RESEARCH REPORT

BENCHMARKING PARTICIPATORY STRATEGIES

Value allocated to participatory strategies from managers and stakeholders and effectiveness analysis of the actual effort

Date:18 October 2024

Authors:

Dr. Maria José del Barrio Tellado

MSc. Fátima Espinosa Casero

Dr. Jonathan Daniel Gómez Zapata

Dr. Luis César Herrero Prieto

from the University of Valladolid

TABLE OF CONTENT

RE

1. **Main purpose and approach**

Main purpose. The main purpose of this work is to estimate the value allocated to participatory strategies from the institutional side (managers and stakeholders of the museums and LLs) by ranking participatory dimensions and options. Results are therefore very useful for decision-making in museum management and for guiding and balancing participatory strategies. Benchmarking analysis is evaluated by museums and clusters of stakeholders in order to better refine the results and focus them towards policy implications. Finally, a comparative analysis is carried out, taking into account the current effort of museums in terms of labour dedication and expenditure invested in participatory strategies so as to assess whether this effort aligns with the preference structure of the community (demand) and stakeholders (supply).

Approach. We apply the Analytic Hierarchy Process (AHP) method, which allows us to obtain a robust hierarchical ranking of the alternatives, applying a process of comparison and iteration between options in order to find those with the highest intensity of preference from an institutional perspective, through the responses obtained from surveys carried out with managers, policy-makers and stakeholders. This preference structure from the institutional side –together with that revealed by the museums' communities (demand side)– are compared with the current effort made by museums (time spent and expenses). Variables in this analysis were standardised into ranges from 0% to 100% within each museum in order to make them comparable with each other, and also as regards scale of preferences.

Fieldwork: The three RECHARGE museums (Hunt, Tessuto, and Maritime) identified and compiled a list of professionals from different stakeholder groups with an active relationship with the museum over the whole production chain: managers and policy-makers (Governance Cluster), cultural creators, curators and technologists (Production Cluster) and commercial allies and educators (Services Cluster). Fieldwork was conducted through an on-line survey during the months of March and April 2024. There was only one questionnaire, although three different versions were used so as to randomize the choice set questions, thereby avoiding anchoring bias. A significant number of surveys were obtained, distribution of which by clusters and museums is shown in Table 3. In addition, one mini-survey was conducted in each of the three museums on the current institutional dedication, in terms of labour force and costs engaged in participatory activities and strategies. This information was obtained in September 2024.

Work structure. The report is divided into five sections. After this introduction, section 2 covers the main issues concerning the methodological approach and application, including the design of the participatory model (dimensions and options), stakeholder selection, survey fieldwork, the benchmarking process and, finally, socio-demographic characterisation and cultural profile of samples. Section 3 deals with the evaluation results, presented both by museums and stakeholders. Section 4 presents the analysis of the current effort carried out by museums in participatory strategies (in terms of labour dedication and expenditure), for subsequent comparison with the structure of preferences shown by the communities and stakeholders. The paper concludes with a section on conclusions and policy implications, a bibliography and an appendix.

2. **Methodological approach: major issues**

2.1. *Defining participatory dimensions and strategies*

On the basis of partner discussion within RECHARGE and the literature on participatory models for cultural institutions, four specific dimensions of community participation were defined for the analytical purpose of this research, namely: Collaborative co-governance, Creative co-production, Social co-innovation, and Technological co-innovation. The definition and explanation of each category is provided below (Table 1). Each of these dimensions were detailed in specific actions on a scale of growing participatory involvement –namely, three levels as follows: contribution (*options n1*, sporadic participation), co-decision (*options n2*, systematic and regular participation), and empowerment (*options n3*, high level of commitment).

For the purposes of this research, the status quo option –which was offered as an option to the museum community (see RECHARGE Research Report on the Value of Participation) –has been removed. In fact, it is understood that the institutional side (managers, policy-makers and, by extension, the rest of the stakeholders) are in favour of a participatory model, although perhaps to varying degrees of intensity. Our purpose is therefore to estimate the structure of preference from this institutional side.

RE

Research Report: Benchmarking Participatory Strategies

Table 1. Participatory strategy: dimensions and options

DIMENSION 1: Involving collaborative co-governance	
This strategy encourages active collaboration and shared responsibility between different stakeholders including local communities, artists, educators and the museum itself (managers, curators, etc.) in developing policies, programmes and other museum activities. This stakeholder participation ranges from contributing with their ideas and perspectives to involvement in the decision-making process and to even engaging in the governance structure, establishing mechanisms for evaluation or policy prioritization so as to ensure that decisions align with the museum's mission and serve the interest of the broader community.	**Option 1.1.** Annual consultation with participant community on activities of their interest
	Option 1.2. Advisory board with relevant groups (artists, curators, citizens, artisans, etc.)
	Option 1.3. Full multi-stakeholder engagement with the power of decision over policy prioritization and institutional accountability
DIMENSION 2: Involving creative co-production	
This dimension involves collaboration between museums and artist, designers and local communities to create collections, exhibitions and educational programmes. This process provides for community members to actively participate in the production of knowledge as well as in creative content and cultural programming. Actions range from creating workshops on creative skills and content experiences for communities to booking spaces and programming for emerging artists and guest curators, or establishing long-term plans and programme-contracts with creators' associations, art fairs and schools of arts and designing with power and decision-making authority to intervene in museum practices and cultural programming.	**Option 2.1.** Workshop programme and content experiences for creatives and local communities
	Option 2.2. Provision of facilities (space, funding, residencies, internships, traineeships) for emerging artists and guest curators.
	Option 2.3. Long-term programme contract with schools of arts, art departments, art fairs and creators' associations with programming decision-making authority
DIMENSION 3. Involving social co-innovation	
In this approach, museums actively engage with their local communities and other stakeholders to address social challenges, foster inclusivity, promote social change, and contribute to societal well-being. Actions consider collaborative partnerships with organizations, non-profits and volunteers in social and museum activities: co-ideation of specific initiatives dealing with social equity, inclusion and diversity; and mandatory engagement on empowering communities, giving them decision-making authority and objectively measuring the well-being impact of museum policies	**Option 3.1.** Voluntary programme on social actions and museum activities
	Option 3.2. Social co-creation activities that promote cultural diversity, social inclusion, and civic engagement
	Option 3.3. Long-term engagement programme with communities to address social challenges and the impact of well-being over time
DIMENSION 4: Involving technological co-innovation	
This strategy refers to a participatory process in which museums collaborate with technology experts, innovators, and researchers to explore and develop new technological solutions, tools, and approaches that enhance the museum experience, increase cultural supply and improve managerial tasks. It involves leveraging technology to drive innovation, creativity, and engagement within the museum environment. Actions range from collaborating in the digital accessibility of cultural contents, to creating new cultural supply for an immersive museum, and engagement of technologists as commercial allies and in managerial improvements.	**Option 4.1.** Contributing in crowdsourcing initiatives to make digital material more widely available
	Option 4.2. New digital cultural supply based on sensory experimentation, augmented and virtual reality and other interactive technologies
	Option 4.3. Participatory engagement of creators and technologists in the museum development cycle (programming, accessibility and managerial issues)

RE

2.2. Setting up related stakeholders

The sample of agents that are representative of the institutional side had to include a selection of stakeholders directly or indirectly involved in the running and development of museum activities and, particularly, in the implementation of participatory strategies. Stakeholder groups were therefore selected to obtain a representation of all areas, from the formulation and funding of cultural policy and internal decision-making –both strategic and operational (Governance)– to the creation, programming and modernisation of content (Production stage), and the support, education and outreach services provided by these institutions (Museum Services). Table 2 shows the detailed composition of each of the clusters, disaggregated into two subgroups in order to better identify the types of stakeholders involved, although for reasons of significance, the analyses have been carried out at the main cluster level (Governance, Production, and Museum Services).

Table 2. Composition of stakeholder clusters

Cluster	Composition of the cluster
Governance	Management staff (in a broad sense: managers, curators, preservation, security, documentation, etc.)
	Policy-makers (government entities that regulate, support or fund museum activities, including donors and sponsorships)
Production	Cultural creators and programmers (artists, creatives, curators, guest collaborators, other supporting cultural institutions, etc.)
	Technologists (professionals who use technology and innovation to enhance various aspects of museum operations (management, security systems, digitization, preservation, new cultural-digital supply, website and on-line presence, etc.)
Museum services	Commercial allies (providers, artisans, advertisers, publishers, media, transport, etc.)
	Education and disseminators (people involved in educational and training programmes, research projects and activities as well as dissemination tasks)

It is important to note that, according to the AHP method, for the ranking of the preferences of these stakeholders on the models of participation in museums, the condition of significance and statistical representation consists of conforming a group of experts with a certain homogeneity in terms of academic training, professional experience and participation in decision-making. In this way, a homogeneous representation is obtained on the institutional side without being conditioned to a specific sample size. Rather, the focus is on having a mature and well-trained technical focus group, whose opinions are extrapolable to any context. For this reason, great efforts were made in the preparation and selection of the experts included in the study, which was carried out with the key support of the different museums involved in the project: Hunt Museum (Limerick), Museo del Tessuto (Prato), Maritime Museum (Tallinn).

2.3. Survey process and application of the AHP technique

The institutional evaluation survey was conducted anonymously, but was channelled through the museums, which sent an explanatory message and a link to the online survey to the list of stakeholders selected by each museum. Fieldwork was carried out from March to May

2024, resulting in a total sample of 96 people, with a balanced proportion of responses, both among the museums and among the stakeholder groups, as shown in Table 3.

Table 3. Number of respondents of the sample (distribution by museum and stakeholder)

	Hunt (Limerick)	Tessuto (Prato)	Maritime (Tallinn)	Total by stakeholder
Governance	11	15	13	39
Production	10	8	7	25
Museum Services	11	11	10	32
Total by museum	32	34	30	96

Surveys were applied with the Google Forms format, which was translated for each museum according to the official language (English, Italian, and Estonian). The survey consisted of 14 questions, divided into four thematic sections as follows: perception and level of satisfaction with the participatory strategies; socio-demographic characteristics of the respondent with special attention to their education and work experience; questions on the profile and relationship with the museum and, finally, a group of questions on the hierarchy of preferences for the participatory strategies. In this last block of questions –and following the AHP method– each respondent had to choose between two options of participation strategies, or else be indifferent. In total, each respondent was faced with 66 choices, resulting from the pairwise comparison of the 12 participation options (three Collaborative co-governance, three Creative co-production, three Social co-innovation, and three Technological co-innovation). This set of choices was divided into three blocks (each with 22 choices) placed throughout the questionnaire in order to avoid fatigue bias. Also in an effort to avoid anchoring bias, three types of survey (A, B and C) were conducted with inverted orders in the presentation of the choice sets, which were randomly and evenly distributed by each type of stakeholder.

