

„Dunărea de Jos” University of Galați
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DOCTORAL THESIS ABSTRACT

The impact of strategic partnerships with stakeholders on increasing the managerial performance of museums in Romania

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CHAPTER 1

General considerations regarding museums and museum management – theoretical aspects

The services offered by a museum are diverse, some being related to the cultural heritage that the museum manages, and some not. As examples of services we mention: exhibition projects, guidance, educational programs, documentaries, entertainment programs with a cultural character and auxiliary services (information; commercial - sale of promotional items such as: albums, views, books, souvenirs; and food – cafes, restaurants), all ultimately aiming at transmitting the organization's message to a very varied visiting public, through as diverse methods as possible.

Innovation in museums and cultural institutions is defined as the tendency to incorporate new systems, technologies and processes that change both the way the museum operates and how it presents its exhibitions to the visitor.

From the point of view of funding, museum organizations can be divided into public or private, for-profit or non-profit. Museums base their activities on a mix of income, own income and public or private subsidies. The main types of income obtained are from: budget allocations, own income, public subsidies, private grants, donations, sponsorships, specialized consultancy, as well as from various contracts and scientific research projects.

Like many areas of the economy, museums face a lack of resources when trying to improve the specific services they offer. As we saw in the previous sub-chapter, museums obtain funding/resources mainly in two ways: grants and own income.

Financing from public funds is done in the form of fixed allocations. Such contributions remain the main source of income for most museums worldwide, but the type of funding can be a determining factor in the level of innovation in museums.

Three economic models are described, which through the high degree of innovation can constitute solutions for the sustainability of museums and for improving performance:

- The museum with a strong focus on the brand – mainly focused on activities that generate income (sales of products, written publications, audio-visual materials, research and consultation services, exploitation of intellectual property rights), and which strengthen its image;
- The event-focused museum – organizes cultural events, exhibitions, concerts, conferences in an attempt to attract as many visitors as possible, both loyal and new (the whole community);
- The museum focused on responsibility towards the community – a public space for local meetings and debates, art events or simply of local interest, based on the stimulation of volunteer activity, building social links with the intention of further development in one's own community.

Museums, as institutions, must respond to the demands and act in accordance with the interests of stakeholders to ensure their support and legitimacy and to achieve sustainable actions. Stakeholders, defined as groups and actors who influence or depend on museum decisions, include owners, central and local authorities, sponsors, visitors, customers, the general public, donors, associations of friends, sponsors and suppliers of services and goods used by the museum.

Stakeholder groups influence the organization differently. For example, regarding the total income of a museum, public authorities (central and local), which distribute financial support for museums, base their decisions on political priorities, the economic status of the public, finances and competition with other areas of resource policy public. Visitors and customers are obviously vital to museums, and the revenue they generate is increasingly important to museum funding. Donors and sponsors are also important to museums, especially in the long term, but their behavior or preferences are difficult to predict, depending on many factors such as: tax regulations, income levels and personal interests. Associations of friends and volunteers are important resources and stakeholders for museums, working generally to promote the benefit of museum organizations. They contribute economically to the budgets of cultural institutions, by collecting funds for various purchases, and can also broker larger donations. They also actively promote the museum and have an important impact on visitor numbers and volunteer activities, activities which however do not generate direct income for the museum. Founders, boards of directors and grant-making bodies are equally important stakeholders for museums, contributing to their funding. The public (visitors in general) is a stakeholder group that only has an indirect economic impact on museums, but is essential for the legitimacy of museums.

However, the general mission of museums remains addressability, the transmission of the message of the community heritage, to the widest possible audience, and in fulfilling this desire we must take into account that it is not so important how many visitors can see an exhibition, but how many visitors can he enjoys an exhibition, under circumstances where he is likely to have a pleasant experience.

The most visible role of museums in the field of sustainability should be that of education, but it does not stop here, it embraces all aspects of a museum institution, from everyday life, from specific operations, management of collections, buildings to to the economic aspects, as well as the role of the institution in the community.

Museums can and should talk to their stakeholders about sustainability, mainly through a non-formal education system. Effectively applied, such a system becomes the foundation for assuming a more significant role, namely that of an active facilitator of social change, at the community, local, regional or even national level.

