Contrast

Innovation in the Cultural and Creative Industries

Contrast II global study

CCSIs and innovation: ecosystems, typologies, measurement, and impacts.

EUSKO JAURLARITZA
GOBIERNO VASCO
KULTURA ETA HIZKUNTZA POLITIKA SAILA
DEPARTAMENTO DE CULTURA Y POLÍTICA LINGÜÍSTICA

TABLE OF CONTENTS

RESULTS AND CONCLUSIONS

Contrast

Innovation in the Cultural and Creative Industries

PART I.
INTRODUCTION

1. Presentation

This report collects and analyses the results of the *Contrast II* study on Cultural and Creative Industries and Sectors (CCISs) and innovation. It is structured in five main parts: introduction, description of the study results, in-depth analysis of the study results, conference report and final synthesis.

As an introduction, the document initially presents the BACKGROUND, objectives and methodology to place the reader adequately in the context of the study.

The beginning of the *Results* part begins with an initial contextualization (Regional contexts) of the territories analysed, taking into account, firstly, secondary data on territories, population and economy and, secondly, innovation, offering an overview with data extracted from the Global Innovation Index. The section closes with a context summary at a general level that allows a better reading of the data in the specific field of CCSIs.

The report then goes into the core results of the content of the study in the section on Innovation and CCSIs. This section addresses all the relevant dimensions for the study of innovation and CCSIs combining policy information and agents involved in each territory with their specific innovation practices and organizations in the cultural and creative sector. This section provides a descriptive view (graphs and charts, descriptive statistics…), drawing on two main tools: the questionnaire to regional coordinators, on regional contexts, and the questionnaire to CCSIs agents, on the innovation they produce. This entails addressing all relevant dimensions of innovation in CCSIs at two different levels.

Thus, the section "CCSIs monitorization and innovation" reflects on the existence of tools and agents that monitor CCSIs and/or innovation; the section "Regional strategic approaches" it reflects on the type of strategic approaches of administrations; section "Innovation environment" it reflects on actors and types of tools used in support

of the sector and its innovation; the section "Innovation features" reflects on what kind of innovations are made and for what reasons, and at the section "Measuring results, impacts and innovation value" it reflects on the positive social, economic and environmental externalities produced by the sector from its innovation.

In the third part (In-depth analysis), an interpretative perspective is provided. From all the results presented in previous sections, deeper looks and analyses are made expanding and crossing results, but also providing interpretative and conceptual keys that generate greater understanding of the state of the matter. Two large dimensions structure this part: Trends, typologies and singularities, on one hand, and Innovation measurement in CCSIs: scope and limitations. The first section is divided into two parts: Innovation ecosystems and Types and innovation values in CCSIs. In each of these parts, the content is structured into two subparts: one for summarizing the previous results and the other for deepening the analysis.

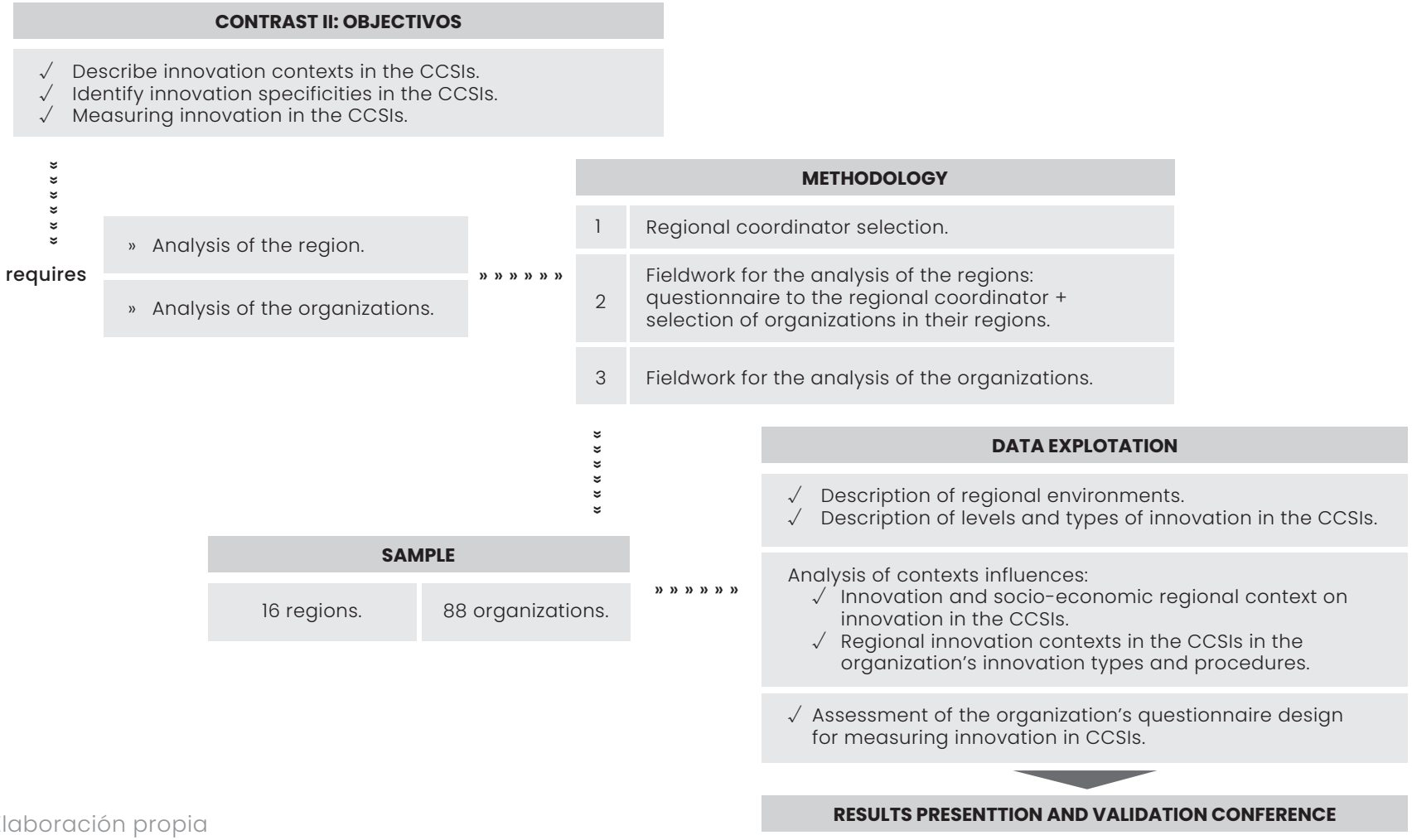
In the section on the measurement of innovation in CCSIs, specific issues related to measurement in CCSIs are addressed through the results obtained in the organizations' survey, assessing how the design and used indicators have functioned. Reflections are made on how CCSIs adapt to established measurement frameworks and their uniqueness.

The fourth part presents the report of the CCIs and Innovation *Contrast II* conference , an essential part of the project's reflection and discussion process. This involved a comparison of the results, and served to gain a more detailed understanding of the innovation ecosystems in the regions studied and to broaden specific views on innovation in the CCISs. This part presents the conference programme and the ideas that emerged from the round tables, workshops and keynote speeches.

Finally, the fifth part, the Final Synthesis, concludes the study by reviewing the initial objectives and synthesising the key results obtained throughout the research process.

2. Background, objectives and methodology

Diagrama 1. Síntesis del proceso metodológico



Fuente: Elaboración propia

Origin of the study

The Department of Culture and Language Policy of the Basque Government is promoting a work route within the framework of RIS3 around Cultural and Creative Industries (CCSIs) as an area of opportunity.

In 2019, a process of reflection began on the conceptualization and exploitation (through indicators) of R+D in the Basque cultural and creative sector. The reason for undertaking it is the deficit of R+D that is reflected in the data of cultural and creative sectors compared to the three strategic priorities (Advanced Manufacturing, Energy and Life Sciences - Health) and two of the four areas of opportunity (Food and Urban Habitat) included in the RIS3.

Based on this problem, the work began with the development of a conceptual framework for the application of R+D in the cultural and creative sectors with the following objectives:

- Raise awareness about the innovation that is taking place in the CCSIs, according to approved and standardized measurement criteria for all sectors.
- Show the uniqueness of CCSIs, identifying aspects that characterize cultural innovation, which are not reflected in the frameworks established for other sectors and that make them unique.

In 2020 and 2021, a broad process of reflection and contrast was carried out on two levels:

- Drafting of a report concerning R+D in the CCSIs contrasted with local experts. It was shown that existing innovation indicators at European and regional level could not reflect the authentic levels of cultural innovation in the Basque Country.
- This report gave rise to an international project, where experts in R+D in cultural and creative sectors and industries (*CCSIs*) analysed and debated models and practices on measuring innovation. The conclusion was that an international case study was needed to complete the research. This case study was the *Contrast* I pilot study.

Objectives and main hypothesis

The objectives of the initial pilot study (*Contrast I*) carried out in 5 European regions (North Rhine-Westphalia, Flanders, Piedmont, Catalonia and Basque Country) and extended worldwide through *Contrast II* are:

- Identify elements of the regional context that characterize and favour the development of innovative projects in the CCSIs.
- Carry out a comparative analysis of good innovation practices to detect both shared elements with other sectors and those elements inherent to cultural and creative innovation.
- Advance on the design of operational indicators to monitor innovation in the cultural and creative industries in the future.

In the *Contrast I* pilot study final report it was concluded that it is relevant to address the general context in which each region is inserted. Contexts influence and indirectly contribute to explaining certain aspects of CCSIs and their innovation by mixing structural conditions, opportunities, and constraints. In this sense, some correlation was observed between the general context in urban and socioeconomic terms and some aspects related to CCSIs and their innovation. Therefore, it was considered relevant to deepen the general characterization of the regional context and the creation of a typology to classify them. This typology, in *Contrast I*, relied on the classification scheme of European welfare systems as a starting point.

The *Contrast II* study is proposed in 2022 as an expanded version of the analysis of regional innovation contexts in CCSIs, this time on a global scale. It maintains the same objectives (the exploratory and descriptive nature of innovation ecosystems) and raises again the general hypotheses on the importance of the context:

- Influence of the global context into the specific context: There is a correlation between an advanced socioeconomic and innovative context with the specific development of the CCSIs and their innovation.
- Case-specific context influence: Various specific types of innovation ecosystems within the CCSIs generate innovation outcomes and impacts accordingly.

Methodology

To achieve its objectives, *Contrast* is based on two pillars:
A. Context analysis or innovation ecosystems analysis in the CCSIs.
B. Analysis of cases or agents of innovation in the CCSIs.

The common thread of the whole project intertwines two levels: the political, administrative and strategic levels; and the agents in the field (companies, associations, NGOs...).

It should be noted that the Contrast II project does not end with the analysis and production of results. A key element in the closing of the project was the CCIs and Innovation Contrast II conference with the participation of participating regions, organisations and experts in the field of study. This served to validate and give further depth to the results obtained previously, thus completing the research project.

Until now, the methodological approach carried out has followed three steps:
1. Selection of a coordinator for each of the 16 selected regions (see Table 1 for sample characteristics). These coordinators are connected in different ways to the ecosystems of the CCSIs in their respective regions (public officials, consultants, researchers...).

Table 1. Characteristics of the regional sample

Global Area	Europe								Africa			Asia-Pacific		North America		Latin America
Country	Germany	United Kingdom	Spain	Denmark	Estonia	Finland	Portugal	Italy	Kenya	South Africa	Uganda	India	Australia	United States of America	United States of America	Colombia
Case type	Region	Region	Region	Country	Country	Country	Region	Region	Country	Region	Country	Region	Region	Region	Region	Region
Case	Baden-Württemberg	Cardiff Capital Region (CCR)	Comunitat Valenciana	Denmark	Estonia	Finland	Região do Norte	Puglia	Kenya	Western Cape	Uganda	Karnataka	South Australia	Washington	California	Antioquia

Source: Own elaboration

2. These **coordinators have answered a questionnaire** about their regions concerning: sources of information, general positioning of the region in terms of innovation and CCSIs, general strategic approach and characteristics of the innovation environment. Additionally, the **coordinators have selected between 5 and 10 practices** from their respective regions based on their informed criteria.

3. These **88 organizations**, which constitute a large and relevant sample from a theoretical/qualitative point of view (see Figure 1 for the list of participating organizations and the sample characteristics) have also answered a specific questionnaire. Through their answers, **a key component of *Contrast II* study**, they also provide information on characteristics of their innovation environment, the types of innovation they carry out, and their organization's results and impacts.

Therefore, the process is shaped through fieldwork at two levels, each with its own questionnaire in which closed and open questions are combined for the regional coordinators and for the innovation agents (organizations). Both questionnaires can be found in the methodological annex (Annex 2).

It is important to note that the design of the organizations' survey is itself a proposal for measuring innovation in CCSIs. Through the **lessons learned from *Contrast I* and based on the theoretical framework of the project** [1] , a set of questions has been introduced to capture innovation in CCSIs. Not only with the goal of measuring this innovation but also to reflect on the challenges and possibilities of doing so. For this reason, the questionnaire also included questions about the extent to which participants felt represented by the proposed items. Additionally, for the same reason, the report includes a section (section 6 "Innovation measurement in CCSIs: scope and limitations") reflecting on how the questionnaire has functioned in relation to this objective.

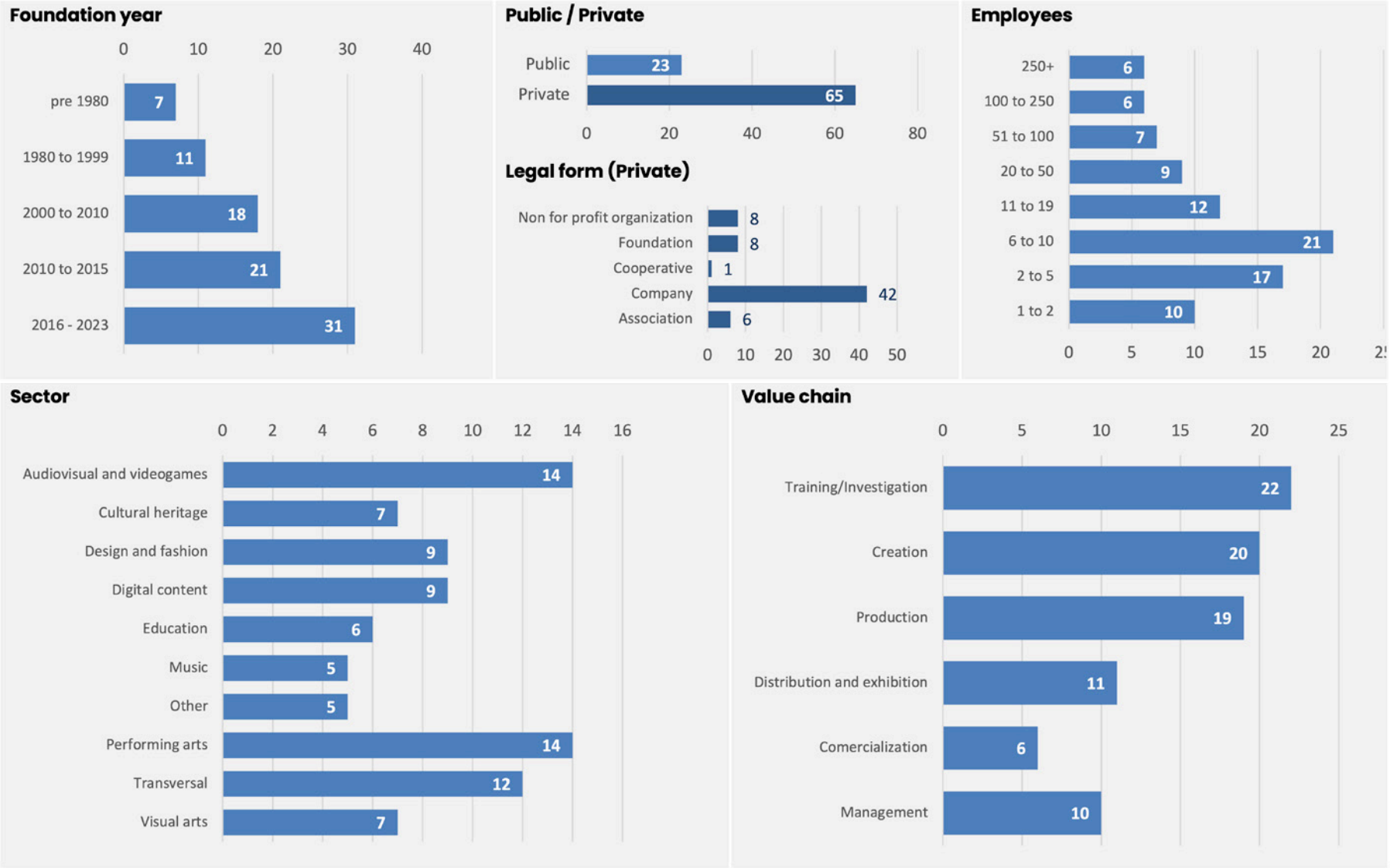
[1] Contrast I report: *Innovation context within CCSIs in 5 European regions* (2022) https://www.euskadi.eus/contenidos/informacion/ksi_cwf_workshop_20220719/eu_def/adjuntos/Basque_Country_Innovation_CCIs_pilot_draft.pdf
Theoretical framework: CCIs and innovation contrast. General outcomes (2021) https://www.euskadi.eus/contenidos/informacion/ksi_contrast_proiektua/en_def/adjuntos/CCIs-and-Innovation_General_Outcomes.pdf

List of participating organizations and characteristics of the organizations sample

List by alphabetical order:

