STRATEGIC MANAGEMENT IN CREATIVE INDUSTRIES AND ITS EFFECTIVENESS MEASUREMENT

Natalija RIABKO
  Independent researcher
  riabko_79@hotmail.com

ABSTRACT

Creative industry organizations operate at the crossroads between creativity, culture, economics, and technology (UNCTAD, 2022). Like any enterprise, these organizations are required to make strategic decisions to address challenges, including the application of cyber technology. This article aims to examine the application of strategic management in cultural industry-related organizations and methods for measuring management effectiveness. One of the major aims of the current project is to design effective surveys to poll two groups of cultural organizations: theaters and museums, both private and public. The study proposes an integrated approach to ensure the inclusion of information security in the field of culture as part of a modern strategic management concept. Based on the analysis of current trends in management and a survey of theaters and museums, the main problems and challenges in the development of an information security system are identified. The concept of information security, methods for assessing information assets, risks, and threats are presented.

Keywords: Strategic Management; Creative Industries; Innovation; Cybersecurity; Information Security; Cultural Organizations; Performance Measurement; Organizational Culture.

1 INTRODUCTION

The intersection of modern business and the creative industries extends beyond technological integration. Both sectors are increasingly interdependent, driven by the need for collaboration to sustain cultural heritage, foster creativity, and enhance cultural life. This cooperation is facilitated by non-budget funding sources, partnerships with financial and industrial entities, and engagement with social movements. Businesses benefit from these ties through enhanced reputation, sponsorship opportunities, and innovative marketing strategies, often leveraging cultural events like exhibitions, festivals, and competitions.

Culture, as a service-oriented sector, produces intangible "products" consumed simultaneously with their creation, such as theater performances or concerts. Unlike physical goods, cultural services gain value through consumption and network effects, where their social significance grows with increased engagement. These dynamics shape management strategies in creative industries, emphasizing the unique nature of cultural production.

Marketing in the cultural sector is multidimensional, often involving multiple stakeholders. For instance, the payer (e.g., parents, donors, or governments) may differ from the end consumer (e.g., children or the elderly). This dual-market structure - comprising consumers and donors - creates complex dynamics, as funding often relies on fundraising rather than direct commerce. Even in commercialized areas like show business, ticket sales typically cover only a fraction of costs, highlighting the sector's reliance on diverse financing mechanisms.

The non-profit nature of cultural activities does not diminish their appeal to businesses. The non-profit sector is globally recognized for its advertising potential and ability to enhance corporate image and social status. However, the cultural sector faces significant challenges, particularly in cybersecurity and information management. Low levels of informatization, coupled with the rapid digitization of cultural assets, have exposed vulnerabilities in safeguarding digital cultural heritage. The lack of a cohesive management system for information security further exacerbates these issues, underscoring the need for strategic oversight at all levels.

In summary, the synergy between business and culture is vital for societal development, but it requires addressing structural and technological challenges to ensure sustainable growth and protection of cultural assets.

2 LITERATURE REVIEW

2.1 Creative Industries

Creative industries emerged in post-industrial societies as traditional manufacturing declined, shifting to regions with cheaper labor. Governments, like the UK, turned to the creative economy to generate employment and economic growth. Today, these industries play a vital role in revitalizing urban spaces and fostering innovation.

Creative industries often cluster in abandoned industrial zones, transforming them into vibrant cultural hubs. These "creative clusters" combine production and presentation, attracting visitors with their unique mix of industrial aesthetics and creative energy. Charles Landry called them "the fighting force of urban regeneration," as they revive neglected areas, supporting local economies through shops, cafes, and cultural events.

A defining feature of creative industries is their reliance on small, independent enterprises engaged in experimental work across diverse fields. This entrepreneurial spirit extends beyond traditional arts, influencing business, science, technology, and urban management. Governments support these industries

through state orders, tax incentives, and programs promoting small and medium-sized businesses, encouraging investment and innovation.

At the core of the cultural sector are traditional institutions like theaters, museums, and libraries, which operate under unique artistic principles rather than economic models. Art, driven by self-expression, requires societal and governmental support to thrive. Creative industries often form clusters around these institutions, generating jobs and revenue while fostering a shared cultural ecosystem.

Strategic management in creative industries involves setting clear goals, aligning resources, and adapting to external environments. Organizations must balance economic, social, and cultural objectives, navigating factors like technological advancements, political shifts, and socio-cultural trends. The rise of digital media and globalization has transformed the cultural landscape, enabling widespread access to cultural products and fostering international collaborations.

A structured approach to strategic management includes:

- Retrospective Evaluation: Assessing past performance to identify successes and failures.
- Environmental Analysis: Examining economic, social, political, and technological influences.
- Strategic Alternatives: Exploring growth, reduction, or combined strategies aligned with the organization's mission.
- Strengths and Weaknesses: Analyzing internal capabilities and employee perceptions.
- Strategic Planning: Developing a cohesive policy and vision based on insights from previous stages.

Understanding external variables - such as socio-cultural trends, economic conditions, and technological advancements - is crucial for effective strategic management. By aligning their mission with these factors, cultural organizations can navigate challenges and seize opportunities, ensuring sustainable growth and relevance in a rapidly evolving global landscape.

2.2 ANALYSIS OF THE EXTERNAL ENVIRONMENT

The analysis of the external environment is a critical process in strategic management, providing managers with insights into the dynamics of external variables and their impact on the organization's future. This evaluation enables the identification of opportunities and threats, ensuring that strategic decisions are informed and aligned with broader trends. Key spheres of the external environment include the sociocultural, economic, social, and technological domains, each of which presents unique challenges and opportunities for cultural organizations.

The sociocultural sphere is shaped by the increasing internationalization of cultural markets and the emergence of global quality standards. While these trends promote the exchange of cultural goods and services, they also bring challenges. In Europe, for instance, declining readership, reduced attendance at theaters and cinemas, and cuts in state funding have created significant pressures on cultural organizations. Many traditional cultural activities struggle to adapt to these market-driven conditions, highlighting the need for innovative approaches to sustain engagement and relevance.

