studying the factors influencing the transformation of performing arts organizations contributes to the effective positioning of these organizations, quantifying the absolute values of each influencing factor in the form of influential factor calculations and exploring the key positioning content that can truly implant into the audience's mindset.

Clarifying the various factors that influence organizational transformation is the foundation for constructing a model of factors influencing the transformation of performing arts organizations. In recent years, researchers have categorized factors influencing organizational transformation based on types. The first is open system factors, with the main influencing factors being external environment and technological indicators. The second is internal factors, with primary influencing factors including organizational strategic goals, organizational culture, size, and lifecycle. These two major factors determine the success or failure of organizational transformation. Based on this, an influential factor model of performing arts organizational transformation can be established to facilitate the focused positioning of performing arts organizations (Figure 2).

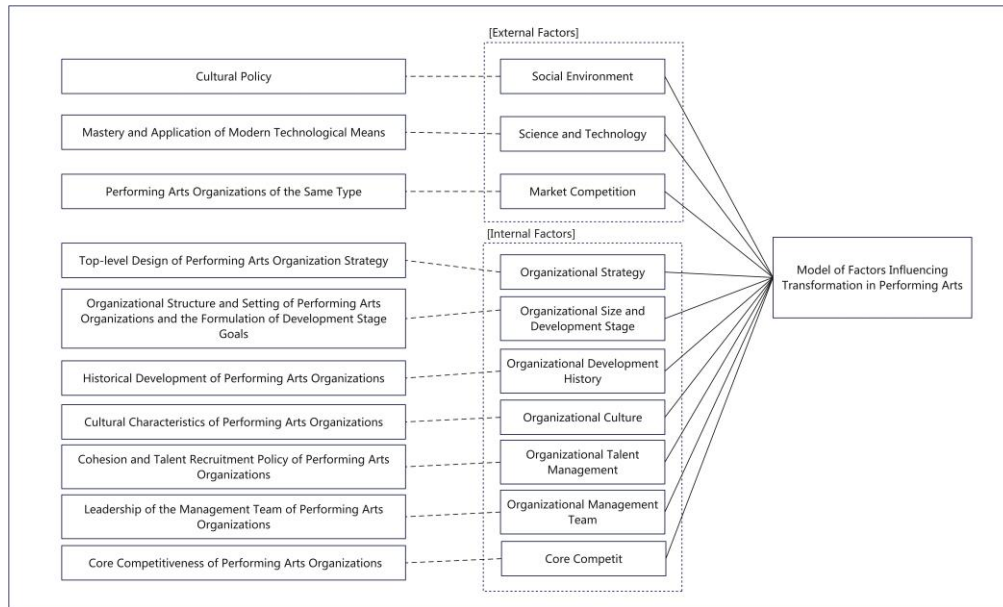


Figure 2. Model of Factors Influencing the Transformation of Performing Arts Organizations

Based on the model depicted in Figure 2, an analysis of the influencing factors of performing arts organizations can be conducted by examining different dimensions of external and internal factors. Considering the characteristics of performing arts organizations, the external influencing factors can be identified as follows: national policies and cultural initiatives (social environment), utilization and mastery of modern technological means (science and technology), market competition among similar performing arts organizations. The internal influencing factors can be identified as follows: strategic top-level design of the performing arts organization (organizational strategy), organizational structure of the performing arts organization, formulation of developmental goals in different stages of the performing arts organization (organizational scale and developmental stage), organizational history and culture of the performing arts organization, cohesion and talent recruitment policies of the performing arts organization (organizational talent management), leadership of the management team of the performing arts organization (organizational management level), and core competitiveness of the performing arts organization. Based on these factors, each influencing factor of the performing arts organization can be further analyzed and positioned to promote sustainable development of performing arts organizations.