1. Realities Extended at the University of Adelaide (South Australia)
2. Flinders University - The Void (South Australia)
3. Light ADL (South Australia)
4. Illuminate Adelaide (South Australia)
5. ModelFarm (South Australia)
6. Corporación Hérmetus (Antioquia)
7. Museo de Antioquia (Antioquia)
8. Orquesta Filarmónica de Medellín (Antioquia)
9. Pantolocos de la Corporación Casa Arte (Antioquia)
10. Impact Hub Medellín (Antioquia)
11. diidoo® (Antioquia)
12. Popakademie Baden-Württemberg GmbH (Baden-Württemberg)
13. NEXT Mannheim (Baden-Württemberg)
14. Hochschule der Medien Stuttgart (Baden-Württemberg)
15. K3 Kultur- und Kreativwirtschaftsbüro Karlsruhe (Baden-Württemberg)
16. Wirtschaft und Stadtmarketing Pforzheim / EMMA - Kreativzentrum Pforzheim (Baden-Württemberg)
17. MFG Baden-Württemberg (Baden-Württemberg)
18. Virtual Dimension Center (VDC) w.V. (Baden-Württemberg)
19. Tinkertank, Interactive Media Foundation gGmbH (Baden-Württemberg)
20. AMCRS - Animation Media Cluster Region Stuttgart (Baden-Württemberg)
21. SkySpirit GmbH (Baden-Württemberg)
22. Center for Cultural Innovation (California)
23. Destination Crenshaw (California)
24. Arts for LA (California)
25. BRIC Foundation (California)
26. BWLB Ltd (Cardiff CCR)
27. Object Matrix (Cardiff CCR)
28. Hijinx Theatre (Cardiff CCR)
29. edge21 studio ltd (Cardiff CCR)
30. Y Pod Cyf. (Cardiff CCR)
31. gorilla TV (Cardiff CCR)
32. Palau de les Arts Reina Sofía, Fundació de la Comunitat Valenciana (Comunitat Valenciana)
33. Fira Trovam (Comunitat Valenciana)
34. IVAM (Comunitat Valenciana)
35. Centre del Carme Cultura Contemporània - Consorci de Museus de la Comunitat Valenciana (Comunitat Valenciana)
36. Institut Valencià de Cultura (Comunitat Valenciana)
37. Espai LaGranja- IVC (Comunitat Valenciana)
38. Espai d'Art Contemporani de Castelló (Comunitat Valenciana)
39. Marahaba Music expo (Uganda (East Africa))
40. Malafi'arts production (Uganda (East Africa))
41. Orupaap Cultural Foundation (Uganda (East Africa))
42. Culture and Development East Africa (CDEA) (Uganda (East Africa))
43. MOTIV (Uganda)
44. Quad - A Group (Uganda)
45. The GoDown Arts Centre (Uganda)
46. Filaret OÜ (Estonia)
47. Aus Design OÜ (Estonia)
48. Myceen (Estonia)
49. RAIKU Packaging (Estonia)
50. The Ladies Association of Kuopio / Design Union (Finland)
51. Helsinki Xr Center/Metropolia Univeristy of Applied sciences (Finland)
52. Creative Export Innovations (Finland)
53. Uniarts Helsinki (Finland)
54. Aalto University (Finland)
55. VIPROF ELECTRONICS (Karnataka)
56. Indian Institute of Science (Karnataka)
57. Edunet Foundation (Karnataka)
58. BlackRhino VR (Kenya)
59. Kenya Private Sector Alliance (Kenya)
60. Standup Collective (Kenya)
61. THE ART OF MUSIC FOUNDATION (Kenya)
62. Circle Art Agency (Kenya)
63. Art at Work Limited (Kenya)
64. Kariboo Creative (Kenya)
65. Trio Media Kenya (Kenya)
66. TIKITWORLD (Região do Norte)
67. Canal180 (Região do Norte)
68. Everythink, Lda (Região do Norte)
69. 4Humanz - Consultancy and research for humanz (Região do Norte)
70. Applicazioni di Ingegneria ed Informatica s.r.l. (Puglia)
71. Espero srl (Puglia)
72. Didap s.r.l.s. (Puglia)
73. Università del Salento (Puglia)
74. Tou.Play ETS (Puglia)
75. IMAGO (Puglia)
76. 34° Fuso APS (Puglia)
77. Chocolate Tribe (Western Cape)
78. The Craaft and Design Institute (Western Cape)
79. Nyamakop (Western Cape)
80. Empatheatre (Western Cape)
81. Free Lives (Western Cape)
82. The Centre for the Less Good Idea (Western Cape)
83. Path with Art (Washington)
84. Terrain Programs dba Terrain (Washington)
85. Cultural Space Agency (Washington)
86. Mighty Tieton Production (Washington)
87. TwispWorks Foundation (Washington)
88. King County Creative (Washington)

Characteristics of the organizations in the sample:



Contrast

Innovation in the Cultural and Creative Industries

PART II.
RESULTS

3. Regional contexts

In this first section of results, the environments of the selected regions are characterized at a general level. First, variables related to territory, population and economy are described based on secondary information generally from the United Nations or the World Bank.

Secondly, a characterization of each general environment is also offered in terms of innovation. In this sense, the general innovation contexts of each region are described through the results of the Global Innovation Index 2022. Since the Global Innovation Index also incorporates a specific section of Creative Outputs, the results of each environment are also noted in these terms. This provides external information, based on objective indicators, which will complement the primary information collected in the study through the information provided by regional coordinators.

All this secondary information based on general characterization is analysed at country level. This is the minimum unit of information for which it is possible to find standardized information common to all regions, which have different territorial ranges or levels as will be shown in Table 1 (states, regions, and countries).

In the last subsection, a synthesis of these contexts is made, which, for the final reflection, should be useful for a better interpretation of the results obtained.

Thus, this section becomes relevant in terms of exploring the hypothesis of the influence of the general context in the specific context of innovation in the CCSIs.

3.1 Territories, population, and economy

As seen, the analysed regions are in 5 global areas (Europe, Africa, Asia-Pacific, North America, and Latin America). The diversity of contexts is very high, with very different demographic, political and welfare systems and with very different world economic positions, even within the same global area.

In Annex 2, it is possible to consult a summary for each region of indicators in the basic dimensions of demography and economy, but also in terms of society, education, environment, and health:

- At demographic level, the differences in terms of percentage of urban population stand out. The sample has an average of 69,1% of the percentage of urban population, but there are contexts in which this percentage rises above this average and others in which it remains below, even far away. Among the countries of Europe, the figure rises to 77,6%. In the African countries it remains 39,6% (South Africa remains above this average, Kenya and Uganda remains below). India's percentage is similar, 34,5%, which differs greatly from the other country in the same global area as Australia, 86,1%.
- In the dimension of economy and society, GDP per capita also shows very different realities following this same pattern, which are also manifested, in issues such as percentage of employment in services or industry.

In terms of GDP per capita, the United States reaches approximately 76,000 US $, an average of 54,500 US $ in the European countries and 8,000 US $ for African countries. India also reaches about 8,000 US $, although Australia reaches approximately 62,500 US $ and Colombia is in between with about 20,000 US $.

- The GINI coefficient also offers a glimpse into different social and welfare realities. Countries in Europe have the lowest inequality rates, with a GINI average of 31.8 compared to 48.8 for African countries. Both Asia-Pacific countries are around 35, the United States are around 39.7 and Colombia 51.5.

In economic terms, it is important to highlight that in some countries there is a relevant external debt, a sign of the different positions in the world economic panorama. This is the case of Colombia, India, Kenya, South Africa, and Uganda.

- In relation to the educational dimension, African countries, together with India, have the lowest average number of years of schooling, between 10.1 (Uganda) and 13.6 (South Africa). On the contrary, in European countries this number rises to 17.3, in Australia to 16.5 and in the United States to 16.3.
- Finally, different characteristics are also observed in other dimensions such as environment and health. Pollution issues are related to indicators such as the percentage of urban population or the type of economy. To contrast examples, CO^2 pollution in African countries is the lowest and in Australia and the United States the highest, with Europe in between. On the contrary, the primary energy intensity follows the opposite trend.

The set of indicators contributes to drawing a set of different economic and social positions between the countries, pointing to the fact that general contexts may influence in different ways the specific issues concerning the CCSIs.

3.2 Level of innovation

The Global Innovation Index (GII), led by World Intellectual Property Organization (WIPO), has a special value because it provides a common basis for describing countries according to their levels of innovation. This allows for a better understanding of the regional context of each case, introducing information about innovation at different levels and dimensions (see Annex 3 for more information).

Table 2. Results of each case (by country) in the GII and proposed classification

Country	Score	Position (total = 132 countries)	Classification according GII
United States of America	61,78	2	Innovation leader
United Kingdom	59,73	4	Innovation leader
Germany	57,23	8	Innovation leader
Finland	56,88	9	Innovation leader
Denmark	55,93	10	Innovation leader
Estonia	50,19	18	Innovation leader
Australia	47,14	25	Innovation leader
Italy	46,06	28	Performing at expectations for its level of development
Spain	44,62	29	Performing at expectations for its level of development
Portugal	42,11	32	Performing at expectations for its level of development
India	36,57	40	Performing above expectations for its level of development
South Africa	29,82	61	Performing above expectations for its level of development
Colombia	29,22	63	Performing at expectations for its level of development
Kenya	22,75	88	Performing above expectations for its level of development
Uganda	15,66	119	Performing at expectations for its level of development

Source: Own elaboration based on data from the Global Innovation Index 2022

As shown in Table 2, the regions participating in the study exhibit distinct innovation profiles and levels, ranging from leading positions to emerging ones. In the broader context of innovation according to the *Global Innovation Index*, seven countries stand out with a leading innovation profile (USA, UK, Germany, Finland, Denmark, Estonia, and Australia). Italy, Spain, and Portugal are very close to each other and near a leading position, yet they might be better characterized as 'advanced profiles'. India holds and intermediate position, being a clear leader in its own region, but not from a global perspective. Alongside South Africa, Colombia, Kenya, and Uganda, they constitute a heterogenous block of moderate and emerging innovation profiles.

The *Global Innovation Index* measures a very broad set of variables in seven dimensions ranging from aspects related to the political and administrative environment to sustainability, through the characteristics of business and knowledge or education (for more details about indicators, Annex 3). Four of them are considered as "inputs" of innovation and two of them are considered as "outputs" of innovation.

In fact, one of the subdimensions of *outputs* has to do with creative outputs and the production and export of cultural and creative goods and services. This provides valuable information to complement this study, which is why it will be briefly discussed in a specific subsection of this chapter.

Before that, Table 3 summarizes the position of each country in each of the seven dimensions of the Global Innovation Index:

Table 3. Countries' position in the Global Innovation Index and scores in each dimension

		Inputs					Otputs	
Countries	GII Position	Institutions	Human capital and research	Infrastructure	Market Sophistication	Business Sophistication	Knowledge and technology	Creative outputs
USA	2	*80.9*	*59.9*	*58.7*	*80.8*	*64.5*	*60.8*	*48.4*
UK	4	*74.5*	*61.5*	*62.9*	*67.6*	*51.7*	*55.7*	*55.9*
Germany	8	*76.5*	*64.1*	*57.7*	*53.7*	*52.7*	*54.8*	*52.3*
Finland	9	*82.5*	*60.6*	*65.9*	*51.7*	*61.6*	*59.6*	*39.0*
Denmark	10	*64.5*	*43.3*	*58.3*	*29.6*	*46.2*	*44.7*	*29.9*
Estonia	18	*82.2*	*42.7*	*61.6*	*68.8*	*48.3*	*41.2*	*38.2*
Australia	25	*77.2*	*61.7*	*58.8*	*50.2*	*48.6*	*32.2*	*37.8*
Italy	28	*59.0*	*46.8*	*57.4*	*41.9*	*39.3*	*45.2*	*41.3*
Spain	29	*66.8*	*47.7*	*59.8*	*43.4*	*41.4*	*38.1*	*36.8*
Portugal	32	*62.5*	*49.4*	*53.4*	*38.8*	*38.6*	*33.3*	*38.1*
India	40	*60.1*	*38.3*	*40.7*	*50.3*	*30.9*	*33.8*	*24.3*
South Africa	61	*51.9*	*26.9*	*40.7*	*40.4*	*27.6*	*24.7*	*19.5*
Colombia	63	*54.6*	*27.4*	*46.0*	*32.5*	*35.6*	*20.5*	*17.9*
Kenya	88	*51.8*	*14.0*	*30.3*	*19.7*	*24.7*	*19.2*	*15.6*
Uganda	119	*57.5*	*10.4*	*28.7*	*11.0*	*16.0*	*11.0*	*2.2*

Source: Own elaboration based on Global Innovation Index 2022 data

3.2.1 Creative products: general view and specific view linked to CCISs

The three subdimensions of "Creative outputs" dimensions ("Intangible assets", "Creative goods and services" and "Online creativity") cover different fields, with a concept of creativity that goes beyond the usual sectoral delimitation of CCSIs (including issues related to patents and trademarks and software products). Moreover, it includes a subdimension ("Creative goods and services") closely related to cultural products and services (the export of cultural and creative services, national audiovisual productions, the entertainment and media market, the weight of graphic arts and the export of creative goods).

Without being a detailed portrait of the strength of the sector in terms of results, it does establish a useful guidance given the usual difficulties of finding internationally comparable information in the field of CCSIs.

The comparison between the global position, the position in the *Creative Outputs* dimension and the position in the *Creative goods and services* subdimension[2] allows us to see that, in the specific concept of the *Creative goods and services* subdimension, most countries lose positions.

As can be seen from Table 4, on average, the countries in the sample are in a general position with a score of 35'73, in position 37'8 for the *Creative Outputs dimension and in position* 47'57 regarding the Creative goods and services subdimension. The loss of position in the dimension of Creative Outputs is very slight, but it is significant in the subdimension of *Creative goods and services*.

[2] The entire information structure of the Global Innovation Index can be seen in Annex 3.

Table 4. Comparison among countries in the dimension of Creative outputs, the subdimension of Creative goods and services and the overall position, together with the detailed scores of the dimension of Creative outputs.

	Positions			Specific scores			
Countries	Creative Outputs general position	Creative goods and services specific position	Overall GII position	Creative outputs (dimension)	Intangible asets (subdimension)	Creative goods and services (subdimension)	Online creativity (subdimension)
UK	3	5	4	55.9	68.3	42.3	44.8
Germany	7	34	8	52.3	67.8	28.4	45.2
USA	12	4	2	48.4	52.8	44.8	43.0
Denmark	14	21	10	29.9	24.1	40.6	30.9
Italy	16	46	28	41.3	62.2	25.3	15.5
Finland	18	40	9	39.0	46.0	27.0	36.8
Estonia	24	9	18	38.2	39.6	40.0	33.4
Portugal	25	51	32	38.1	51.2	23.6	26.5
Australia	27	48	25	37.8	43.3	24.5	40.2
Spain	28	43	29	36.8	50.6	26.1	19.9
India	52	61	40	24.3	38.0	17.2	4.1
South Africa	64	99	61	19.5	34.3	5.5	4.1
Colombia	75	81	63	17.9	26.4	10.2	8.6
Kenya	79	44*	88	15.6	17.7	25.8	1.3
Uganda	123	124	119	2.2	3.9	0.9	0.3

Source: Own elaboration based on Global Innovation Index 2022 data

From the observation of the table and the data of the *Global Innovation Index* itself, it is worth highlighting:

- The case of Kenya, which gains positions, and one explanation could be the lack of information on audiovisual productions, on one hand, and for a leading position in the concept of graphic arts as part of the total manufacturing (it is ranked 3 worldwide).

- The case of Estonia also presents a similar situation, where a lack of information in the field of entertainment and media is combined with a position of world leader (second) in terms of national audiovisual productions by population aged 15 to 69.

- On the contrary, South Africa goes down one step, and goes from occupying position 61 in the general ranking and 64 in the dimension of *Creative Outputs* to occupy 99 in the specific ranking most linked to CCSIs. It is the case in which there is a worse comparison in these terms. It is also due to a lack of information in one indicator (graphic arts on total manufacturing) and the drag of two indicators in which positions worsen: exports of cultural and creative services and national audiovisual production.

- In Uganda, it highlights that there are significant information gaps and no data in 3 of the 5 indicators.

- A large group of countries worsen their position relative to the general ranking and go from what could be considered leading to advanced (Germany, Australia, and Finland), or maintain their advanced position despite losing some positions (Spain, Portugal, or Italy).

- Finally, they maintain an almost identical position as leading US and United Kingdom.

Considering the score in the *Creative outputs* dimension, the following classification (Diagram 2) is proposed in terms of cultural and creative context according to the three main jumps that occur in the ranking (between position 18 in Finland and 24 in Estonia, and between position 28 in Spain and 52 in India).

Diagram 2. Blocks of regions according to their results in Creative Outputs dimension of the GII

Source: Own classification based on the Global Innovation Index 2022

This classification is relevant to obtain a better portrait of reality and because it provides a secondary information based on objective data to complement and interpret the primary information obtained by the regional coordinators. In this sense, this classification will be used in the synthesis section to explore the relationship between general contexts and CCSIs ecosystems (section 5.1.2). Specifically, as will be explained, our results (those obtained from the regional coordinators' survey) will be weighted with this external, objective data, helping to obtain a more comprehensive general view of each of the CCSIs contexts.

3.3 Overview of the regional context

To summarize this initial section, it is essential to highlight two points:

- The relationship between countries innovation profile and their socioeconomic profile.
- The specific secondary information about CCSIs provided by the Global Innovation Index.

Firstly, in Table 5 it can be observed each case with its results in terms of general innovation and the different variables of context of territory, population, and economy. The cases are ordered according to their general position in the *Global Innovation Index* and coloured according to their general innovation category, as indicated by the results in Table 2.

As can be seen immediately, green predominates at the top of the table, yellow colours and softer shades of green are in the middle and, at the bottom, orange and red are the ones most predominant.

This is indicative of the relationship between the general characterization variables (socioeconomic profile of the region) and the overall results in terms of innovation.

Table 5. Comparative characterization (colour scale) of the territory, population, and economic data of each region at country level, ordered according to their position in the Global Innovation Index general ranking.

Country (listed by their position at the global ranking)	% urban population	GDP millions ($ US) 2022	GDP per capita ($ US) 2022	% unemployment (modelled ILO estimate)	Gini Index	% employed services	External Debt Stocks (% of GNI)	Average years of schooling	CO2 emissions (metric tons per capita)	PM2.5 air pollution, mean annual exposure	Life expectation
USA	82,5	25.462.700	76.399	8,1	39,7	78,73	&	16,3	14,67	7,4	77,2
United Kingdom	83,7	3.656.809	54.603	4,5	32,6	80,83	&	17,3	5,22	10,47	80,7
Germany	77,4	5.309.606	63.150	3,8	31,7	71,61	&	17	7,91	12,02	80,6
Finland	85,4	328.004	59.027	7,8	27,1	74,58	&	19,1	7,37	5,86	82
Denmark	88	436.857	74.006	5,6	27,5	79,23	&	18,7	5,1	10,02	81,4
Estonia	69,1	62.797	46.697	6,8	30,7	68,12	&	15,9	7,67	6,73	77,1
Australia	86,1	1.626.940	62.625	6,5	34,3	78,37	&	16,5	15,23	8,55	84,5
Italy	70,7	3.052.609	51.865	9,2	35,2	70,23	&	16,2	5,31	16,75	82,9
Spain	80,6	2.181.968	45.825	15,5	34,9	75,54	&	17,9	5,09	9,69	83
Portugal	65,8	430.227	41.452	6,8	34,7	69,83	&	16,9	4,33	8,16	81
India	65,8	11.874.583	8.379	8	35,7	32,27	21,4	11,9	1,79	90,87	67,2
South Africa	66,9	952.603	15.905	29,2	63	72,41	51,77	13,6	7,5	25,1	62,3
Colombia	81,1	1.052.389	20.287	15	51,5	64,11	58,3	14,4	1,6	16,52	72,8
Kenya	27,5	311.410	5.764	5,7	40,8	39,43	38,45	10,7	0,42	28,57	61,4
Uganda	24,4	127.282	2.694	2,8	42,7	21,36	46,53	10,1	0,13	50,49	62,7

Source: Own elaboration based on data and sources from table 1

Scale from red (unfavorable values) to green (favorable values)

Secondly, it must be considered that the information provided by the Global Innovation Index in terms of Cultural Outputs is very valuable. This establishes a basis for comparison for all the regions with objective information that can complement our primary (survey) data.

In this regard, it is relevant to keep in mind the categorization of the cases (regions/countries) according to their position in the **specific ranking of Creative Outputs**, which allows them to be classified accordingly to their cultural and creative results:

- **Leading** (Most powerful creative results): UK, Germany, USA, Denmark, Italy, and Finland.
- **Advanced** (Strong creative results): Estonia, Portugal, Australia, and Spain.
- **Moderate or emerging** (Less strong creative results): India, South Africa, Colombia, Kenya, and Uganda.