CHAPTER 2

Stakeholders of a museum and managerial strategies for their optimal approach

Regardless of the name they bear: authorities, sponsors, donors, friends, visitors, beneficiaries, clients, staff, all these entities are an integral part of the diverse category of stakeholders of a museum. As an institution with a strong community role, the museum has the duty to maintain a close relationship with its stakeholders, pursuing the fulfillment of both its own objectives and their expectations and needs.

The benefits brought to an organization by the involvement of stakeholders in the creation of strategies, decision-making and in the evaluation of projects are also confirmed by Monnikhof & Enelenbos, who summarize the strategy of stakeholder involvement in four stages: identifying the demand (desires, interests, criteria and values of the stakeholders); their involvement in the process of finding solutions; negotiation – identification of interests; adopting the strategy with the largest number of "win-win" solutions and making the decision (by consensus).

Regardless of the way of defining and identifying the stakeholders, their continuous knowledge and analysis must not be missing from the management strategy, being the only possibility to evaluate the likely effect on the success of a common action (projects, exhibitions, activities and various manifestations).

For the museum sector, based on research conducted by Halcro, a museum's stakeholders can be divided into three broad categories: visitors, governing bodies and the community.

Visitors - their role has evolved a lot in the last 30 years, becoming the main stakeholders of the museum. It exerts both a direct influence (tickets, taxes, souvenirs, purchases of various museum services, eating in cafes and restaurants), and indirect (through the needs that a visit to the museum can respond to, such as a good way to- and spend leisure time or the satisfaction of learning new information).

Governing bodies - I refer both to the public authorities: Government, Ministry, County Council, Local Council, as well as to the management of the institution, to the employed staff and even to volunteers (unpaid employees). Museum staff are the 'paid stakeholders' of the organization and should, in theory, feel the greatest commitment to the institution's values and respond positively to the opportunity to have a significant role in decision-making and provide feedback to the specific needs of visitors. Public authorities are usually considered a control group, and volunteers represent a separate category of stakeholders because their motivation differs from that of contractual staff.

Community – includes individuals or groups of individuals (firms, NGOs, associations, community groups, etc.) with varied orientations, experiences and expertise. Community consultation must be one of the main objectives of a museum that assumes a social role and responsibility.

Concluding what has been explained so far, for stakeholder management to be truly effective, a real, open and participatory dialogue is needed with all those who fall into this category. The more satisfied the stakeholders are, the faster and safer the museum develops, on all levels, and the easier it is to achieve its goals.

2.1 Quantitative study on the involvement of external stakeholders in the process of improving museum services and managerial performance for museums in Romania

The target population was represented by museum employees in Romania: management, specialist and administrative staff, and the main aim was to identify the respondents' perception of the relations that museums have with their (internal and external) stakeholders.

Four hypotheses were formulated to be tested by statistical methods:

HYPOTHESIS 1: the position held in the museum influences the perception of the benefits of the involvement of external stakeholders in the process of improving the museum's activity;

HYPOTHESIS 2: seniority in the position influences the perception of the benefits of the involvement of external stakeholders in the process of improving the museum's activity;

HYPOTHESIS 3: the importance of the museum (national, regional or local) influences the perception of the benefits of the involvement of external stakeholders in the process of improving the museum's activity;

HYPOTHESIS 4: the type of financing of the museum influences the perception of the benefits of the involvement of external stakeholders in the process of improving the museum's activity.

There is an agreement in principle among the respondents regarding the potential role of stakeholders in obtaining competitive advantages for the museum, in creating added value for the community. Also, stakeholders are recognized, especially for the help provided for obtaining information, experience and income diversification, and community stakeholders (NGOs, associations, various community centers, commercial organizations) can have an important role in the equation, through the exchange of experience regarding the partnerships made with stakeholders and through the contribution of innovative ideas to improve managerial performance.

Regarding their effective involvement, as a solution, we believe that we should start with the implementation of decision committees, in which the internal stakeholders (employees from all sectors of a museum) are initially co-opted, in order to cultivate and educate them on the importance of involving as many people as possible in managerial issues, thus stimulating the feeling of belonging to various projects and of responsibility towards the organization.