3.2 Solidifying Position

Solidifying positioning contributes to the coordinated management of internal and external aspects of performing arts organizations, enabling sustainable development. In the specific implementation process, it is necessary to base it on the model of factors influencing the transformation of performing arts organizations. After calculating the data obtained from research, the theory of management coordination effects should be applied, integrating internal and external management to form an integrated and standardized management approach where “1 + 1 > 2”. This approach considers the

social environment, scientific technology, and market competition together. By drawing lessons from history, adopting a proactive mindset, observing the trends of the times, and seizing favorable opportunities, we can understand the mission of technological empowerment in the historical process of world cultural and technological development. Technological empowerment serves as an important catalyst for promoting innovative development in performing arts organizations.

Through the establishment of information platforms and the integration of new technologies into new performance formats, cultural exchange can be broadened. It is essential to strike a balance between new media and traditional development, and strive for a win-win situation in terms of social and economic benefits. At the same time, during the “14th Five-Year Plan” period, we should take the major strategic task of China’s economic development as our guide and coordinate supply-side macro-control with demand-side management. This will lead to a higher level of dynamic balance between demand-driven supply and supply-driven demand. The author has organized the dynamic coordination between the supply side and demand side of performing arts organizations into Figure 3.

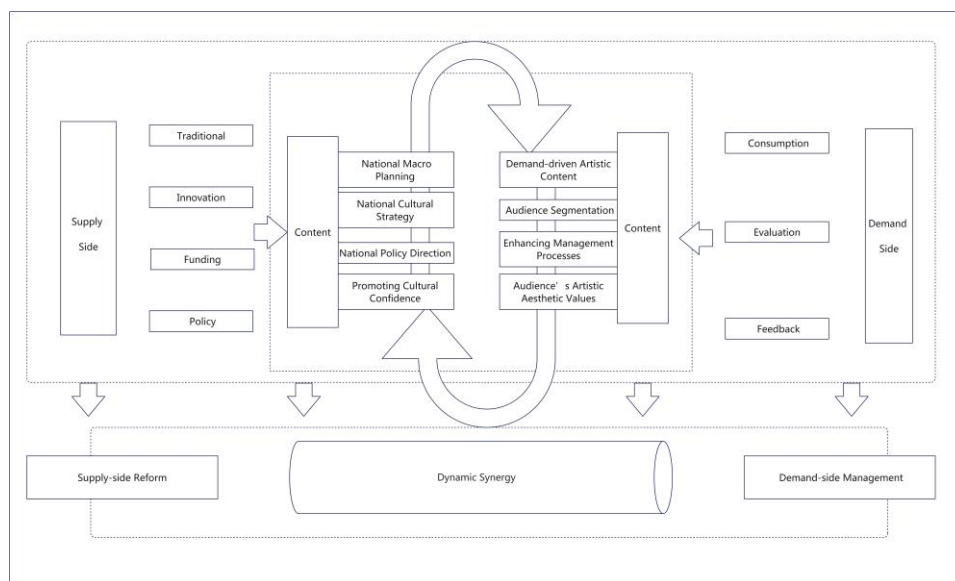


Figure 3. Dynamic Coordination Figure of Supply Side and Demand Side in Performing Arts Organization

The management and operation of performing arts organizations should fully leverage the synergistic effect. The supply side (performing arts organizations) should integrate tradition and innovation under the guidance of national macro policies, creating high-quality artistic content that aligns with national macro plans and policy directions. They should also engage in top-level design for the implementation of projects within the organization. At the same time, performing arts organizations should constantly pay attention to the consumption trends, audience evaluations, and feedback from the demand side (audience). Based on external feedback from the demand side, utilizing the framework of the closed-loop logic of coordinated management in performing arts organizations, continuous

improvement and adjustments should be made to the top-level design projects within the organization to achieve a balance between supply and demand. This will help maximize the effectiveness of performing arts organization management.

3.3 Refining Position

To achieve the coordinated management and sustainable development of performing arts organizations, it is necessary to focus on the full-process management. Therefore, in the later stages of management, an effect feedback mechanism can be established in a quantitative form to create a scientific, standardized, and empirical performance evaluation system for performing arts organizations.