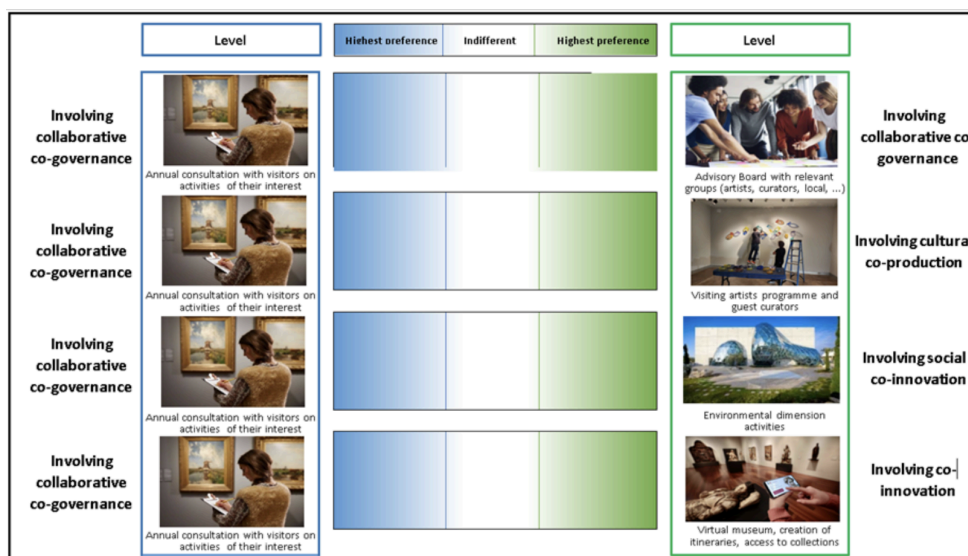*Figure 1. Illustrative example for choice questions*

Figure 1 presents an example of choice with comparisons by dimension. The exercise is similar to a Likert scale assessment of three values: the respondent prefers the alternative on the left, or the alternative on the right, or is indifferent and chooses the alternative in between. With this, it is possible to build decision matrices and to estimate using matrix algebra techniques the eigenvector associated with the respondents' preferences, and subsequently calculate the vector of values that are representative of the preferences stated by the three stakeholder groups identified.

2.4. *Socioeconomic characterisation of the institutional sample*

The figures below describe the main socioeconomic variables that characterise the institutional sample of stakeholders, first for the overall sample (Figure 2), the sub-samples for each cluster of stakeholders (Figure 3), and the sub-samples for each museum (Figure 4). Detailed results are shown in Table 4. The main features are summed up in the following:

- Almost two-thirds of respondents were female. Average respondent age was 46 years old, and was over 50 for the 'governance' cluster, and younger in the group of museum services. Stakeholders are younger in the Maritime museum compared to the Tessuto and Hunt museums
- The most common income levels are intermediate. Specifically, the lowest intermediate level was between 1,600 and 2,200 euros, and the highest intermediate between 2,800 and 3,600 euros per month, with these two levels accounting for almost 45% of the sample. The intermediate high level predominates among agents in governance, whereas museum services reach the lowest income level. We find high income levels among Hunt Museum stakeholders, a balanced structure in Maritime Museum, and a higher frequency of lower income levels in the Tessuto Museum.
- We found the population to have a very high level of education, with almost 60% reporting master/doctorate studies compared to only 7.3% with low or medium-low educational level. The high level of training of the Governance cluster is worthy of note, especially compared to that of Producers. However, when analysed by museums, the results are quite balanced.
- The majority of stakeholders surveyed reported a long-standing relationship with the museum, with almost a third reporting over 10 years. They are, in general, professionals with a knowledge of the progression and activities carried out by the museum, and who are therefore in a position to offer a qualified and reasoned opinion thereon. This is especially notable in the Tessuto Museum, where over 50% of the sample selects the highest level for this category, while the Hunt Museum shows a higher frequency of stakeholders with 1-3 years of relationship with the museum.
- In terms of field of study (according to subject area), most stakeholders report studies in humanities, with a large presence of history or art history degrees, or social sciences. These categories have a higher percentage weight as they are very general. However, studies related to heritage, being a very specific field, account for almost 20% of the sample. Not only does the sample present high levels of

RE

education, but these studies are also related to the museum and cultural field, especially in the Tessuto Museum. Not surprisingly, the cluster of producers has a greater presence of graduates in the arts (especially visual arts) and creative industries (especially design), while in Governance the most prominent studies are in social sciences.

- The stakeholders in the sample report an average of 18 years since they obtained their last academic degree, which can be assimilated to a long working experience. This experience is especially notable in the Governance and Production cluster, compared to professionals with less experience (albeit over 13 years) in the Services cluster. The high results for the Tessuto Museum stand out, with an average of over 23 years since their studies were completed.

To sum up respondents' socioeconomic profile in one sentence, stakeholders are mainly women, of middle age and with an intermediate level of income, higher on governance and lower for stakeholders from production and museum services. They have a very high level of studies in subjects related to heritage, humanities and social sciences. They have a long-standing relationship with the museum, as well as a long professional career, which positions them as experts in the field of study.

Figure 2. Socioeconomic characteristics of the total sample
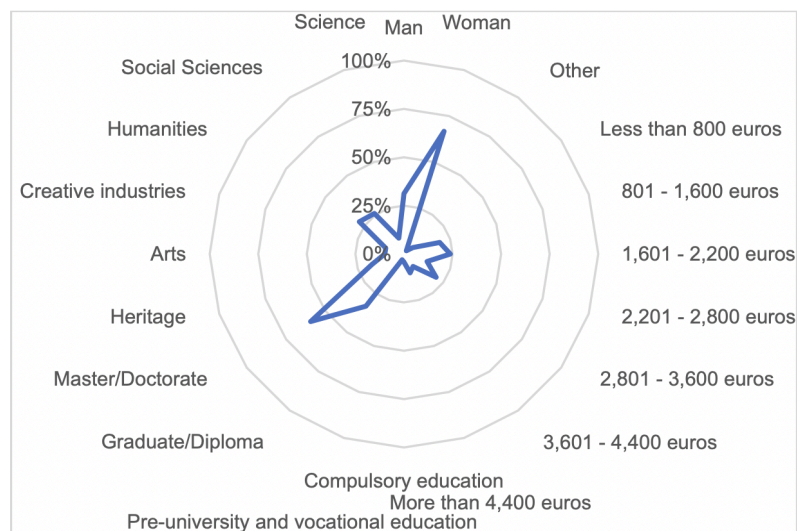
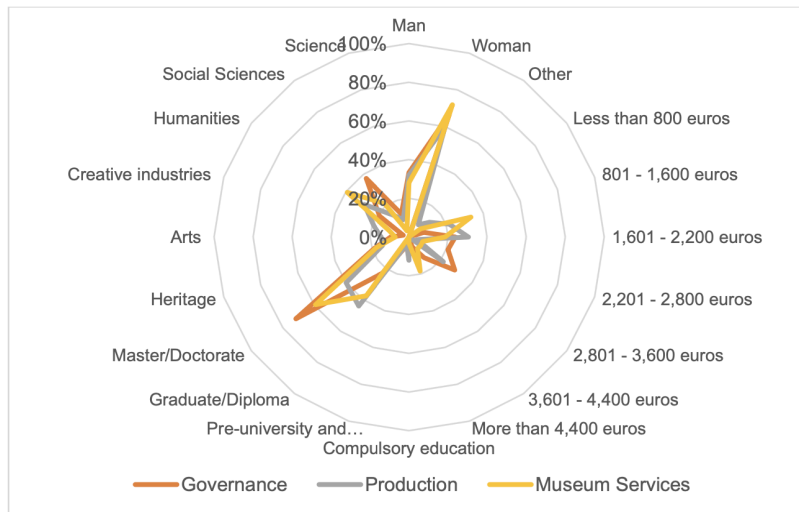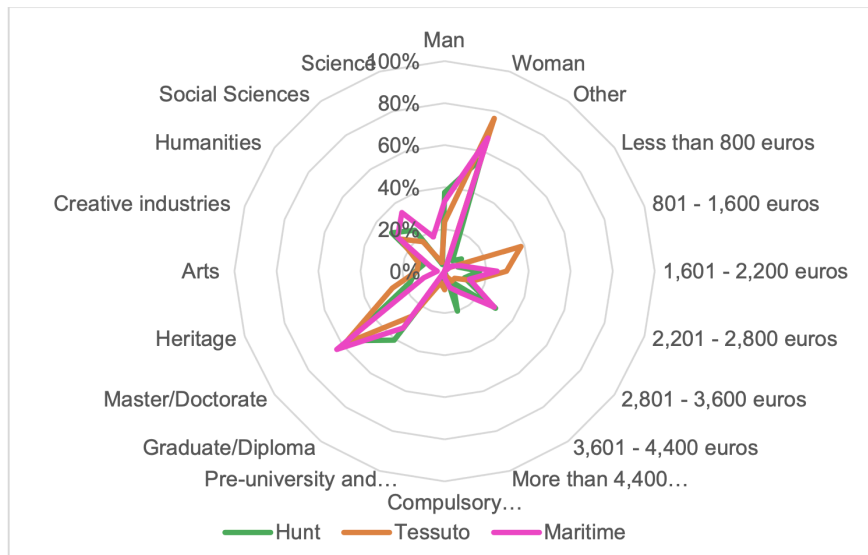*Figure 3. Socioeconomic characteristics of the sub-samples by cluster: Governance, Production, and Museum Services*

Figure 4. Socioeconomic characteristics of the sub-samples by museum: Hunt, Tessuto and Maritime