Out of the four hypotheses, only one was validated through specific statistical analyses: The seniority in the occupied position influences the perception of the benefits of the involvement of external stakeholders in the process of improving the museum's activity.

2.2. Qualitative study on the role of museum partnerships with their stakeholders in increasing the managerial performance of museum institutions

The purpose of this qualitative analysis is to identify the perception of Romanian museum managers regarding partnerships with stakeholders and to obtain an x-ray of the real situation, their existence or lack, types of involvement, effects (beneficial or negative). The study has the following objectives:

1. to obtain as much information as possible regarding the real situation in the museum sector;
2. to compare the information obtained from the study of specialized literature with the practical experiences of museum managers.

For a general perspective on a phenomenon, the most commonly used research tool is the interview. 10 people were requested for the interview, of which 9 responded positively.

When selecting the management staff: directors, managers, head of services, we took into account the experience, expertise, knowledge and willingness to share from their rich activity. Experts were selected from among the management staff of 8 major museums.

We draw several conclusions from the qualitative analysis. First of all, we appreciate the diversity of the information provided by the respondents and we are aware that their answers depend a lot on the reality they face and the type of museum they manage (national, regional or local). Although the answers provided by a single respondent are not always satisfactory in the sense of correlating the trends of Romanian museography with the reality of countries with a rich tradition in this segment (for example Italy, where it is estimated that more than 60% of the world heritage is housed, Great Britain or the USA), the rich and diverse information and experiences of all respondents can constitute a manual of good practices in museography and give us hope for the future of museums in Romania.

The present research also has limitations. Regarding the qualitative analysis, more respondents should be selected in the future, and the interviews should be conducted face-to-face in order to capture the emotions as well. It will also be useful to carry out a qualitative analysis from the perspective of external stakeholders - of partners outside the institution.

CHAPTER 3

Multidimensional analysis of museum visitor behavior

The most active stakeholders of a museum are clearly the visitors, closely followed by internal staff, funders and various partners. The key to a good collaboration between the museum and its stakeholders is to understand the behavior of the visitors, which will pave the way for the adaptation of the museum programs according to the requirements, the forecasting of the visits, the efficiency of the expenses and the necessary personnel.

Two relevant research questions consider how stakeholders value museum performance and what are the most relevant performance indicators in reporting success to stakeholders? These are questions that the present study aims to answer by analyzing one of the most important categories of stakeholders of a museum: the visitors – through two approaches:

- ❖ quantitative - the application of a questionnaire, for visitors to a museum, within the European event Night of Museums 2018;
- ❖ qualitative - studying the Book of Honor of the museum in which the questionnaire was applied (impressions, advice and proposals - period 2015-2018).

3.1 Quantitative analysis

The study aimed at exploring the performance indicators is more interesting for the stakeholders of a museum and is carried out at the Museum of Christian History, Culture and Spirituality from the Lower Danube, in Galati.

A number of 104 people between the ages of 16 and 70 participated in the research carried out, by applying a questionnaire, at the end of the visit to the museum, in 2018. Participants were asked to rate 16 possible performance indicators for a museum on a Likert scale, on a scale from 1 to 5 (1. Not important; 2. Relatively unimportant; 3. Little important; 4. Very important; 5. Essential) .

In the questionnaire, the following indicators were proposed: the total number of visitors to the museum; the representation of Galatians in the total number of visitors; the willingness of the locals to bring their relatives, family or their own visitors to the museum; the number of tourists in the city or in transit visiting the museum; the ability of exhibitions and displays to satisfy the interests of a wide range of visitors; the number of traveling exhibitions hosted by the museum each year; the quality of the traveling exhibitions on loan to the museum; the frequency of change of exhibits and displayed information; the repeated visits of the locals; developing exhibitions in partnership with local community members; number of repeat visits by students as well as other cultural interest groups; the availability of interactive educational resources; the local community's respect for the museum; staff attitude: friendly, approachable, enthusiastic.

Table 3.1 centralizes the process of validation and invalidation of the hypotheses.