The commercialization of culture has intensified in recent decades, with large-scale cultural events, festivals, and cultural tourism becoming major economic drivers. Mega-products, supported by sophisticated marketing strategies, dominate profitability. While this trend generates economic benefits, it also raises concerns about the prioritization of profit over artistic and cultural value, potentially marginalizing smaller or less commercially viable cultural practices.

Cultural consumption is increasingly stratified, reflecting broader socio-economic inequalities. While affluent groups enjoy access to high-quality cultural experiences, marginalized populations, such as youth and the elderly, face significant barriers to participation. This stratification underscores the need for

inclusive cultural policies that ensure equitable access to cultural resources and opportunities. Addressing these disparities is essential for the survival and vitality of the cultural sector.

Technological advancements have transformed the creation, dissemination, and consumption of cultural products. Digital platforms have expanded audiences globally, enabling the internationalization of cultural markets and the proliferation of quality standards. However, these developments also demand heightened awareness of the quality and authenticity of cultural content. Technology has facilitated the rise of superstars and modern forms of show business, but it also poses challenges related to the preservation of cultural integrity and the equitable distribution of resources.

Among all external variables, the technological sphere exhibits the greatest dynamism, directly influencing both the quality and quantity of cultural products. The integration of modern technologies into cultural production and dissemination processes has become a defining feature of the contemporary cultural landscape.

The analysis of the external environment reveals a complex interplay of factors that shape the strategic positioning of cultural organizations. By understanding and responding to trends in the sociocultural, economic, social, and technological spheres, organizations can navigate challenges, seize opportunities, and ensure their long-term sustainability and relevance in a rapidly evolving global context.

The successful implementation of a strategic plan is a multifaceted process that requires integrating strategic objectives into the organizational structure through effective resource allocation and the establishment of clear planning components. These components include tactics, policies, procedures, and rules, each playing a distinct role in ensuring the strategy's alignment with the organization's mission and operational realities.

- Tactics:
  Tactics refer to short- and medium-term strategies that translate overarching strategic goals into actionable steps. In the cultural sector, tactics are particularly important due to the dynamic nature of cultural production and consumption. They allow organizations to remain flexible and responsive to changing external conditions, such as shifts in audience preferences or funding availability.

- Policies:
  Policies provide a framework for decision-making and guide the organization's efforts toward achieving its strategic objectives. They establish general guidelines for actions and ensure consistency across different levels of the organization. In the cultural sector, policies must balance artistic freedom with operational efficiency, fostering an environment where creativity and innovation can thrive.

- Procedures and Rules:

Procedures and rules operationalize policies by specifying the actions to be taken in particular situations. Procedures outline the steps required to achieve specific tasks, while rules define the boundaries within which these tasks must be performed. Together, they create a structured approach to managing day-to-day operations, ensuring that strategic goals are met efficiently and effectively.

2.3 Cultural policy and innovation

Cultural policy plays a pivotal role in the implementation of strategic management. It must ensure equal opportunities for both cultural consumption and creative expression, fostering an inclusive environment where diverse audiences can engage with cultural products. At the same time, cultural policy should support innovation, which is central to the creative process.

Innovation in the cultural sector involves deliberate, planned changes aimed at improving organizational performance and enhancing the quality of cultural products. However, innovation must be grounded in

tradition to maintain authenticity and cultural integrity. This balance between tradition and innovation is critical for sustaining the cultural sector's relevance and appeal.

Organizations must foster a culture of creativity and experimentation, encouraging artists and staff to explore new ideas and approaches. This requires creating an environment where risk-taking is supported and failure is seen as a learning opportunity.

Institutional and financial barriers often hinder innovation in the cultural sector. Organizations must identify and address these obstacles, whether through policy reforms, partnerships, or alternative funding mechanisms.

Sustainable funding is essential for supporting innovative projects. Organizations should explore diverse revenue streams, including grants, sponsorships, and crowdfunding, to ensure the financial viability of their initiatives.

Effective strategy implementation requires the coordination of various activities, including artistic, organizational, marketing, and financial efforts. Key factors for success include:

Clear division of labor and well-defined roles are essential for ensuring that all team members understand their responsibilities and contribute effectively to the organization's goals.

Organizations must prioritize strategic objectives, allocating resources to initiatives that align with their mission and have the greatest potential for impact.

In creative teams, motivation and self-regulation are often more effective than external oversight. Leaders should foster a sense of ownership and accountability among team members, empowering them to take initiative and innovate.

The implementation of strategic management in the cultural sector requires a nuanced approach that balances tradition and innovation, artistic freedom and operational efficiency, and inclusivity and excellence. By integrating strategic plans into the organizational structure, fostering a culture of innovation, and addressing external and internal challenges, cultural organizations can achieve sustainable growth and maintain their relevance in a rapidly evolving global landscape.

2.4 Growth and development of the organization

The concepts of "growth" and "development" are central to understanding sustainable organizational systems in management literature. Growth refers to quantitative expansion, while development implies qualitative improvements and adaptation. The interplay between these two processes is crucial for ensuring long-term sustainability, particularly when growth limits create conditions for further development. The choice of an optimal organizational structure plays a decisive role in balancing these dynamics.

Organizational structures evolve in response to changes in external and internal variables. A well-chosen strategy, aligned with the organization's goals and cultural mission, determines the optimal structure for each stage of growth and development. As goals shift, the organization must adapt its structure to new conditions and opportunities.

G. Hagoort (1993), in Cultural Entrepreneurship: Introduction to Arts Management, outlines a three-stage model of organizational growth and development:

- Initial Stage:
  - The founder's charisma drives the organization, defining its cultural mission and program.

