



Project Details

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Glossary and Abbreviations

Cultural and creative industries	ссі
Cultural and creative clusters	ссс
Intellectual Property	IP



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EXECUTIVE SUMMARY

This deliverable D3.1 - Analysis grid and interview script provides the comparative dimensions for analyzing the spatial organization and clustering dynamics of the video game industry across Europe, with a particular focus on local and regional clusters located outside major urban centers. This report supports the **GAME-ER** project's objectives by presenting a thorough account of:

- 1. The core objectives and functionalities of the **GAME-ER** methodological tool, designed to analyse and map cluster activities.
- 2. The structured design and development process of this tool, supported by in-depth interviews with key stakeholders, which reveal critical insights into the industry's clustering dynamics.
- 3. An analysis grid that organizes the core dimensions of cluster interactions, accompanied by guidelines and interview protocols to facilitate its effective application.

The report is structured to provide a clear and progressive understanding of the **GAME-ER** methodological framework. The first section outlines the aims and objectives of the analysis grid and details its primary functions within the broader research framework. Subsequent sections describe the phases of the grid's design and the rationale behind the selected dimensions, offering a breakdown of each component and its relevance to clustering analysis. The final section includes guidelines for deploying the analysis grid, ensuring its replicability for examining similar clusters in varied geographic and national contexts.

Additionally, this document captures the status of the consolidated analysis grid at month M8, providing a snapshot of its current application and readiness for broader field studies. By consolidating these resources, deliverable D3.1 positions the GAME-ER methodological tool as a valuable framework for understanding and comparing video game industry clusters across Europe.



1. INTRODUCTION

1.1. Project Overview

The Gaming Clusters Across Multiple European Regions (GAME-ER) project aims to explore the emergence, development, and sustainability of video game clusters, with a specific focus on local and regional clusters. The project will develop a comprehensive Interactive Methodological Toolkit, featuring policy and practical recommendations designed to assist local and national policymakers in establishing or enhancing Cultural and Creative Industries (CCIs) clusters within their regions or cities. Existing research often focuses on clusters outside Europe or within major metropolitan areas like Helsinki or Hamburg. However, GAME-ER addresses a critical gap by studying the dynamics of smaller, regional clusters, which play a significant role in driving innovation, growth, and regional cohesion. The project's core component involves a comparative analysis of six clusters in five European countries—France, the Czech Republic, Italy, Scotland, and Portugal. These clusters were chosen for their diverse levels of maturity and unique characteristics, including concentrations of creative talent and companies. In addition to this comparative study, GAME-ER will conduct a Europe-wide analysis of the spatial organization of the video games industry, specifically focusing on local and regional ecosystems. This research, conducted in collaboration with policymakers and industry stakeholders, will guide the formulation of actionable recommendations using a participatory approach. GAME-ER brings together 15 partners from 9 countries, encompassing expertise in social sciences, humanities, policymaking, business, and innovation.

1.2. Deliverable Objectives

The aim of this deliverable, D3.1, is to establish a comprehensive comparative analysis framework for the **GAME-ER** project, focusing on the spatial organization and clustering dynamics of the video game industry across Europe. This framework will provide the necessary dimensions to systematically analyse industry clusters, particularly those located outside major urban centres, and will enable the project to draw meaningful insights on regional dynamics. Designed to be adaptable, the framework will be refined throughout the project's duration, serving as a collaborative resource for consortium partners to apply and revise based on evolving data and insights. In addition, this deliverable aims to:

- Develop guidelines to standardize the methodological approach across diverse regional clusters, ensuring consistency and comparability in data collection and analysis.
- Equip stakeholders with tools to identify and assess key factors influencing the development and sustainability of video game clusters, such as local collaboration networks, resource pooling, and innovation ecosystems.
- Facilitate the use of the analysis grid as a replicable tool for studying video game industry clusters in varied geographic and national contexts, supporting broader applications beyond the scope of this project.



1.3. Cluster Definition

As defined by Porter¹, Clusters are "geographic concentrations of interconnected companies, specialised suppliers, service providers, firms in related industries, and associated institutions (e.g., universities, standards agencies, trade associations) in a particular field that compete but also cooperate.". Beyond Porter's definition which makes it clear that there is a variety of institutional actors that can play a significant role in a cluster, an important bulk of literature on these local agglomerations of organizational actors recognizes that the sociological aspects related to the preexisting social milieu and the synergic relations across local actors play a significant role in the economic development and should remain a key insight for researching regional/local clusters in the Cultural and Creative Industries (CCIs).