Table 3.1. Summary of hypotheses testing

No.	Hypothesis	Result
1.	The assessment of the frequency with which the museum changes temporary exhibitions and various displays, as an indicator of a museum's performance, is influenced by the age of visitors	Rejected
2.	Appreciation of the development of exhibitions, cultural-scientific and educational activities carried out by the museum in partnership with local cultural institutions, as a performance indicator, is influenced by the education level of the visitors	Rejected
3.	Willingness to pay for the cultural services offered by the museum is influenced by the income level of the beneficiaries	Rejected
4.	The appreciation of the availability of interactive educational resources as an indicator of museum performance is influenced by the age of visitors	Rejected

Source: author's contribution

Even if the hypotheses were not confirmed, the generally positive answers for all the proposed performance indicators (the minimum positive answers per indicator was 86.48%) demonstrate their validity from the perspective of the main stakeholder category of a museum - the visitors.

3.2 Qualitative analysis

The qualitative study had as its starting point the testimonies left by the visitors of the Museum of Christian History, Culture and Spirituality from the Lower Danube in Galați, during 4 years of operation: 2015-2018, in the Museum's Book of Honor. 509 testimonies were analyzed, from which the following data resulted:

- ❖ 48% - 243 people: express generally positive opinions related to the cultural institution;
- ❖ 29% - 149 people: particularly appreciate the building and the permanent exhibition;
- ❖ 17% - 84 people: appreciate the initiators and founders of the museum, as well as the museum staff;
- ❖ 4% - 20 people: express promises for a new visit, as well as recommending the museum to other people;
- ❖ 1% - 7 people: especially appreciate temporary exhibitions;
- ❖ 1% - 6 people: they perceive the museum as a place to relax and socialize.

In general, there is a symmetry of the responses on the segmentation levels, and the segmentation criteria do not influence the proposed performance indicators, being equally valued according to the presented results.

3.3. Modern, technology-based methods of museum performance evaluation

Modern methods bring technology to the fore in order to save important funds, but also to considerably increase the scale of application of various researches. Technology has been widely used in museums so far, but not to support museum staff in curatorial work, but generally to facilitate interactivity between visitors and exhibits. Using technology to understand how visitors behave in the museum, how they allocate their time, choose their exhibition route, the galleries to visit, can have major implications for the impact of the exhibition as well as the interpretation of the exhibition content.

3.4. Statistical modeling regarding the predictability of visitor flows in museums in Romania

The research methodology involved the identification of a trend model regarding the evolution of the number of visitors in two national museums, the "Grigore Antipa" National Museum of Natural History in Bucharest and the "Peleş" National Museum in Sinaia, in 2012-2019, based on a predictive analysis for the years 2020 and 2021.

Afterwards, the trend model was replicated on the total number of visitors to museums in Romania in the period 2012-2019, to predict the number of visitors for the years 2020 and 2021. We used data made available online by the National Institute of Statistics of Romania as well as the public reports of the 2 researched museums.

Three hypotheses were proposed:

- null hypothesis: the existence of the trend model of the number of visitors to a museum in the form of a linear function;
- the first alternative hypothesis: the existence of the trend model of the number of visitors to a museum, in the form of a quadratic function;
- the second alternative hypothesis: the existence of the trend model of the number of visitors to a museum, in the form of an exponential function.

To test the hypotheses, we applied the coefficient of variation method to identify the optimal trend model. The statistical modeling carried out was meant to exemplify and test the methods, by which forecasts can be made, with the help of regression coefficients. We are aware that the predictions we have made have been invalidated by the consequences of the Covid-19 pandemic, which has led to roadblocks and a global decline in visits to heritage institutions.

At the same time, it should also be mentioned that the statistical modeling in this research is not intended to provide us with an exact forecast, but to make us aware of the existence of such tools, the benefits of their use and the importance they can have in making the management of an institution more efficient, in this case the museum.

CHAPTER 4

Emerging technologies supporting the digital transformation of museums

One of the possible ways to support the digital transformation of museums can be to adapt the language used by them to achieve their goals: mainly conservation, educational and recreational, with the help of technology and especially technologies based on artificial intelligence (AI). Some changes are indeed needed to adapt the collections to the tools provided by AI, but using them will bring countless opportunities to discover and experience the treasures hidden in the permanent exhibition and in the museum's warehouses in completely new ways that are engaging for the public and which, overall, they improve the experience of visitors in museums and increase the degree of satisfaction, but also of community responsibility for the institution.

