HAPSc Policy Briefs Series

Vol 5, No 2 (2024)

HAPSc Policy Briefs Series

Applying Foresight Methodology in Public Governance for Sustaining Resilient Cultural Heritage Management

Ilektra Simitsi, Elpida Tzika

doi: 10.12681/hapscpbs.40820

To cite this article:

Simitsi, I., & Tzika, E. (2024). Applying Foresight Methodology in Public Governance for Sustaining Resilient Cultural Heritage Management. *HAPSc Policy Briefs Series*, *5*(2), 139–151. https://doi.org/10.12681/hapscpbs.40820

 ISSN: 2732-6578 (print version) 2732-6586 (online)

Applying Foresight Methodology in Public Governance for Sustaining Resilient Cultural Heritage Management[1]

Ilektra Simitsi[2] & Elpida Tzika[3]

Abstract

This report explores the integration of foresight methodology into public administration and governance, focusing on its application to the cultural heritage sector. Foresight, through tools such as scenario planning, trend analysis, and visioning, helps governments foresee future challenges, align policies with long-term goals, and plan resilient strategies. The methodology enhances decision-making by fostering long-term, inclusive planning and stakeholder collaboration. Particularly in the context of cultural heritage, foresight aids in addressing issues like climate change, technological advancements, and demographic shifts, ensuring sustainable and adaptive preservation of cultural assets. The report also discusses the practical application of foresight in projects like INT-ACT, which employs extended reality technologies to bridge past, present, and future cultural experiences. It is highly needed to integrate foresight into public governance and particularly in the cultural heritage sector, demonstrating its potential to create more robust, forward-thinking policies and strategies that are better equipped to handle complex, evolving global challenges.

Keywords: Foresight methodology, Public Administration, Culture, Cultural Heritage, Decision making in Culture.

Introduction

Foresight methodology does not predict the future. Though, it projects probable solutions in each given problem, taking into consideration the past knowledge, thus transforming more resilient societies. According to UNDP, foresight equips stakeholders to strengthen resilience, adaptability and long-term impact by systematically exploring, predicting and preparing for alternative futures (UNDP Foresight Manual, 2018).

Being a forward-looking methodology, is increasingly used in public administration and governance not only to foresee future challenges and opportunities but also to guide strategic decision making while engaging a variety of interested stakeholders. In order to do so, foresight uses various tools to organize the findings and to provide a clear view of the external environment. The most common one is the PESTLE (Political, Economic, Social, Technological, Legal, Environmental) analysis which systematically examines each dimension, and then helping stakeholders to identify the interrelated factors. Applications of this methodology have been wide, reaching across the public health sector,

[1] To cite this paper in APA style: Simitsi, I., & Tzika, E. (2024). Applying Foresight Methodology in Public Governance for Sustaining Resilient Cultural Heritage Management. *HAPSc Policy Briefs Series, 5*(2), 139-151. https://doi.org/10.12681/hapscpbs.40820

[2] Democritus University of Thrace, Greece.

[3] MSc in Innovation Management and Entrepreneurship, Project Manager in ITML.

especially during the recent COVID pandemic, energy and sustainability, transitioning to renewable sources and managing climate risk, and digital transformation, to manage the evolving role of technology in society. Recently, projections deriving from this methodology have been widely use in other sectors such as culture and heritage preservation, where foresight can contribute address various challenges saw as political conflicts in Syria, environmental issues as climate change, societal changes as urbanization and socio-demographic shifts, technological and legal that have to do with digital innovation.

This brief performs an analysis of the application of the foresight methodology regarding its application and usability in public administration, while it provides insights on its implementation in the cultural sector. The reason of selecting the cultural sector as a use case is because of its strong linkages with policy making, as well as because it is being challenged by safeguarding tangible and intangible heritage in rapidly changing social, economic and environmental contexts. The incorporation of foresight methodologies within the strategies of stakeholders of the culture sector enables proactive response to these complexities in a sustainable and adaptive perspective on preservation and engagement. Similarly, as Sarris, N., et al. (2024) mention in climate governance, the use of foresight methodologies in culture could employ various forms of scenario building and stakeholder collaboration to generate new solutions for the protection of heritage in the face of emerging challenges.