Investigating local clusters in the video games industry and answering the above research question involves unraveling **three key aspects**:

- ☑ Understand how the European video game ecosystem is deeply coupled with local and regional innovative clusters which possess specific traits by investigating the local dynamics and characteristics of cluster formation and maintenance.
- ✓ Understand how local dynamics and the innovation and growth processes enacted locally contribute to unlock the innovative capacities of the European communities and regions and impact the large context through e.g., the capacity to compete at an international level or to attract talent.
- Reproduce sound knowledge, grounded in strong empirical evidence, about key ingredients (resources and processes), challenges and issues, and ultimately solutions and granular recommendations that can be used by policy and decision-makers to bootstrap new CCIs clusters or facilitate the sustainability of existing ones.

Methodologically, these key aspects require different precautions and prerequisites as well as a sound approach during the design and appliance of the methodological tools. Moreover, the GAME-ER project involves investigating 6 heterogeneous clusters in 5 different countries. A key component of the project will be delivering comparative research focusing on the following six local/regional clusters: Turin Cluster (around Officine Grandi Riparazioni in Turin, in the Piedmont Region in Italy), Lyon Cluster (in the Auvergne-Rhône-Alpes Region in France) and Bordeaux Cluster (in the Nouvelle-Aquitaine Region in France), Dundee Cluster (in the North-east of Scotland, UK), Brno (in the South Moravian Region in Czechia), and Fundão Cluster (the seat of an essentially small Municipality in Portugal). While this heterogeneity (in size, stage of lifecycle, process of emergence, governance instance, among others) guarantees the depth of the comprehensive analysis and the reliability and validity of the results, it requires a number of adjustments to be made during data collection and the design of data analysis tools.

D3.1 – ANALYSIS GRID AND INTERVIEW SCRIPT

¹ Porter, M. (2000). Location, competition, and economic development: Local clusters in a global economy. *Ec. Dev. Quarterly*, 14(1),15-34.



Among other actions it is required to:

- ✓ **Conduct systematic literature reviews and meta-analyses** to synthesize existing knowledge and ground the different methodological tools in the literature review.
- Mobilize robust qualitative and quantitative methods of data collection to help the investigation of the local dynamics and characteristics of cluster formation and maintenance. This includes conducting in-depth case studies and interviews with key stakeholders and deploying surveys to gather detailed information about the specific traits of the studied clusters.
- Employ mixed method approaches to capture both the breadth and depth of data and use the relevant approach to map cluster locations and analyze spatial data alongside qualitative insights from stakeholders.
- ☑ **Identify key indicators of innovation capacity and growth** that can be consistently measured across different regions.
- ✓ **Undertake longitudinal studies that track changes over time** to highlight how local dynamics and innovation processes contribute to regional and international competitiveness.
- Adopt a comprehensive approach to data collection and validation to produce reliable knowledge that is empirically grounded. This includes identifying key resources, processes, challenges, and issues that affect cluster sustainability.
- Adopt a comparative approach which involves putting into light the consistent components throughout the different case studies that will ultimately allow the elaboration of the main typologies, toolkits and recommendations destined to policy and decision makers.

To address these conceptual and methodological issues and challenges, the project relies on an analytical grid which serves as the main analytical tool mobilized throughout the different stages of the project. It also relies on several interview scripts tailored to the specificities of each cluster. Indeed, whereas the analytical grid is a unified and common tool destined to allow regularity and consistency during the data collection and analysis for the sake of cross-comparison, the interview scripts are specific to each cluster. Thus, to capture the specificities and diversity of each cluster, each research team created their own interview script based on the grid and the detailed interview script template provided in this report.

This deliverable reports the various stages and the status of the consolidated analytical grid in month M8. It details the aims and objectives of the grid and its design process before presenting its different components. In addition, the document highlights how the grid and the interview transcripts stemming from it are grounded in the knowledge base provided by WP2. The report also includes different guidelines to use the grid, thus facilitating its replication and mobilization for the study of other clusters in other geographical and national contexts.



2. OBJECTIVES OF THE ANALYTICAL GRID

Methodologically, the design and adjustments of the analytical grid and the interview transcript are designed to reach the following objectives and goals.

Supporting the articulation of the flows of different Work Packages in the Game-ER project

- The analytical grid and the interview transcripts stemming from it complement the analysis of the literature review elaborated for **T 2.1** State of the art on Video game Industry as a CCIs in the EU.
- The grid allows the assessment, discussion and evaluation of the interim results of WP2,
 WP4 and WP5 and their integration into a cross-case analysis.
- The grid allows the collection of the relevant needed material for each studied cluster to answer different research questions.