The purpose of the study presented in this chapter is to obtain relevant information on how the digital transformation in the cultural heritage sector should be carried out, with the help of AI technologies, in 3 stages:

1. an analysis of the main benefits brought by the implementation of AI technologies in the current activity of museums;
2. a study of good practices from museums that have taken digital transformation as their main objective and are recording successful implementation results, from 3 continents: Europe, USA and Australia;
3. a series of fsQCA (qualitative - comparative) analyzes based on an online questionnaire addressed to museum managers in several European countries to see how the level of preparedness for the digital transformation of museums is perceived, considering 4 antecedent conditions: social media, augmented reality (AR), virtual reality (VR) and chatbot tools based on AI technologies.

4.1 Emerging technologies used by museums

Technology has been used, both to improve the form or content of exhibitions or specific installations, to meet the increasingly diverse demands of visitors, and to develop those tools that facilitate work in areas such as: security, access control, control and preservation of the environment in museum spaces.

Among emerging technologies, AI-based ones offer the greatest opportunities for museums, both in terms of the visitor experience in the museum and the fruition and analysis of important data: collection information management; visitor research and evaluation; engaging and connecting with them. Collecting this data, about collections, visitors and exhibitions, through traditional methods has been inaccessible to many small and medium-sized museums, due to the high costs and human resources required, but AI represents a solution to all these problems.

In general, museums that have already implemented AI-based tools tend to use them more to improve and enhance the interaction between visitors and exhibits, between the public and the museum, both on-site and online. Museums are constantly looking for new tools that can support this interaction, using increasingly diverse partnerships.

Object recognition is the starting point for a whole range of museum applications, with increasing diversity, from research and collection management to visitor engagement through interactive applications. In the following we will present some examples of the implementation of this type of technology in the museum sector.

Today, the volume of data generated by a museum is constantly increasing. These are collected both from the physical or direct experiences of visitors and from all digital touchpoints throughout the entire experience, from the search, the decision to visit, the actual experience and the sharing of feelings after it (websites, social media, mobile applications, ticketing, etc.). Traditional analysis of such data requires large resources, both time and money. AI brings new possibilities to analyze and visualize already existing data, or to collect new data for this purpose, thus providing a great opportunity for museums to better understand their audience and create more engaging and personalized experiences.

The use of AI in general and neural networks in particular in archival research allow specialists to find new connections within collections as well as rapidly test various scientific hypotheses.

We can say that chatbot technology is spread globally today and is becoming more and more specialized, being used more and more in the museum sector to improve services. Museums have been coordinating programs based on AI and NLP for more than 20 years. Free platforms for creating chatbots (Facebook Messenger, WhatsApp, Twitter, etc.) offer small and medium-sized museums the opportunity to experiment with chatbots with relatively little effort, keeping costs and staff resources low. Most examples of implementation in museums aim to provide better, more engaging and personalized services for visitors. The big gain will actually be barrier-free accessibility, which can be achieved through a mix of tools: social media, chatbots, Augmented Reality (AR), Virtual Reality (VR) and robots.

4.2 Study on the self-assessment of the level of preparation for the digital transformation of museums through qualitative comparative analysis of fuzzy sets (fsQCA)

Four antecedent conditions that led to the results were addressed in this study: social media, augmented reality, virtual reality, and AI-powered chatbots (Figure 4.1).