Data Envelope Analysis (DEA) is a relative efficiency evaluation method developed based on the concept of relative efficiency, first proposed by renowned American operations researchers A. Charnes, W.W. Coe, and others. A Decision-Making Unit (DMU) is used to represent a decision unit, and the guiding principle for determining DMU is that, in terms of “resource consumption” and “productivity,” each DMU can be considered as the same entity, meaning that, from a certain perspective, all DMUs have the same inputs and outputs. Through the comprehensive analysis of input and output data, DEA can determine the quantity index of the overall efficiency for each DMU. This allows for the ranking of DMUs, identifying effective (i.e., relatively efficient) DMUs, and indicating the reasons and degrees of inefficiency for other DMUs, providing management information to the supervisory department. Based on this, it can be determined whether the input scale of each DMU is appropriate, and the correct direction and degree of adjustment to the input scale can be provided, such as whether to expand or reduce and by how much.

Among them, the CCR model and BCC model are the most basic and important DEA models. Suppose there are n performing arts organizations. For the p th performing arts organization (DMU_p , where p is the currently evaluated performing arts organization number and $0 \leq p \leq n$), there are m input indicators and s output indicators. The input indicator set for the performing arts organization is denoted as X_p , $X_p = (x_{1p}, x_{2p}, \dots, x_{mp})$, and the output indicator set for the performing arts organization is denoted as Y_p , $Y_p = (y_{1p}, y_{2p}, \dots, y_{sp})$. At this point, the CCR model can be represented in linear programming form (multiplier model)—(1):

$$\begin{aligned} \max z_p &= \sum_{r=1}^s u_{rp} y_{rp} \\ \text{s. t. } &\sum_{i=1}^m v_{ip} x_{ip} = 1 \\ &\sum_{i=1}^m v_{ip} x_{ij} - \sum_{r=1}^s u_{rp} y_{rj} \geq 0, 1 \leq j \leq n \\ &v_{ip} \geq 0, u_{rp} \geq 0 \end{aligned}$$

Here, i denotes the number of input indicators, r denotes the number of output indicators, and j denotes the number of performing arts organizations (j can take the value of p); z_p represents the weighted sum of outputs for DMU_p , i.e., the efficiency value of DMU_p ; u_{rp} represents the weight, indicating the

relative importance of y_{rp} ; y_{rp} represents the r th output indicator of the p th performing arts organization; v_{ip} represents the weight, indicating the relative importance of x_{ip} ; x_{ip} represents the i th input indicator of the p th performing arts organization. Let the optimal value of Equation (1) be denoted as z_p . The second term in Equation (1) represents the constraint that the sum of weights for the p th organization over j organizations must satisfy. Based on Equation (1), the dual form of the CCR model, which has significant economic and social benefits, can be obtained (envelopment model)—(2):

$$\begin{aligned} & \min \theta_p \\ \text{s. t. } & \sum_{j=1}^n \lambda_j x_{ij} + s_{ip}^- = \theta_p x_{ip}, 1 \leq i \leq m \\ & \sum_{j=1}^n \lambda_j y_{rj} - s_{rp}^+ = y_{rp}, 1 \leq r \leq s \\ & \lambda_j \geq 0, 1 \leq j \leq n \\ & s_{ip}^- \geq 0, s_{rp}^+ \geq 0 \end{aligned}$$

By applying the DEA method, all the sub-projects encompassed within performing arts organizations can be regarded as decision-making units in the DEA method. The model can be used for hierarchical positioning evaluation, providing insights into further improving the performing arts organization's internal management levels under the conditions of its own resource allocation. This facilitates optimizing the allocation of internal resources to enhance the core competitiveness and strategic development positioning of the performing arts organization. Based on this, a DEA evaluation framework for performing arts organizations (Figure 4) is constructed, establishing an evaluation system for internal and external management of performing arts organizations. Subsequent performing arts managers and researchers can use this as a guiding principle, conduct in-depth research on various evaluation factors of performing arts organizations, incorporate empirical research data, and perform calculations to achieve a full-process management within the logical framework of coordinated internal and external management in performing arts organizations.