Table 4. Socioeconomic characteristics of samples: main results

Variable		Global	Governance	Production	Museum Services	Hunt	Tessuto	Maritime
Sex	Man	31.25%	33.33%	32.00%	28.13%	37.50%	23.53%	33.33%
	Woman	66.67%	66.67%	60.00%	71.88%	56.25%	76.47%	66.67%
	Other	2.08%	0.00%	8.00%	0.00%	6.25%	0.00%	0.00%
Monthly income level	Less than 800 euros	5.68%	0.00%	13.04%	7.41%	10.00%	2.94%	4.17%
	801 - 1,600 euros	19.32%	7.89%	21.74%	33.33%	6.67%	38.24%	8.33%
	1,601 - 2,200 euros	23.86%	23.68%	30.43%	18.52%	16.67%	29.41%	25.00%
	2,201 - 2,800 euros	12.50%	21.05%	4.35%	7.41%	10.00%	14.71%	12.50%
	2,801 - 3,600 euros	20.45%	28.95%	21.74%	7.41%	30.00%	5.88%	29.17%
	3,601 - 4,400 euros	7.95%	13.16%	0.00%	7.41%	6.67%	5.88%	12.50%
	More than 4,400 euros	10.23%	5.26%	0.00%	18.52%	20.00%	2.49%	8.33%
Years of relationship with museum	Less than 1 year	9.38%	12.82%	8.00%	6.25%	6.25%	8.82%	13.33%
	Between 1 and 3 years	34.38%	23.08%	32.00%	50.00%	53.13%	23.53%	26.67%
	Between 3 and 6 years	12.50%	10.26%	16.00%	12.50%	18.75%	2.94%	16.67%
	Between 6 and 10 years	12.50%	20.51%	8.00%	6.25%	9.38%	11.76%	16.67%
	More than 10 years	31.25%	33.33%	36.00%	25.00%	12.50%	52.94%	26.67%
Level of education	Compulsory education	4.17%	0.00%	12.00%	3.13%	0.00%	8.82%	3.33%
	Pre-university and vocational education	3.13%	5.13%	4.00%	0.00%	3.13%	5.88%	0.00%
	Graduate/Diploma	33.33%	23.08%	44.00%	37.50%	40.63%	26.47%	33.33%
	Master/Doctorate	59.38%	71.79%	40.00%	59.38%	56.25%	58.82%	63.33%
Field of education	Heritage	17.28%	18.75%	14.28%	17.85%	17.24%	26.08%	10.34%
	Arts	9.87%	9.37%	14.28%	7.14%	13.79%	13.04%	3.44%
	Creative industries	9.87%	3.12%	19.04%	10.71%	10.34%	13.04%	6.89%
	Humanities	28.39%	18.75%	28.57%	39.28%	31.03%	26.08%	27.58%
	Social Sciences	25.92%	37.50%	14.28%	21.42%	24.13%	17.39%	34.48%
	Science and Engineering	8.64%	12.50%	9.52%	3.57%	3.44%	4.34%	17.24%
Satisfaction with participatory strategies (1-5)	Involving collaborative co-governance	4.21	4.30	4.08	4.21	4.43	4.47	3.70
	Involving creative co-production	4.40	4.25	4.48	4.53	4.65	4.52	4.00
	Involving social co-innovation	4.19	4.12	4.32	4.18	4.62	4.35	3.56
	Involving technological co-innovation	4.18	4.07	4.21	4.32	4.40	4.23	3.90
Average age		46.51	50.76	44.48	43.06	45.67	50.35	43.03
Years since the last academic degree was obtained		18.35	20.46	21.66	13.12	16.00	23.87	14.65

RE

Complementary to the sociodemographic characterisation, the cultural consumption habits of the sample were analysed. Table 5 shows the stakeholders' participation in different cultural activities (average number of times per year). In general, a very high level of cultural consumption is observed in the institutional survey, especially compared to that of the community sample of each museum (Vid. Research Report on the Value of Participation). Respondents show higher museum consumption (more than eight times a year) and concert attendance; and lower library attendance (less than six times a year). Differences are observed between museum stakeholders, with Tessuto presenting higher levels of consumption linked to heritage, versus the Maritime with lower but balanced results. The results by stakeholder groups converge to a greater extent, although the Governance cluster shows higher attendance at concerts, and the Production cluster shows higher attendance at libraries and performing arts, compared to the Services cluster, with slightly lower results for all cultural activities.

Table 5. Cultural consumption of samples (number of visits per year)

Cultural consumption	Global	Hunt	Tessuto	Maritime	Governance	Production	Museum Services
Visits to museums or exhibitions	8.37	7.78	9.70	7.50	8.61	8.28	8.15
Visits to monuments or archaeological sites	6.84	6.28	8.29	5.80	6.92	6.96	6.65
Going to libraries	5.96	6.18	5.73	6.00	5.38	6.72	6.09
Attending musical performances (concerts)	7.09	7.40	5.73	6.00	7.53	6.96	6.65
Attending performing arts shows (theatre, opera, dance, circus)	6.37	6.56	6.61	5.90	6.07	7.20	6.09
Going to the cinema	6.28	5.25	7.50	6.00	6.15	6.60	6.18

Figure 5. Cultural consumption profile of the total sample and subsamples by city (Limerick, Prato, and Tallinn) and by cluster (Governance, Production, Museum Services)
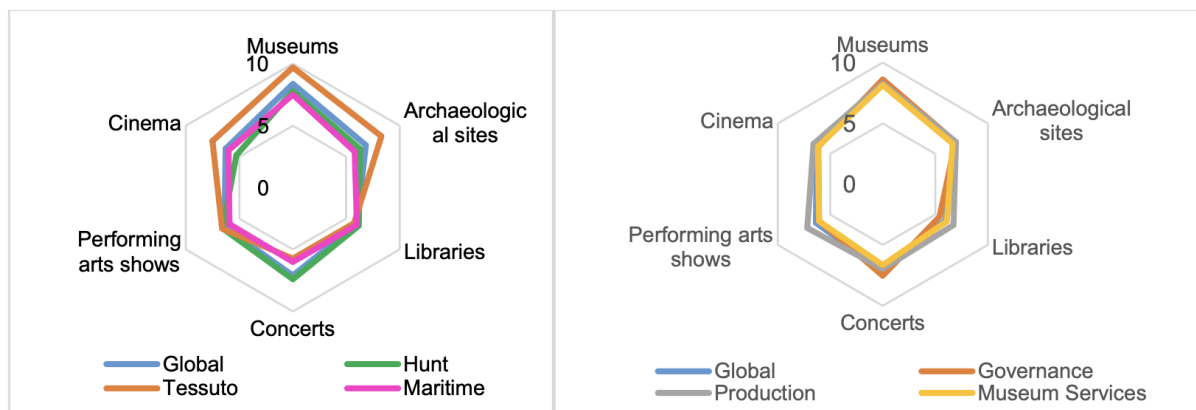
3.   **Evaluation results: value allocated to participatory strategies from the institutional side**

    3.1.   *Results by stakeholders*

Using matrix calculation techniques (AHP) it was possible to estimate the eigenvector of preferences reported by stakeholders for all the options of the participatory model. It is therefore an ordering of the value assigned to the different participation strategies on the institutional side. Appendix 1 shows the structure of values obtained considering the stakeholder sample as a whole, i.e. taking the three museums at the same time, also discriminating between the different groups of agents involved (Governance, Production, and Museum Services). Figure 6 presents a visual graph of all these consolidated results.

Figure 6. Overall preference structure by stakeholders
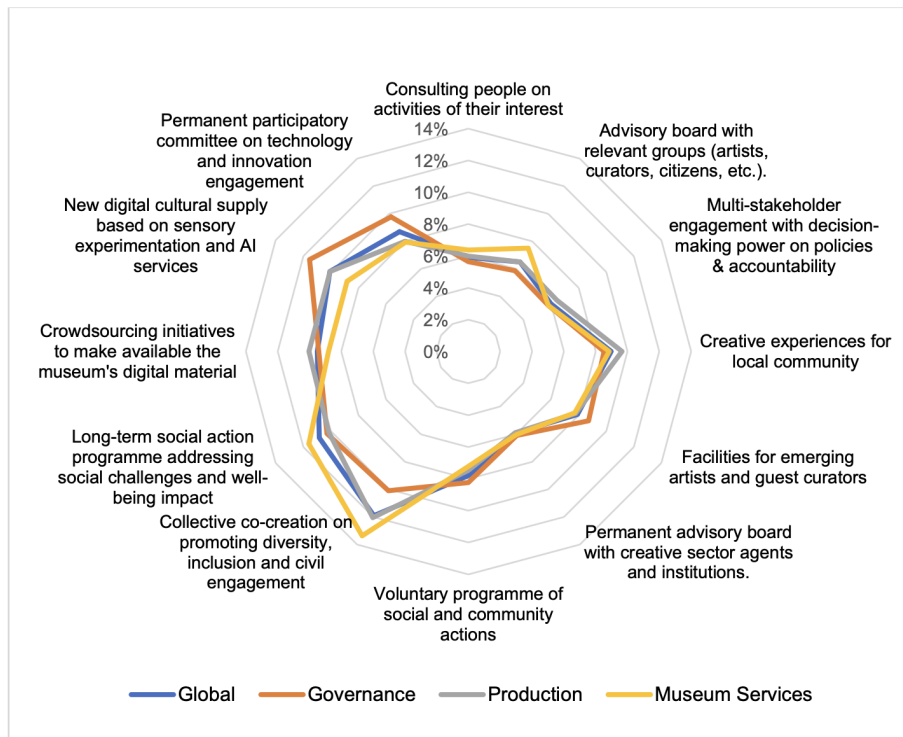
In general, it is found that museum stakeholders have a higher preference for the options related to the social co-innovation dimension, in contrast to the levels of the collaborative co-governance dimension, which are the least valued by all groups, not exceeding 7%. The most valued option is DEI actions that promote diversity, inclusiveness, and civic engagement. Secondly, the options of the Technological co-innovation dimension are highly valued, especially new digital supply based on sensory experimentation and AI services, as well as the Creative co-production options, especially creative experiences for the local community and facilities for emerging artists and guest curators. It is notable that stakeholders always state a greater preference for the intermediate level options, i.e. those associated with a strategy of sporadic co-decision, but not so much empowerment. This is interesting, because although stakeholders recognise the importance of involving communities in the development of museums, they consider that their intervention should focus on formulating and assisting in participatory actions, but less on stable collaboration in permanent programming and decision-making bodies.

Analysing these results by stakeholder group, it should be highlighted that although they follow the trend of the overall results, there are some significant differences. In the case of the Governance group, their main preferences favour technological options (New digital cultural supply based on sensory experimentation and AI services, 11.54%) and social options (Long-term social action programme addressing social challenges and well-being impact, 10.29%). This demonstrates the alignment with recent trends of implementing and using new technologies and understanding the museum as a social driver. The Production stakeholder group offers a fairly balanced preference structure, valuing governance less and preferring social and technological options. The Museum Services group is strongly in favour of social and technological options and, unlike the others, values the governance option of creating an advisory board with the integration of artists and members of the community. To some extent, this hierarchical ranking also reveals stakeholder preferences regarding their interests and the direction they would like the museum to take.

3.2. *Results by museum*

Similar to the overall sample, an eigenvector was estimated to rank the preferences declared by the stakeholders in each of the three museums under study: Hunt (Limerick), Tessuto (Prato), and Maritime (Tallinn).