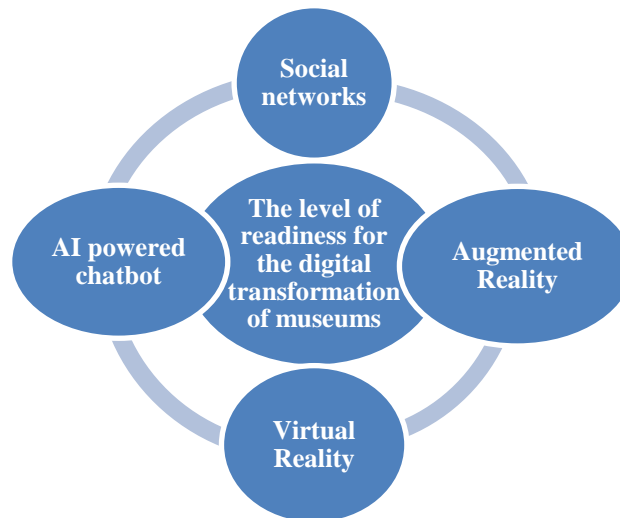


Figure 4.1. The conceptual framework of configurational research

Source: author's contribution

Table 4.1 shows the antecedent conditions or factors used in fsQCA that strongly influence the digital transformation of museums. Four conditions were considered, comprising a total of twelve items, included in the online questionnaire sent to museum managers in different countries. They cover a wide range of issues, such as online branding strategies for museums and virtual tours, enhanced by augmented reality and virtual reality tools, as well as AI-based chats.

Table 4.1. Influencing factors (antecedent conditions) of digital transformation in museums

Antecedent condition/outcome	Item from the online questionnaire
Social networks	SM1: Enabling virtual visitor engagement by increasing the average number of interactions per post
	SM2: Improving the online branding power of the museum by increasing the number of followers
	SM3: Tracking the scores given by virtual visitors in the review sections of the museum's social media page
Augmented Reality	AR1: Enhancing museum displays by explaining the significance of cultural heritage objects
	AR2: Offering downloadable apps to provide visitors with memorable learning experiences
	AR3: Seizing opportunities to reveal massive cultural heritage objects at scale (actual dimensions)
Virtual Reality	VR1: Providing enjoyable and personalized information about cultural heritage objects through VR headsets
	VR2: Overcoming physical constraints by providing a fully immersive experience in the atmosphere and story of the museum
	VR3: Bringing museum collections to life through interactive online exhibitions
	AIPC1: Accessibility for improved experiences and saving virtual

AI powered chatbots	visitors time while searching for specific collections
	AIPC2: Providing valuable clues and information about visitor demand during their virtual tour
	AIPC3: Enabling a gamification approach that enables a treasure hunt inside the virtual exhibition
Outcome	Self-assessment of the level of preparation for the digital transformation of museums

Source: author's contribution

The complex solution provided by the Quine-McCluskey algorithm presents four configurations of the antecedent conditions ($\sim AR * \sim VR * \sim AIPC$; $SM * AR * VR$; $SM * \sim AR * \sim AIPC$ and $SM * VR * \sim AIPC$) leading to the result. The symbol \sim signifies a reduced level associated with an antecedent condition.

Furthermore, the configuration ($SM * AR * VR$) that achieves the highest consistency score (0.9532) reflects that social media, AR and VR technologies are the most influential predictors of the digital transformation of museums (Table 4.2)

Table 4.2. Complex solution

Complex solution	Raw coverage	Unique coverage	Consistency
$\sim AR * \sim VR * \sim AIPC$	0.2983	0.00	0.8621
$SM * AR * VR$	0.8843	0.4149	0.9532
$SM * \sim AR * \sim AIPC$	0.3575	0.00	0.8812
$SM * VR * \sim AIPC$	0.4775	0.00	0.9375
Solution coverage: 0.8925			
Solution consistency: 0.9105			

Source: fsQCA software outputs

The main conclusion of the fsQCA analyzes is that all four antecedent conditions—namely, high social media score, high and low AR score, high and low VR score, high and low AI-powered chatbots score—appear in all causal configurations and lead to high digital transformation. Furthermore, all four simple antecedents are necessary (although not sufficient) for a high level of readiness for digital transformation.

CHAPTER 5

Evaluation of managerial performances in the museum sector - approach through the Balanced Scorecard method

In the specialized literature, 4 key dimensions of success in museum organizations are also identified: the ability to create a clear mission; the ability to attract the necessary resources to achieve the mission; the ability to manage resources so that the created programs achieve their goal - effectiveness; managerial ability to create and present the services offered by the museum in an efficient manner.