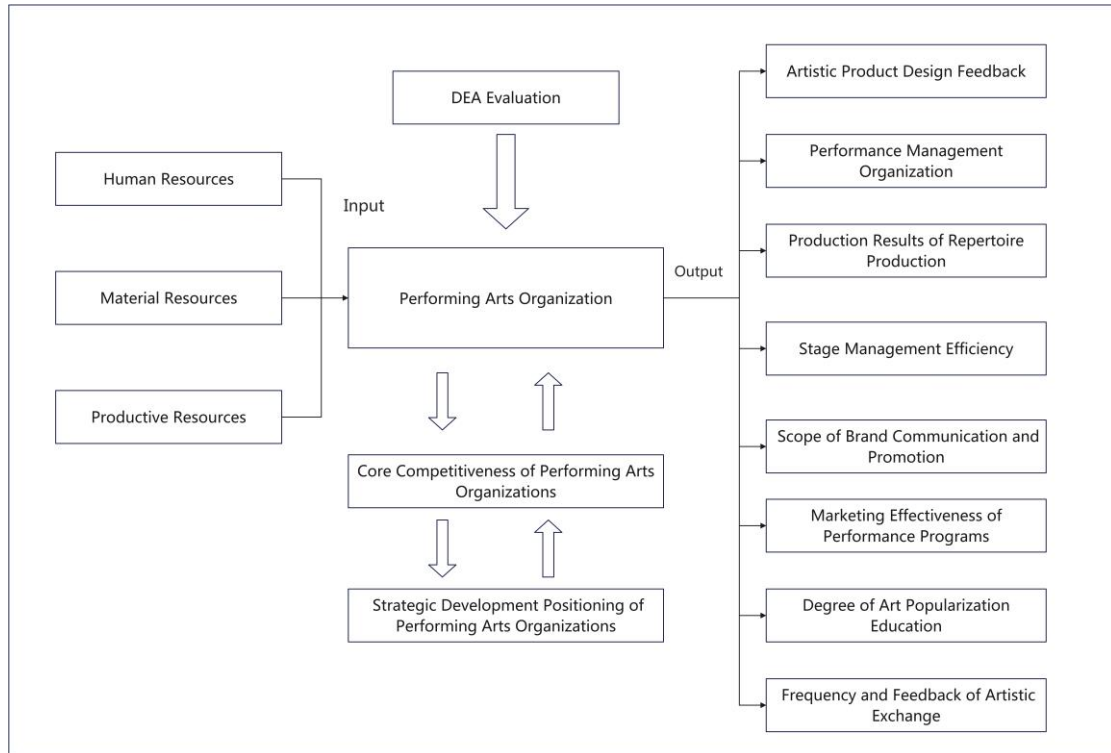


Figure 4. DEA Evaluation Framework for Performing Arts Organizations

4. Discussion

The introduction of empirical research in the field of performing arts management holds significant implications and is critical for advancing our understanding in this domain. This study serves as a catalyst for future investigations, cultivating a pathway for further scholarly exploration. Scholars are encouraged to enhance their research endeavors by embracing a combined approach that integrates both quantitative and qualitative methodologies.

The significance of this study lies in its empirical nature, which contributes substantially to the existing body of knowledge in performing arts management. Through the application of positioning theory and analysis of organizational functional types, it offers a distinct perspective on collaborative management within the realm of performing arts organizations. These findings contribute to both theoretical and practical aspects by shedding light on the intricate dynamics of collaboration specific to this context.

It is paramount for future research endeavors to incorporate a synergistic approach that combines quantitative and qualitative research methods. While this study provides valuable insights into collaborative management, a comprehensive understanding can be achieved by integrating diverse research approaches. Quantitative methods, including statistical analysis, can provide objective measures of performance and effectiveness. In contrast, qualitative methods, such as interviews and case studies, capture the subjective experiences of stakeholders, offering in-depth contextual comprehension.