In the case of the Hunt Museum (Limerick) –and according to the results of the eigenvector of preferences (Appendix 2) represented in Figure 7– it is possible to observe the following particularities. The ranking of their preferences indicates that the strategies associated with Social co-innovation are clearly the most preferred, with a maximum weighting of 16.71%. The Governance and Museum Services groups are seen to be the ones that most value this dimension and in particular the option of greater commitment to the long-term social action programme addressing social challenges and well-being impact. This is interesting as it is in line with the strategy implemented by Hunt, with a strong orientation towards its customers and the surrounding communities. The next dimension in the ranking is Creative co-production with a maximum weighting of 11.27%, specifically for the action Facilities for emerging artists and guest curators. This statement is given by the Production group, which is consistent as it is an aspect in which the agents are directly involved. In conclusion, the preference structure of the Hunt Museum stakeholders is mainly oriented towards the social and creative dimensions and with less intensity towards the technological and co-governance dimension options.

Figure 7. Preference structure for the Hunt Museum (Limerick)
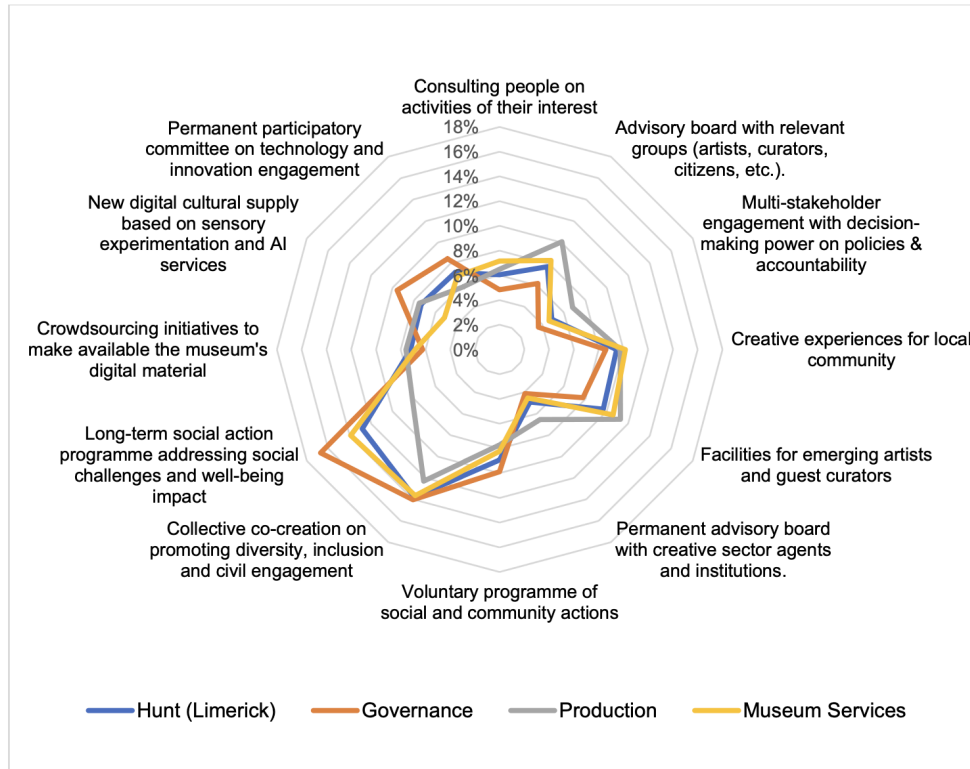
With regard to the stakeholder preference scheme of the Tessuto Museum (Prato), as shown in Figure 8 and Appendix 3, a balanced structure is observed, where the social commitment options prevail, but also the technological ones and some of the co-production dimension. While Museum Services and Production stakeholders in the museum are more inclined towards the social and technological dimensions, Governance stakeholders value more the co-creation actions and particularly any option involving a permanent advisory board. In general, this preference structure seems to be aligned with the character and orientation of the Tessuto Museum.

Figure 8. Preference structure for the Tessuto Museum (Prato)
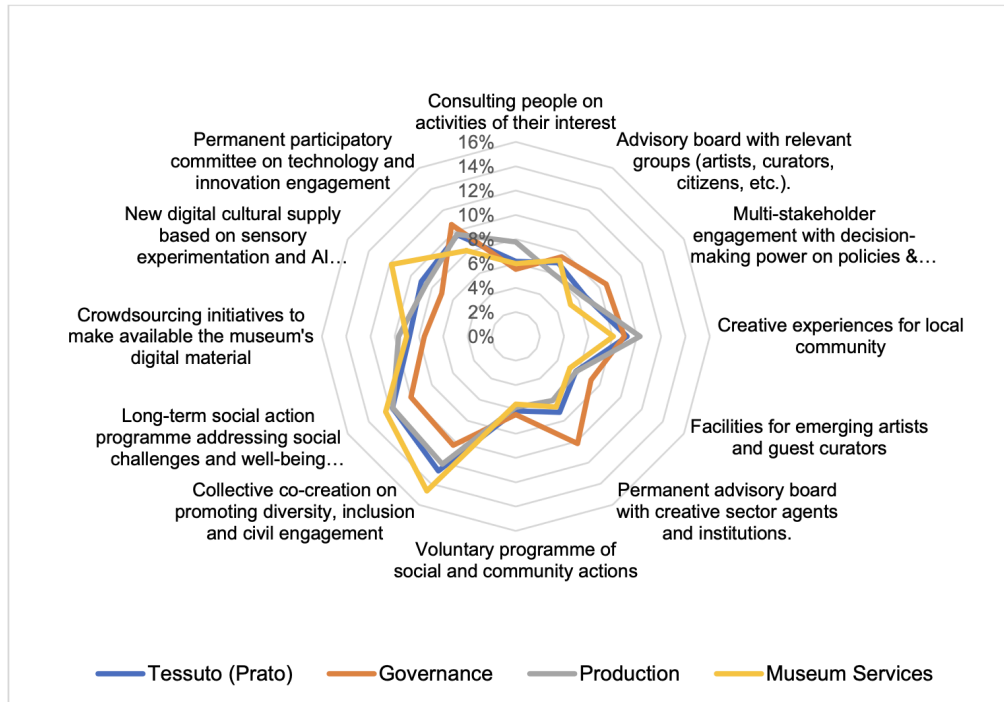
With regard to the Maritime Museum (see Figure 9 and Appendix 4), the structure of stakeholders' preferences is very much aligned with the mission and typology of the museum, i.e. there is a majority interest in strategies related to technological and social dimensions. Specifically, it is evident that the highest value is given to New digital cultural supply based on sensory experimentation and AI services almost unanimously by all stakeholders. These scores are generally the highest compared to the other options and to the other two museums. While social actions are also appreciated, the actions in the Creative dimension are rated relatively higher. This is consistent with the fact that technological strategies are directly related to creative production. These results reveal that the choices declared by the stakeholders of the Maritime Museum are consistent in terms of pointing towards the vision and category of this museum as a museum of science and technology.

Figure 9. Preference structure for Maritime Museum (Tallin)
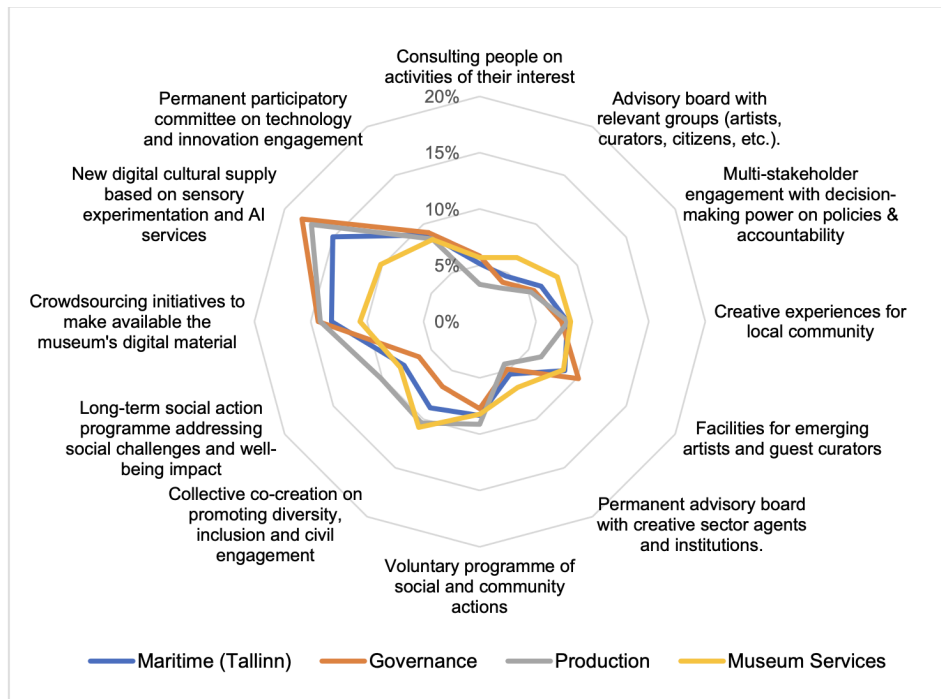
Summing up, although there are specificities between the preference structure in each of these three museums, some common trends are found, such as the higher score for actions related to the social dimension and the lower interest for co-governance strategies, which is broadly in line with the stated preferences of the museum community (see RECHARGE Research Report on the Value of Participation). This is an important result as it shows that the preference structures on the supply and demand side are quite aligned. Therefore, it would be useful to analyse what museums are actually doing and where they are focusing their efforts, in order to ascertain whether stated preferences and actual effort coincide –an issue we will address in the next section. Another important result in this section is that the ranking of values assigned by the institutional side is consistent with the orientation and specialisation of each museum: Hunt focuses on the social, Tessuto on creation, and Maritime on the technological dimension.

4. **Effectiveness analysis: stated preferences versus actual effort**

    4.1. *Museum effort in participatory strategies: level of dedication and expenditure*

In order to analyse the labour and financial budgets of the three museums in developing their participation models, data was requested for a cumulative period of 18 months (January 2023 to June 2024) matching the implementation of the RECHARGE project. A mini-survey was applied to the museums in order to collect the number of people (full-time, part-time, and voluntary) involved in each of the participation strategies and the number of weeks of dedication, as well as the expenses spent, classified in operational costs (materials, advertising, etc.) and investments (facilities, equipment, etc.). To carry out the comparison exercise, the workforce units were first standardised by computing part-time employment as half, and absolute and relative frequency measures were estimated, so that we have a

structure of time spent (in persons and weeks) for each museum in each of the 12 options of the participatory model (Appendix 5). With regard to costs, these were aggregated by dimensions (4), and absolute and comparative measures were also established (Appendix 6). It should be noted that these comparisons are useful for the evaluation of each museum, but not as a measure of global analysis, as no purchasing power parity calculations are performed between countries.