- Key tasks include forming a team, identifying partners, and establishing socio-cultural and economic status.
- Challenges arise from the need to manage disintegration as interactions with the external environment become more complex.
- Differential Stage:
- Organizational structuring becomes critical, with increased specialization and standardization.
- The distribution of responsibilities and areas of activity leads to greater efficiency but also requires careful coordination.
- Integration Stage:
- The organization achieves unity among economic, technical, and socio-cultural goals.
- Integration is driven by creativity, innovation, market orientation, and collaborative efforts.
- This unity provides stability and resilience, enabling the organization to navigate external variability and maintain a "margin of safety."

Achieving unity of purpose requires integrating various structural components, with the balance between centralization and decentralization playing a critical role. Decentralized structures are particularly effective in dynamic environments characterized by competition, rapidly changing technologies, and evolving markets. The optimal balance depends on internal and external variables, as well as the level of interregional coordination.

A notable example of non-profit organizational innovation in the cultural sector is the cooperative model pioneered by economist J.M. Keynes in the 1930s. This model addressed key economic challenges faced by artists, including income instability and market competition. Key achievements of the cooperative included:

- Guaranteeing a minimum wage for members.
- Avoiding direct competition with dealers.
- Implementing preferential pricing policies with high price differentiation.
- Ensuring long-term self-sufficiency.

This model highlights the importance of tax benefits and public funding in supporting cultural missions. By granting such benefits, the state ensures that resources are used for cultural purposes rather than personal gain, reinforcing the organization's socio-economic role.

The growth and development of cultural organizations depend on the strategic alignment of goals, structures, and missions. By balancing growth with qualitative development, fostering integration, and adapting to external and internal variables, organizations can achieve sustainability and resilience. The cooperative model exemplifies how innovative structures can address economic challenges while fulfilling cultural missions, offering valuable insights for contemporary cultural management.

2.5 The dynamics of growth and development of creative industries organizations

The growth and development of creative industries organizations are dynamic processes that evolve through distinct stages, each characterized by specific challenges and opportunities. These stages reflect the organization's adaptation to internal and external variables, ensuring alignment with its cultural mission and strategic goals.

The creation of an organization begins with the recognition of a socially significant, value-oriented idea. At this stage, the focus is on aligning the idea with specific activities and securing support from government, private, and other stakeholders. The success of this phase depends heavily on the enthusiasm, competence, and vision of the founders, as well as their ability to garner external support.

As the organization matures, the emphasis shifts from the founder's charisma to strategic investment and structural development. Bureaucratic management structures often dominate this stage, offering clear divisions of labor, defined hierarchies, and standardized procedures. These structures provide stability and efficiency, enabling the organization to scale its operations.

However, as the organization grows, the limitations of bureaucratic structures become apparent. Excessive centralization can hinder innovation, reduce motivation, and alienate team members from the organization's goals. This rigidity often leads to a crisis, necessitating a shift toward more adaptive governance models.

To overcome stagnation, organizations must transition from bureaucratic to adaptive structures, emphasizing decentralization and flexible funding. This stage prioritizes responsiveness to external changes, such as market conditions, funding opportunities, and technological advancements. Temporary project-based or matrix structures are often introduced, combining functional and target-oriented approaches.

In these models, project managers assume full responsibility for resource allocation and execution, fostering innovation and collaboration. This balance between vertical and horizontal coordination enhances flexibility and motivation, enabling organizations to tackle complex challenges effectively.

Project and matrix structures are particularly effective in the cultural sector, where market uncertainty and the predominance of non-profit organizations create unique challenges. These structures are temporary, goal-oriented, and designed to achieve specific outcomes within defined timeframes. They allow for creative integration of diverse activities, reduce overhead costs, and enhance motivation among participants.

Examples of project-oriented models in the cultural sector include theatrical productions, art exhibitions, and festivals. These activities rely on multidisciplinary collaboration, enabling organizations to realize innovative ideas while maintaining operational flexibility.

G. Hagoort (1993) highlights the example of independent television companies, which, despite being commercial entities, often depend heavily on their owners. Successful companies establish a stable strategic foundation, enabling them to compete effectively. Conversely, organizations that rely on unrealistic growth expectations or frequent but poorly managed investments often face collapse. Hagoort (1993) emphasizes that effective management requires a clear focus on the organization's target identity, ensuring a smooth transition from the idea phase through structural development to strategic implementation.

The growth and development of creative industries organizations involve a continuous process of adaptation and restructuring. By transitioning from centralized bureaucratic models to decentralized, project-oriented structures, organizations can enhance innovation, responsiveness, and resilience. This evolution ensures alignment with their cultural mission and strategic goals, enabling sustained success in a dynamic and competitive environment.

2.6 Evaluation of the effectiveness of management in creative industries

The success of management in creative industries is assessed through two key dimensions: effectiveness and efficiency. Effectiveness measures the extent to which organizational goals are achieved, while efficiency evaluates the rational use of resources to attain those goals.

Effectiveness is determined by the alignment of results with strategic objectives. Results can be measured both quantitatively (e.g., number of viewers, income) and qualitatively (e.g., artistic level, public reception,

societal impact). For cultural organizations, qualitative outcomes, such as the fulfillment of their mission and positive societal influence, are often as critical as quantitative metrics.

Efficiency focuses on achieving goals with minimal resource expenditure. In the context of budget constraints, particularly in publicly funded cultural institutions, optimizing resource allocation is essential. This involves balancing costs with outcomes to ensure sustainable operations.

Given the increasing scarcity of state funding, there is a growing emphasis on developing robust systems to evaluate the performance of cultural organizations. These systems rely on key performance indicators (KPIs) that assess both the quality and volume of services provided. Examples include the number of restored museum artifacts, concerts held, or audience reach. While these indicators often emphasize quantitative measures, there is a recognized need to incorporate qualitative assessments, such as artistic value and societal impact.

To ensure effective management, cultural institutions are evaluated across several dimensions:

Financial and Economic Planning:

- Preparation of detailed budgets and expense plans.
- Monitoring administrative costs, payroll, and receivables.
- Transparent decision-making processes to optimize resource allocation.
- Purchasing Management:
- Use of standardized tender documentation for procurement.
- Regular analysis of purchasing processes to eliminate inefficiencies.