Adopting a mixed-methods research design will enable scholars to gain a nuanced understanding of the

complex dynamics of collaborative management in performing arts organizations. This approach allows researchers to triangulate their findings by validating and enriching the results through complementary data sources.

Furthermore, future studies should explore the applicability and effectiveness of the proposed three-step development strategy across varied cultural and artistic contexts. Considering the unique characteristics of different performing arts organizations, such research would shed light on the implementation and outcomes of collaborative management practices. Comparative studies encompassing diverse regions and artistic disciplines would provide insightful contributions and foster the generalizability of the findings.

In conclusion, this study underscores the importance of introducing empirical research in the field of performing arts management. Its contribution lays the foundation for future investigations and emphasizes the need for scholars to enrich their research endeavors by adopting a combined approach that integrates quantitative and qualitative methodologies. This approach would facilitate a comprehensive understanding of collaborative management and its impact within performing arts organizations.

References

- Brown, W. A. (2005). Exploring the association between board and organizational performance in nonprofit organizations. *Nonprofit Management and Leadership*, 15(3), 317-339. <https://doi.org/10.1002/nml.71>
- Barker, E., Barker, W., Burr, W., Polk, W., & Smid, M. (2014). Recommendation for Key Management - Part 2: Best Practices for Key Management Organization. *Create Space Independent Publishing Platform*.
- Balnaves, M., & Caputi, P. (2001). *Introduction to Quantitative Research Methods: An Investigative Approach*. SAGE. <https://doi.org/10.4135/9781849209380>
- Conte, D., & Langle, S. (2007). *Theatre Management: Producing and Managing the Performing Arts*. California: Luite Specific Media Group, Ltd.
- Kershaw, B. (Ed). (2011). *Research methods in theatre and performance*. Edinburgh University Press.
- Kushner, R. J., & Poole, P. P. (2010). *Exploring structure-effectiveness relationships in nonprofit arts organizations*. *Nonprofit Management & Leadership*.
- Leidner, D. (2000). Knowledge management and knowledge management systems. *Lifelong Learning in Europe*, 9(2-3), 101-105.
- Lawrence, N. (2005). Social research methods: Qualitative and quantitative approaches. *Social Research Methods Qualitative & Quantitative Approaches*, 39(3), 447-448.
- Mugenda, O. M., & Mugenda, A. G. (1999). *Research methods: quantitative and qualitative approaches*. African Centre for Technology Studies.

- Milgrom, P., & Milgrom, P. (1992). *Economics, Organization and Management*. Prentice-Hall.
- Saidel, J. R. (1991). Resource Interdependence: The Relationship between State Agencies and Nonprofit Organizations. *Public Administration Review*. <https://doi.org/10.2307/976605>
- Teece, D. J., Pisano, G., & Shuen, A. (2009). Dynamic capabilities and strategic management. *Strategic management journal*, 509-533. [https://doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7<509::AID-SMJ882>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z)
- Randall, M., Andrei, S. et al. (1988). Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics*.
- Rentschler, R., Radbourne, J., Carr, R., & Rickard, J. (2002). Relationship marketing, audience retention and performing arts organisation viability. *International Journal of Nonprofit and Voluntary Sector Marketing*. <https://doi.org/10.1002/nvsm.173>
- Vries, M. F. R. K. D. (1999). What's playing in the organizational theater? Collusive relationships in management. *Human Relations*, 52(6). <https://doi.org/10.1177/001872679905200604>

Notes

- Note 1. Di Maggio, P., & Powell, W. W. (1983). The Iron Cage Revisited: Collective Rationality and Institutional Isomorphism in Organizational Fields. *American Sociological Review*, 1983, 48(2), 147-160.
- Note 2. Massini, S., Lewin, A. Y., Numagami, T., & Pettigrew, A. M. (2002). The Evolution of Organizational Routines among Large Western and Japanese Firms. *Research Policy*, 31(8), 1333-1348.
- Note 3. Coleman, J. S. (1990). *Foundations of Social Theory*. Cambridge: Belknap Press of Harvard University Press, 1990.