Figure 10 shows the labour effort in absolute value allocated to implementing the participatory model for each museum. In terms of number of people and weeks, the Maritime Museum has significantly more dedication, followed by the Tessuto Museum, and in third place, the Hunt Museum. This is not the case for volunteers, where Hunt leads the way with a significant number of volunteers, followed by Maritime, while Tessuto stated that it has no volunteers in its actions. Overall, volunteers are mainly involved in actions that are in line with the nature of each museum. Furthermore, it is striking that Tessuto and Maritime specifically focus staff efforts on co-governance actions, while Hunt focuses on co-creation and technology, although it is true that it allocates volunteer involvement to co-governance. In general terms, staff engagement is concentrated at the lower levels of community involvement. This may be because models of participation are still being consolidated, and the best ways to involve the community in the management of the museum are still being defined.

Figure 10. Time spent (persons, weeks and volunteers) for Museums

Time spent distribution (Persons)

| Hunt | Tessuto | Maritime |

- Collaborative co-governance: 0, 9, 30
- Creative co-production: 10, 6.5, 13
- Social co-innovation: 0, 3, 13
- Technological co-innovation: 2, 4.5, 8.5

Time spent distribution (Weeks)

| Hunt | Tessuto | Maritime |

- Collaborative co-governance: 0, 208, 626
- Creative co-production: 24, 53, 432
- Social co-innovation: 0, 19, 432
- Technological co-innovation: 5,9, 74, 252

Time spent distribution (Volunteers)

| Hunt | Tessuto | Maritime |

- Collaborative co-governance: 100, 0, 40
- Creative co-production: 37, 0, 0
- Social co-innovation: 65, 0, 12
- Technological co-innovation: 10, 0, 0

Figure 11 presents in a bar chart the monetary values allocated to the budgets for each dimension of participation in the three museums (based on Appendix 6). It should be noted that over the cumulative period of 18 months (January 2023 to June 2024) the Tessuto Museum has the largest budget allocation –almost double that of Hunt and seven times the investment of the Maritime. With the caveat that we are not considering purchasing parity equivalencies, Tessuto's investment in the participatory strategy stands out, reaching €484,000.00.

Figure 11. Cost distribution for Museums (in Euros)
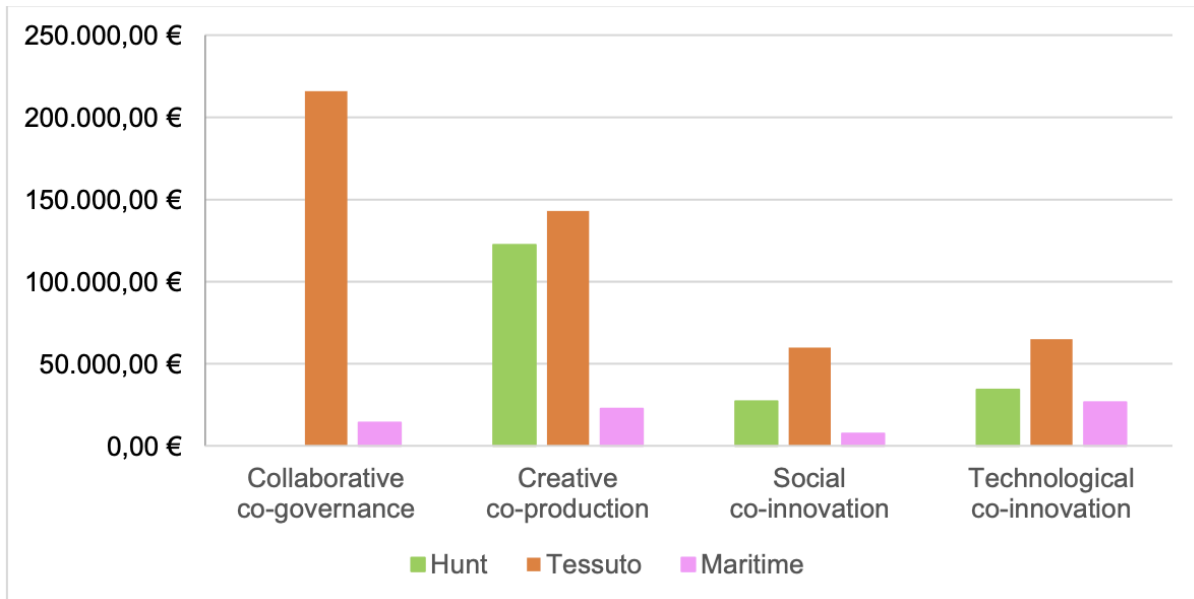
Regarding the distribution of budgets according to participatory dimensions, as can be seen in Figure 12, it could be said in general terms that financial resources are allocated in large proportion to co-governance actions, while actions in the social dimension show less investment. This is striking when it comes to implementing community participation models. In a more detailed look per museum, it is found that Hunt invests mainly in Creative co-production actions (approximately 67%), and less in the social and technological dimensions (where it does not exceed 20%), and with zero investment for co-governance. However, this structure is not followed by the other two museums. For example, Tessuto invests almost half of its resources in co-governance (44.6%), followed by Creative (29.5%), while Maritime prioritises its investments in Technological co-innovation (37.5%) and Creative co-production (31.9%) actions. Finally, these findings are interesting insofar as they characterise the management of each institution.

RE

Figure 12. Cost distribution for Museums (in percentage)
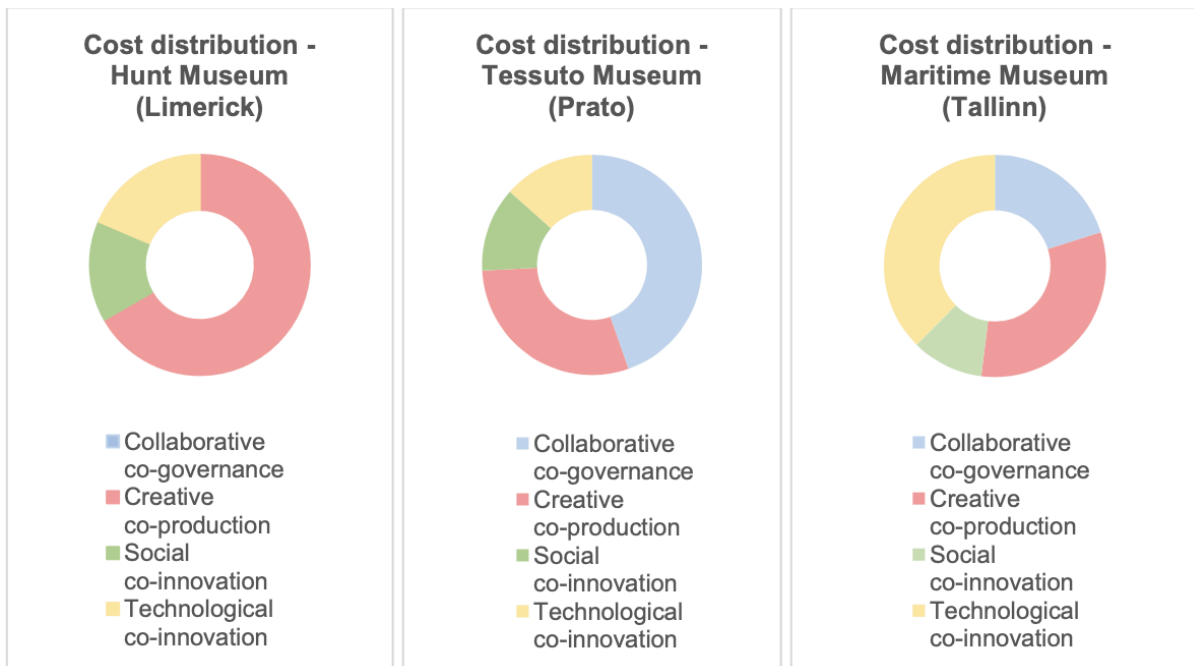
4.2. *Comparative analysis of preferences and current dedication structures*

In order to evaluate the effectiveness of the participation strategies in each of the museums under study, a comparative analysis was carried out between the preferences expressed by the communities (demand) and stakeholders (supply), on the one hand, and the institutional efforts dedicated to developing these participatory actions, on the other. For this purpose, we needed the following:

- For the three variables (community preferences, stakeholder preferences, and effective institutional effort), converting them into index numbers in ranges from 0% to 100%, considering their minimum and maximum behaviour in each museum as a basis for standardisation. In this way, proportional performance measures are taken that make it possible to compare variables for each museum and between the three institutions, thereby avoiding problems of scale and comparability of monetary units between countries.
- For the measures of actual labour effort, the units of dedication expressed in weeks were taken, as this is possibly a more appropriate and refined measure for the comparison exercise.
- The comparative analysis was carried out both for the set of 12 participatory strategy options and for the grouping into four dimensions of the overall model.

Detailed and complete data from the homogenous unit valuation exercise can be found in Appendix 7, and the comparative analysis for each museum in the RECHARGE project is presented below.

Regarding the Hunt Museum, as shown in Figures 13 and 14, the preference structure of the community (demand) and stakeholders (supply) are very much aligned, showing relatively more interest for options in the social and creative dimensions and less with co-governance. However, institutional efforts go in the opposite direction, as they are mainly inclined towards the creative (about 80%) and technological (about 20%) strategies, and in particular towards the option with the lowest degree of engagement, such as the realisation of creative experiences for the local community. In addition, it is worth remembering that the volunteer effort –which was very notable in Hunt– was mainly focused on co-governance options.