Selecting and designing different dimensions striving for exhaustivity and efficiency

- The grid covers all the determined relevant dimensions while allowing the emergence of new dimensions.
- The grid covers different dimensions as well as the inter-links and causal effects between these dimensions and their constitutive variables, thus enabling the investigation of the explicative mechanisms behind the observed phenomena within each cluster.
- The grid covers static as well as longitudinal aspects facilitating the investigation of the different components of each cluster as well as their evolutionary dynamics.

Becoming the major tool for data analysis

- It allows an abductive approach and multi-dimensional categorization of the collected data (both secondary and primary data).
- It facilitates the thematic analysis of the collected data while providing a sufficiently granular level of investigation.
- It facilitates breaking down preexisting theoretical notions of specific phenomena (e.g., video game clusters) and making connections with the empirical material.
- It supports the media-historiographical method adopted in this project by facilitating the analysis of secondary data and natural reports, as well as primary data collected specifically for the GAME-ER project (data gathering on the historical trajectories of clusters through desk research in archives and repositories and its integration with the knowledge base developed through interviews).
- It is an easy-to-handle tool for the different researching teams serving as a methodological toolkit.



Facilitating comparative work

- It helps to identify essential components and elements across each case and facilitates comparative work by allowing the researchers to compare patterns, similarities or differences and make clear connections across the cases. Thus, researchers can capitalize on the different similarities and alignments between case studies while considering singular or perplexing distinct findings.
- It ensures the fluidity and validity of the cross-case comparisons and the construction of typologies and too that are empirically grounded in the different case studies.

3. THE DESIGN PROCESS OF THE ANALYTICAL GRID AND INTERVIEW TRANSCRIPT

To meet the various objectives detailed above and adopt an abductive approach, the design of the analytical grid followed a consultative and an iterative process grounded in literature review as well as the different feedback of the research teams. A first version of the grid was elaborated based on the insights provided by the researchers involved in the project. A first coarse-grained interview transcript that would help the exploratory interviews was also formulated. This transcript served as a template upon which each team could develop a transcript tailored to the specificities of the cluster they are investigating.

The two tools were shared with the partners to ensure that they collectively agree on the different dimensions to be considered in the cluster studies. Their comments and suggestions, collected by mail but also during the regular meetings of the teams, allowed some adjustments and the elaboration of a consolidated and refined analytical grid. The feedback comprised only minor changes as each team only began their interviews and were at an early exploratory stage. It is the same for the semi-structured interview scripts.

The two consolidated tools were communicated to the teams to support the continuous flow of data collection and the in-depth interviews. As the team leading the conception of the grid is also in charge of collecting data about two clusters, this facilitated the process of elaboration and testing of the grid. **Figure 1** details this process:



Collecting the contributions of the different consortium · Collecting feedback from the members as they members and discussing their inputs and insights progress through the initial exploratory interviews Designing the initial drafts of the analysis grid & • Collecting the inputs of the literature review **Activities** interview transcript Discussing and enriching the first drafts Managing of interfaces with other WPs (mainly WP2, Consolidating the grid & interview transcript $\overline{}$ V Consolidated analysis grid **Outputs &** Initial draft of Consolidated Initial draft of interview transcript deliverables the Analysis the interview Grid transcript 1st report on Methodological

Figure 1: The process of design of the Analytical Grid and Interview Transcript

It is noteworthy that the consolidated grid detailed in this report was designed to be the largest possible. The report depicts its components until **M8**. Thus, the grid and its accompanying interview transcripts can evolve according to further feedback from the fieldwork, for instance, to include new additional dimensions, to drop dimensions that were not dealt with through the interviews or that are not relevant in the studied cluster. It is expected that it can be consolidated further, after **M8**, notably during the facilitation meetings and reports on the progress of the different case studies.

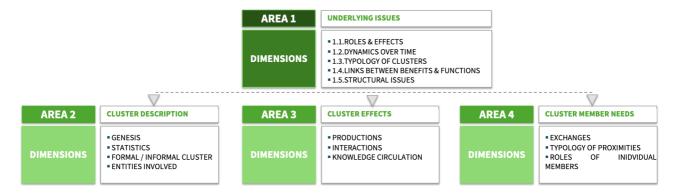
4. THE STRUCTURE AND COMPONENTS OF THE ANALYTICAL GRID

The grid is decomposed into four major areas that are **mutually exclusive** yet, together, ensure an **exhaustive coverage** of the different areas of investigation set by the project's research objectives. These 4 high levels 'Areas' each covers several analytical dimensions of investigation which relate directly to the main aspects mentioned in the project's initial objectives. These aspects include: **the history of the cluster, its specialization, its geographical scales, its organization and governance, its roles and effects, and the interactions with other elements of the territory of the cluster.** The dimensions involved in the analytical grid cover also the issue of viable **alternative forms to clustering**. Thus, the initial set of dimensions was complemented and adjusted to include other dimensions that emerged from the literature review.