These results and classifications, assuming the hypothesis of general contexts' influence in innovation, are relevant for a better understanding of the reality of each case. They may be relevant also for a subsequent reading of the specific data in terms of CCSIs innovation ecosystems.

4. CCIS and innovation

Section 4 presents the results of the questionnaires carried out to regional coordinators in their respective territories and to organizations on their innovation practice. It offers an overview of the state of the art on CCSIs and innovation, addressing relevant dimensions, addressing both regional issues with information from regional coordinators (policies, tools, agents…) and addressing individual issues with information from organizations (specific forms of innovation).

- The first and second sections of **"Monitoring CCSIs and innovation"** and **"Strategic approaches at the regional level"** are formed solely from the results of the questionnaires to regional coordinators. The information therefore refers directly to the characteristics of the regions.
- The third section of **"Innovation Environment"** intersperses both the results of the questionnaire to regional coordinators and the questionnaire of organizations. Therefore, a look at innovation environments is obtained with information from the universe of regional coordinators and the universe of organizations.
- Subsections four and five of **"Characteristics of innovation"** and **"Measuring results, impacts and value of innovation"** are built only with information from organizations, allowing innovation to be studied at case level.

All this information will allow, in the final reflection section, to deepen the hypothesis of the influence of the CCSIs specific ecosystems in the sample of innovation cases (organizations).

4.1 CCIS monitoring and innovation

In most of the cases they declare that cultural observatories do exist in their contexts (in 87,5% of the regions), but the percentage decreases slightly as more specific monitoring tools for CCSIs and innovation are considered: In 81.25% of the regions, there are statistics for CCSIs, and in 75% of all regions, there are innovation statistics. Monitoring is therefore quite widespread. However, the information provided by regional coordinators shows different frequencies, agents involved and orientations.

Figure 2a. Cultural observatories (%)

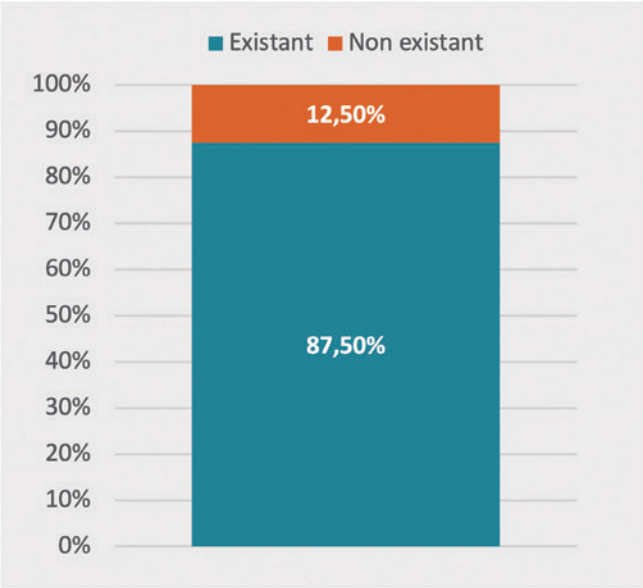


Figure 2b. CCSIs statistics (%)

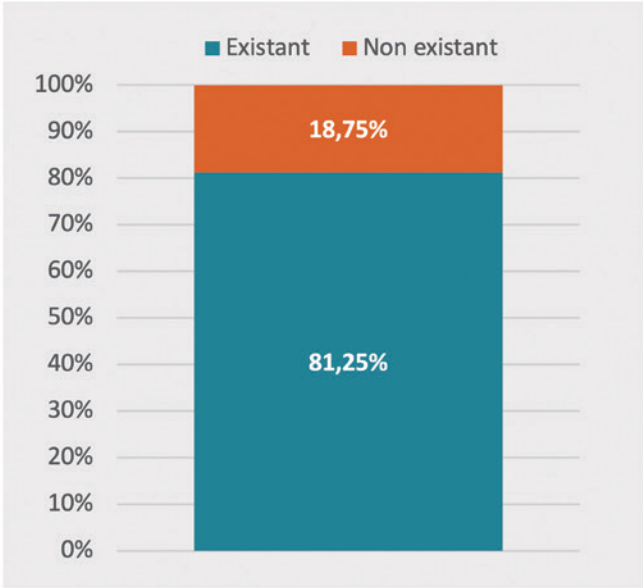
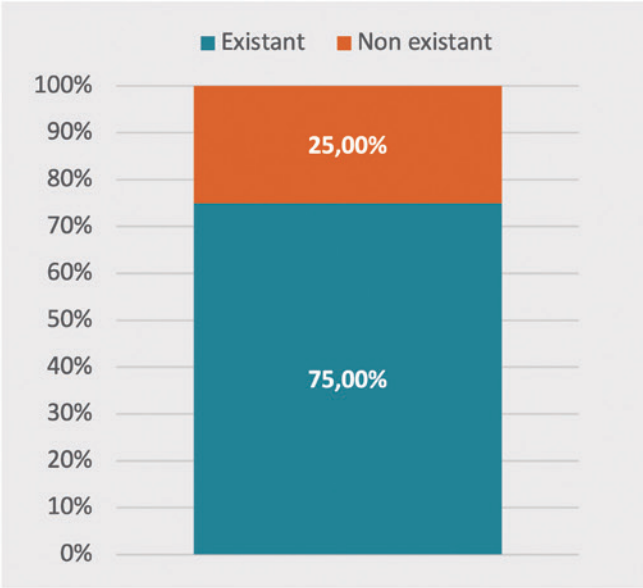


Figure 2c. Innovation statistics (%)



Source: Own elaboration based on surveys data (Regional Coordinators' survey Contrast II)

4.2 Strategic approaches at regional level

Figure 3. Existence of specific plans incorporating CCSIs into economic development (%)

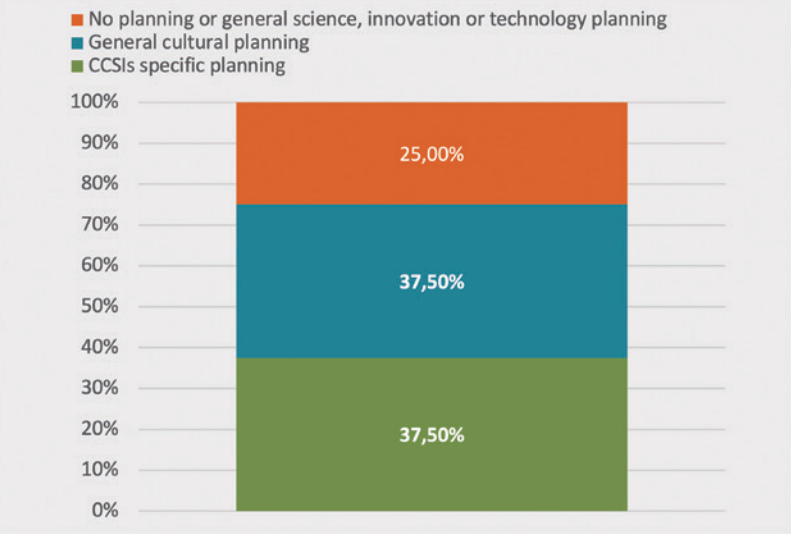
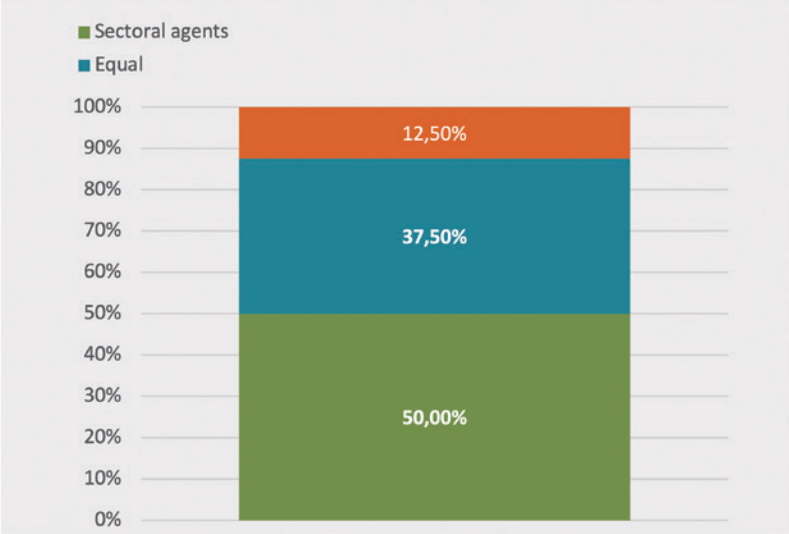


Figure 4. Type of agents involved in the development of CCSIs (%)



Regions with no planning or extra-sectoral planning	Regions with general cultural planning	Regions with CCSIs specific planning
› South Africa – Western Cape	› Italy - Puglia	› Finland
› India - Karnataka	› Kenya	› Denmark
› Germany - Baden-Württemberg	› Spain - Comunitat Valenciana	› Uganda
› Australia - South Australia	› USA - Washington	› USA - California
	› Estonia	› United Kingdom - Cardiff (CCR)
	› Portugal - Região do Norte	› Colombia – Antioquia

Regions with active general agents	Equal	Regions with active sectoral agents
› Spain - Comunitat Valenciana	› Finland	› USA - California
› India - Karnataka	› Denmark	› United Kingdom - Cardiff (CCR)
	› Uganda	› Colombia – Antioquia
	› Italy - Puglia	› USA - Washington
	› Kenya	› Estonia
	› South Africa – Western Cape	› Portugal - Região do Norte
		› Germany - Baden-Württemberg
		› Australia - South Australia

Source: Own elaboration based on surveys data (Regional Coordinators' survey Contrast II)

In terms of strategic approach, according to figure 3 (left), it stands out that, in general, there is either a specific planning of the CCSIs or there is a cultural planning with a broader view. Even so, in 25% of the cases studied there is no type of plan.

Concerning the type of agents actively involved (figure 4), it stands out that there are mainly sectoral agents involved (50%). In any case, it is very unusual for the main actors to be generalist[3] (12.5%) and, in many cases, both sectoral and generalist agents are involved jointly.

Considering the administrative levels[4] involved in monetary support (Figure 5a on the back page, left) and non-monetary[5] (Figure 5b, right), the state and higher levels slightly predominate in monetary support. In terms of non-monetary support (Figure 5b, right), the local and regional levels stand out.

[3] The label "generalist agents" refers to "Ministries, areas, or departments in other fields than culture" or "Development agencies or similar of a general nature (several sectors)". On the contrary, the label "sectoral agents" refers to "Cultural ministries, areas, or departments" or "Development agencies or similar specialized in CCSIs".

[4] The label "lower administrative levels" refers to local and regional levels and the label "higher administrative levels" refers to State and international levels.

[5] Monetary support refers to "aid, subsidies, credit lines, tax incentives...", while non-monetary support refers to "infrastructure, advice, training...".

Figure 5a. Administrative levels involved in monetary support (%)

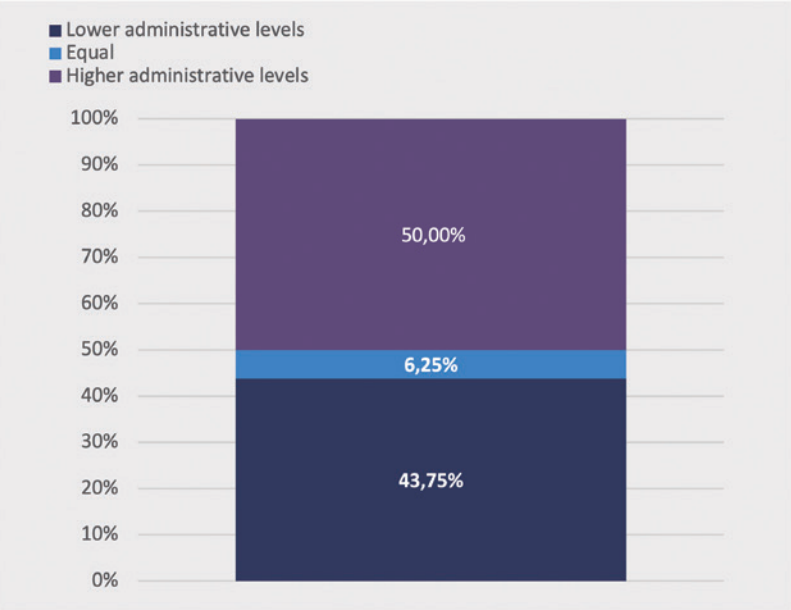
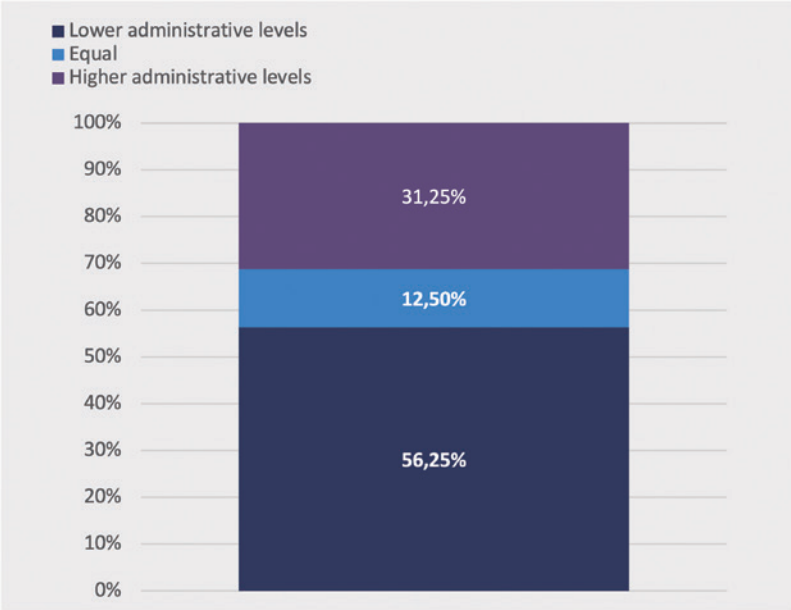


Figure 5b. Administrative levels involved in non-monetary support (%)



Higher administrative levels actively involved providing monetary support	Equal lower-higher	Lower administrative levels actively involved in providing monetary support
> Denmark	> South Africa – Western Cape	> Finland
> Uganda		> Italy - Puglia
> Kenya		> Spain - Comunitat Valenciana
> USA - California		> India - Karnataka
> United Kingdom - Cardiff (CCR)		> Colombia – Antioquia
> USA - Washington		> Germany - Baden-Württemberg
> Estonia		
> Portugal - Região do Norte		
> Australia - South Australia		

Higher administrative levels actively involved providing non-monetary support	Equal lower-higher	Lower administrative levels more actively involved in providing non-monetary support
> Kenya	> United Kingdom - Cardiff (CCR)	> South Africa – Western Cape
> Estonia	> USA - Washington	> Denmark
> Portugal - Região do Norte		> Uganda
> Australia - South Australia		> USA - California
> Spain - Comunitat Valenciana		> Finland
		> Italy - Puglia
		> India - Karnataka
		> Colombia – Antioquia
		> Germany - Baden-Württemberg

Source: Own elaboration based on surveys data (Regional Coordinators' survey Contrast II)

4.3 Innovation environment

4.3.1. Assessment of the status of CCISs and innovation

The respondents of each region have scored in an introductory way their territorial contexts linked to the CCSIs. They have expressed their opinion regarding 8 items, which can be classified as follows for better interpretation:

› Programs and public support (5 items):

- › Support for innovation in the cultural and creative sectors is relevant in the region.
- › Regional administration confers strategic importance to innovation.
- › The participation of the cultural and creative sectors in joint projects with other sectors is promoted.
- › Internationalization of the cultural and creative sectors of the region is being encouraged.
- › Regional administration confers strategic importance to cultural and creative sectors.

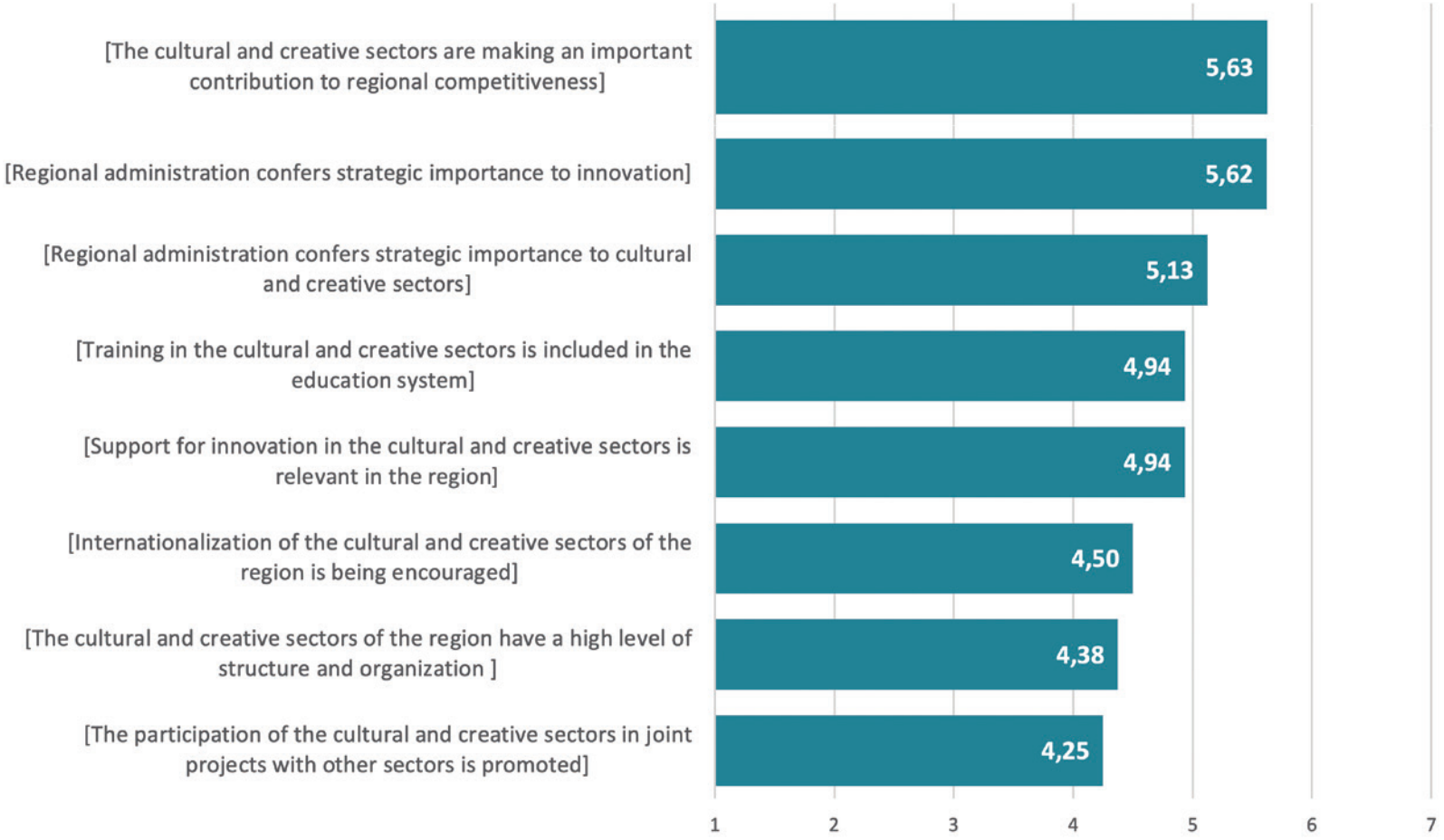
› CCSIs strengths (2 items):

- › The cultural and creative sectors of the region have a high level of structure and organization.
- › Training in the cultural and creative sectors is included in the education system.