Figure 13. Preference structure of participation options for the Hunt Museum
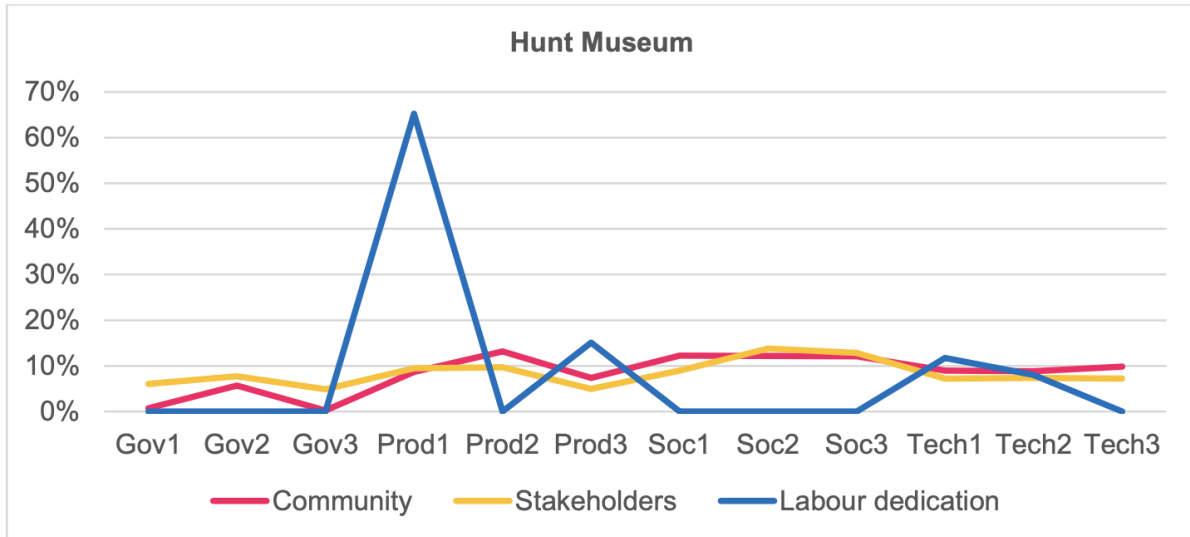
Figure 14. Preference structure of participation dimensions for the Hunt Museum
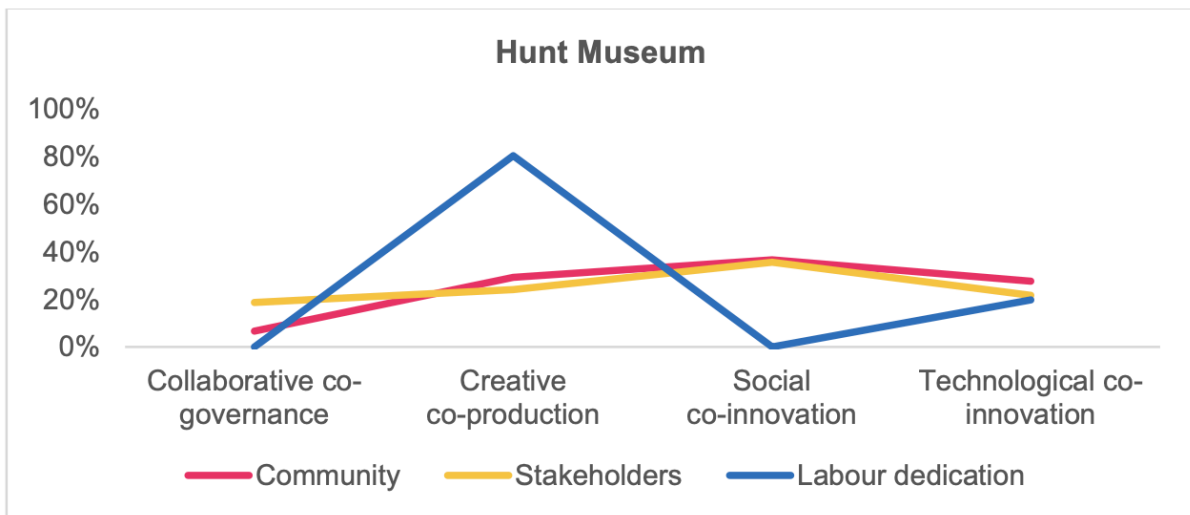
The preference structures of the Tessuto Museum are presented in Figures 15 and 16 and again appear to be relatively aligned. However, the community is more strongly inclined towards the social dimension options and less towards governance, while stakeholders offer a more balanced structure, with social and technological aspects taking precedence. When compared to institutional efforts, we find that the majority of staff are dedicated to governance (almost 60%) followed by technological actions (approximately 20%).

Figure 15. Preference structure of participation options for the Tessuto Museum
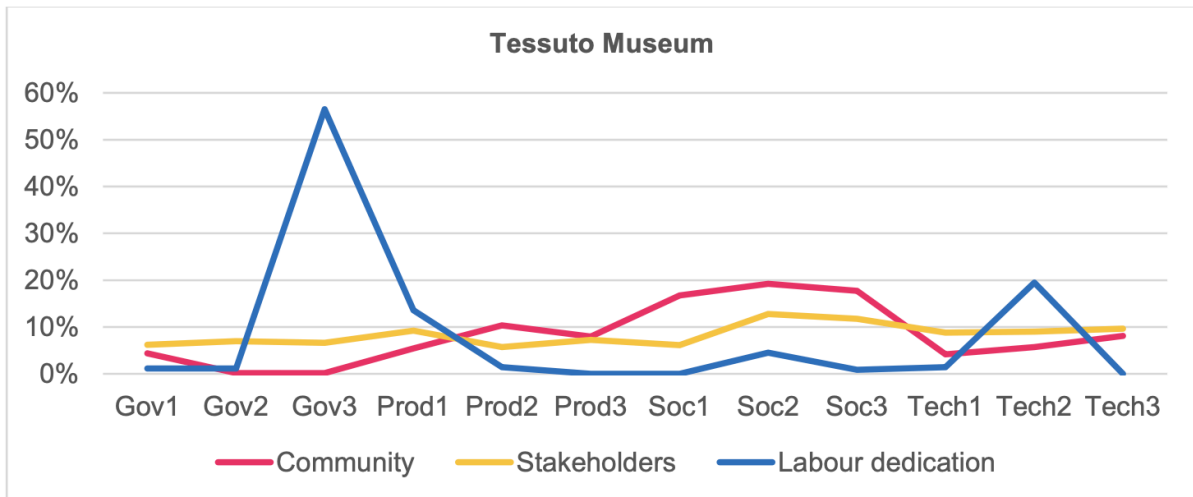
Figure 16. Preference structure of participation dimensions for the Tessuto Museum
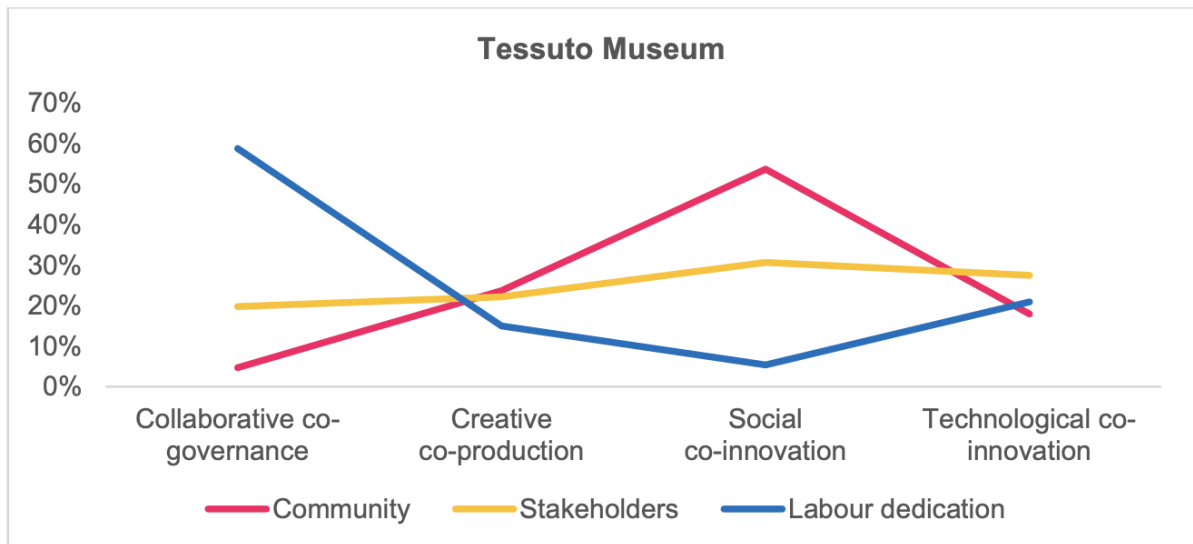
Finally, Figures 17 and 18 represent the preference structure of the Maritime Museum. Here the community and stakeholder assessments diverge, with the former focusing more on co-creation and social options, and the latter clearly opting for technological options, in line with the museum's orientation. All in all, institutional efforts focus on governance and in part on social, but much less on technology options.

Figure 17. Preference structure of participation options for the Maritime Museum
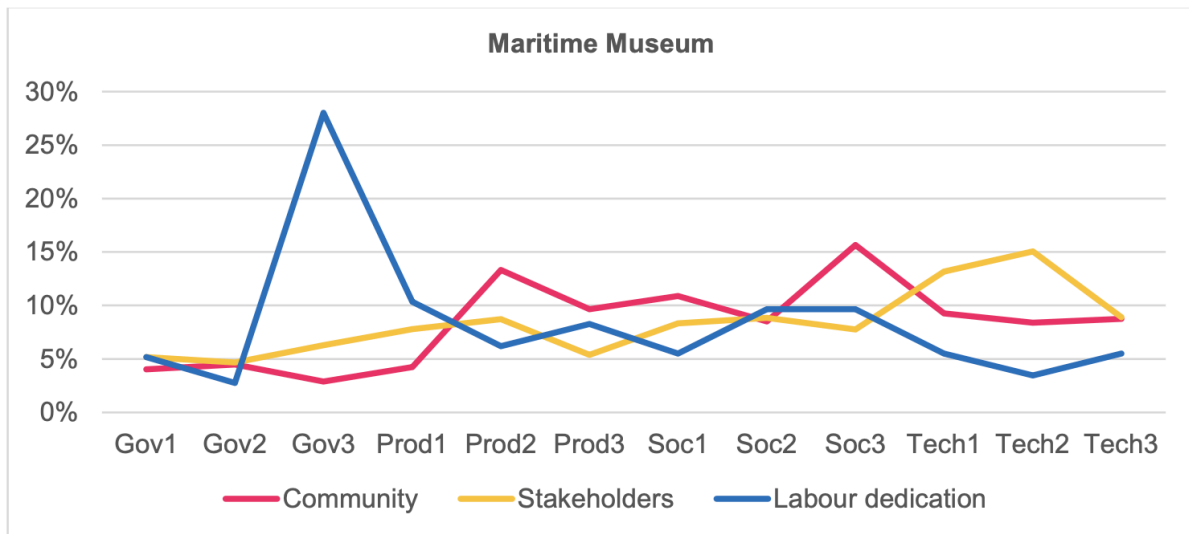
Figure 18. Preference structure of participation dimensions for the Maritime Museum
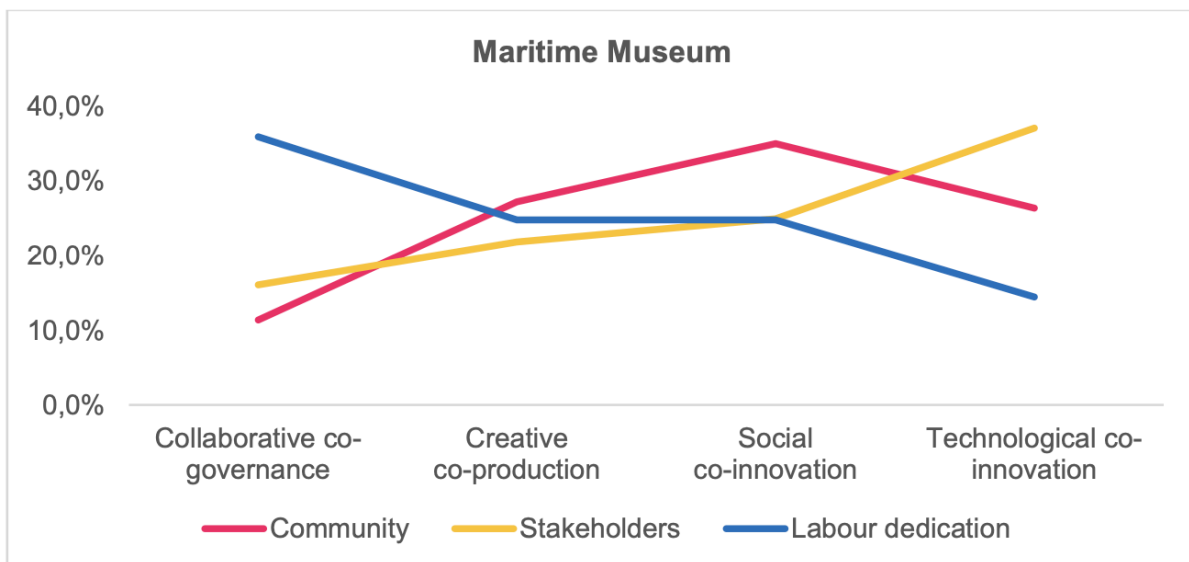
In conclusion, this comparative analysis shows that for the three museums the structure of preferences of the communities and stakeholders are more or less aligned, while the museums' effective engagement (work and expenditure) is polarized and fundamentally oriented towards governance options. This indicates that, while there is clear recognition of the importance and need to implement participatory models in museums; museums are still in a process of adapting and accommodating their resources and efforts in order to be effective in developing these strategies. It seems that in the early stages, museums need to allocate more efforts to co-governance actions than to the social dimension, co-creation and technological adaptation. Perhaps communities and stakeholders are clear about engaging in participatory actions, but finding the most effective way to achieve this may still be under discussion, and hence the greatest dedication is devoted to consultation and strategic decision-making processes. In these case studies, it is important to note that each museum stands out with a personality of preferences that is quite in line with its vocation and nature.