To ensure the maximum coverage of the different observed phenomena, the various dimensions have been broken down into axes which, each, covers several questions that can be mobilized directly during the interviews. Each axis can cover variables or causal links between variables, thus enabling the different research teams to cover comprehensive objectives and/or static elements, as well as dealing with dynamic phenomena and answering explanatory objectives and 'why' questions. Figure 2 details the structure of the analytical grid and articulations between its components.



Figure 2: The components and structure of the Analytical Grid



4.1 Area 1: Underlying Issues

As Area1 has a special status and covers the overarching problems that the other 3 areas should address, there are important links between the dimensions covered in this area and the dimensions involved in the remaining areas. However, these links exclude any redundancies between these areas and their dimensions. The researchers will pay attention to this aspect and avoid any overlapping between the dimensions and thematic categories that will emerge during the coding of data that will follow the use of this analytical grid.

4.1.1. Dimension 1.1 - Respective roles and effects of the cluster

This dimension seeks to grasp the different roles that may be played by the cluster and how they shape the effects of the cluster. The notion of cluster refers, on the one hand, to the geographical grouping of different players, in the manner of industrial districts (e.g. in Italy), and, on the other hand, to the organizations that lead and bring together these different players. In the first case, we speak of a cluster as a geographical network; in the second, the cluster is apprehended as an institution. This distinction is important since it is an important indicator of the stage of collaboration reached by the cluster members and the kind of dynamics and roles that will prevail within the cluster. This distinction also implies that when investigating the effects and roles of any cluster, and particularly CCC, it is necessary to understand separately what comes under the heading of rapprochement and organic networking from what comes under the heading of facilitation work carried out by an institution.

Understanding the overall roles of a cluster boils down to comparing and contrasting the effects of the cluster as an institution vs the cluster as an active network of close players. To grasp the respective roles and effects of a cluster, understand its dual nature (cluster as an institution or as an active network of close players) and delve into how these roles interact and complement each other it is necessary to answer the following questions:

What is the impact of the cluster's institutional framework (if it exists) on the intensity and form of collaborations among its members? This entails another question:



- What are the main features (intensity and form) of the collaboration between the cluster's members?
- ✓ How formalized structures and governance mechanisms within the cluster facilitate or hinder collaboration dynamics? In particular, what is the role of leadership, policies, and resources in shaping collaborative efforts? This question entails another investigation:
 - What are the specific governance mechanisms mobilized within the cluster?
- ✓ How do institutional frameworks set norms, standards, and goals, while allowing network dynamics to foster creativity, innovation, and knowledge exchange? This principal question requires investigating:
 - What are the hierarchical structure and the informal networks that contribute to the cluster's functioning?
 - What are the tensions between formal regulations and informal interactions within the cluster?
 - How these formal and informal components and their tension influence the cluster's functioning?

4.1.2. Dimension 1.2 – Cluster dynamics over time

This dimension will help tracing the evolution of cluster dynamics over time and to identify their adaptation strategies and coping mechanisms while taking into consideration different influencing factors.

- How did the cluster evolve? Are there particular moments of growth, stagnation, or decline? Are there any particular patterns followed by this evolution?
- ✓ How did the cluster adapt to crisis and specific triggers of change (membership changes, technological advancements, market trends, and policy interventions)? Did the cluster exhibit resilience and adequate adaptation?
- ✓ What is the role of cluster leadership and strategic planning in driving adaptation and resilience in the face of change? This implies answering another question:
 - What are the main features of Cluster leadership and strategic planning?



4.1.3. Dimension 1.3 – Typology of clusters

This dimension seeks to analyze the unique characteristics and competitive advantages of each cluster and classify clusters based on factors such as industry focus, geographical proximity, innovation levels, and governance structures. Different typologies can be explored, such as huband-spoke clusters, value chain clusters, or innovation districts. For a better analysis of the unique features of the cluster, the adopted classification must also be linked to contextual elements such as the regulatory framework and support, the geographical features (transport, urban planning, etc.), the economic context, etc.

Investigating this dimension boils down to investigating the following questions:

- What are the most salient features of the cluster (industry focus, geographical proximity, innovation levels, and governance structures)?
- ✓ What classifications can be applied to better understand these features?
- What are the contextual elements that influence the salient features of the cluster and its classification and how does this influence occur?

4.1.4. Dimension 1.4 – Link between cluster benefits and cluster functions

This dimension strives to establish connections between the benefits derived from the participation in the cluster and the specific functions performed by this cluster. For this, it is necessary to answer the following questions:

- ✓ What are the major functions of the cluster?
- ✓ How do these functions contribute to the overall success and sustainability of the cluster ecosystem?