› CCSIs contribution (1 item):

- › The cultural and creative sectors are making an important contribution to regional competitiveness.

Figure 6. General strengths and challenges of the selected regions. Coordinators' evaluations average according to various dimensions. Scale from 1 (weak score) to 7 (strong).



Source: Own elaboration based on surveys data (Regional Coordinators' survey Contrast II)

Looking at each item we can see (figure 6) that the assessment of the contribution made by CCSIs in the regions is on average very positive (5.63 out of 7). Informants state public administration attaches strategic importance to both innovation and CCSIs. Despite these intentions, the different characterization items of the sector receive slightly more unfavourable scores. In the worst position are the issues of internationalization of the sector, structuring, and promotion of collaborations with other sectors.

Figure 7 shows a great disparity of region situations contrasting the items organized in two groups with the score on CCSIs contribution to regional competitiveness. There are cases in which the contribution to regional competitiveness of CCSIs is valued very positively, but their characteristics and/or the existent public support to the CCSIs are unfavourable dimensions.

On the contrary, there are cases in which there is great support or a sector with strong characteristics but the assessment of the contribution to regional competitiveness does not stand out so especially. In any case, certain dynamics are noticed:

- Contexts where strengths are aligned and which have structured sectors, strategies and plans to support CCSIs, as well as great awareness of CCSIs ability to contribute to regional competitiveness: Cardiff (CCR) (Great Britain), the Valencian Community (Spain), Denmark and Puglia (Italy).

- Contexts where awareness of CCSIs ability to contribute to competitiveness is maximum, although both the structuring of the sector and the support policies are more limited: Washington (USA), California (USA), South Australia (Australia), Região do Norte (Portugal) and Kenya.

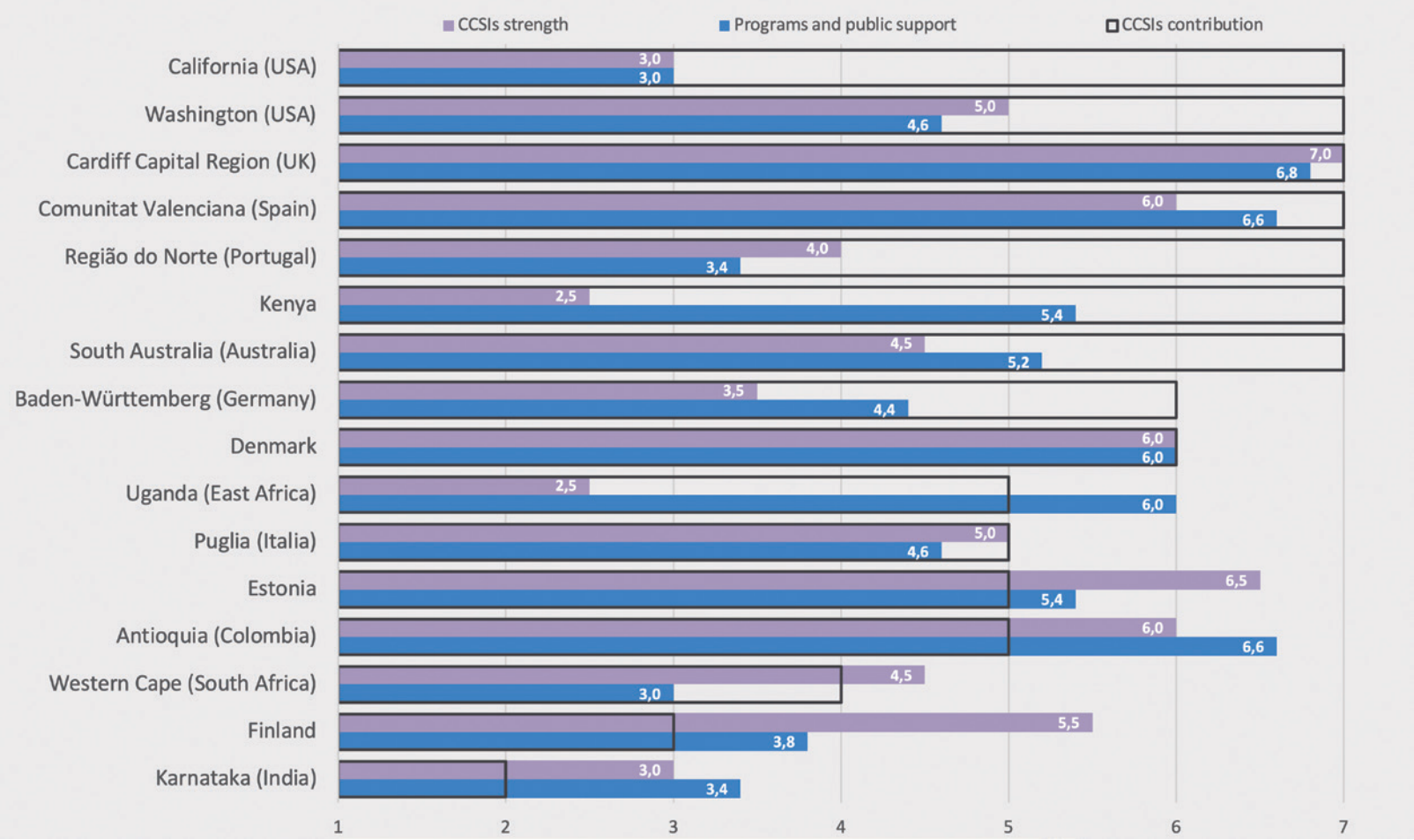
- Strong contexts both in CCSIs structuring and support, but whose capacity to contribute to regional competitiveness is not considered so evident: Estonia and Antioquia.

- In the case of Finland, the self-assessment data provided contrasts with the objective reality. Despite the data in Figure 7, as can be seen in their regional report (Annex 6), Finland has broad support for the sector. In addition, the sector makes a significant contribution to regional competitiveness.

- Contexts where awareness of CCSIs capacity to contribute to competitiveness is medium-high, but with disparate sectoral realities and support tools: Uganda and Western Cape (South Africa).

- Contexts where all CCSIs elements considered are emergent, with low awareness, low level of structuring and weak characteristics: Karnataka (India).

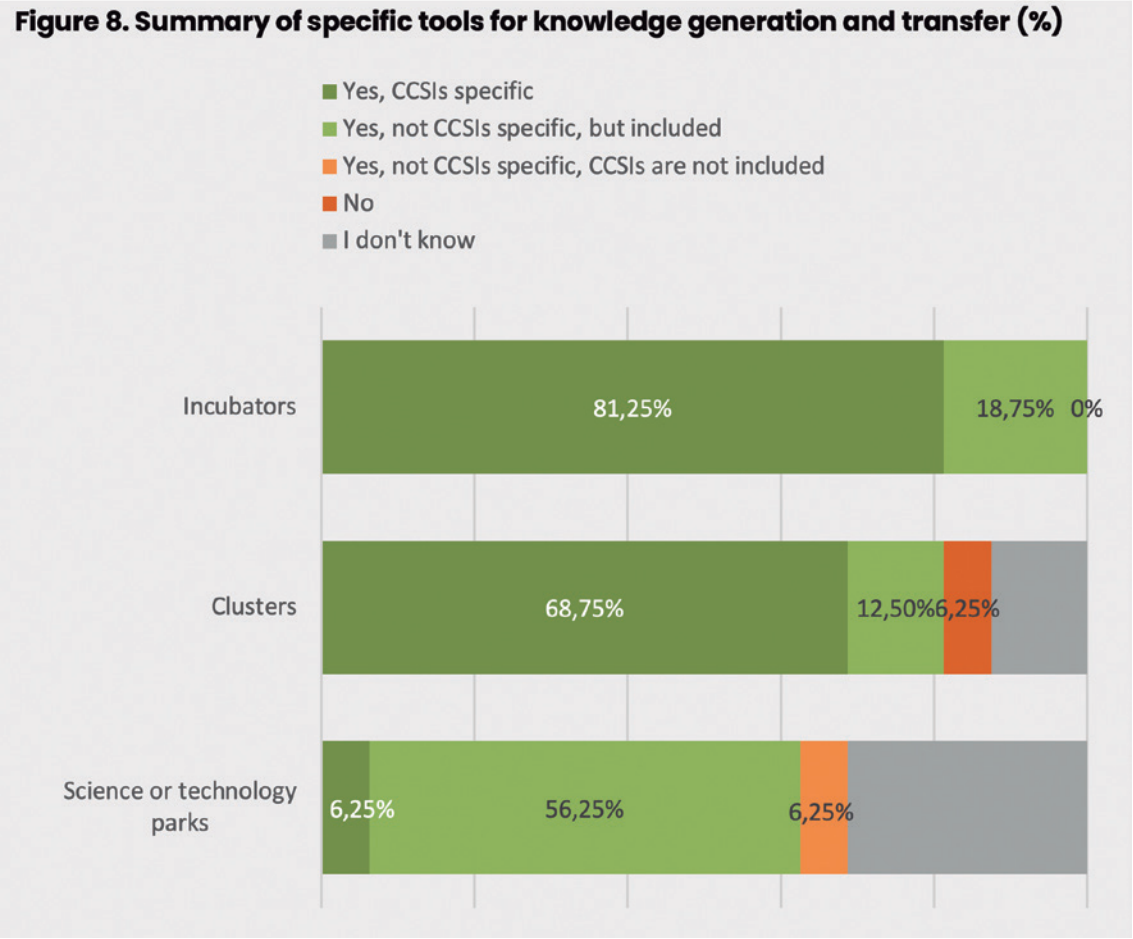
Figure 7. General strengths and challenges of the selected regions. Coordinators' evaluation according to previous items grouped between "CCSIs strength" (2 items) and CCSIs planning, support, or promotion (5 items) and contrasted with the CCSIs evaluation concerning to regional competitiveness. Scale from 1 (weak score) to 7 (strong).



Source: Own elaboration based on surveys data (Regional Coordinators' survey Contrast II)

4.3.2 Generation and knowledge transfer

Figure 8. Summary of specific tools for knowledge generation and transfer (%)



	CCSIs specific*
Incubators	› South Australia › Baden-Württemberg › California › Cardiff (CCR) › Comunitat Valenciana › Denmark › Estonia › Finland › Região do Norte › Antioquia › Kenya › Western Cape › Uganda
Clusters	› South Australia › Baden-Württemberg › California › Cardiff (CCR) › Comunitat Valenciana › Denmark › Estonia › Finland › Região do Norte › Puglia › Antioquia
Sci. or tech. parks	› Região do Norte

* Details can be observed at the section Contexts comparison

Source: Own elaboration based on surveys data (Regional Coordinators' survey Contrast II)

Incubators are the most common type of initiative for the generation and transfer of knowledge in the specific field of CCSIs. In most of the cases there are specific initiatives and, in those that do not, there are generalist ones including the CCSIs. Clusters are also a widespread type of strategy with a specific focus on CCSIs. Finally, **science or technology parks** are more generalist initiatives and only in one case is specific to CCSIs.

Another different look at the existence of these tools is their knowledge and use by the organizations surveyed, as well as the perception of relevance they have (Figures 9a and 9b). This perspective confirms the importance of each program.

Figure 9a. Knowledge and participation in each tool by organizations (%)

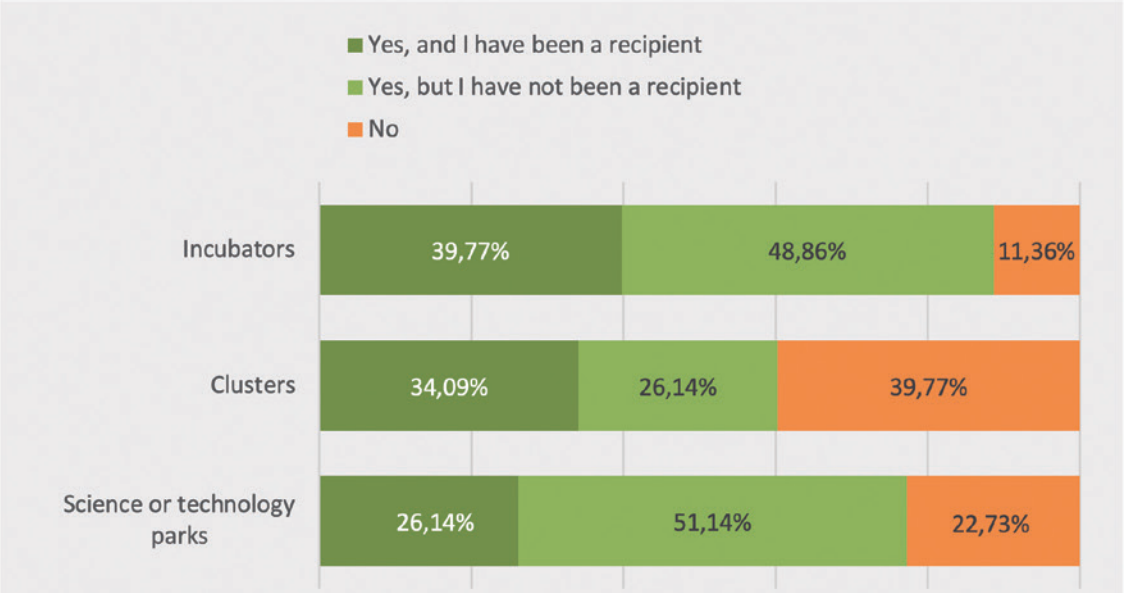
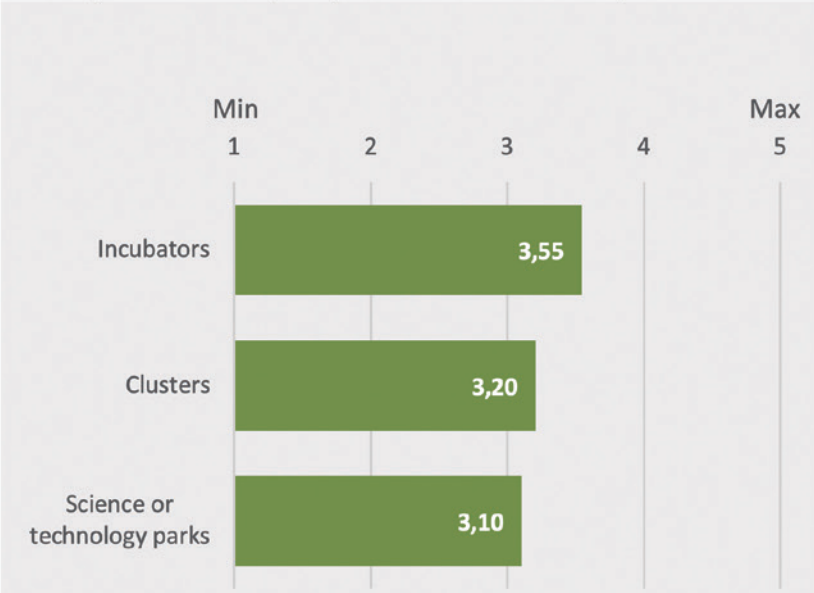


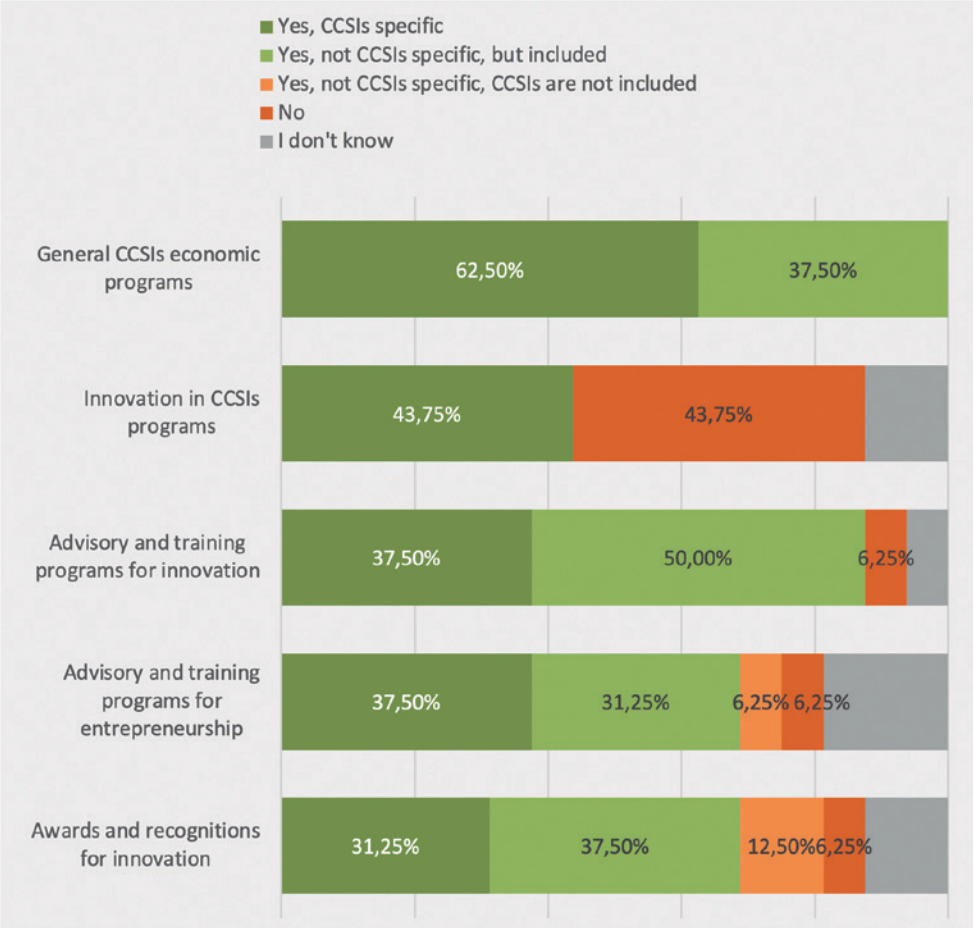
Figure 9b. Perceived relevance of each tool by agents (scale from 1, no relevance, to 5, maximum relevance)



Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

4.3.3 Conditions and support for Innovation

Figure 10. Summary of specific tools to support innovation (%)



Source: Own elaboration based on (Organizations' survey Contrast II)