The Hunt Museum (Limerick) is inclined towards the social dimension, the Tessuto Museum (Prato) prioritizes the creative and technological dimensions, and the Maritime Museum (Tallinn) mainly values the technological dimension. However, actual institutional efforts still diverge.

5. **Conclusions and policy implications.**

- Participatory management models for cultural institutions are gaining growing interest, but are so far little evaluated. This research is, therefore, a methodological proposal for the evaluation of a participatory strategy for museums. This is an ex-ante evaluation, embedding the value allocated to participatory dimensions and options. Complementary to the previous research carried out, which analysed demand-side valuation (see report *Allocating Value to Participatory Dimensions and Strategies by Museum Communities*), this research constitutes an evaluation of the supply-side, thereby capturing preferences on both sides of the market.

- In terms of sociodemographic profile, the stakeholder sample stands out for having a particularly high level of education, with almost 60% reporting master's or doctorate studies. In addition, we found a large presence of graduates in fields related to heritage and humanities. A segmented analysis by cluster shows that the studies are thematically aligned with the cluster profiles. The Governance cluster presents studies in social sciences, while in the Production cluster there is a greater presence of studies in the arts and creative fields. In terms of cultural consumption habits, a very high level of consumption is observed, especially of so-called highbrow culture, with a level of attendance at museums of more than eight times a year on average).

- These characteristics, together with the long professional career of the stakeholders (more than 18 years since obtaining their last academic degree) and the long relationship reported with the reference museum, confirm that the sample has sufficient knowledge and experience for the selected methodology to be applied.

- In general, stakeholders have a lower preference for the Collaborative co-governance options, and a higher preference for the options associated with the Social co-innovation dimension, while Creative co-production and Technological co-innovation have intermediate ratings. There is a greater preference for intermediate level options, associated with co-decision. Diversity, Equity and Inclusion actions, creative experiences, digitalization and sensorial offerings stand out among the strategies. In addition, museums are displaying a preference structure mainly according to their specialization: Hunt-Social, Tessuto-Creative, Maritime-Technological.

- There are some differences in the analysis segmented by stakeholder group. The Governance cluster shows an alignment with global Governance trends, preferring options associated with the implementation and use of new technologies and long-term social programmes. The Production and Museum Services clusters place a higher value on the social dimension, especially on promoting diversity and inclusion.

- All in all, the value allocated by museum stakeholders shows a similar preference structure to that of the community (social and technology options are more highly valued than governance involvement). This is an important result since there seem to be no major discrepancies between the value assigned by communities (demand) and stakeholders (institutional supply) to participatory options.

- In terms of the labour efforts made by the museums, the Maritime Museum has a significantly higher allocation of these resources, followed by the Tessuto Museum

and, in third place, the Hunt Museum. However, the Hunt Museum presents an extensive policy of volunteer involvement. We found greater workforce dedication to the governance dimension in Tessuto and Maritime (opposite to preference structures), while in Hunt these activities are being carried out by volunteers, focusing their workforce on social and technological dimensions

- Disclaimer: in expenditure analysis, it should be noted that these comparisons are useful for evaluating each museum, but not as a measure of global analysis, since no purchasing power parity calculations are made. Regarding the distribution of budgets according to participatory dimensions, a large part of the financial resources are allocated to co-governance actions, while the actions of the social dimension allocated less expenditure.
- The Hunt Museum invests mainly in Creative co-production actions, to a lesser extent in the social and technological dimensions (where it does not exceed 20%), leaving co-governance without a budget. The Tessuto Museum invests almost half of its resources in co-governance (44.6%) followed by the creative dimension, while the Maritime Museum prioritises its investments first in Technological co-innovation actions.
- Considering index numbers and then allowing the comparison among value structures and museums, an overall conclusion would be that the preference structure of museum communities and stakeholders is more or less aligned, but that the effective dedication of museums (work and expenditure) is polarised. In the case of the Hunt Museum, we found greater consistency, as they did not allocate resources to the governance dimension, which is the least valued and preferred by demand and supply, although these actions are carried out with volunteers. In the case of the Tessuto Museum, its investment (almost 60% in governance) is not aligned with the preferences declared by the demand (creative co-production dimension) and supply of the museum. The Maritime Museum displays balanced behaviour in the social and creative co-production dimensions (consistent preferences and institutional dedication), although we found divergence in the technological and, particularly, co-governance dimensions, which is where the main current effort focuses.
- This research will be complemented by the ongoing enquiry, which comprises building a synthetic indicator of effectiveness of the participatory living labs in the context of the museum ecosystem, and carrying out a counterfactual analysis.

Bibliography

Ananda, J.; Herath, G. The use of Analytic Hierarchy Process to incorporate stakeholder preferences into regional forest planning, *Forest Policy and Economics*, 2003, *5*(1), 13-26.

Awad, J.; Jung, C. Extracting the Planning Elements for Sustainable Urban Regeneration in Dubai with AHP (Analytic Hierarchy Process), *Sustainable Cities and Society*, 2022, 76, 103496.

De Marinis, P.; Sali, G. Participatory analytic hierarchy process for resource allocation in agricultural development projects, *Evaluation and Program Planning*, 2020, *80*, 101793.

Guerriero, I.; Di Napoli, M.; Novellino, A.; Di Martire, D.; Rispoli, C.; Lee, K.; Bee, E.; Harrison, A.; Calcaterra, D. Multi-hazard susceptibility assessment using analytic hierarchy process: the Derwent Valley Mills UNESCO World Heritage Site case study (United Kingdom), *Journal of Cultural Heritage*, 2022, *55*, 339-345.

Londoño-Agudelo, J. P.; Gómez-Zapata, J. D.; Montoya-Arboleda, S.; Aguilar-Amaya, A. Un enfoque multicriterio para la evaluación económica ambiental en el sector minero colombiano. *Memorias del V Congreso Internacional de Medio Ambiente Construido y Desarrollo Sustentable – MACDES,* 2018. La Habana, Cuba.

Kamvysi, K.; Andronikidis, A.; Georgiou, A.; Gotzamani, K. A quality function deployment framework for service strategy planning, *Journal of Retailing and Consumer Services*, 2023, *73*, 103343.

Ma, H.; Li, S.; Chan, C. Analytic Hierarchy Process (AHP)-based assessment of the value of non-World Heritage Tulou: A case study of Pinghe County, Fujian Province, *Tourism Management Perspectives*, 2018, 26, 67-77.

Naziris, I.; Lagaros, N.; Papaioannou, K. Optimized fire protection of cultural heritage structures based on the analytic hierarchy process. *Journal of Building Engineering*, 2016, *8*, 292-304.

Ossadnik, W.; Shinke, S.; Kaspar, R. Group Aggregation Techniques for Analytic Hierarchy Process and Analytic Network Process: A Comparative Analysis. *Group Decis Negot*, 2015, *25*(2), 421-457.

Saaty, T. Decision making with the analytic hierarchy process, *International Journal of Services Sciences*, 2008, *1*(1), 83-98.

Saaty, T.; Vargas, L. *Models, Methods, Concepts & Applications of the Analytic Hierarchy Process*. 2012. Nueva York: Springer.

Sun, Y.; Li, Z.; Liu, Z. Usability Study of Museum Website Based on Analytic Hierarchy Process: A Case of Foshan Museum Website. In: Soares, M.M.; Rosenzweig, E.; Marcus, A. (eds), *Design, User Experience, and Usability: UX Research, Design, and Assessment*, 2022, Lecture Notes in Computer Science, 13321. Springer, Cham.

Vaidya, O.; Kumar, S. Analytic hierarchy process: An overview of applications. *European Journal of Operational Research*, 2006, *169*(1), 1-29.