The "Balanced Scorecard" (BSC) method transforms the mission and strategy of the organization into a set of performance indicators, which is the foundation for an optimal framework for developing a system for measuring the achievement of the strategy and evaluating management, in a unique way and innovative.

The BSC performance measurement tool has also been successfully adopted in the evaluation of cultural institutions, as it is one of the few methods that allow the consideration of multiple and diverse aspects, specific to organizations in this sector, from financial ones to those related to learning, organizational growth, internal processes, beneficiaries/customers and stakeholders in general.

About the application of BSC in museums we find several testimonies in the specialized literature. Also, the BSC tool recognizes the existence and importance of different categories of stakeholders for organizational performance, an extremely useful fact for our research, whose main goal is to improve organizational performance precisely through strategic partnerships with stakeholders.

Regarding the use of the BSC in the museum sector, the tool proves extremely useful. The reasons underlying the success of BSC implementation in the museum sector, as well as in organizations from all sectors of activity (profit and non-profit), globally, can be the following:

- the high degree of adaptability, regarding both perspectives and indicators, to the specifics of each sector/field in which it is implemented;
- the benefits brought by overcoming the use exclusively as a measurement tool and its adaptation in the management system of organizations.

The traditional BSC model consists of 4 perspectives: financial, customer (or stakeholder satisfaction), internal processes (or organizational development) and educational (innovation and learning or learning and growth).

After forming a fairly clear picture of the BSC methodology, definitions, parameters, components, utility, application models and analyzing the success factors identified by the authors who implemented the assessment tool, we designed a system of relevant performance indicators for the multidimensional activity of the Museum of Christian History, Culture and Spirituality from the Lower Danube in Galati, and which were distributed on four perspectives: the financial perspective, the educational

perspective, the perspective of stakeholder satisfaction and the perspective of organizational development.

1. Financial perspective:

- revenue from subsidies;
- own income from donations and sponsorships
- the ratio between own revenues and the total budget;
- the report of current expenses, maintenance, repairs and building utilities, museum activities, acquisitions and investments in the annual budget;
- the ratio of expenses to salaries in the annual budget;
- the cost/benefit ratio.

2. Educational perspective:

- the ratio between the number of beneficiaries of the cultural-educational services organized at the museum headquarters and the staff employed;
- the ratio between the number of cultural-educational and recreational activities organized at the museum headquarters and the staff employed;
- the share of pupils/students in the average number of participants per activity, in a time period from one day to three months (in all spaces: headquarters, partners and open air);
- the share of appreciations regarding the formative (educational) role of museum services, from the total number of impressions entered in the museum's Book of Honor in 2019.

3. Stakeholder satisfaction perspective:

- the level of satisfaction of the beneficiaries of museum services – ratio of views on Facebook/events;
- the level of satisfaction of the beneficiaries of museum services – ratio of the total number of participants per event, exhibition, activity;
- the activities carried out with local partners (community stakeholders);
- the activities carried out with regional and national stakeholders;
- the ratio between the activities carried out in partnership with the institution's external stakeholders and the total number of activities carried out in 2019;
- the level of partner satisfaction – the degree of repeatability of collaboration with partners in various activities during 2019;
- the level of management satisfaction – the percentage of achievement of the objectives established in the activity plan for 2019;
- press visibility: article per event.

4. Organizational development perspective:

- the number of cultural-educational and recreational activities carried out in 2019;
- the number of beneficiaries of museum services;
- the number of analytical documents (recording, conservation, restoration) drawn up for objects from the museum's heritage in 2019;
- the ratio between the number of documents drawn up and the specialized staff;
- the number of heritage objects restored;
- the ratio between the number of restored objects and the specialized staff.

The overall performance of the entire Balanced Scorecard system associated with the investigated museum (70.59% - Figure 5.1) was determined as a weighted average of the performances of the four perspectives.