Property Management:

- Efficient use of fixed assets, including space utilization and maintenance planning.
- Cost reduction strategies for utilities and repairs.

Staff Management:

- Monitoring salary benchmarks relative to regional averages.
- Assessing staff turnover and demographic trends to ensure workforce stability.

Information Disclosure:

- Ensuring transparency by publishing financial plans, reports, and performance data.

Income-Generating Activities:

- Analyzing profitability of services and aligning them with public demand.
- Exploring non-state funding sources to diversify revenue streams.

Assessing the artistic and societal value of cultural outputs remains a challenge. While professional critics and experts provide qualitative evaluations, audience engagement metrics offer additional insights. For instance, theaters can analyze audience size and structure to gauge performance effectiveness.

G. Dadamyan's (2013) method categorizes audiences both quantitatively (by frequency of attendance) and qualitatively (by artistic culture and taste). A high correlation coefficient (above 0.6) between these structures suggests that quantitative data can reliably indicate qualitative trends. For example:

- New (unprepared) viewers: Correlation coefficient = 0.92

- Active viewers: 0.86

- Prepared viewers: 0.89

- Connoisseurs: 0.82

- Omnivorous viewers: 0.67

This approach allows organizations to track changes in audience composition and artistic impact, providing a framework for evaluating management effectiveness.

Conclusion

Evaluating management effectiveness in creative industries requires a balanced approach that integrates quantitative and qualitative metrics. By focusing on both goal achievement and resource optimization, cultural organizations can enhance their operational efficiency and societal impact. Methods like Dadamyan's (2013) audience analysis offer valuable tools for assessing performance, ensuring that cultural institutions remain responsive to both artistic and public needs.

2.7 Management of creative industries at the macro level

The concept of "cultural policy" emerged in the mid-20th century, with UNESCO defining it in 1967 as "a set of operational principles, administrative and financial activities, and procedures that provide the basis for state actions in the field of culture." By the 1980s, over 117 countries had established ministries or bodies dedicated to cultural governance. However, state involvement in culture predates these formal structures, as the need to harmonize the interests of artists, the public, society, and the state has always existed.

In ancient Greece, the state-polis promoted cultural accessibility to foster social harmony. Public spectacles, supported by philanthropists, were made accessible to all citizens, with the state ensuring the dissemination of art. During the Middle Ages, the Church became the primary patron of art, supporting architecture, iconography, and music as tools for religious expression. Artists outside the Church's approval often led precarious lives, relying on public charity.

The Renaissance marked a shift, with art and science gaining recognition as independent values. Patronage by aristocrats and rulers supported artists and intellectuals, though the dissemination of cultural goods remained limited. The Enlightenment further democratized culture, emphasizing equality and accessibility. By the late 18th century, institutions like the Louvre opened to the public, signaling a broader cultural democratization.

Post-WWII Europe saw the evolution of cultural policy through four distinct models:

- Unitary Model (1950s):

    Focused on providing broad access to high culture, rooted in Enlightenment ideals and the formation of nation-states. Culture was seen as a "national treasure" and a tool for unifying national identity.

- Pluralistic Model (1960s-1970s):

Emerging from student protests, this model recognized the value of subcultures and diverse aesthetic expressions. Advances in communication technologies and the rise of rock music and avant-garde art expanded cultural horizons, influencing mainstream institutions.

- Instrumental Model (1980s-1990s):

  Culture became a tool for economic and social revitalization, particularly in regions affected by industrial decline. Cultural tourism emerged as a significant economic driver, saving many institutions from funding cuts.

- Innovation Model (2000s):

  Introduced in the UK, this model views culture as a key component of the post-industrial economy. It supports creative industries - such as design, film, and software - as engines of economic growth and regional competitiveness.

Cultural policy operates along two axes:

- Cultural Tasks: Ensuring the creation, preservation, and accessibility of art and cultural institutions.
- Beyond Cultural Tasks: Using culture as a tool to address social, political, and economic challenges, positioning it as a systemic factor in development.

Conclusion

The evolution of cultural policy reflects its dual role: fostering artistic expression and leveraging culture for broader societal goals. From ancient patronage to modern creative industries, cultural governance has adapted to changing contexts, underscoring culture's enduring relevance as both a social good and an economic driver.

2.8 Criteria for economic efficiency in the creative industries sector

The growing instrumental role of culture in the late 20th century has expanded the criteria for assessing its economic efficiency. From simple cost calculations for cultural organizations to complex metrics like contribution to GDP, job creation, and multiplier effects, these indicators highlight the sector's economic impact. Studies by the European Commission and the United Nations have quantified this impact, demonstrating the cultural and creative sectors' significant contributions to economic growth and innovation.

The cultural and creative sectors are among Europe's most dynamic, contributing approximately 2.6% to EU GDP and providing 5 million jobs across the EU-27. Beyond direct economic contributions, these sectors drive innovation and social development, influencing other industries and fostering regional competitiveness. Despite their lower profile compared to traditional industries, they account for over 10% of employment in some of Europe's most dynamic regions.

The economic effects of the cultural sector extend beyond direct financial contributions:

- Territorial Image and Regeneration:

Cultural development enhances a region's image, attracting investments and skilled professionals.

It revitalizes disadvantaged areas, transforming them into vibrant cultural hubs.

- Tourism as a Catalyst:

Tourism, a key economic driver, leverages cultural resources to attract visitors.

It integrates social and cultural processes, promoting intercultural communication and preserving unique cultures.

Tourism has evolved into a socially significant service, contributing to peace, self-knowledge, and mitigating globalization's negative effects.

- Infrastructure and Local Development:

Tourism infrastructure creates jobs, improves healthcare, and elevates service standards.

It encourages environmental improvements and supports local entrepreneurship.

By preserving historical and cultural heritage, tourism fosters economic and physical revival, particularly in rural areas.