As a result, this publication looks at the broader remit of foresight methodology across sectors, and specifically at the potential for its use in the cultural and heritage sector. To be highlighted that the discussion is inspired by the context of the INT-ACT project[4], and of how structured approaches to envisioning the future can shape strategies and policies to deal with problems of contemporary relevance.

1. The Foresight Methodology integrated into Public Governance

Public administration and governance benefit significantly from the integration of foresight methodology into policymaking. Foresight enhances governments' ability to anticipate and address long-term challenges by embedding future-oriented thinking into decision-making processes. As proposed by the OECD (2023), applying foresight helps governments improve socio-economic conditions, align current policies with future needs, and design resilient strategies to meet emerging

[4] Acknowledgements: INT-ACT receives funding from the European Union's Horizon Europe 2023 research and innovation programme under agreement #101132719. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or REA. Neither the European Union nor the granting authority can be held responsible for them.

challenges. This methodology emphasizes generating intelligence on future trends, equipping public servants with tools for future-oriented planning, and fostering a culture of long-term thinking across governance structures.

By identifying emerging opportunities and risks, governments can align public policies with future scenarios and goals. Countries that institutionalize foresight through dedicated strategic foresight units demonstrate improved preparedness and adaptability. For instance, Nordic countries, known for their proactive anticipation strategies, managed the COVID-19 pandemic more effectively due to their robust foresight frameworks. These units play a pivotal role in advising leaders, embedding foresight insights into the policymaking process, and addressing critical areas like digital transformation and climate adaptation.

Collaboration with foresight experts and stakeholders further ensures the creation of inclusive and informed strategies. Ultimately, foresight enables public administration to improve decision-making, enhance resilience to disruptions, promote innovation, and foster consensus among diverse stakeholders, thus aligning governance with a forward-looking vision for societal progress. The foresight methodology enables stakeholders to anticipate challenges and identify opportunities, and to put in place adaptive and resilient strategies by progressing through key steps, from framing the context through monitoring and revisiting. This structured approach ensures stakeholders are able to design strategies for the long term with the help of the dynamic realities.

1.1. The seven step approach of Foresight Methodology

In order to do so it is introduced in seven (7) concrete steps, from understanding and establishing the problem statement, to building the most prominent policy and strategy, leading to its implementation, monitoring and evaluation (UNDP, 2018). Therefore, this chapter outlines the comprehensive steps that foresight methodology is applied in relation to the policy making integrated into governance.

The first step (1) of the foresight methodology deals with Framing the Context. In the beginning the foundations are set in order to define the scope, objectives and time horizon of a given thematic. This step ensures that everything is laid for the whole process, and everyone is on the same page. The primary objective of this step is to clearly articulate the purpose and goals, in order to maintain focus and relevance of efforts. For instance, foresight study of urban development may be to enhance sustainability and resilience in the next two decades by anticipating the likely impacts of demographic and environmental changes (UNDP, 2018). During this process is imperative to involve from the beginning important key stakeholders like policymakers, academics, private sector representatives and civil society representatives. By encouraging participation of a diverse set of participants in the

process, it fosters collaboration, leading to better quality of insight and shared ownership of outcomes, and thus greater chance of successful implementation (Sarris, Lovell Prescod, and Cole, 2024; UNDP, 2018).

The second step (2) deals with Scanning the Environment, thus identifying the current trends and external factors that may influence future developments. Horizon scanning is a means to identify megatrends, weak signals and uncertainties in this process, which enables stakeholders to better understand the broader context of change. These trends form the basis of scenario development and the anticipation of their possible effect on various sectors. For example, foresight exercises in education might look at how future strategies in education can be informed by trends in digital learning, as well as changes in global demographics (UNDP, 2018).