The particular functions that can be investigated may include:

✓ Pooling function

- What is the cluster's role in facilitating the pooling of resources, expertise, and capabilities among its members?
- What are the mechanisms (such as shared infrastructure, joint projects, passing work to other companies, collective branding, and investment funds that promote synergy and resource optimization within the cluster?



✓ Lobbying function

- How does the cluster serve as a platform for bringing together diverse stakeholders with common interests and goals?
- What are the mechanisms through which the cluster fosters trust, solidarity, and collective action among its members?
- How do these mechanisms enable the cluster members to address shared challenges, advocate for common policies, and pursue mutual benefits?

✓ Transaction costs

- What are the transaction costs associated with interactions and exchanges within the cluster ecosystem? Are there particular factors such as information asymmetry, coordination efforts, negotiation complexities, and enforcement mechanisms that influence transaction costs and shape the efficiency of cluster operations.)?
- To what extent do clusters limit transaction costs and enable efficient matching, compared with the two main configurations of markets and firms? How does the cluster mitigate the transaction costs through mechanisms such as improved information flows, standardized processes, shared platforms, and collaborative initiatives?
- How do the reduced transaction costs impact on innovation, competitiveness, and overall economic performance within the cluster?

4.1.5. Dimension 1.5 – Structural & current issues

This dimension shed light on the other issues, apart from the positive effects of clusters, that can affect the way the cluster operates.

Are there any other specific issues, whether generic or specific, that may influence the role and benefits of the cluster? Are there new questions (market conditions, social issues, etc.) that may yield new influencing issues?

4.2 Area 2: Cluster description

4.2.1. Dimension 2.1 - Genesis of the cluster

This dimension investigates the genesis of the cluster and aims to help unpack the threads that lead to a cluster formation and the factors influencing this genesis from cultural influences, economic drivers, political issues, to local challenges.



- ☑ How did the cluster come into being as an institution?
- ☑ What were its challenges and triggers?
- ☑ What are the factors that shaped the Cluster's genesis? How did they shape this genesis?

4.2.2. Dimension 2.2 - Statistics of the cluster

One of the main statistics of the cluster are related to its members and main stakeholders. The following questions aim to facilitate the analysis of this dimension.

- What is the total count of members within the cluster? Are there any fluctuations or dynamics over time?
- Are there other relevant aspects to investigate such as: the variety/diversity of members within the cluster, the characterization of members (size, market segment, ...), the turnover and people (incl. dynamics).
- What are the factors influencing membership growth or decline, such as industry trends, policy changes, or shifts in organizational priorities?

4.2.3. Dimension 2.3 – Formal/informal cluster

This dimension is destined to untangle the formal components of the cluster from its informal aspects to allow a better understanding for the interplay between these two types of components and how they can impact the evolution of the cluster and its benefit. It covers, but is not limited, to different aspects such as:

✓ History

- How did the cluster evolve? What are its origins? Are there any major milestones, and significant events?
- What are the main specificities of the socio-economic context in which the cluster emerged? What are the key drivers that shaped its development over time?
- How are the historical factors continuing to influence the cluster's identity, mission, and strategic direction?

✓ Organizational form and status (incl. historical changes)

- What are the institutional and organizational forms adopted by the cluster: association, public institution, informal network (community of practice), inclusion in a formal system (e.g. French "pôles de compétitivité"), individual or corporate members...?
- What is their scope (type of company and sector)?
- How have they evolved over time?



✓ Activities covered (incl. historical changes)

- What is the range of activities and initiatives undertaken by the cluster, including any shifts or expansions observed over time?
- How is the cluster involved in areas such as research and development, skills training, market promotion, policy advocacy, and international collaboration?
- How did the evolving industry dynamics influence the scope and focus of cluster activities?

✓ Tools

- What are the tools and resources utilized by the cluster to support its operations and objectives? This may include digital platforms, data analytics tools, funding mechanisms, incubation facilities, or networking events.
- Were these tools effective in fostering collaboration, innovation, and value creation within the cluster ecosystem?

4.2.4. Dimension 2.4 – Entities involved and historical changes

This dimension aims to map out the diverse entities participating in the cluster, such as companies, research institutions, government agencies, and industry associations and analyze the changes in the composition of cluster stakeholders over time, including entry or exit of key players, mergers, acquisitions, or organizational restructuring.

Apart from the direct members, who are the major stakeholders and entities involved in the cluster? What is their status? date of entry? Involvements, (incl. historical changes)?