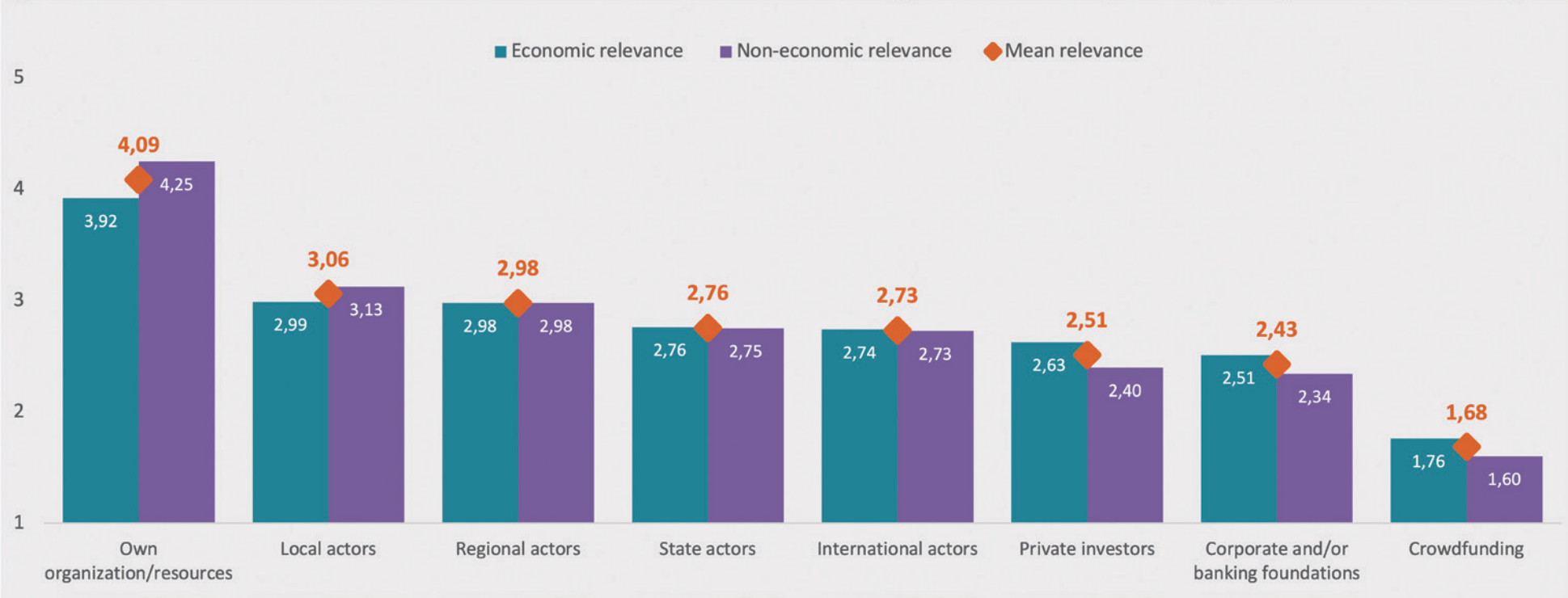
	CCSIs specific*
General CCSIs economic programs	› South Australia › Baden-Württemberg › Cardiff (CCR) › Comunitat Valenciana › Estonia › Finland › Puglia › Antioquia › Kenya › Uganda
Innovation in CCSIs programs	› California › Cardiff (CCR) › Finland › Antioquia › Kenya › Western Cape › Uganda
Advisory and training programs innovation	› Baden-Württemberg › California › Cardiff (CCR) › Comunitat Valenciana › Finland › Kenya
Advisory and training programs entrepreneurship	› Baden-Württemberg › California › Estonia › Finland › Kenya › Western Cape
Awards and recognitions	› Baden-Württemberg › Cardiff (CCR) › Denmark › Estonia › Washington

* All details appear in the Contexts comparison

In all cases there are **financing and financial aid programs** (grants, credit lines, tax incentives ...) that either specifically target the CCSIs (mostly), or at least include them. In addition, in a good number of cases (although they are not the majority) there are specific economic programs aimed at innovation in CCSIs.

Non-economic support, such as counselling and training and awards, are only specific to CCSIs in about one third of cases. Even so, many of them do include them, especially in the case of advice and training for innovation.

Figure 11. Relevance of different actors in terms of economic and non-economic support. Scale from 1 (irrelevant) to 5 (maximum relevance).



Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

According to the surveyed organizations, there is nearly no difference between the relevance of different actors in terms of monetary and non-monetary support (Figure 11). In addition, this equation includes the relevance of their own resources, a dimension that manifests itself as central to innovation.

In any case and focusing again on the programs (in this case, in the counselling and training programs and in the R&D), it is observed that they are considered quite relevant (Figure 12a), and more than half not only know them, but have been beneficiaries of one of these programs (Figure 12b).

Figure 12a. Knowledge and participation in each tool by organizations (%)

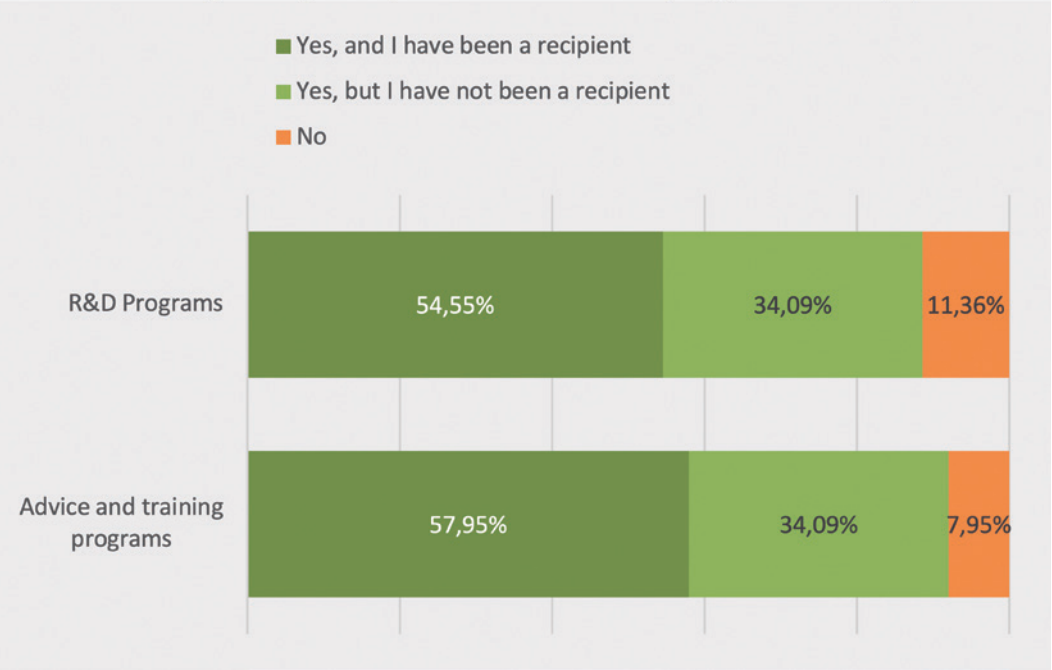
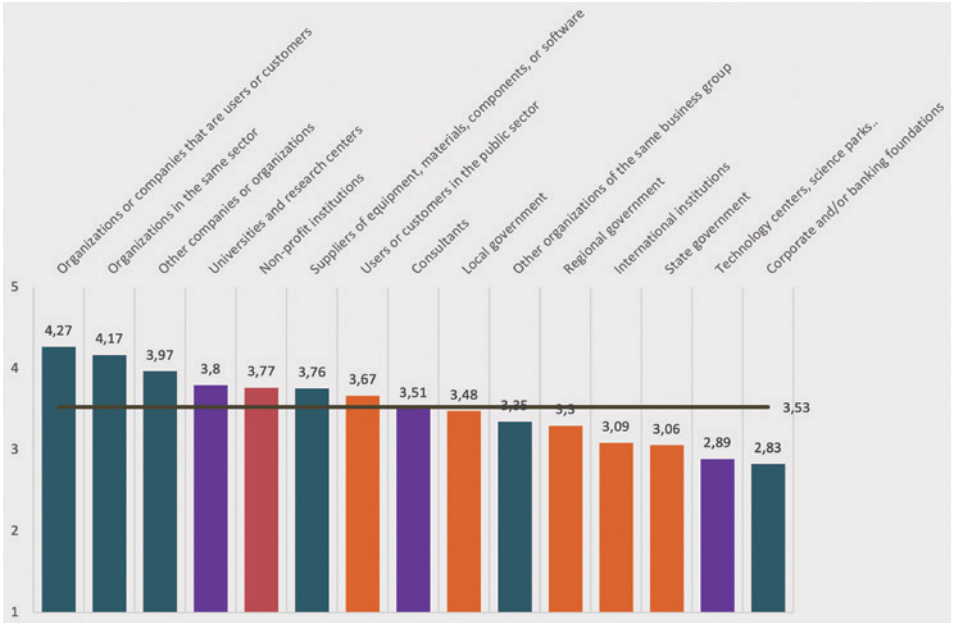


Figure 12b. Perceived relevance of each tool by agents
(scale of 1, no relevance, to 5, maximum relevance)

Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

4.3.4 Stakeholders

Figure 13. Contact regularity with the following key *stakeholders* (scale from 1, "never", to 5, "usually")



Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

Many agents participate in the environments linked to innovation in the CCSIs, but not all collaborate with all of them with the same frequency. In the first place, it should be noted that stakeholders have different characters, and their character determines the form and, therefore, the regularity of contact. Likewise, organizations in the sector have their own needs, which make them more likely to maintain contact with one or other organizations. For example, banking and business foundations, as well as technology or science parks, are unusual stakeholders for them. Governments, with whom it can be understood that they have a more administrative and formalized relationship are also unusual stakeholders to be in contact with regularly for the surveyed organizations.

On the contrary, the most regular contact occurs with private agents such as organizations and companies that are users or clients, as well as others linked to their specific field of activity. These are key stakeholders for CCSIs.

Thus, it highlights that stakeholders can have a public or private character, and within these categories it is possible to establish other types. The private ones (specifically other related organizations or within the same sector) are more relevant stakeholders. Among the public ones, although the administrations and public institutions of local, regional, state, and international level are not that relevant, universities and research centres are. With these last agents it can be understood that it is possible to maintain relationships more linked to specific interests, with significant specific knowledge to collaborate and innovate, a fact that makes them interesting.

4.4 Characteristics of innovation

4.4.1 Types of innovation

The analysis of innovation distinguishes two broad general types of innovation: process or methodological[6] and product (services or goods, including artistic works)[7]. Process or methodological innovation has to do with the internal transformation of the organization, while product innovation has to do with the transformation of goods and services that are put into circulation.

The results show that the levels of innovation in both dimensions are very similar, with significant changes around 65% of cases in the reference period. Only a small portion of cases report not having made this type of significant change in their processes or products in the last two years. About 30% in both cases say they have made changes, but of a minor nature. In this sense, it must be considered that these changes of greater magnitude are usually counted as innovations.

[6] Includes novelties or improvements for the organization itself and novelties or improvements for the sector, whether originally developed by the organization itself or initially developed by others. Examples: changes in the forms and tools of creation and production, in sales and marketing channels, in the administration and management of accounting and human resources.

[7] This includes new features or improvements for the organization itself and novelties or improvements for the sector, whether originally developed by the organization itself or initially developed by others. Examples: improvement of materials, incorporation or improvement of software, environmental improvements, digital services.

Figure 14a. Process or methodological innovation (%)

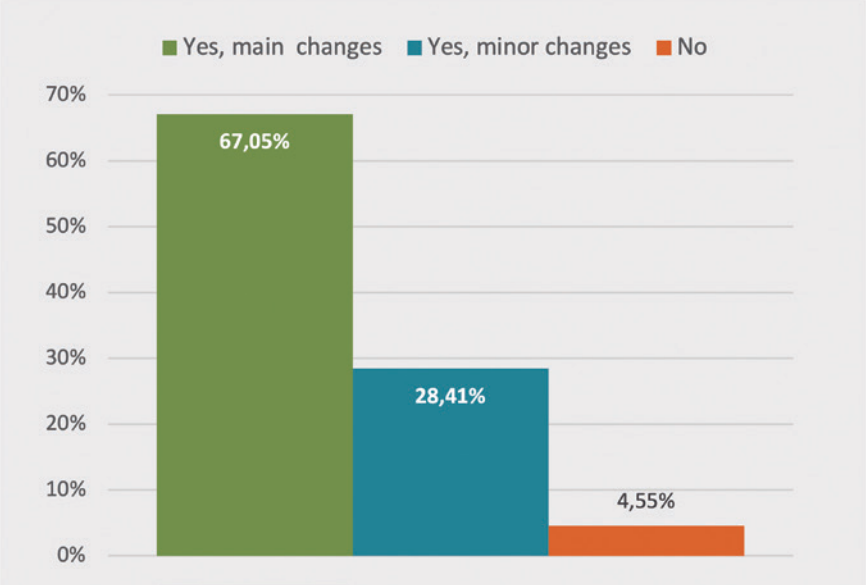
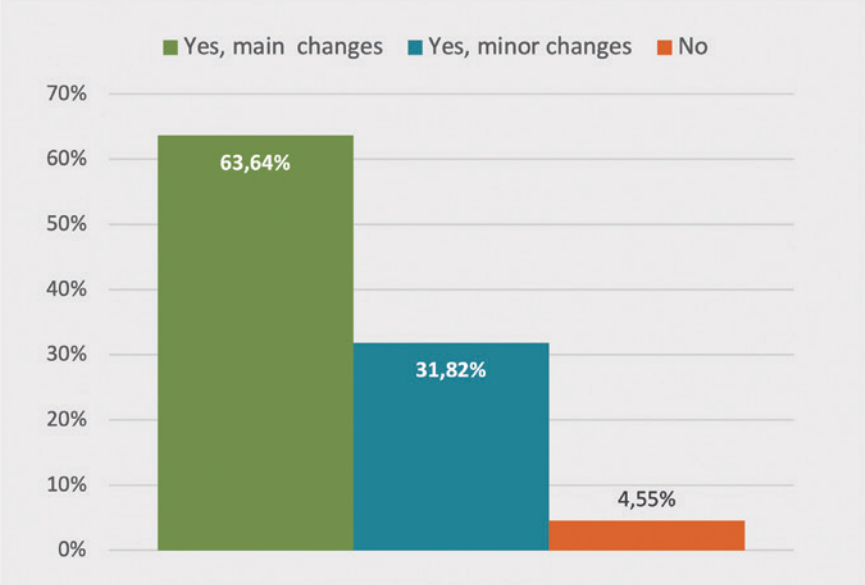


Figure 14b. Product innovation (services, goods, or artistic works) (%)



Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

Table 6. Combined look to process or methodological innovation and to product innovation (%)e

		Process or methodological innovation			Total
		No	Yes, minor changes	Yes, main changes	
Product innovation (services, goods or artistic works)	**No**	**1,14%**	**3,41%**	**0,00%**	4,55%
	Yes, minor changes	**2,27%**	**17,05%**	**12,50%**	31,82%
	Yes, main changes	**1,14%**	**7,95%**	**54,55%**	63,64%
	Total	4,55%	28,41%	67,05%	100,00%

Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

It is interesting to note in Table 6 that there is a combined innovation, a reinforced dynamic: in most cases there are important changes in both process and product concepts (54.55%). Likewise, cases that make minor changes in one dimension are mostly also making changes in the other, and in the same way (minor changes in both dimensions). This can reveal a certain inertia or dynamic in the level of innovation: some involved in a general dynamic (both product and process) of greater changes and others in a dynamic of smaller changes.

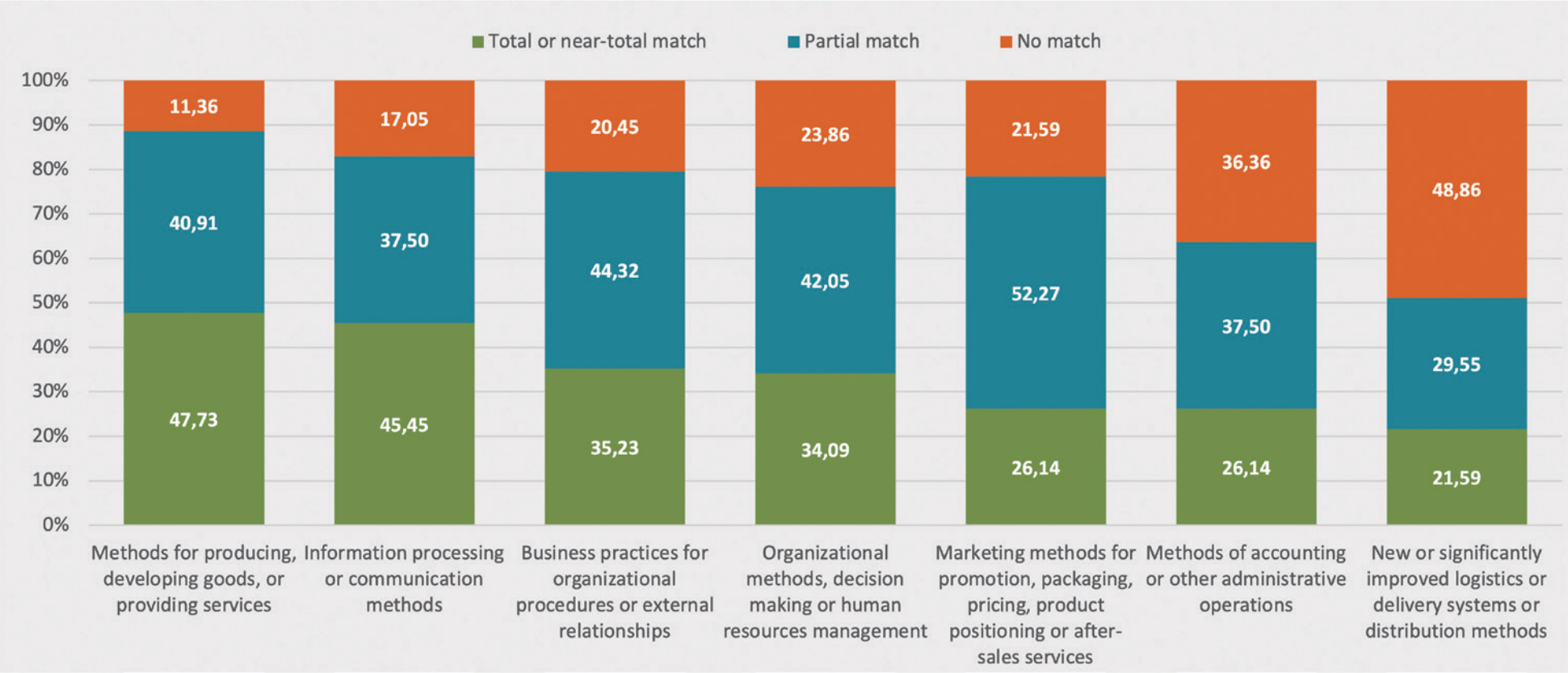
To delve into the type of changes introduced in this regard, the cases have pointed out to what extent these coincide with different areas or characteristics.

In terms of process or methodological innovation, the most common changes in the sector are aimed at modifying "methods for producing, developing goods or providing services", as well as "information processing or communication methods". In these areas there is the highest percentage of "total or near-total match", with 47.73% and 45.45% respectively. In addition, 40.91% of cases and 37.5% respectively manifest changes that are partially related to these areas.

On the opposite side, two areas with little relevance can be included, where there are less changes that are related to them: "accounting or other administrative operations", with 36.36% in the category "no match" and "new or significantly improved logistics or delivery / distribution methods", with up to 48.86%.

In the central block there are three areas in which there is also change but they only partially align with the mentioned areas: it is "business practices for organizational procedures or external relationships", "Organizational methods, decision making or human resources management" and "promotion, packaging, pricing, product positioning and after-sales services".