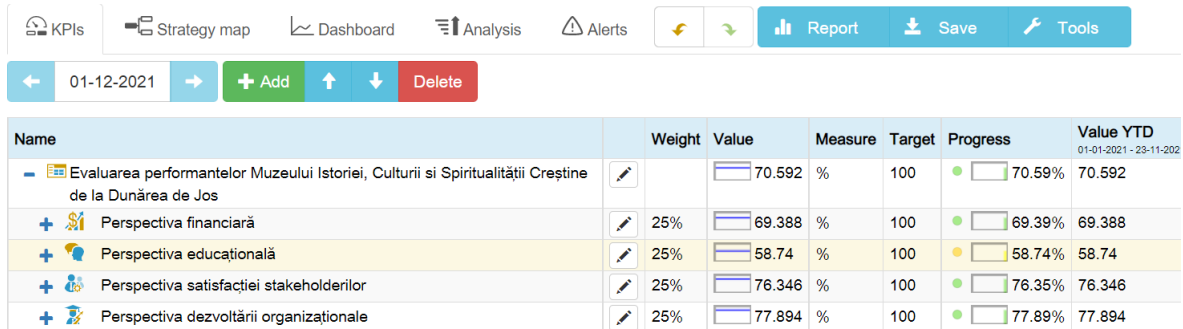


Figure 5.1 Global performance level of the Balanced Scorecard system of the Museum of Christian History, Culture and Spirituality from the Lower Danube, Galati

Source: Balanced Scorecard Designer software output

The organizational development perspective achieved the highest degree of performance. This result indicates that the evaluated institution is a young one, in training (during the evaluated period, 2019, it was 5 years since its official opening) and that is why it is making constant efforts to develop multidimensionally, in an attempt to respond as much as possible well to the needs of the community and stakeholders, with whom it intends to or already has partnerships, while preserving the main mission of any museum, to be the "custodians" of the cultural heritage of the community, of which it is a part. The efficiency of these partnerships is found in the financial perspective, through a good performance, mainly due to the sharing of costs and the pooling of resources necessary for the organization of various activities. Without partners, probably 90% of the activities and visibility would not have existed, the annual budget of the institution in 2019 being a relatively small one (850,168.31 lei) for the activities carried out, the staff employed and the buildings under maintenance.

The compromise to organize high impact/visibility (block-buster) events and activities to attract a large number of visitors and achieve a high level of satisfaction for the majority of stakeholders has negative effects on the education perspective which ranks last place in the hierarchy, but still at a high level - 58.74%, in the average performance area. Another cause is, as I pointed out above, the lack of dedicated staff – educational instructors. The result, however positive, is due to an important step taken: the co-optation in the organization of the activities of some associations, NGOs and various school and extra-school organizations, which deal with the education of young people, in general, but also of the elderly.

We can only state that, under existing conditions, the museum has met a large part of its performance objectives, and the BSC tool has proven its usefulness as a performance measurement tool, turning after implementation into an extremely useful tool for management of the organization.

CHAPTER 6

Final conclusions, personal contributions, managerial implications, research limitations and further research directions

The studies presented in this doctoral thesis offer solutions regarding the institutional and organizational transformation of museum institutions, recognizing at the same time the need for a managerial action to address innovative value propositions, capable of radically reshaping the way museums interact with relevant stakeholders.

The results of the qualitative, quantitative and comparative-qualitative studies demonstrate that stakeholders have a role in activating a participative and open dialogue mechanism, in which the principles and criteria of institutional governance serve to optimize the services offered to visitors; museum stakeholders can more quickly anticipate the market's expectations towards the managers of these institutions, thus contributing to a better adaptation of the offer to the changing needs of visitors.

We honestly assume the limitations of the research in this thesis. Regarding the qualitative analyses, in the future more respondents should be selected, the interviews should be done face to face to capture the emotions of the study participants. We also consider it opportune to carry out several qualitative analyses, which capture the perspective of external stakeholders - partners outside the institution. The quantitative analyzes carried out have several limitations: a small sample (the maximum was 104 people), and the results obtained cannot be generalized for the entire Romanian or global museology.

The effects generated by the Covid-19 pandemic have limited physical access to collect the necessary information from the mentioned studies, but have also boosted the effort to discover all the positive implications that technology based on artificial intelligence can have to facilitate our accessibility regardless of environmental conditions external.

The future research agenda will also include comparative studies regarding the approach to the role of stakeholders in relations with museums, from an intercultural perspective, using structural equation modeling as a research method.

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