The third steps (3) fulfill the Analysis of the Trends and Drivers, thus building the future scenarios. This step is based on the identification of trends and drivers of the given issue and establish interconnections among them. At this step, stakeholders are involved to gain a better understanding of the dynamics of shaping the future. For example, the identified trend could be linked with the sudden emergence of artificial intelligence while the drivers could be the economic globalization, climate change and technological breakthroughs that play key roles in determining the path of future development. This results to implications in across public policy sectors from healthcare to transportation — automated processes, sounder decisions, new ethical challenges and workforce adaptation (Sarris, Lovell-Prescod & Cole, 2024). The comprehensive understanding of the interaction between the trends and drivers shall allow us to perform better projection in complex problems. For instance, if climate influences migration patterns, then urban infrastructure and economic growth may also be affected. A valuable approach to map these interdependencies is through systems thinking, in a way to better understand and measure clearly the impact on the interplay of dynamics in different domains (e.g. how driver one can cascade through all domains) (EIPA, 2024).

The next stage (4) in foresight methodology is to build on the analysis of trends and drivers to explore scenarios, plausible representations of alternative futures. This can be potentially one of the most interesting approaches of the method since it enables stakeholders to think through alternative pathways and to plan for different possibilities. Several methods can be used to construct possible combinations of identified factors into a complete set of scenarios, while gathering experts' opinion (i.e. the Delphi technique, the morphological analysis) each with its strengths according to the context and objectives (Sarris et al., 2024; UNDP, 2018). At this stage the application is governance is critical as it allows policymakers to try out strategies in response to different potential futures and how to be

prepared. As an example, scenarios of economic downturns can be developed to formulate resilient economic policies to address short- and long-term economic impacts. For instance, such scenarios can provide policymakers with insight into potential paths for economic recovery or developing policies that reinforce systemic resilience against future shocks (EIPA, 2024).

Having finished exploring several scenarios, the next step (5) in foresight methodology is to assess these scenarios to find the preferred futures and develop the strategic pathways to get there. This enables to make sure that the process of foresight leads to actionable and impactful outputs. Prioritization is dependent on which scenario is most desirable and feasible, and how those scenarios match long term goals. This evaluation is often reined in by criteria such as sustainability, equity, and economic viability. For instance, adoption of renewable energy may be preferred among scenarios on the basis of its capacity to deal with climate issues and promote sustainable economic development (UNDP, 2018). After identifying preferred scenarios, strategies are formulated that are both robust and adaptive. Actionable plans that will aid to achieve intended outcomes are translated out of these insights from the foresight. An example of a strategic response to the scenario of increasing fossil fuel scarcity is the integration of renewable energy adoption into national energy policies in order to assure long term energy security and environmental sustainability (Sarris, Lovell Prescod, & Cole, 2024).

Foresight's goal is to inform the decision makers to take tangible actions. At this stage (6) the understanding gained through the foresight process is translated into user tangible strategies, policies and programs to address challenges and opportunities identified. The most impactful foresight findings are those that consider how they can be embedded in policy frameworks, making strategies future oriented and resilient in the face of uncertainty. Foresight findings can be used to design targeted initiatives to confront challenge or take advantage of upcoming opportunities. For instance, foresight insights into workforce trends would be essential to motivating educational programs to develop skills for workers of the future in the event of technological advancement. Some examples of training programs could be artificial intelligence, digital literacy, and other emerging fields (UNDP, 2018).

Foresight is not a one-off exercise, but an ongoing iterative process that needs to be, adaptable, continually updated and revised to stay relevant in an ever-changing environment (7). Foresight methodologies can stay dynamic and future oriented through their embedding of adaptability and feedback mechanisms. Foresight work is only as useful as it is regularly revisited and revised to ensure strategies stay aligned with changing circumstances and new information. This iterative approach allows stakeholders to alter their plans and actions as trends, uncertainties and drivers of

change. In this way, foresight strategies should be revised responding to the changing technological goals and global crises which can strengthen their significance and effect (Sarris, Lovell-Prescod, & Cole 2024). Continuous improvement requires the setting up of systems for monitoring outcomes, and feedback gathering. These mechanisms also provide insight to the effectiveness of foresight-informed policies and initiatives and the opportunity to adjust and refine.

1.2. The Foresight Methodology Common Tools and Techniques

This chapter builds on the structured approach described in Chapter 1 to explore the core tools and techniques that are part of the Foresight methodology. Using these methods, as Delphi, Scenario Planning, Trend Analysis, Visioning, and Backcasting, is a practical way to apply Foresight, allow stakeholders to navigate uncertainty, anticipate change and design robust strategies, while enabling them not only to maintain the past, but also to help create future policies for resilient societies.