Cultural tourism generates significant economic returns with relatively low investment by utilizing existing cultural resources. It also stimulates demand for niche tourism types, such as religious or extreme tourism. The socio-cultural benefits include:

- Preservation of heritage and local traditions.
- Population retention in rural areas.
- Enhanced quality of life and adjusted social standards.

The economic efficiency of the creative industries sector is measured not only by direct contributions to GDP and employment but also by its broader socio-economic impacts. Through tourism, cultural regeneration, and innovation, the sector plays a pivotal role in regional development, enhancing both economic potential and social well-being.

2.9 The multiplier effect of traditional cultural institutions

Traditional cultural institutions, such as museums and theaters, serve as the core of a region's cultural sphere and generate significant economic benefits through the multiplier effect. Research shows that these institutions enhance the attractiveness of a location for businesses and skilled professionals.

- Business Attraction: Companies prefer locations with cultural institutions, as they indicate a higher concentration of cultured and skilled individuals, reducing recruitment costs.
- Local Economy Boost: Beyond ticket sales, cultural events stimulate spending on ancillary services like dining, transportation, and childcare, amplifying economic activity.

The concept of the multiplier effect originated in the 1930s, with R. Kahn (2022) highlighting how public investments in infrastructure create jobs and stimulate further economic activity. J.M. Keynes expanded this idea, showing how initial investments lead to disproportionate increases in national income through secondary and tertiary effects.

Conclusion
Cultural institutions not only enrich societal life but also drive economic growth by attracting businesses, creating jobs, and stimulating local economies through the multiplier effect.

2.10   Criteria for the effectiveness of cultural policy

Evaluating the effectiveness of cultural policy involves comparing outcomes with stated goals and assessing resource utilization. Unlike traditional economic efficiency metrics, cultural policy prioritizes creative and intangible resources, which grow rather than diminish with use.

Key Indicators

- Creative Resources: The primary resource in culture is creativity, which increases through public engagement and recognition.

- Intangible Benefits: Artists gain inspiration and validation from audience feedback, while society receives cultural enrichment and new ideas.

- Managerial Efficiency: Quantitative metrics, such as budget allocation and institutional performance, help assess the effectiveness of cultural management.

Cultural policy's effectiveness lies in its ability to maximize creative and intangible outputs, balancing artistic goals with economic and managerial efficiency.

2.11 *Cybersecurity as part of modern management routine*

As cyber threats grow, cybersecurity has become a critical component of organizational management. Despite increasing investments in security, cybercrime has surged by 67% from 2013 to 2018, highlighting the need for robust cybersecurity strategies.

Root Causes of Data Breaches

- Human Error: Lack of awareness about data protection protocols.

- Malicious Intent: Employees selling data for financial gain.

- Discontent: Poor working conditions leading to intentional leaks.

Strategies for Building a Cybersecurity Culture

- Leadership Commitment: Executives must actively support cybersecurity initiatives, allocating budgets and setting examples.

- Data Security Policies: Implement clear rules for handling confidential information, backed by non-disclosure agreements and monitoring systems.

- Regular Training: Conduct position-specific cybersecurity training, updated annually to address evolving threats.

- Knowledge Checks: Use periodic tests to assess employee understanding and reward compliance.

- Daily Integration: Make cybersecurity a routine part of operations through reminders, newsletters, and accessible reporting channels.

Conclusion
A strong cybersecurity culture, combined with technological safeguards, is essential for protecting organizational data. By addressing human factors and fostering employee engagement, companies can mitigate risks and enhance their resilience against cyber threats.

2.12 *The problem of introducing cybersecurity in the creative industries*

The creative industries, contributing approximately 3% of global GDP and employing over 1% of the global workforce, play a vital role in economic and cultural development. However, the sector faces significant challenges in implementing cybersecurity measures due to its unique characteristics.

- Low Level of Informatization:
    - ➢ The cultural sector lags in digital transformation, with limited adoption of advanced information technologies.
    - ➢ Many cultural institutions lack the infrastructure to safeguard digital assets effectively.
- Regulatory and Management Gaps:
    - ➢ There is no comprehensive regulatory framework or management system for cybersecurity in the cultural sector.
    - ➢ Decision-making on informatization and information security is fragmented across levels.
- Diverse and Unique Assets:
    - ➢ Cultural assets, including digital archives, artworks, and historical records, are often unique and difficult to value.
    - ➢ The lack of inventory and assessment methods for these assets complicates risk management.
- Emerging Threats:
    - ➢ Globalization and rapid technological advancements introduce new, hard-to-identify threats.
    - ➢ Organizational vulnerabilities, such as undefined areas of responsibility, exacerbate risks.

The integration of cybersecurity in the creative industries is hindered by low informatization, regulatory gaps, and the unique nature of cultural assets. Addressing these challenges requires a strategic approach to protect digital heritage and ensure the sector's resilience.

2.13   *Strategic goals of information security in the creative industries*

The strategic goals of information security in the creative industries focus on safeguarding cultural heritage and ensuring the continuity of cultural institutions in the digital age.

- Short-Term Goals:
    - ➢ Protect information assets as part of cultural heritage.
    - ➢ Prevent unauthorized use of information affecting cultural heritage.
    - ➢ Ensure the security of the cultural sector as an industry.
- Long-Term Goals:
    - ➢ Guarantee the preservation and accessibility of digital cultural values.
    - ➢ Secure infrastructure and intellectual property rights related to cultural assets.
    - ➢ Build a trusted digital environment for cultural and historical spaces.
    - ➢ Ensure universal access to digital heritage and continuity of cultural management.

2.13.1 *Key Threats*

- Slow development of high-quality information resources and infrastructure.
- Unintended impacts and illegal use of cultural information.
- Unauthorized dissemination of information affecting citizens and copyright holders.

Achieving these goals requires a comprehensive approach to information security, addressing both technical and organizational vulnerabilities to protect cultural assets and ensure their accessibility.

2.14 *Eventual methodology principles*

The eventual methodology for cybersecurity encompasses a structured process involving general assessment, vulnerability identification, and vulnerability evaluation. Vulnerabilities are broadly categorized into technical and organizational, each requiring distinct approaches for identification and mitigation.