Figure 15. Areas of process or methodological innovation (%)

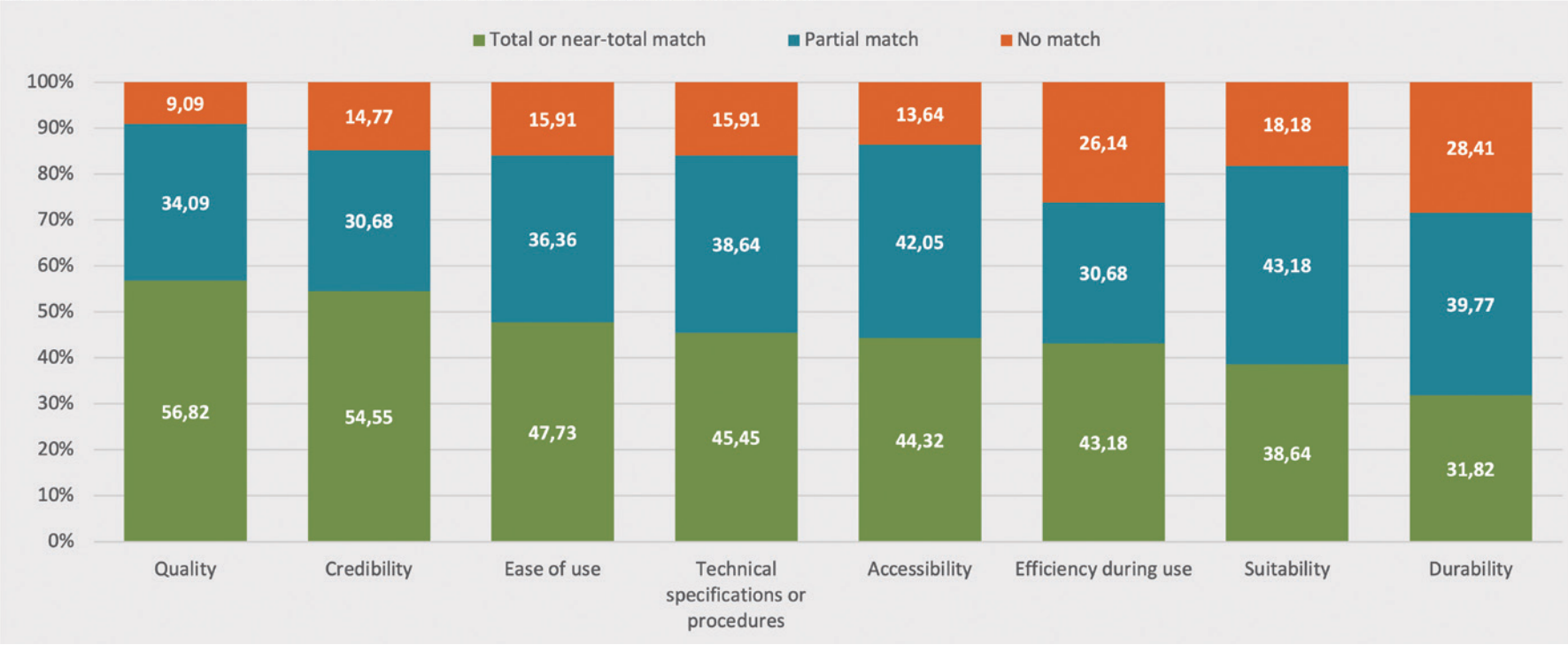


Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

In relation to product innovation (whether goods, services, or artistic works) the two criteria for which greater innovations are generated is to improve quality and credibility. About 55% of cases show changes that must do directly with these criteria. On the other hand, the term "suitability" is understood as the quality of adapting to a particular purpose, it is the criterion with which least matches when innovating, and in general the changes only partially coincide with this criterion. In an intermediate block are the "ease of use", the "technical specifications or procedures", the "accessibility" and the "efficiency during use".

In summary, the process innovations of CCSIs are primarily related to "methods for producing, developing goods or providing services," as well as "information processing or communication methods," and product innovations are associated with "quality" and "credibility".

Figure 16. Product innovation criteria (goods, services, or artistic works) (%)

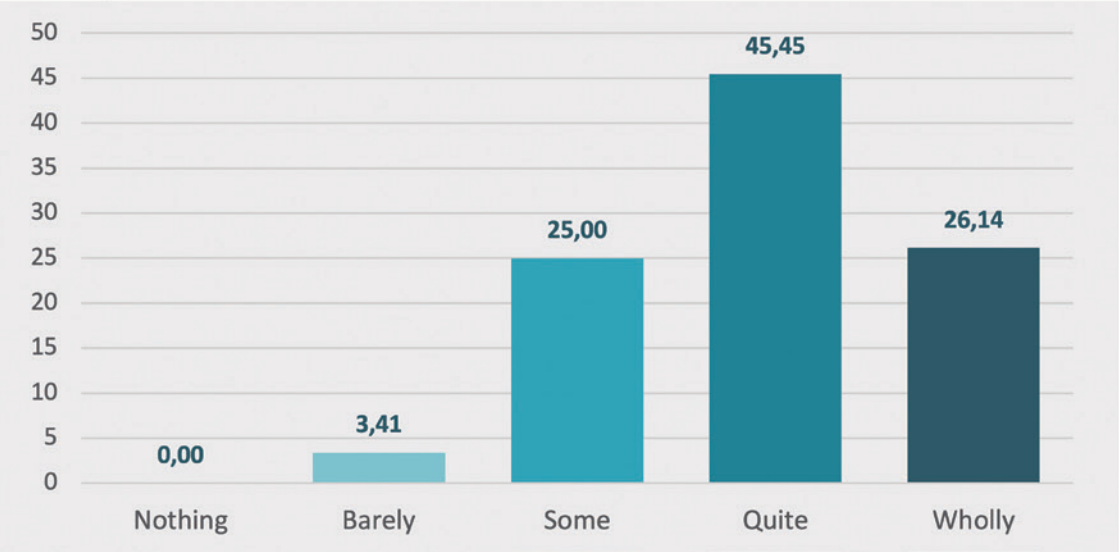


Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

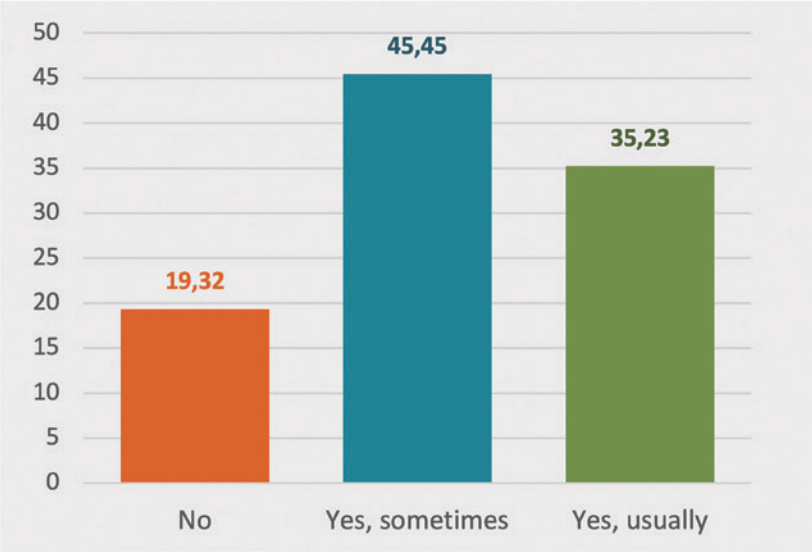
4.4.2 Procedures and mechanisms

As Figure 11 (conditions and support for innovation) highlighted previously, it should first be noted that organizations report that innovations are made possible by their own resources or means (Figure 17). A total of 45.45% of the organizations say that own means are quite important, and 26.14% that they are important. Taken together, this means that seven out of ten organizations believe that innovations are developed almost entirely or completely thanks to their own resources and means. In this sense, it stands out that in general specific R&D resources (whether human or economic) are used to produce innovations: 45.45% of the organizations state that they occasionally use them, and 35.23% of the organizations state that they do so on a regular basis.

Figure 17. Degree of innovation by own means/resources (%)
To what extent has your organization made innovations only by own means/resources?



Feature 18. Use of specific R&D human or economic resources (%)



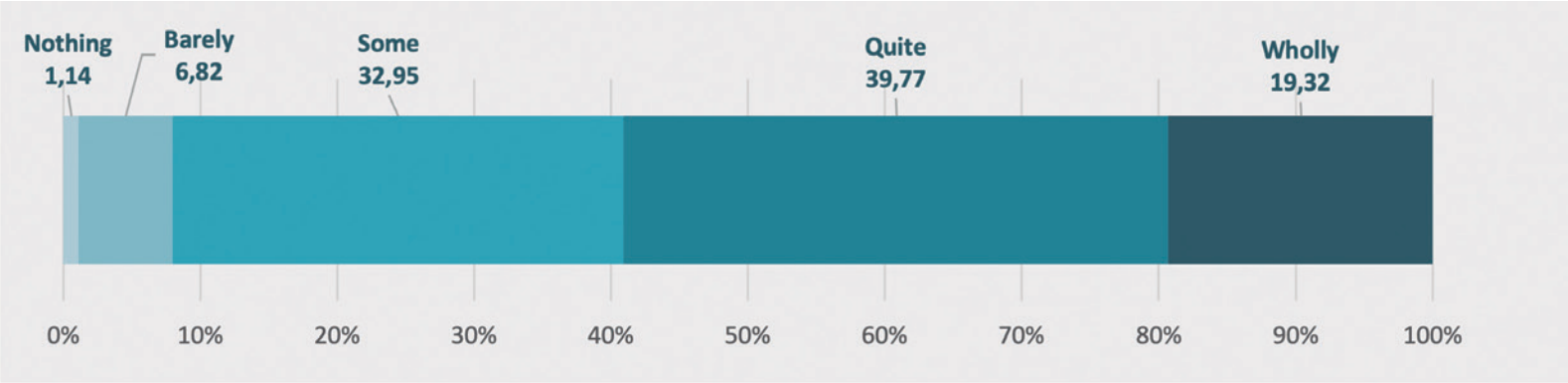
Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

Despite the importance of own resources and means, there is a relevant degree of open or collaborative innovation. In this sense, these are not exclusive issues, but a usual combination with potential.

Organizations say in 39.77% of the cases that the extent to which they have made innovations with external support is "quite a lot", and in 19.32% "completely". This adds up to 59.09% of cases in which external support is manifested as basic, by 40.91% in which it is not so much. It should be specified, in this sense, that the categories "nothing" and "barely" barely add up to 7.96%, reinforcing the idea that external collaboration is vital.

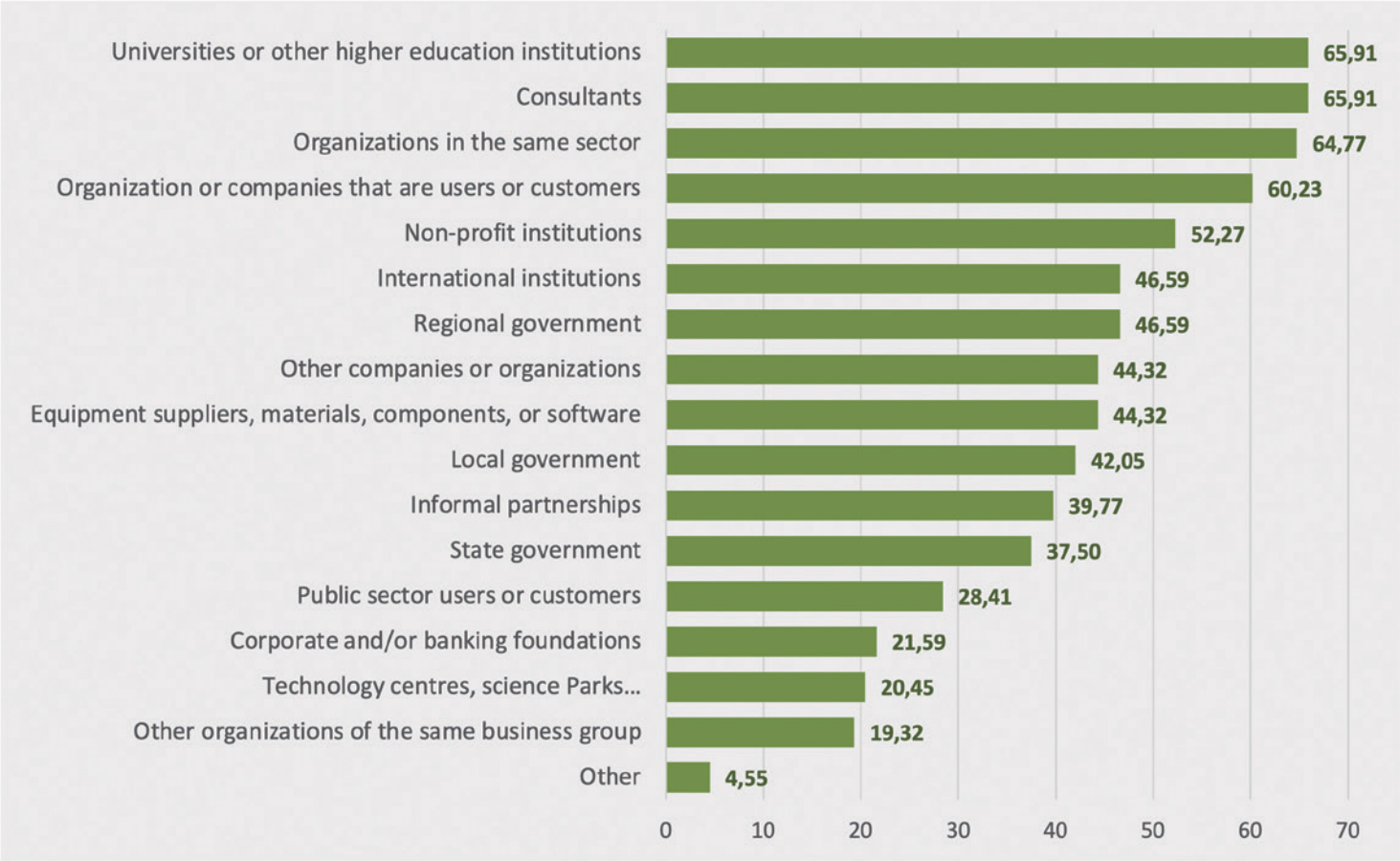
Again, the look at the partners with whom we have collaborated reviews the importance of user or customer organizations and those of the sector itself, as well as universities and research centres but also consultants: between 60% and 70% of cases claim to have collaborated with this type of agents. Non-profit institutions also account for more than 50% of responses. The reading obtained is very similar in general to that resulting from the generic question on the frequency of contact maintained with different stakeholders (Figure 12).

Figure 19. Open or collaborative innovation (%)
To what extent has your organization made innovations with external support (collaboration, external knowledge, advice, transactions...)?



Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

Figure 20. Partners (%)
With which of the following actors have you collaborated during the period 2020-2022 to develop your innovation activities?
Multiple choice question



Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

Considering figure 21, the idea of these necessary connections produced by innovation is also reinforced by observing that only 12.5% of organizations state that their innovations are never or almost never directed to organizations in sectors other than their own. 57.95% of the organizations say that from time to time these innovations are directed to other sectors, and 29.55% say that they are always directed to other sectors. Thus, intersectoral innovation reaches a medium and medium-high degree or extension.

Figure 21. Cross sectoral innovation (%)

During the reference period, are the innovations generated by your organization directly targeted at companies or organizations in sectors other than yours?

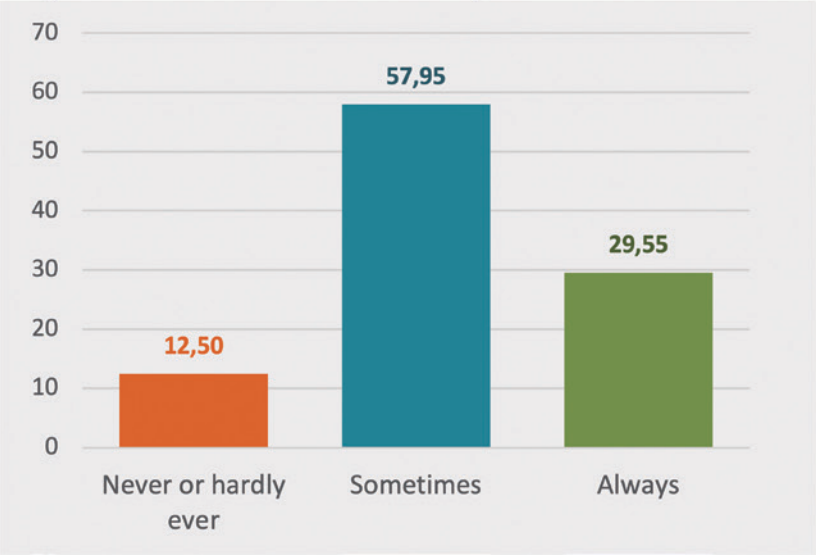
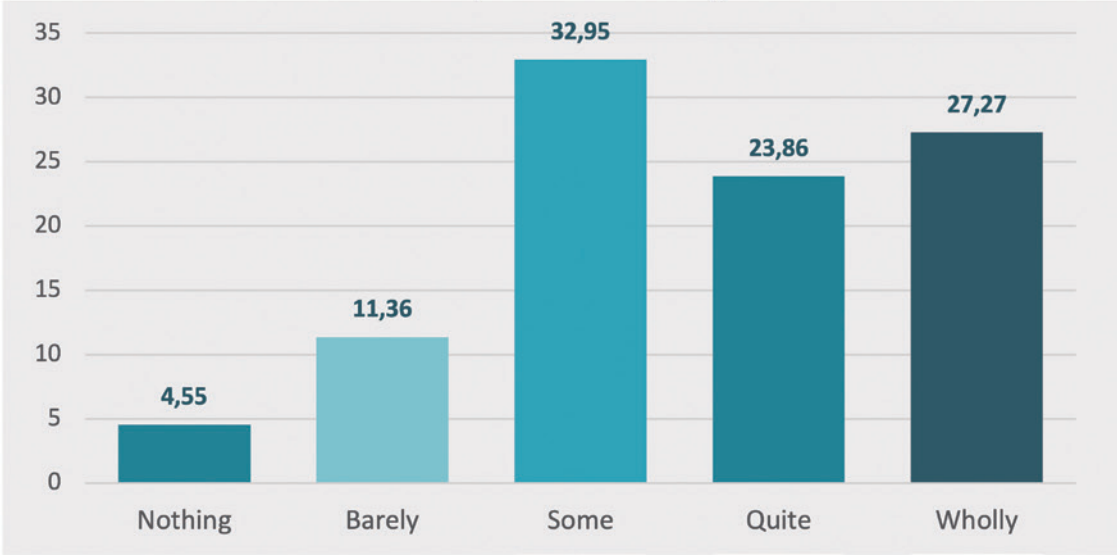


Figure 22. Technology based innovation (%)