The Delphi Method is a structured method for obtaining information from experts via multiple rounds of surveys. It identifies expert driven solutions in areas such as energy policy (Tapio 2002) and public sector innovation (Landeta, 2006). For example, it could guide cultural heritage strategies by combining insights from climate science and urban planning.

Scenario planning develops narratives around alternative futures that are based on combinations of trends, uncertainties and key drivers identified in earlier steps of the foresight process. It empowers decision makers to test strategies against the resilience to different possible futures as noted in sustainability studies (Van Notten et al. 2003) and urban planning (Börjeson et al. 2006). For instance, applied to cultural heritage in terms of planning different paths for heritage preservation, may adapt to climate induced risks or by exploiting digital innovation to increase heritage engagement.

Trend analysis, a method widely used (OECD, 2019) is the study of collected historical data, in order to project future developments. This method identifies patterns and extrapolates them to provide insights into the possible (future) trajectories of change. The benefit of this technique is that decisions are being made based on data and are backed by observable trends.

Visioning is a process where stakeholders can align their efforts towards common goals by articulating aspirational outcomes. In the cultural heritage sector visioning may be imagining of a world in which digital tools democratize access to heritage sites (Conway, 2009).

Finally, another commonly used method is Backcasting that beginning with a desired future and works in reverse to identify required actions. Whereas forecasting is the act of projecting trends forward, backcasting looks at the actions necessary to achieve a given goal. As such, this technique is particularly useful for addressing complex, long term challenges as it is based on purposeful and

strategic planning (Robinson, 1990). For instance, backcasting in cultural heritage preservation could start with the vision of carbon neutral heritage sites it can guide heritage preservation efforts toward carbon neutrality, aligning policy and technological steps with sustainable goals (European Commission, 2022).

2. Public Governance, Foresight and its application in Cultural Heritage Sector

The integration of foresight methodology into public governance has particular relevance for the culture and heritage sector, where long-term planning is essential to preserving and adapting cultural assets to evolving societal and environmental contexts. In this sector, foresight can identify emerging trends such as the impact of climate change on heritage sites, advancements in digital technology for cultural preservation, and shifting societal interests in cultural tourism. By embedding foresight within the policy/decision making, stakeholders in the culture and heritage domain can develop resilient strategies that balance preservation with modernization, ensuring cultural relevance for future generations.

For example, scenario planning allows stakeholders to anticipate potential climate-induced risks to heritage sites or explore opportunities to use augmented reality to enhance public engagement with historical artifacts. Similarly, backcasting techniques can map the steps needed to achieve carbon-neutral heritage conservation practices. Engaging diverse stakeholders, including policymakers, cultural institutions, technologists, and local communities, fosters collaborative solutions that reflect the sector's multidimensional challenges. This integration ensures that culture and heritage policies are aligned with future societal priorities, promoting sustainable development while safeguarding historical and cultural identity.

The application of the foresight methodology to the cultural heritage is vital in the INT-ACT project since it shall play a critical role in anticipating future societal challenges and designing policies that can adapt to the aforementioned uncertainties, thus linking the knowledge of the past, the present challenges to future perspectives. In the context of culture and heritage, foresight seeks to allow public administrations to plan for potential changes such as the effects of cultural tourism, ageing societies, disappearing communities and immigration and multiculturalism[5]. These shifts can deeply affect cultural and heritage institutions, requiring forward-thinking approaches to preserve both tangible and intangible cultural assets. By leveraging foresight, public administrations can develop strategies that are resilient, sustainable, and inclusive, ensuring that cultural heritage remains a dynamic and relevant resource for future generations.

[5] For further information you can visit the INT-ACT project website at https://int-act.aalto.fi/index.html.

The INT-ACT project, funded under the Horizon Europe program, is a key example of how foresight methodology can be applied to the cultural sector. Focused on "Intangible Cultural Heritage: Bridging the Past, Present, and Future," the project aims to preserve and reinterpret cultural heritage using immersive XR (extended reality) technologies. These technologies connect historical narratives with modern experiences, providing innovative ways to engage contemporary audiences. By linking foresight with the project's objectives, INT-ACT not only addresses the preservation of heritage but also incorporates future-oriented strategies. Scenario building, stakeholder engagement, and cultural sustainability are integral elements of the project's approach. For example, its use of XR environments allows users to explore different scenarios of cultural evolution, while the project fosters collaboration between local communities, academics, and policymakers to create sustainable cultural strategies. This participatory, foresight-driven methodology ensures that cultural heritage remains adaptable and relevant in a rapidly changing world.