4.3 Area 3: Cluster effects

4.3.1. Dimension 3.1 – Cluster Productions

This dimension includes essentially the following aspects:

✓ Studies

- What are the research and studies produced by the cluster notably on topics such as industry trends, market analysis, technological innovations, and policy recommendations?
- What is their level of quality and relevance?
- What are their impacts on decision-making processes, industry practices, and public discourse?



☑ Regulation (production of rules for the industry, internal or transformed into law (lobbying))

- What is the cluster's role in shaping regulatory frameworks for the industry, both internally through self-regulation and externally through advocacy efforts or lobbying activities?
- How does the cluster collaborate with regulatory bodies, policymakers, and other stakeholders to influence legislation, standards, and industry practices?

☑ IP (Intellectual Property)

• What is the role played by the cluster in generating intellectual property, patents, and trademarks, and their impact on innovation and economic growth?

✓ Outcomes

What is the impact of specific cluster activities and initiatives on member outcomes such as innovation, productivity, and market competitiveness?

4.3.2. Dimension 3.2 – Interactions between members

This dimension explores the dynamics of interactions among cluster members, considering factors such as collaboration, competition, knowledge sharing, and resource exchange.

- ☑ What are the historical changes that intervened in interaction patterns?
- Are there any shifts in power dynamics, collaboration models, and relationship networks within the cluster ecosystem?

4.3.3. Dimension 3.3 – Interactions between members

This dimension investigates the features of the networks of links and interactions between the members of the cluster. The following aspects cover essential salient features that can be observed:

- What are the mechanisms for knowledge transfer within the cluster and between cluster members and the external world?
- ✓ Are there particular types of knowledge exchanges that are involved, such as tacit knowledge sharing, collaborative research projects, technology licensing, and participation in industry events?
- ✓ Are there historical changes in knowledge circulation patterns and their impact on innovation and competitiveness?

 $\overline{\mathsf{V}}$

The historical changes include aspects such as:



☑ Circulation of people (incl. historical changes)

- How did people and individual talents move within the cluster ecosystem, including skilled professionals, researchers, entrepreneurs, and students?
- Are there any historical trends in talent mobility, migration patterns, and workforce development initiatives within the cluster?
- How does the circulation of people contribute to knowledge diffusion, skill transfer, and diversity enrichment within the industry?

✓ Partnerships (and outputs)

- How are the partnerships formed by the cluster with other stakeholders, such as industry associations (business combinations, partnerships, joint ventures, subcontracting), research institutions, government agencies, and international organizations?
- What are the outputs and outcomes of these partnerships, including joint projects, collaborative ventures, policy initiatives, and collective advocacy efforts?
- How do partnerships contribute to the cluster's objectives, capabilities, and impact?

External Partnerships

- How does the cluster facilitate cross-border collaborations and international partnerships to access new markets, expertise, and funding opportunities?
- What are the impacts of cluster-led initiatives in promoting sustainability, corporate social responsibility, gender balance and ethical business practices within the industry?

✓ Training/Education

How do cluster-based training programs, internships, and education initiatives nurture future talent and workforce development?

✓ Clusters as responses to specific problems

- Did the cluster emerge as strategic responses to specific challenges or opportunities facing the industry?
- How does the cluster address issues such as market fragmentation, technological disruptions, skills shortages, global competition, economic sustainability or regulatory constraints?
- Are cluster-based approaches effective in fostering resilience, innovation, and sustainable development and how do they contribute to these aspects?



4.4 Area 4: Cluster in relation to its members' needs

This area involves considering the added value respectively of the institutional cluster, the network and the different levels of geographical proximity in relation to the activity and needs of the members.

4.4.1. Dimension 4.1 – Inventory of collaboration, exchanges and proximities

One of the major components of a cluster is the complex network of different economic, social, cultural and institutional relationships and proximities linking its different members and cementing the overall structure of the cluster. The following dimension investigates these relationships and proximity to each other, their different forms and constituents, the different levels where they take shape as well as the collaborative behaviors they entail. Thus, this dimension includes the following issues:

✓ Global level

- What are the main collaborations and exchanges the cluster maintain at the global level, considering partnerships, joint ventures, and knowledge networks with international stakeholders?
- How relational and geographical proximity influence global collaborations, including factors such as cultural affinity, language barriers, time zone differences, and travel logistics?
- What are the typologies of links, such as strategic alliances, cross-border investments, and participation in global value chains that the cluster has developed and what are their implications for global competitiveness and market expansion?