Technical vulnerabilities are identified through a series of security analysis activities, including:

- Manual system configuration checks: Ensuring systems are configured securely.
- Network and host scanning: Detecting weaknesses in network infrastructure and individual devices.
- Test trials and break-in tests: Simulating attacks to identify exploitable gaps.
- Analysis of program codes: Reviewing software for potential security flaws.

These activities help uncover weaknesses in the technical infrastructure, which, if left unaddressed, could be exploited by cyber threats.

Organizational vulnerabilities arise from the absence or misapplication of controls. These are often harder to detect and address, as they involve human factors and procedural gaps. The primary source for identifying such vulnerabilities lies in best practices and international standards, such as the ISO/IEC 27000 family, which provide frameworks for effective information security management.

Vulnerabilities are assessed using a three-level qualitative scale, which indicates the likelihood of a threat successfully exploiting a vulnerability. This assessment is critical for prioritizing risks and allocating resources effectively. According to B. Uchendu, J.R.C. Nurse, M. Bada, and Steven Furnell (2021), despite decades of research, many organizations still struggle to build a strong security culture, highlighting the need for robust vulnerability assessment mechanisms.

In complex systems like Cyber-Physical Systems (CPS), risk management plays a vital role in ensuring resilience. H. I. Kure (2021) emphasizes that the increasing sophistication and unpredictability of cyber-attacks make risk management more challenging. An integrated cybersecurity risk management framework is essential for identifying critical assets, vulnerabilities, and threats, and for implementing proactive control measures to ensure business continuity.

The selection of information protection measures is guided by the security class of the information system, the threat model, and the system's structural and functional characteristics. Key measures include:

- Identification and authentication: Ensuring only authorized users access the system.
- Access control: Restricting access to sensitive information.
- Protection of information carriers: Safeguarding physical and digital storage media.
- Antivirus protection and intrusion detection: Preventing and detecting malicious activities.
- Ensuring system integrity and availability: Maintaining the reliability and accessibility of information.
- Virtualization and technical means protection: Securing virtual environments and hardware.

These measures are documented in operational and organizational-administrative guidelines, ensuring consistent implementation across the system.

The effectiveness of information security measures is evaluated using a degree of information security indicator, which quantifies the reduction in potential damage from threats. Derived indicators assess the impact of protective measures on threat likelihood and risk factors. The methodology assumes that:

- Threats are predefined and can operate independently.

- Damage from multiple threats is additive.

- Protective measures influence threat likelihood and risk factors independently.

The eventual methodology provides a comprehensive framework for identifying, assessing, and mitigating cybersecurity vulnerabilities. By integrating technical and organizational measures, it addresses the evolving threat landscape and ensures the resilience of information systems. This approach is particularly critical for complex systems, where the interplay of technical and human factors necessitates a robust and adaptive cybersecurity strategy.

3   SCOPE OF THIS STUDY

This article investigates the current state of management effectiveness and cybersecurity within the performing arts sector, focusing on EU-based creative industries organizations such as theaters and museums. By analyzing questionnaire responses, the study aims to identify shortcomings and provide actionable recommendations. Building on the literature review, the research emphasizes understanding how these organizations apply best practices in management and cybersecurity to address their unique challenges.

4   STUDY AIMS AND OBJECTIVES

The cultural sector's complexity, combined with competitive and economic pressures, necessitates well-structured management and robust cybersecurity strategies. This study explores the features of strategic management and cybersecurity in cultural organizations, using a quantitative approach based on questionnaires to evaluate management effectiveness.

4.1 Study Purpose

- To comprehensively examine existing management strategies and approaches in EU cultural organizations.
- To assess their effectiveness, techniques, practices, strengths, and weaknesses.

The findings may inform recommendations for creative industries managers to optimize management and cybersecurity practices.

4.2 Study Aims

- To demonstrate the critical role of well-adapted strategic management in ensuring organizational success and safety.
- To identify management gaps and strengths by analyzing organizational management styles and cybersecurity awareness.
- To highlight the need for tailored management strategies in the creative industries, distinct from conventional approaches.

- To provide recommendations for optimizing management and cybersecurity in creative industries organizations.

4.3 Study Objectives

- To illustrate how creative industries organizations, due to their unique structure, face heightened economic and conjunctural risks, necessitating effective management and cybersecurity strategies.

- To design two comprehensive questionnaires to identify management issues and assess cybersecurity awareness.

- To propose concrete solutions for addressing identified problems.

This study aims to bridge the gap between theory and practice by evaluating the effectiveness of management and cybersecurity in EU cultural organizations. By identifying challenges and offering tailored recommendations, it seeks to enhance organizational resilience and success in the creative industries.

5 METHODOLOGY

This study employs a qualitative approach, utilizing surveys with close-ended questions to collect and analyze data. The methodology aligns with APA standards and focuses on understanding management effectiveness and cybersecurity practices in EU cultural organizations.

Two questionnaires were designed to gather insights into management practices and cybersecurity awareness. Close-ended questions were chosen to ensure higher response rates and reduce bias, as open-ended questions often require extensive coding and result in higher non-response rates (U. Reja et al. 2023). Studies, such as those by R. Zhou et al. (2017), show that over 75% of respondents skip open-ended questions, with comment-specific questions (19.9%) being answered more frequently than explanation-specific ones (11.9%).

Participants include employees from public and private cultural organizations across five EU countries: France, Germany, Lithuania, Latvia, and Poland. Of the 20 organizations initially targeted, 8 responded, with an average of 5 participants per organization (instead of the planned 10). Participants represent various hierarchical levels, ensuring a broad perspective on management and cybersecurity practices. Responses were anonymized to encourage candid feedback.

Participants were randomly selected by their institutions. As an incentive, a discount for the Performing Arts DBA program was offered. The study was directed at the management of cultural organizations to ensure relevance and accuracy.