3. PESTLE analysis and policy recommendations in the Cultural Heritage Sector

The various influences that foresight can bring to cultural heritage can be obtained through a PESTLE analysis that presents the Political, Environmental, Societal, Technological, Legal and Economic framework at the given time (Heritage et al., 2023). PESTLE seeks to offer insights into the challenges and opportunities that lie ahead for culture and heritage management, while allows for the creation of policy recommendations that make societies more sustainable, equal and thus, resilient (European Commission, n.d.).

3.1. Political framework

The shifting dynamics of global power are evident within the Political framework. Emerging economies, such as China, are anticipated to surpass developed nations, leading to a realignment of geopolitical alliances. In the worst-case scenario, this could exacerbate tensions and conflicts. This paradigm has been evident in regions like the Middle East and Syria, where cultural heritage monuments have been destroyed amid instability caused by prolonged conflicts (IMF, 2024). As countries engage more intensely in the politics of heritage as a tool of soft power, the role of cultural heritage in international relations will become increasingly significant. The politicization of heritage may also provoke demands for greater representation from marginalized communities, necessitating a rights-based approach to heritage management (Heritage et al., 2023, p21). Political recommendations shall be in line with approached linked with cultural rights, empowering marginalized and oppressed communities. This includes encouraging for greater representation and participation of these groups in heritage decision-making processes. In addition, it is essential to move

further from the Eurocentric approach, acknowledge and showcase the significance of diverse cultural knowledge systems and perspectives (IntechOpen, (2022).

3.2. Environmental framework

In the discourse of the impact on cultural heritage, a considerable indicator is the environmental considerations, as the effect of climate change. It is an urgent need for the heritage sector to demonstrate environmental responsibility and reduce its carbon footprint (EPRS, (2024). As climate change exacerbates extreme weather events, such as rising temperatures or sea levels, cultural organizations will face pressure to adopt sustainable practices. A key point is also the convergence of natural and cultural heritage, indicating that a holistic approach to conservation is essential. It is also necessary to engage young people, to make them more aware of culture as a whole, in order to change the social perception of man's relationship with nature and history, further influencing heritage practices (Lai et al, 2019). Taking the above into consideration it is prominent that culture maintains a great role on environmental sustainability efforts. This includes reducing negative impacts on the environment, encouraging the renovation and new use of heritage sites and integrating climate change adaptation strategies into heritage management. At the same time, the need to build partnerships with indigenous communities to address the interaction of natural and cultural heritage, enhancing the resilience of communities to climate challenges needs to be emphasized (UNESCO, 2023).

3.3. Societal framework

Social trends show a significant change in demographic and cultural dynamics. Transnational migration is expected to increase due to the climate crisis and political conflicts, leading to the creation of larger diasporic communities. This migration is linked to historical legacies of colonization, which will challenge traditional notions of heritage. The ageing population in many regions will also require new approaches to heritage engagement as cultural institutions adapt to the needs of diverse and evolving communities. The report highlights the importance of inclusion and representation in heritage practices, emphasizing the need for grassroots initiatives that empower the voices of marginalized groups (World Bank, 2023). Recommendations regarding the societal perspective are advocating towards a more inclusive governance that integrate diverse opinions and insights in cultural related strategies. In addition, the involvement of grassroots organizations and initiatives, community-based actions to empower local populations, to allow them to narrate their own heritage stories, may foster social cohesion and enhance the sense of identity and belonging (Heritage et al., 2023: 25).