✓ Regional level

- What are the main collaborations and exchanges the cluster maintains with other regional clusters or economic blocs, such as trade agreements, industry consortia, and research networks?
- How relational and geographical proximity among regional stakeholders facilitate knowledge sharing, supply chain integration, and policy harmonization?
- What are the typologies of proximities, such as geographical clustering, industry specialization, and regulatory alignment that the cluster have developed? What role do they play in fostering regional innovation ecosystems and economic integration?



✓ Local level

- What are the main collaborations and exchanges the cluster maintains at the local level, focusing on partnerships between companies, research institutions, and community organizations within a specific geographic area?
- How relational and geographical proximity enhance local collaborations, including factors such as trust, face-to-face interactions, shared infrastructure, and access to local markets?
- What are the typologies of links, such as joint ventures, technology transfer agreements, and skills development programs that the cluster have developed? and their impact on local economic development, job creation, and social cohesion.

☑ Micro-local level (building or neighborhood)

- What are the main collaborations and exchanges that intervene within the microlocal environments of the cluster, such as innovation hubs, business incubators, or urban neighborhoods?
- How relational and geographical proximity among stakeholders within a small geographic area facilitates informal interactions, knowledge spillovers, and community-driven initiatives?
- What are the typologies of proximities, such as physical proximity, social networks, and shared amenities that were developed within the Cluster? And how do they nurture entrepreneurship, creativity, and place-based innovation?

4.4.2. Dimension 4.2 – Connections between typologies of links / typologies of proximities

This dimension seeks to unravel the interplay between different types of links and proximity and their roles in shaping collaborative dynamics within and across various spatial scales.

- What are the major types of proximities that link the different members and stakeholders of the cluster?
- ✓ How relational and geographical proximity intersect with other dimensions, such as technological connectivity, institutional alignment, and market access, to create synergies or tensions in collaborative networks?
- What other typology of proximity can capture the diverse ways in which proximity influences collaboration patterns, including spatial, social, cognitive, and institutional dimensions?



4.4.3. Dimension 4.3 – Connections between the cluster and the individual

This dimension involves analyzing the role each individual plays in cluster dynamics and once the individual's role has been identified, understand how it may be relevant in the micro dynamics within the cluster, placing it as a potential object of analysis ("individual as belonging to a specific 'political' community," in this case as part/member of the cluster). By individual, we refer to individual actors who are particularly involved in the cluster (its activities, its regulation, its governance, ...). This entails answering the following questions:

- ✓ What are the roles endorsed by the individual?
- How it may be relevant in the micro dynamics within the cluster, placing it as a potential object of analysis ("individual as belonging to a specific 'political' community," in this case as part/member of the cluster).
- What are the dynamics that he/she creates and/or entertains with other actors in the cluster, as well as with networks outside of it, while maintaining the individual's perspective, needs and points of view?
- ☑ Is the value of spatiality (of the cluster) still relevant to the individual, from the perspective of transformations in work styles?

5.THE STRUCTURE AND COMPONENTS OF THE INTERVIEW TRANSCRIPT

The following blocks provide a set of questions that helped the different research teams to elaborate their own semi-structured interviews transcripts and tailor to the cluster they investigate.

The Interviewee & the organization

Career path and entry into the Gaming Sector

Current role within the organization / cluster

Story of the organization / company

- Could you share your career journey and how you came to work in the video game industry?
- What is your current role within your organization or the corresponding cluster?
- Can you tell us about the history of your organization, including its main milestones?



The Interviewee & the Cluster

Activities and Stakeholders

Encounter w	ith the
association	(Cluster)

How did you first come into contact with the association or cluster?

Prior Relationships with the local ecosystem

• What was your relationship with the local ecosystem before joining the cluster?

Current relationships with the association and ecosystem

What is your current relationship with the association and the ecosystem? What activities are you involved in?

Company involvement in cluster activities

Which members of your company are involved in the cluster's various activities?

Key activities

What are the key activities of this cluster?

Roles within the local and national context

What roles does the cluster play for its members and within the local and/or national context?

Key stakeholders and leading actors

What is your current relationship with the association the ecosystem? What activities are you

Types and roles of actors

Who are the key stakeholders in the cluster?

Common objectives and contributions

What are the common objectives among members, and what are their contributions?

Links among actors

What are the links between the members?

Changes in stakeholder's configuration

Have there been any major changes in the configuration of actors in the past? If so, who were the actors involved during the cluster's emergence?

Membership criteria

• Are there specific criteria for joining the cluster? Are there any exclusion criteria? Have these criteria evolved over time? If so, how?