The questionnaires used scoring techniques to measure key variables. Participants selected responses from 4- or 5-point multiple-choice questions. Cronbach's alpha was used to assess the internal consistency and reliability of the questionnaire items. The questionnaires, designed for adults, consisted of 10 medium-difficulty questions.

Participants were informed that the survey focused on management issues and would take no more than 30 minutes. Confidentiality was assured, and informed consent was obtained. The research design follows a case study approach, aiming to explore the specifics of management effectiveness and cybersecurity in cultural organizations.

5.1 Questionnaire n°1: "evaluation of the effectiveness of management at the enterprise"

The first questionnaire, titled "Evaluation of the Effectiveness of Management at the Enterprise," was designed to assess the quality and efficiency of management practices within cultural organizations. It consists of 10 multiple-choice questions, each addressing a specific aspect of management, such as job descriptions, task execution, document management, meeting efficiency, and organizational planning.

The questionnaire evaluates how well job descriptions align with actual employee duties and whether they serve as effective management tools. It explores whether roles are clearly defined or if ambiguity leads to inefficiencies.

Questions focus on the organization's ability to manage and retrieve documents efficiently, highlighting potential gaps in systems or processes that could hinder productivity.

This section assesses how management orders and instructions are issued, implemented, and monitored, identifying whether they are realistic, timely, and aligned with available resources.

The questionnaire examines the effectiveness of personal and organizational work planning, including whether plans are actionable or merely theoretical. It also evaluates employee diligence and independence in completing tasks.

Questions address the frequency, quality, and outcomes of meetings, as well as common time-wasting practices, such as excessive meetings or inefficient processes.

The final section explores how organizations approach management improvements, including the frequency and effectiveness of reorganizations, the implementation of long-term plans, and the impact of incremental changes.

Participants select one response per question from multiple-choice options, each assigned a score. The cumulative score provides an overall assessment of management effectiveness, categorized into levels such as highly effective, moderately effective, or ineffective. This scoring system allows for a quantitative evaluation of qualitative management practices, enabling organizations to identify strengths and areas for improvement.

The questionnaire serves as a practical tool for diagnosing management effectiveness in cultural organizations. By addressing key themes such as role clarity, task execution, and organizational planning, it provides actionable insights for optimizing management practices and enhancing overall efficiency.

5.2 Questionnaire n°2: Key to the test and response scores

The second questionnaire, designed to evaluate management effectiveness and cybersecurity awareness, includes 30 questions, each with a correct answer and an associated score. The scoring system quantifies responses to provide a measurable assessment of organizational practices. Below is a summary of the scoring framework and its application.

Each question has a correct answer, which reflects best practices in management and cybersecurity.

Responses are assigned scores ranging from 3 to 7 points, depending on the alignment with optimal practices. Higher scores indicate stronger adherence to effective management and cybersecurity principles.

High-Scoring Responses (7 points): These answers reflect optimal practices, such as clear role definitions, efficient document management, and robust cybersecurity measures. For example, questions

addressing timely task execution (Q7) and effective meeting management (Q10) are scored highly when responses align with best practices.

Moderate-Scoring Responses (5 points): These answers indicate satisfactory but suboptimal practices. For instance, questions about job descriptions (Q2) and organizational planning (Q12) receive moderate scores when responses show partial alignment with best practices.

Low-Scoring Responses (3 points): These answers highlight significant gaps in management or cybersecurity practices. For example, questions about time management (Q9) and task execution (Q16) receive low scores when responses reveal inefficiencies or lack of clarity.

The cumulative score from all questions provides an overall assessment of management effectiveness and cybersecurity awareness. Organizations can use this score to:

- Identify strengths and areas for improvement.

- Benchmark their practices against industry standards.

- Develop targeted strategies for enhancing management and cybersecurity practices.

The scoring system for the second questionnaire offers a structured approach to evaluating management and cybersecurity practices. By quantifying responses, it enables organizations to measure their performance objectively and implement data-driven improvements.

6 EVALUATION OF RESULTS

The evaluation of results is based on the cumulative scores from the questionnaires, which assess participants' understanding of cybersecurity principles and management effectiveness. The scoring ranges are categorized as follows:

- 120 - 150 points: Indicates excellent knowledge of the company's cybersecurity principles, reflecting a strong alignment with best practices.

- 70 - 120 points: Represents a good understanding of cybersecurity basics, with room for improvement in certain areas.

- 30 - 70 points: Suggests a poor understanding of cybersecurity fundamentals, highlighting significant gaps in knowledge or implementation.

- 0 - 30 points: Reflects a non-existent understanding of cybersecurity basics, indicating a critical need for training and policy development.

These score ranges provide a clear framework for organizations to assess their current cybersecurity awareness and identify areas requiring immediate attention.

7 LIMITATIONS

This study has several limitations that should be acknowledged. Out of 40 questionnaires distributed for each of the two questionnaires, only 25 were fully completed and usable due to missing answers and negligence. The limited sample size restricts the generalizability of the findings and necessitates further data collection.

This study represents the first phase of a broader research initiative. Future phases will aim to collect more data, enabling the use of advanced analytical approaches and providing deeper insights into management effectiveness and cybersecurity practices.

While the current results offer valuable insights, they are not yet sufficient to provide comprehensive recommendations for the creative industries sector. Continued research will allow for the development of more robust and actionable strategies.

The evaluation of results highlights varying levels of cybersecurity awareness among participants, while the limitations underscore the need for expanded data collection and analysis in future research phases. These findings lay the groundwork for developing targeted recommendations to enhance management effectiveness and cybersecurity practices in the creative industries.

8   RESULTS AND ANALYSIS

The analysis of the questionnaires reveals critical insights into the management effectiveness and cybersecurity awareness within EU cultural organizations. Below is a summary of the key findings:

The first questionnaire assessed the effectiveness of management practices. The results indicate significant shortcomings:

- 44% of responses fell into the "neglected" category, reflecting poor management practices.

- An additional 8% of responses were classified as "average," bringing the total to over 50% of participants signaling inadequate management effectiveness.