3.4. Technological framework

Technological developments are redefining the landscape of cultural heritage management. In this context, the potential of digital tools and technologies to enhance the conservation and enhancement of cultural heritage, as well as public participation, is discussed. Innovations in artificial intelligence and data analysis can facilitate the improvement of documentation, conservation and accessibility of cultural heritage. However, rapid advances in technology also bring challenges, as cultural organizations need to address issues related to digital equity and the preservation of intangible cultural heritage. Integrating technology into cultural heritage practices requires new skills and training for professionals in the field (Maietti, F., 2023). Amongst the most important recommendation is the adoption of new technological tools for heritage conservation and management, while also including deepening the digitization processes in a common EU cloud. Though, in a rapidly evolving digital society, cybersecurity is also critical for the protection and preservation of cultural data (e. i. digitization in the cloud) (Saeed et al, 2023). Finally, engaging the public and relevant stakeholders in a more accessible form of culture ensures that technological developments are aligned with public values and community needs.

3.5. Legal framework

The legal dimension of cultural heritage conservation is becoming increasingly important as it is linked to issues of rights and ownership. The new needs arising from decolonization and restoration processes require the creation of clear legal frameworks to ensure the protection of heritage. In particular, the recognition of the rights of indigenous and marginalized communities to manage and represent their cultural heritage must be incorporated into a more just and equitable legal framework (Kania, 2019).

3.6. Economic framework

Economic parameters are crucial to understanding the sustainability of heritage initiatives. Increasing inequalities and the potential collapse of markets may reduce funding for heritage conservation. As governments prioritize other sectors during economic crises, heritage institutions may find it difficult to secure funding. The heritage sector needs to demonstrate its socio-economic value to justify investment and support (Heritage et al., 2023). In addition, the need for innovative financing models is urgent to enhance social welfare and reduce inequalities. Re-using cultural resources and developing partnerships with the private sector are also strategies for securing sustainable financial resources for cultural heritage conservation.

Conclusions

The foresight methodology offers many benefits for public administration and governance, as it allows for proactive policy formulation rather than simply reacting to crises. By focusing on long-term planning, foresight helps governments to anticipate future challenges and design policies based on robust, future-oriented data. This proactive approach leads to better informed and resilient policy making, which is essential for addressing complex societal issues. Foresight also promotes inclusiveness by engaging different stakeholders in co-creation of future visions, ensuring that policies reflect a wide range of perspectives and are more likely to gain public support. In addition, foresight enhances policy coherence by aligning long-term strategies across different sectors and levels of government, ensuring consistency and synergy in the implementation of public policies (OECD, 2023).

However, there are several challenges and factors that need to be taken into account when integrating foresight into public governance. First, the uncertainty of the future makes it difficult to accurately forecast, requiring flexibility in planning and readiness to adapt strategies as new information emerges. Second, effective engagement of all relevant stakeholders can be difficult, requiring effective communication and collaboration between different groups. Third, the complexity of analyzing interconnected systems and trends requires specialized expertise and resources that are not always available. Finally, institutional resistance, particularly in the face of short-term political pressures, can undermine foresight efforts, making it difficult to maintain commitment to future-oriented strategies (Sarris, Lovell-Prescod & Cole, 2024).

Despite these challenges, the benefits of foresight in creating sustainable and adaptive policies go beyond the obstacles. By integrating foresight into governance structures, governments can ensure that their policies are better prepared for future uncertainties and aligned with long-term goals. This not only enhances the resilience of public systems, but also helps to build a more inclusive and innovative society capable of responding to evolving global challenges. Integrating foresight methodology into the decision-making process is therefore essential for governments wishing to navigate an increasingly complex and unpredictable world.

References

Börjeson, L., Höjer, M., Dreborg, K. H., Ekvall, T., & Finnveden, G. (2006). Scenario types and techniques: towards a user's guide. *Futures*, 38(7), 723-739.

Conway, M. (2009). An overview of visioning approaches. *Foresight International*. https://www.researchgate.net/publication/242707360_Scenario_Planning_An_Innovative_Approach_to_Strategy_Development

European Commission. (2022). *Strategic Foresight Report 2022*. Publications Office of the European Union. Available at: https://commission.europa.eu/strategy-and-policy/strategic-foresight/2022-strategic-foresight-report_en (Accessed: 15/11/2024).

European Commission. (n.d.). Sustainability and cultural heritage. Culture and Creativity. Available at: https://culture.ec.europa.eu/cultural-heritage/cultural-heritage-in-eu-policies/sustainability-and-cultural-heritage (Accessed: 10/12/2024).