	Coordination & control	How are coordination and control managed within the cluster? Which tools and instances are used? Are they formal / informal? What prevents clusters from having formal governance instances? Which actors are involved?
Governance	Alignment of interests	How is alignment of interests achieved? Is it emerging or formalized? How do the members of the cluster engage in its activities? Are there any specific incentives or sanctions?
	Handling opportunistic behaviours	Have there been any opportunistic behaviors in the past? How are they resolved?
	Benefits from cluster involvement	What benefits do you derive from your involvement in the cluster? To what extent do you consider the cost-benefit ratio when renewing your membership?
Performance & benefits	Tools and skills provided to the members	What tools and skills do the association make available to its members?
nance &	Cluster contributions to members	What does the cluster bring to its members? If there are any gaps, what are they?
Perfor	Improving cluster roles	What should be done to better fulfill the cluster's roles? Are there additional roles the cluster should take on?
	Past issues and resolutions mechanisms	Have there been any issues in this area in the past? How were they resolved?
External contingencies	External actors and relationships	• Who are the external actors the cluster maintains relationships with? At the national level? At the local level?
conti	External factors and trends	• What external factors or trends influence the cluster?
mics	Critical moments and crises	• Have there been any important or critical moments in the life of the cluster? Any crises? If so, how did they influence the cluster's trajectory?
Cluster dynamics	Description of the ecosystem / cluster	How would you describe this ecosystem or cluster? What makes it unique, especially compared to other clusters?
5	Experience with other ecosystems / clusters	Have you worked with other ecosystems or clusters in the past?



The interview script includes a final section about data collection that involves asking the interviewee about any contacts they would recommend helping the data collection efforts and thus help a snowballing effective.

As the grid is an evolving and flexible tool, it was important that the interview guide remained also a flexible tool, easy to use during an interview, while facilitating data collection and the subsequent establishment of links between the material collected and the grid. The above transcript acted as an overarching canvas from which the different researchers can choose the questions that apply best to the specificities of the cluster they are studying. For instance, not all the clusters in the **GAME-ER** sample include formal agencies and governance instances. The questions were designed to apply to both cases.



5. CONCLUSIONS

The overall aim of the present deliverable is to report on two main methodological tools that serve as the basis for the collection and analysis of the data and empirical material gleaned throughout the **GAME-ER** project.

Although the significant heterogeneity of the clusters included in the **GAME-ER** project is a necessary condition for having recommendations and tools that can be replicated in contexts other than those studied in this project, it raises several methodological challenges, in particular how to study the different cases in depth and integrate their diversity while allowing for a rigorous comparative approach that takes into account the similarities and regularities between the different case studies and mobilize them to produce recommendations, typologies and toolkits that are robust, valid and replicable in heterogeneous geographical, political, economic contexts, etc.

These two proposed tools play an important role in addressing these challenges and in articulating the data and insights flows from the different research teams as well as the findings between the different WP. They are key for the validity and replicability of the knowledge, recommendations and decision-making tools that are going to emerge from the **GAME-ER** project.

This report has detailed the various stages and the status of the consolidated analytical grid at month M8, elucidating its aims, design process, components, and practical guidelines for its application.

Th depiction of the aims and constrains, the design process and guidelines aim to address different conceptual, empirical and methodological challenges and enable subsequent replication and reuse of the methodological tools provided above across different geographical and national contexts.

Key sections of the report include:

- Aims and Objectives of the Analytical Grid: Establishing the purpose and intended outcomes of the grid.
- **Design Process**: Detailing the steps and considerations involved in creating the grid.
- **Components of the Grid**: Describing the elements that make up the grid and their respective roles in the analysis.
- Components of the transcript for the semi-structured interview

As the **GAME-ER** project unfolds other additional methodological tools and frameworks are being developed to guide the following steps of data collection and analysis and the construction of the Typologies and toolkit destined to policy and decisionmakers.



The analytical grid and the interview transcript canvas are the keystone to develop other analytical tools that are going to be mobilized during the following steps of the data collection and analysis. For instance, based on these two major tools and the subsequent results of the first exploratory interviews, we are elaborating three major frameworks that will achieve the methodological goals detailed in the introduction section of this report.

In addition to an (i) executive identity card for each cluster, the research teams will have at their disposal (ii) a cluster analysis framework and (iii) an actor comprehensive framework that will help them investigate each cluster as the main unit of analysis while adopting also the point of view of the major actors in the cluster and taking into account different economic, organizational and social phenomena intervening at the level of the organizational member of the cluster.

Moreover, this comprehensive analysis of the major actors in the cluster will allow the emergence of an empirically grounded and inductive mapping of the actors, and its integration in the deliverable D4.4- *Mapping of Actors*. These additional frameworks will enable a comprehensive approach that delves into the intricacies of each case study and takes into accounts its peculiarities whereas allowing a comparative approach that capitalize on the similarities and consistencies among the different clusters.



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