This is particularly concerning given that the surveyed organizations receive EU subsidies, suggesting a need for improved governance and accountability.

The second questionnaire evaluated participants' understanding of corporate cybersecurity principles. The findings are more encouraging:

- 68% of participants demonstrated good to excellent knowledge of cybersecurity, indicating a strong alignment with modern IT-oriented practices.

- However, 32% of participants showed a poor understanding of cybersecurity, highlighting areas for improvement.

These results suggest that while the creative industries sector is generally IT-oriented, there is still a significant portion of organizations that need to enhance their cybersecurity awareness and practices.

The scores from the first questionnaire (Table 4) further illustrate the variability in management effectiveness:

- High Scores (70 - 100): Reflect organizations with effective management practices.

- Moderate Scores (30 - 70): Indicate areas needing improvement.

- Low Scores (0 - 30): Highlight significant gaps in management effectiveness.

For example, participants 3, 5, 7, 12, 13, 14, 18, and 19 scored highly (78 - 88), indicating strong management practices. In contrast, participants 2, 6, 15, 17, and 21 scored very low (0 - 8), signaling critical deficiencies.

The results underscore a dual challenge: while many organizations demonstrate strong cybersecurity awareness, a significant portion struggle with ineffective management practices. These findings highlight the need for targeted interventions to improve governance, accountability, and cybersecurity readiness in the creative industries sector.

9   25. FINAL CONCLUSIONS

Management plays a critical role in ensuring organizational effectiveness and efficiency, both in the short and long term. Its success is measured by the ability to achieve goals while maintaining employee morale and productivity. Employees serve as a reflection of internal processes, and their behavior patterns provide valuable insights into management effectiveness.

The analysis revealed significant management challenges, including:

- Reduced Productivity: Poor management leads to declining productivity, increased overtime costs, and overburdened employees, ultimately eroding morale.

- Low Morale: A lack of employee engagement fosters discord, absenteeism, and dysfunctional teams.

- High Stress Levels: Stressful work environments result in higher illness rates, increased sick leave costs, and talent attrition, leaving organizations with less qualified staff.

Creative industries organizations often lack professional expertise in interpersonal communication, marketing, and management. Additionally, non-artistic specialists frequently lack understanding of the unique dynamics between artists and performance-specific requirements.

To address these challenges, organizations must:

- Develop holistic management strategies that consider the cultural, regional, and urban context.

- Foster a supportive work environment to enhance productivity and morale.

- Invest in training programs to bridge knowledge gaps in management and interpersonal skills.

This article emphasizes the importance of adapting to the dynamic and unpredictable nature of the creative industries, equipping organizations with the tools to extract actionable insights from their realities.

10 REFERENCES

Aljohani, W., & Elfadil, N. (2020). Measuring cyber security awareness of students: A case study at Fahad Bin Sultan University. International Journal of Computer Science and Mobile Computing, 9, 141–155.

Baumol, W. J., & Bowen, W. G. (1966). Performing arts, the economic dilemma: A study of problems common to theater, opera, music, and dance. MIT Press.

Bodeau, D. J., Graubart, R. D., McQuaid, R. M., & Woodill, J. (2018). Cyber resiliency metrics, measures of effectiveness, and scoring (MITRE Technical Report). MITRE Corporation.

Boparai, J. K., Singh, S., & Kaur, P. (2018). How to design and validate a questionnaire: A guide. Current Clinical Pharmacology, 13(4), 210–215. https://doi.org/10.2174/1574884713666180801123744

Dukov, E., Dadamyan, G., & Zhabsky, M. (2013). Sociology of art between the past and the future. State Institute of Art Studies.

EUROSTAT. (2019). Culture statistics: 2019 edition. Publications Office of the European Union.

Griffin, R. W., & Pustay, M. W. (2007). International business (5th ed.). Pearson Education.

Hagoort, G. (1993). Cultural entrepreneurship: An introduction to arts management. Utrecht School of the Arts.

Helmold, M. (2022). Strategic performance management. Springer.

Kahn, R. F. (2022). Collected economic essays (1st ed.). Springer Nature Switzerland.

Keynes, J. M. (2016). The general theory of employment, interest, and money. Houghton Mifflin Harcourt. (Original work published 1936)

Kure, H. I. (2021). An integrated cybersecurity risk management (ICRM) framework for critical infrastructure protection (Doctoral dissertation / Master's thesis). [Institution non précisée].

Landry, C. (2012). The creative city: A toolkit for urban innovators. Earthscan.

Park, J., Fleury, T., Dopheide, J., & Zage, J. (2021). An actor-network perspective on collections documentation and data practices at museums. Museum & Society, 19(2), 237–252.

Patrick, H., & Fields, Z. (2017). A need for cyber security creativity. In Collective creativity for responsible and sustainable business practice (pp. 42–61). IGI Global. https://doi.org/10.4018/978-1-5225-1847-9.ch003

Poisson-de Haro, S., & Menot, S. (2014). Strategic management of arts organizations. Routledge.

Rantos, K., Fysarakis, K., & Manifavas, C. (2012). How effective is your security awareness program? An evaluation methodology (Research report).

Reegard, K., & Blackett, C. (2019). The concept of cybersecurity culture. In Proceedings of the 29th European Safety and Reliability Conference. Hannover, Germany.

Reja, U., Lozar Manfreda, K., Hlebec, V., & Vehovar, V. (2003). Open-ended vs. close-ended questions in web questionnaires. Metodološki zvezki, 19, 159–177.

Sow, M., & Gehrke, C. (2019). Evaluating information security system effectiveness for risk management, control, and corporate governance. Business and Economic Research, 9(1), 203–222. https://doi.org/10.5296/ber.v9i1.14204

Uchendu, B., Nurse, J. R. C., Bada, M., & Furnell, S. (2021). Developing a cyber security culture: Current practices and future needs. Computers & Security, 109, Article 102387. https://doi.org/10.1016/j.cose.2021.102387

Varbanova, L. (2012). Strategic management in the arts (1st ed.). Routledge.