European Parliamentary Research Service (EPRS). (2024). Cultural heritage and sustainable development: The EU framework and challenges (EPRS Briefing No. 762282). European Parliament. Available at: https://www.europarl.europa.eu/RegData/etudes/BRIE/2024/762282/EPRS_BRI(2024)762282_EN.pdf (Accessed: 10/12/2024).

Heritage, A., Iwasaki, A., & Wollentz, G. (2023). Anticipating futures for heritage. ICCROM. Available at: https://www.iccrom.org/publication/anticipating-futures-heritage (Accessed: 11/11/2024).

Glenn, J. C., & Gordon, T. J. (Eds.). (2009). *Futures Research Methodology* (Version 3.0). The Millennium Project.

IntechOpen. (2022). Cultural heritage and sustainability: A critical perspective. In: Alves C. G. A. (Ed.), *Advances in cultural heritage*. IntechOpen, pp. 1-22.

International Monetary Fund. (2024). Central Banks Casting a Global Financial Safety Net: What Drives the Supply of Bilateral Swaps? *IMF Working Paper* No. WP/24/88. Available at: https://www.imf.org/-/media/Files/Publications/WP/2024/English/wpiea2024076-print-pdf.ashx (Accessed: 15/12/2024).

Kania, M. (2019). Indigenous peoples' rights and cultural heritage: Threats and challenges for a new model of heritage policy. *Latinoamérica. Revista de Estudios Latinoamericanos*, 121, 10-22201/cialc.24486914e.2019.68.57064.

Lai, H., Wei, W., & Li, Q. (2019). Impact of climate change on the preservation of cultural heritage. National Library of Medicine, *PubMed Central*. Available at: https://pmc.ncbi.nlm.nih.gov/articles/PMC7157616/ (Accessed: 15/12/2024).

Landeta, J. (2006). Current validity of the Delphi method in social sciences. *Technological Forecasting and Social Change*, 73(5), S0040162505001381 .

Maietti, F. (2023). Heritage enhancement through digital tools for sustainable fruition—A conceptual framework. *Sustainability*, 15(11), 11799.

Martino, J. P. (1993). *Technological forecasting for decision making* (3rd ed.). McGraw-Hill.

OECD. (2019). *Trends shaping education*. Paris: OECD Publishing.

Robinson, J. B. (1990). Futures under glass: a recipe for people who hate to predict. *Futures*, 22(8), 820-842.

Saeed, S., Altamimi, S., Alkayyal, N., Alshehri, E., & Alabbad, D. (2023). Digital transformation and cybersecurity challenges for business resilience: Issues and recommendations. *Sensors*, 23(15), 6666.

Sarris, N., Lovell-Prescod, M., & Cole, G. (2024). Navigating strategic foresight in public administrations: The do's and don'ts. European Institute of Public Administration (EIPA). Available at: https://www.eipa.eu/blog/navigating-strategic-foresight-in-public-administrations-the-dos-and-donts/ (Accessed: 25/11/2024).

Tapio, P. (2003). Disaggregative policy Delphi: Using cluster analysis as a tool for systematic scenario formation. *Technological forecasting and social change*, 70(1), 83-101.

UNESCO World Heritage Centre. (2023). The UNESCO Recommendation on the Protection and Promotion of Museums and Collections, their Diversity and their Role in Society. Available at: https://whc.unesco.org/document/203725 (Accessed: 15/12/2024).

United Nations Development Programme. (2018). Foresight manual: Empowered futures for the 2030 agenda. UNDP. Available at: https://www.undp.org/sites/g/files/zskgke326/files/publications/UNDP_ForesightManual_2018.pdf (Accessed: 11/11/2024).

Van Notten, P. W., Rotmans, J., Van Asselt, M. B., & Rothman, D. S. (2003). An updated scenario typology. *Futures*, 35(5), 423-443.

World Bank. (2023, December 11). Global migration in the 21st century: Navigating the impact of climate change, conflict, and demographic shifts. World Bank. Available at: https://www.worldbank.org/en/news/feature/2023/12/11/global-migration-in-the-21st-century-navigating-the-impact-of-climate-change-conflict-and-demographic-shifts (Accessed: 11/11/2024).