Appendix

Appendix 1. Eigenvector of preferences from stakeholders on participatory options for the whole sample

Actions / Level	Global	Governance	Production	Museum Services
Consulting people on activities of their interest	5.91%	5.64%	5.99%	6.37%
Advisory board with relevant groups (artists, curators, citizens, etc.).	6.50%	5.87%	6.50%	7.50%
Multi-stakeholder engagement with decision-making power on policies & accountability	5.99%	5.81%	6.43%	5.79%
Creative experiences for local community	8.97%	8.53%	9.65%	8.85%
Facilities for emerging artists and guest curators	7.92%	8.72%	7.77%	7.72%
Permanent advisory board with creative sector agents and institutions.	5.91%	6.09%	5.89%	6.03%
Voluntary programme of social and community actions	7.80%	8.23%	7.47%	7.22%
Collective co-creation on promoting diversity, inclusion and civil engagement	11.91%	10.10%	12.05%	13.37%
Long-term social action programme addressing social challenges and well-being impact	10.83%	10.29%	10.15%	11.60%

Funded by the European Union

RE

Crowdsourcing initiatives to make available the museum's digital material	9.51%	9.42%	10.04%	8.81%
New digital cultural supply based on sensory experimentation and AI services	10.07%	11.54%	10.05%	8.82%
Permanent participatory committee on technology and innovation engagement	8.69%	9.77%	7.99%	7.93%

Appendix 2. Eigenvector of preferences from stakeholders on participatory options for the Hunt Museum (Limerick)

Actions / Level	Hunt (Limerick)	Governance	Production	Museum Services
Consulting people on activities of their interest	6.06%	4.83%	6.49%	7.16%
Advisory board with relevant groups (artists, curators, citizens, etc.).	7.73%	6.17%	10.07%	8.32%
Multi-stakeholder engagement with decision-making power on policies & accountability	4.88%	3.61%	6.81%	4.62%
Creative experiences for local community	9.45%	8.58%	9.74%	10.15%
Facilities for emerging artists and guest curators	9.67%	7.78%	11.27%	10.58%
Permanent advisory board with creative sector agents and institutions.	4.92%	4.12%	6.53%	4.53%
Voluntary programme of social and community actions	8.94%	9.88%	7.72%	8.22%
Collective co-creation on promoting diversity, inclusion and civil engagement	13.79%	14.03%	12.29%	13.65%
Long-term social action programme addressing social challenges and well-being impact	12.83%	16.71%	8.16%	13.90%

RE

Crowdsourcing initiatives to make available the museum's digital material	7.21%	6.24%	7.58%	6.83%
New digital cultural supply based on sensory experimentation and AI services	7.33%	9.58%	7.50%	5.17%
Permanent participatory committee on technology and innovation engagement	7.19%	8.47%	5.86%	6.87%

Appendix 3. Eigenvector of preferences from stakeholders on participatory options for the Tessuto Museum (Prato)

Actions / Level	Tessuto (Prato)	Governance	Production	Museum Services
Consulting people on activities of their interest	6.17%	5.53%	7.77%	5.98%
Advisory board with relevant groups (artists, curators, citizens, etc.).	6.99%	7.55%	6.03%	7.23%
Multi-stakeholder engagement with decision-making power on policies & accountability	6.60%	8.60%	6.48%	5.23%
Creative experiences for local community	9.19%	8.96%	10.25%	8.05%
Facilities for emerging artists and guest curators	5.72%	7.17%	5.77%	5.18%
Permanent advisory board with creative sector agents and institutions.	7.23%	10.19%	6.09%	6.70%
Voluntary programme of social and community actions	6.14%	6.43%	5.83%	5.57%
Collective co-creation on promoting diversity, inclusion and civil engagement	12.77%	10.34%	12.13%	14.67%
Long-term social action programme addressing social challenges and well-being impact	11.75%	10.00%	11.73%	12.40%
Crowdsourcing initiatives to make available the museum's digital material	8.78%	7.56%	9.67%	9.00%
New digital cultural supply based on sensory experimentation and AI services	9.02%	7.07%	8.55%	11.83%
Permanent participatory committee on technology and innovation engagement	9.65%	10.61%	9.70%	8.15%

Appendix 4. Eigenvector of preferences from stakeholders on participatory options for the Maritime Museum (Tallinn)

Actions / Level	Maritime (Tallinn)	Governance	Production	Museum Services
Consulting people on activities of their interest	5.16%	5.84%	3.31%	5.69%
Advisory board with relevant groups (artists, curators, citizens, etc.).	4.67%	4.05%	3.47%	6.58%
Multi-stakeholder engagement with decision-making power on policies & accountability	6.27%	5.55%	5.25%	7.93%
Creative experiences for local community	7.77%	7.25%	7.84%	8.06%
Facilities for emerging artists and guest curators	8.71%	10.11%	6.27%	8.58%
Permanent advisory board with creative sector agents and institutions.	5.38%	4.88%	4.36%	6.74%
Voluntary programme of social and community actions	8.33%	7.72%	9.11%	8.21%
Collective co-creation on promoting diversity, inclusion and civil engagement	8.84%	6.67%	10.39%	10.84%
Long-term social action programme addressing	7.76%	6.23%	10.12%	8.16%

social challenges and well-being impact				
Crowdsourcing initiatives to make available the museum's digital material	13.16%	14.34%	14.16%	10.64%
New digital cultural supply based on sensory experimentation and AI services	15.05%	18.22%	17.26%	10.15%
Permanent participatory committee on technology and innovation engagement	8.89%	9.14%	8.47%	8.42%

Appendix 5. Labour dedication in participatory actions for museums

Participatory strategy			2023 - 2024														
Dimension	**Actions**		**Hunt (Limerick)**					**Tessuto (Prato)**					**Maritime (Tallinn)**				
			Pr	Pc	Wk	Pc	Vl	Pr	Pc	Wk	Pc	Vl	Pr	Pc	Wk	Pc	Vl
Collaborative co-governance	Consulting people on activities of their interest	Gov1	0	0.0%	0	0.0%	100	2	8.7%	4	1.1%	0	3	4.7%	90	5.2%	20
	Advisory board with relevant groups (artists, curators, citizens, etc.)	Gov2	0	0.0%	0	0.0%	0	2	8.7%	4	1.1%	0	3	4.7%	48	2.8%	16
	Multi-stakeholder engagement with decision-making power on policies & accountability	Gov3	0	0.0%	0	0.0%	0	5	21.7%	200	56.5%	0	24	37.2%	488	28.0%	4
Creative co-production	Creative experiences for local community (+)	Prod1	5.5	45.8%	19.5	65.2%	37	5.5	23.9%	48	13.6%	0	5	7.8%	180	10.3%	0
	Facilities for emerging artists and guest curators	Prod2	0	0.0%	0	0.0%	0	1	4.3%	5	1.4%	0	3	4.7%	108	6.2%	0
	Permanent advisory board with creative sector agents and institutions	Prod3	4.5	37.5%	4.5	15.1%	0	0	0.0%	0	0.0%	0	5	7.8%	144	8.3%	0
Social co-innovation	Voluntary programme of social and community actions	Soc1	0	0.0%	0	0.0%	0	0	0.0%	0	0.0%	0	3	4.7%	96	5.5%	0
	Collective co-creation on promoting diversity, inclusion and civil engagement	Soc2	0	0.0%	0	0.0%	65	2	8.7%	16	4.5%	0	5	7.8%	168	9.6%	8

Dimension	Description	Code															
	Long-term social action programme addressing social challenges and well-being impact	Soc3	0	0.0%	0	0.0%	0	1	4.3%	3	0.8%	0	5	7.8%	168	9.6%	4
Technological co-innovation	Crowdsourcing initiatives to make available the museum's digital material	Tech1	0.5	4.2%	3.5	11.7%	2	1	4.3%	5	1.4%	0	3	4.7%	96	5,5%	0
	New digital cultural supply based on sensory experimentation and AI services	Tech2	1.5	12.5%	2.4	8.0%	8	3.5	15.2%	69	19.5%	0	2.5	3.9%	60	3,4%	0
	Permanent participatory committee on technology and innovation engagement	Tech3	0	0.0%	0	0.0%	0	0	0.0%	0	0.0%	0	3	4.7%	96	5,5%	0
Total			12	100%	29.9	100%	212	23	100%	354	100%	0	64.5	100%	1742	100%	52

(+) Included are the values reported by the museum in the category "Other actions in the same dimension"

Pr: Persons; Wk: Weeks; Vl: Volunteers; Pc: Percentage

Appendix 6. Expenditure in participatory dimensions for the three museums

Participatory dimensions	Hunt (Limerick)		Tessuto (Prato)		Maritime (Tallinn)	
Collaborative co-governance	0.00 €	0.0%	216,000.00 €	44.6%	14,200.00 €	20.1%
Creative co-production	122,413.60 €	66.7%	143,000.00 €	29.5%	22,500.00 €	31.9%
Social co-innovation	27,008.63 €	14.7%	60,000.00 €	12.4%	7,400.00 €	10.5%
Technological co-innovation	34,109.00 €	18.6%	65,000.00 €	13.4%	26,500.00 €	37.5%
Total	**183,531.23 €**	**100%**	**484,000.00 €**	**100%**	**70,600.00 €**	**100%**

RE

Appendix 7. Preferences structures and current effort on participatory strategies in the three museums: index numbers

Dimension	Actions / Level	Hunt Museum (Limerick)			Tessuto Museum (Prato)			Maritime Museum (Tallinn)		
		Comm	Stak	LD	Comm	Stak	LD	Comm	Stak	LD
Collaborative co-governance	Consulting people on activities of their interest	0.7%	6.1%	0.0%	4.4%	6.2%	1.1%	4.0%	5.16%	5,2%
	Advisory board with relevant groups (artists, curators, citizens, etc.)	5.7%	7.7%	0.0%	0.2%	7.0%	1.1%	4.5%	4.67%	2,8%
	Multi-stakeholder engagement with decision-making power on policies & accountability	0.2%	4.9%	0.0%	0.2%	6.6%	56.5%	2.9%	6.27%	28,0%
Creative co-production	Creative experiences for local community (+)	8.7%	9.5%	65.2%	5.4%	9.2%	13.6%	4.2%	7.77%	10,3%
	Facilities for emerging artists and guest curators	13.2%	9.7%	0.0%	10.3%	5.7%	1.4%	13.3%	8.71%	6,2%
	Permanent advisory board with creative sector agents and institutions	7.3%	4.9%	15.1%	7.9%	7.2%	0.0%	9.7%	5.38%	8,3%
Social co-innovation	Voluntary programme of social and community actions	12.3%	8.9%	0.0%	16.8%	6.1%	0.0%	10.9%	8.33%	5,5%
	Collective co-creation on promoting diversity, inclusion and civil engagement	12.2%	13.8%	0.0%	19.2%	12.8%	4.5%	8.5%	8.84%	9,6%

	Long-term social action programme addressing social challenges and well-being impact	12.1%	12.8%	0.0%	17.7%	11.7%	0.8%	15.7%	7.76%	9,6%
Technological co-innovation	Crowdsourcing initiatives to make available the museum's digital material	9.0%	7.2%	11.7%	4.2%	8.8%	1.4%	9.3%	13.16%	5,5%
	New digital cultural supply based on sensory experimentation and AI services	8.8%	7.3%	8.0%	5.7%	9.0%	19.5%	8.4%	15.05%	3,4%
	Permanent participatory committee on technology and innovation engagement	9.9%	7.2%	0.0%	8.1%	9.7%	0.0%	8.7%	8.89%	5,5%
Total		100%	100%	100%	100%	100%	100%	100%	100%	100%
(+) Included are the values reported by the museum in the category "Other actions in the same dimension"										
Comm: Community; Stak: Stakeholders; LD: Labour Dedication										

RE