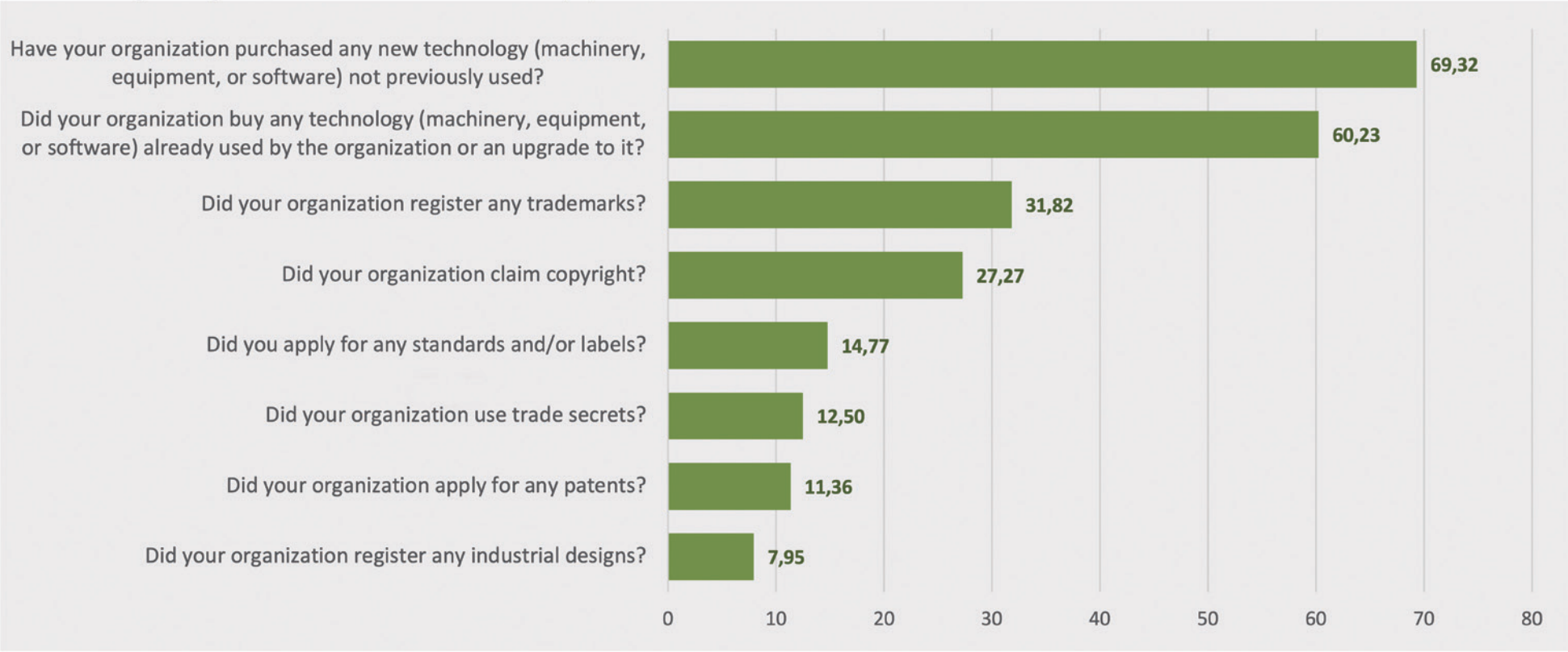
To what extent has your organization made innovations through the application, renovation, combination, or development of technologies?



Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

Finally, it is observed that the role of technology in innovations is quite widespread, but not very profusely: only 23.86% and 27.27% of the innovations have to do with the application, renewal, combination or development of technologies and the term selected by the organizations has been "fairly" or "totally" (in total, 51.13%). In 15.91% of cases, innovations are not made in any or almost no way through technology, while a core group (32.95%) states that only sometimes does technology play a role.

Feature 23. Specific procedures linked to innovation (%)



Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

They are followed by the registration of trademarks as distinctive signs and the claim of copyright, with 31.82% and 27.27%. Finally, with a lower incidence is the obtaining of labels, the use of trade secrets, the obtaining of patents and the registration of industrial designs.

Overall, despite everything, the least widespread options add up a total of 57.95% of agents who use at least one of them (basically, as expected, trademarks or copyrights). The situation here is also very heterogeneous (Table 7): 30.68% of the respondents use at least one of the procedures, 17.05% use two of them, and 10.23% 3 or more. In this sense, there is a small segment of organizations that make very broad use of diverse strategies. In this small segment no pattern is observed: they are agents with a very variable volume of workers, from different sectors (there are from digital content and design and fashion to education and performing arts), with different seniority and different legal forms (public and private).

Table 7. Use of the different mechanisms/procedures less widespread (trademarks, copyrights, labels, trade secrets, patents, industrial designs)

	% Organizations
0 (None of the procedures less widespread)	42,05%
1	30,68%
2	17,05%
3 or more of the procedures less widespread	10,23%

Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

4.4.3 Reasons to innovate

Figure 24. Reasons to innovate (%)

% selected as primary reason		% selected as additional reason (multiple choice)
31,82	**Business** Improvement of strategies and own economic or third parties' results	44,32
31,82	**Cultural** Increase participation or enhance the cultural experience	55,68
13,64	**Educational** Facilitate educational tasks and learning	57,95
5,68	**Environmental** Contribute to sustainability	42,05
4,55	**Urban** Transform environments and communities	43,18
2,27	**Healthcare** Improve health services	13,64
2,27	**Social** Facilitate citizen participation	62,50
7,95	**Other**	7,95

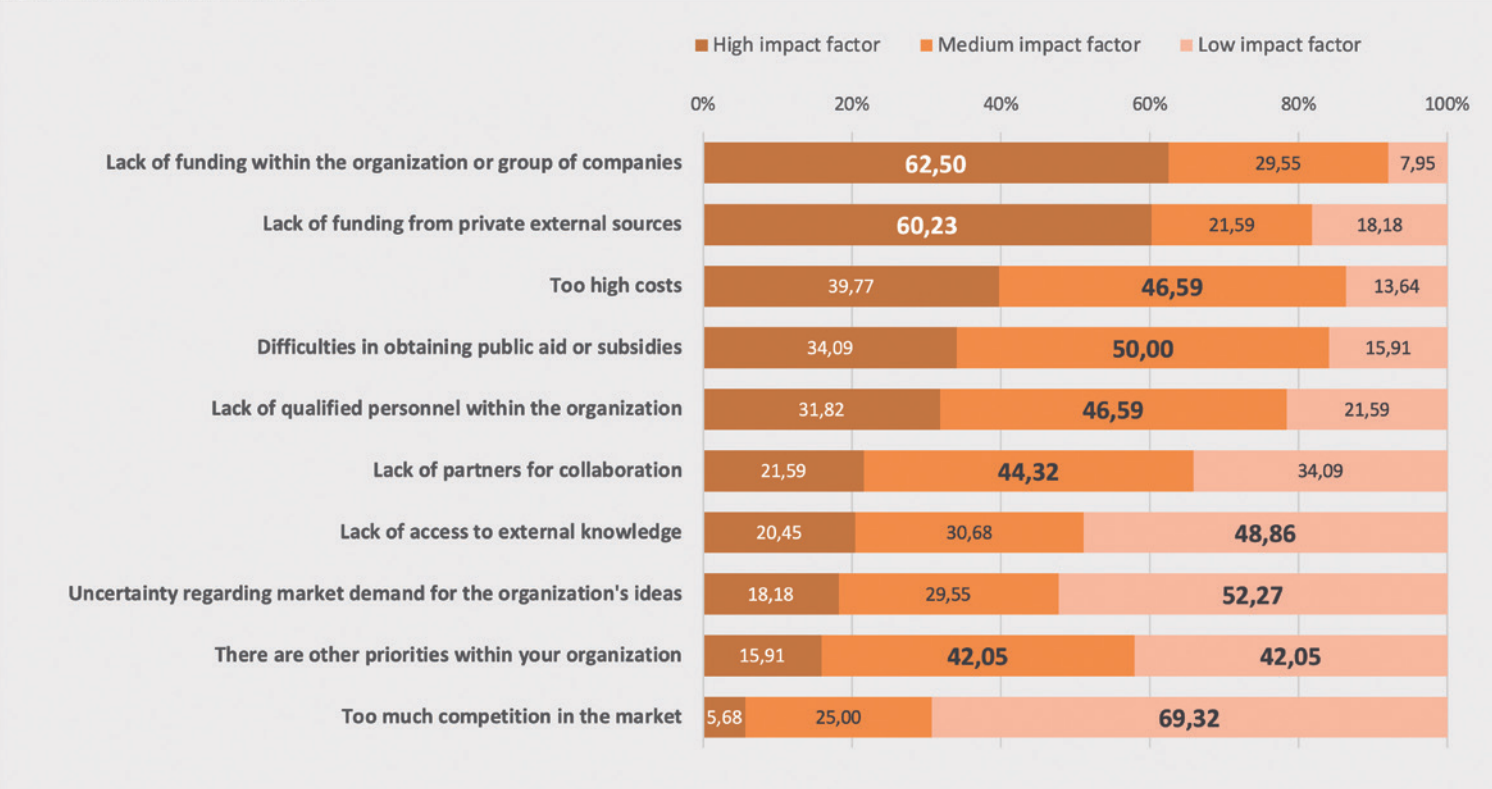
Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

First, it should be noted that the sum of additional reasons selected is 288, an average of 3 additional reasons for each case. Although there are two main reasons to innovate, there is a relevant multidimensionality. In this multidimensionality, the extra-economic vocation of the cultural and creative sector materializes more clearly. Doing business is important, but it is not the most important reason. Their weight is equivalent to cultural vocation, and the rest of the reasons obtain minority weights but encompassed as "non-economic reasons", they make up the majority.

4.4.4. Difficulties to innovate

Finally, in terms of innovation challenges, figure 25 highlights that on top of the challenges ranking it does not appear, as it might sometimes seem, the difficulty in obtaining public monetary support.

Figure 25. Innovation challenges



Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

The **two main difficulties** are the lack of funding within the organization itself and the lack of funding from external private sources. This can be related to the results obtained in terms of partners and stakeholders, where agents such as banking and business foundations appeared to be not very relevant. In this sense, it may be necessary to better connect actors with forms of financing other than public ones.

Concerning the **factors of medium impact**, figure 25 highlights the following items: high costs, difficulties in obtaining public aid, the lack of qualified personnel and the lack of external collaborators.

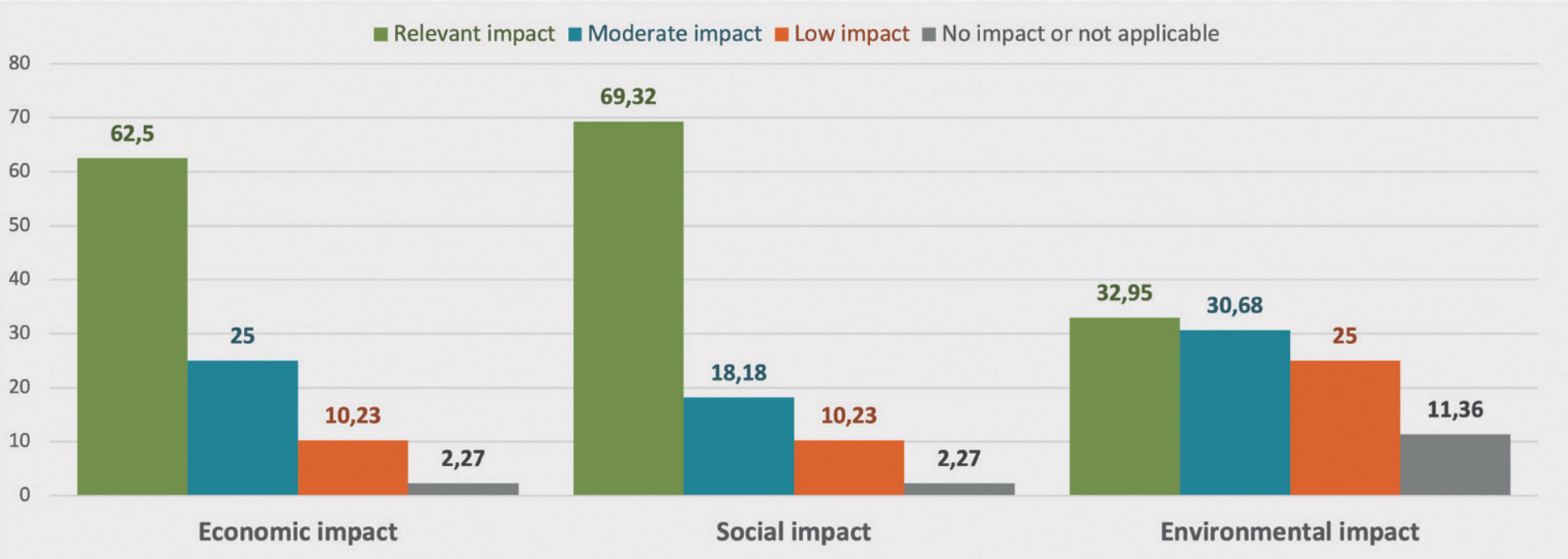
Lack of access to external knowledge, uncertainty regarding market demand, other priorities within the organization and market competition appear as **not very relevant factors**.

4.5 Measuring outcomes, impacts and value of innovation

4.5.1 Overview

The respondents of the survey (organizations) first valued the impact they presume they have on three basic dimensions: economy, society, and environment. This first approach highlights that the CCSIs have an impact above all in social terms (69,32% of the respondents claims to have a relevant impact on this dimension) and economic terms (62,5% of the respondents). In the environmental dimension, the reality is much more disparate (32.95% declare a relevant impact, 30.68 % a moderate impact, and 25% a low -but existing- impact).

Figure 26. Self-assessment impacts



Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

4.5.2 Standard impact dimensions

Economic dimension

Figure 27a. Approximate mean percentage of turnover for the year 2022 due to innovations

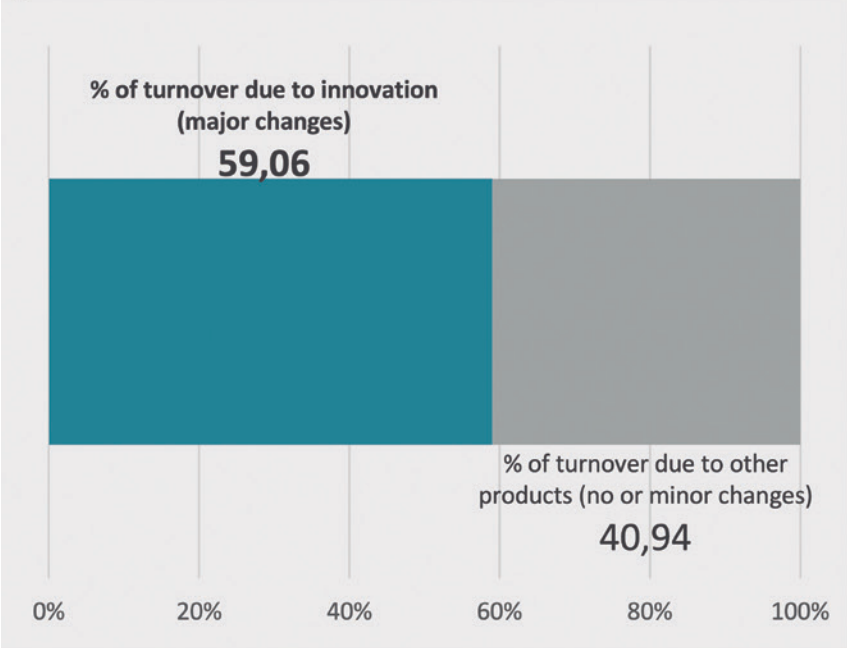
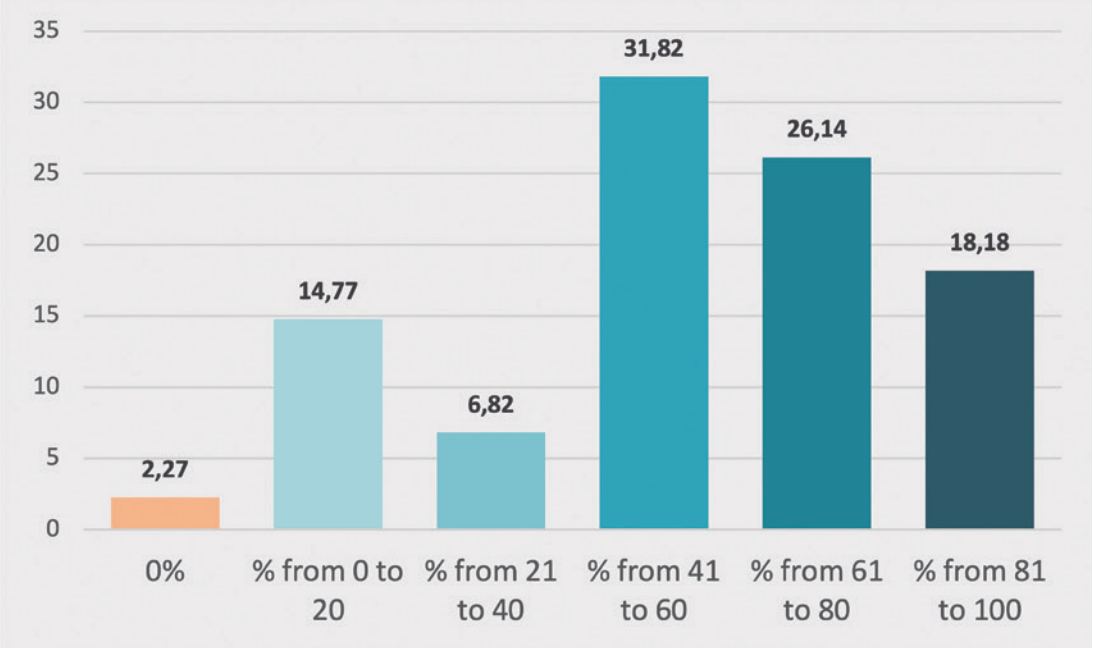


Figure 27b. Approximate percentage of turnover for the year 2022 due to innovations (intervals)

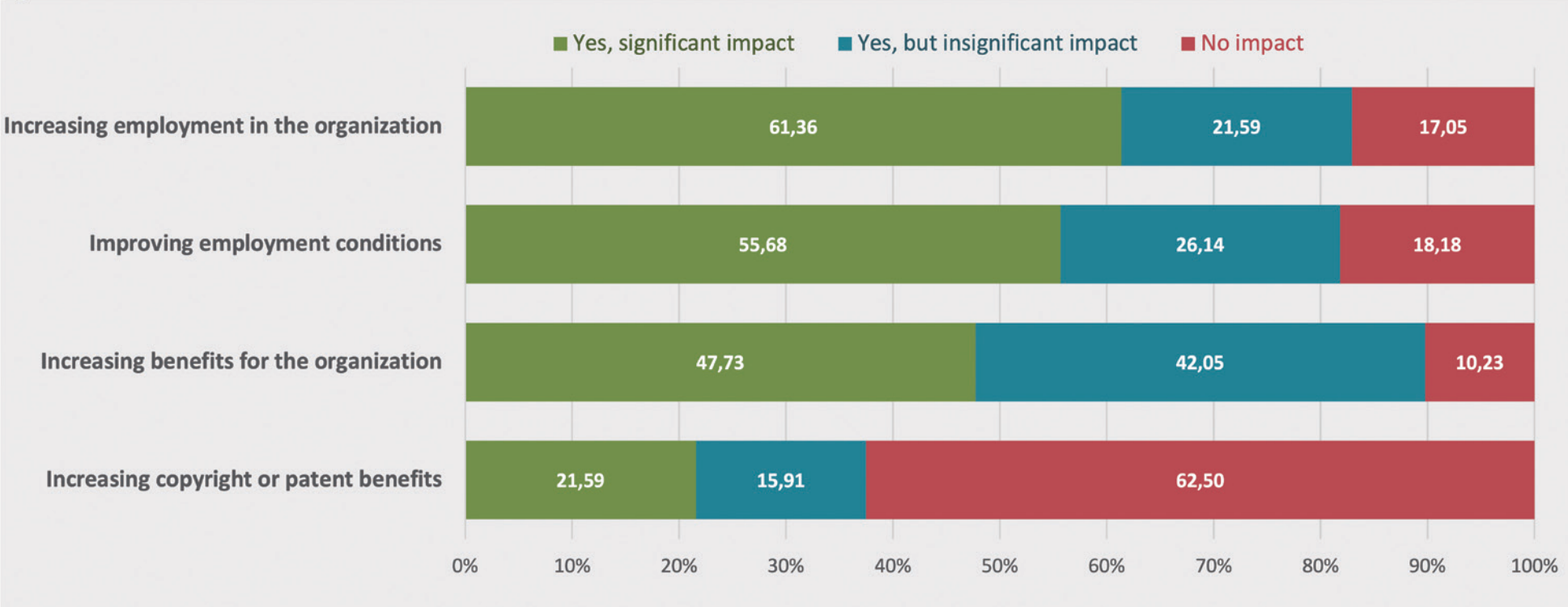


Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

Considering the economic dimension, stands out in the first place that the income of the organizations comes in a relevant way from the innovations generated. 59.05% of revenues in 2022 have to do with significantly improved products or services in the period 2020-2022.

The two most significant impacts have to do with employment: firstly, its increase, and, secondly, the improvement of working conditions. Next, as an existing but less relevant impact, there is the direct increase in profits. Finally, as could already be seen from the results of the figure on specific innovation procedures (figure 23), the impact in terms of increasing benefits from copyright or patents is very little widespread.

Figure 28. Level of innovation in economic dimension

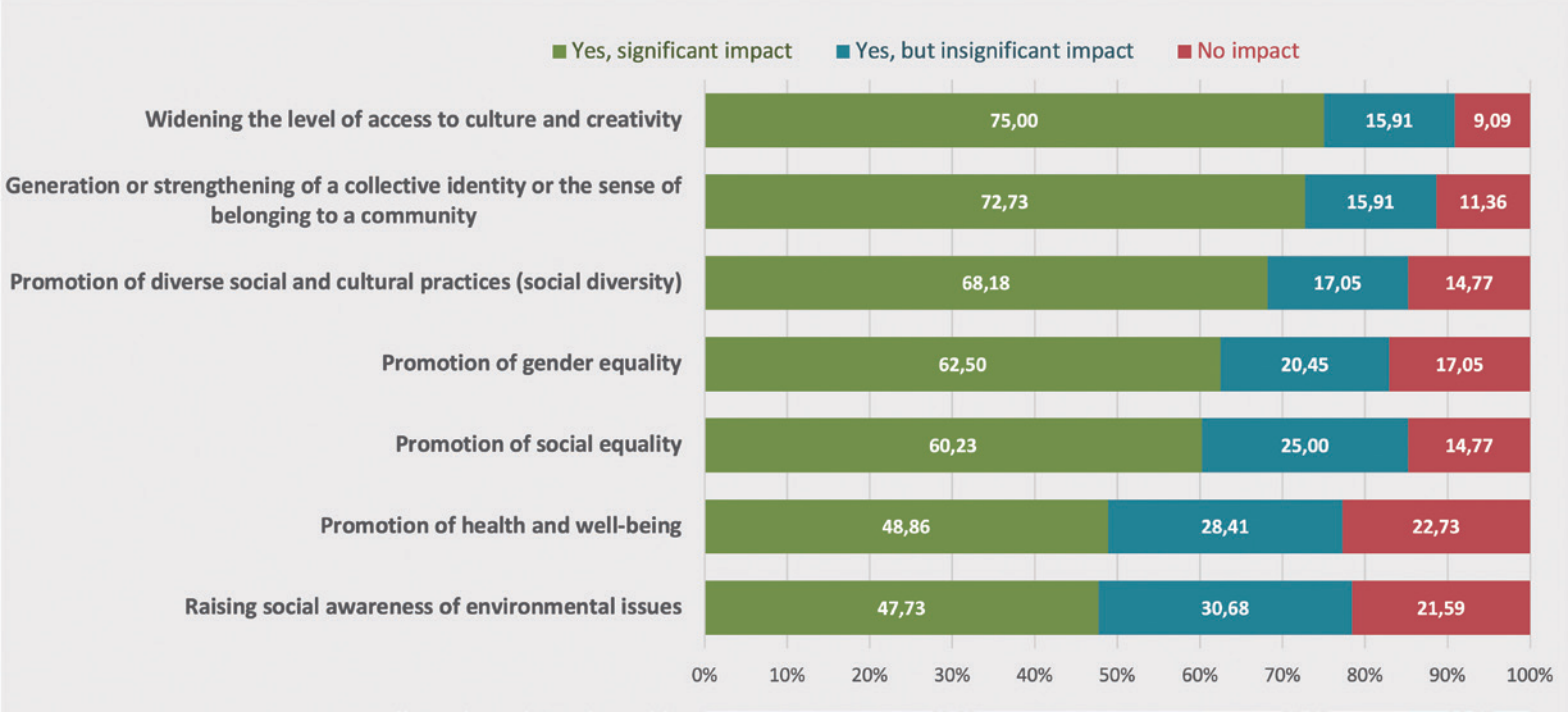


Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

Social dimension

In social terms, it is observed that significant impacts are generally widespread reaching above 60%. The following are highlighted, in order of greater prevalence. The impact on "widening the level of access to culture and creativity", impact on "generation or strengthening of a collective identity or the sense of belonging to a community", impact on "promotion of diverse social and cultural practices (social diversity)", impact on "promotion of gender equality" and impact on "social equality."

Figure 29. Level of innovation in social dimension

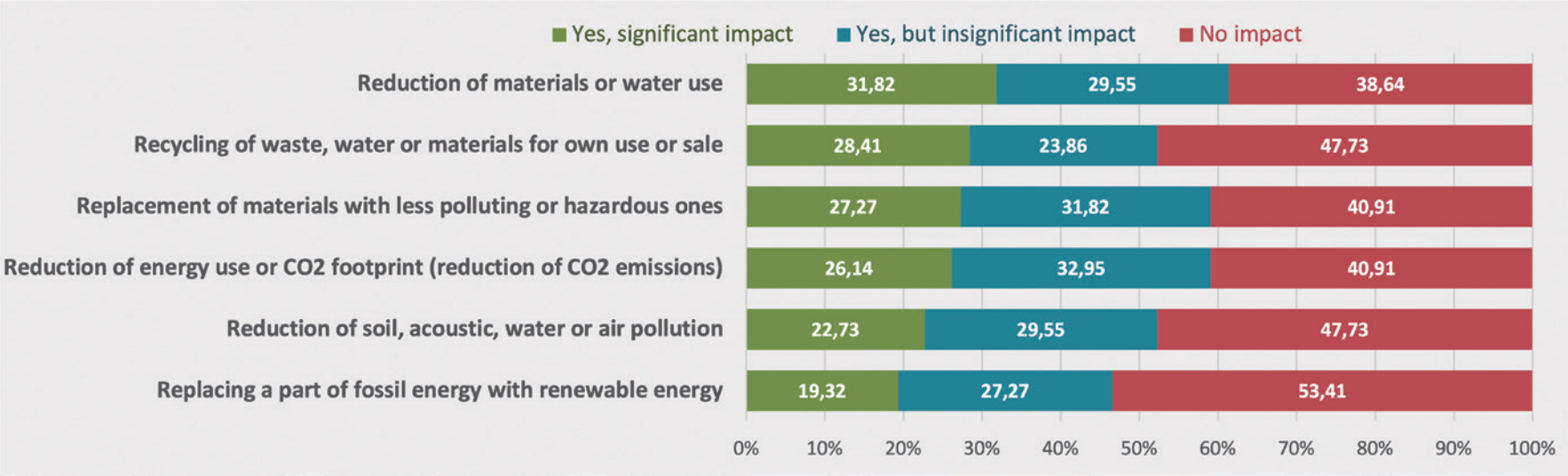


Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

Environmental dimension

Finally, the results allow us to observe in more detail the disparate impact in environmental terms. A very relevant portion of cases that in some items reaches slightly more than 50%, have answered that there is no existing impact, among their organizations, concerning the items used.

Figure 30. Level of innovation in environmental dimension



Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

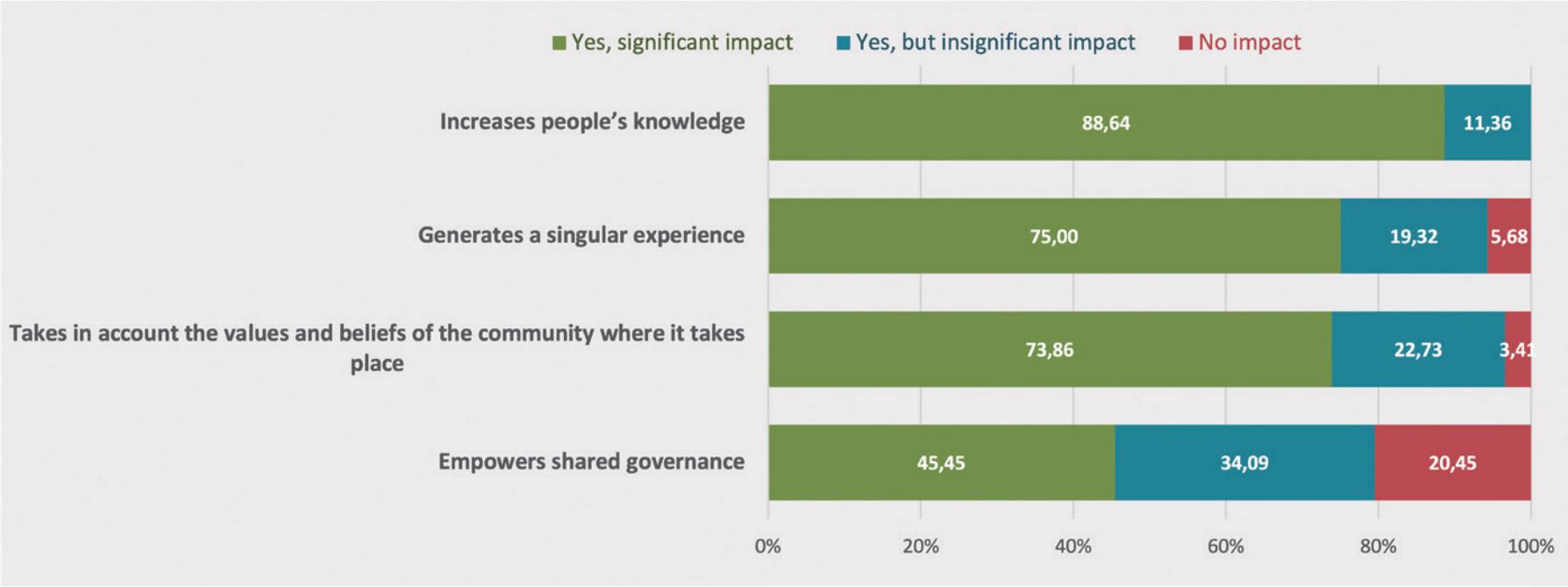
It should be borne in mind that the environmental impact measured with these items has much to do with the use of raw materials and industrial processes, aspects with which different cultural and creative sectors have little relationship due to their creative and, in a certain sense (as opposed to the industrial), artisanal nature. In addition, it is also true that, according to the information provided by the regional coordinators, only in four of the sixteen regions there are specific plans that promote innovation in terms of sustainability in the CCSIs context. Therefore, there could also be a lack of interest and/or capabilities in that issue.

4.5.3 Intrinsic value and shared social value

Finally, in relation to the dimension of intrinsic value, the highest percentages of significant impact are obtained. Almost all organizations state that their innovations significantly increase the knowledge that people have (88.64%), 75% of the organizations state that unique experiences are generated by their innovation and 73.86% of the organizations state that the values and beliefs of the communities where they operate are considered with their innovations.

Thus, the uniqueness of the CCSIs is expressed and materialized according to this intrinsic value. Likewise, social value is also very important, but to a lesser extent.

Figure 31. Intrinsic and social-shared value



Source: Own elaboration based on surveys data (Organizations' survey Contrast II)

Contrast

Innovation in the Cultural and Creative Industries

PART III.

IN-DEPTH ANALYSIS

5. Trends, typologies and singularities

In this section, after presenting all the results in a descriptive way, an interpretative perspective is provided: expanding and crossing results, but also providing interpretative and conceptual keys that generate greater understanding of the state of the matter.

This first section is divided in two parts: Innovation ecosystems and Types and innovation value in CCSIs.

In each of these parts, the content is structured into two subparts:

› One for summarizing the previous results.

› The other for deepening the analysis.

5.1 Innovation ecosystems

5.1.1 General elements of innovation ecosystems

First, we summarize the key elements to combine a general and synthetic view of innovation ecosystems[8].

› **Wide existence of initiatives to measure activity** in the field of culture, creativity, and innovation. The differences have to do with the availability of recent information in terms of innovation and CCSIs. Measurement can be considered as a necessary condition, among others, for the development of specific strategies for the CCSIs.

› **Strategies led mainly by specific agents in the cultural field (in 50% of the regions), or at most led in a mixed way between sectoral, generalist or transversal agents (37,5%).** Only few of the cases declare that their strategies are led by generalist agents.

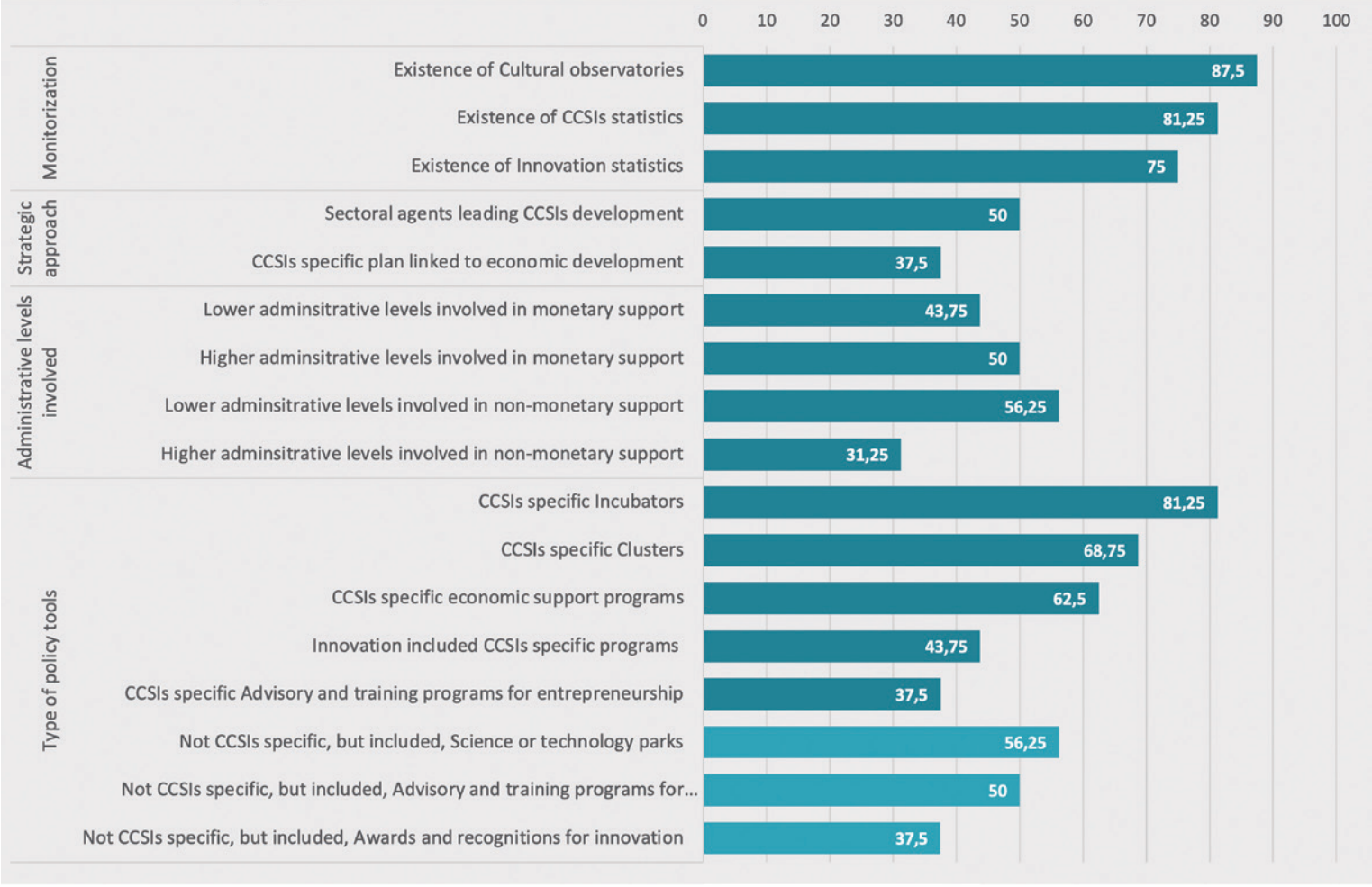
[8] A visual summary of all these elements for each region can be found in Annex 5 (having a look by rows, it is possible to observe each case individually, while having a look by columns it is possible to obtain a comparative or transversal look regarding a specific dimension or variable).

- Regarding the involvement of the different administrative levels, there is a different dynamic for lower levels (local or regional) and for higher levels (state or international levels).
  - **In terms of non-monetary support, lower administrative levels** (local and regional) prevail.
  - **In terms of monetary support, higher administrative levels** (state and international) prevail.
- In both **economic and non-economic support**, the cases are in both extremes. In this sense, there is some specialization according to the administrative level. It is reasonable to think that the lower administrative levels are closer to the ecosystems and have a better position to design and implement non-economic measures. On the other hand, it is easier for higher administrative levels to have more economic capacity.
- Regarding **policy tools**, it is worth highlighting that three of them are **typically tailored specifically for the CCSIs:**
  - Incubators (In 81,25% of the regions).
  - Clusters or platforms (68,75%).
  - Economic support programs (62,5%).

In the case of the other tools, the tendency toward sector-specific customization is lower and does not represent a general trend. In fact, especially in two cases, the trend is **programs that are not specific to CCSIs but include them**:

- Science or technology parks.
- Advisory and training programs.

Figure 32. Summary of the main categories (highest percentages) from the different dimensions of innovation ecosystem characterization (% of cases in each category)



Source: Own elaboration based on surveys data (Regional Coordinators' survey Contrast II)

5.1.2 Emphasis on diversity linked to innovation ecosystems

The first idea to highlight is **that innovation, with its differences, is present in all the regions analysed**. Although in the selection of organizations there has been a clear focus on innovative organizations, it must be considered that they are in diverse contexts in socioeconomic and innovation terms, as we can see in the Global Innovation Index. Therefore, it is necessary to analyse the CCSIs specific contexts.

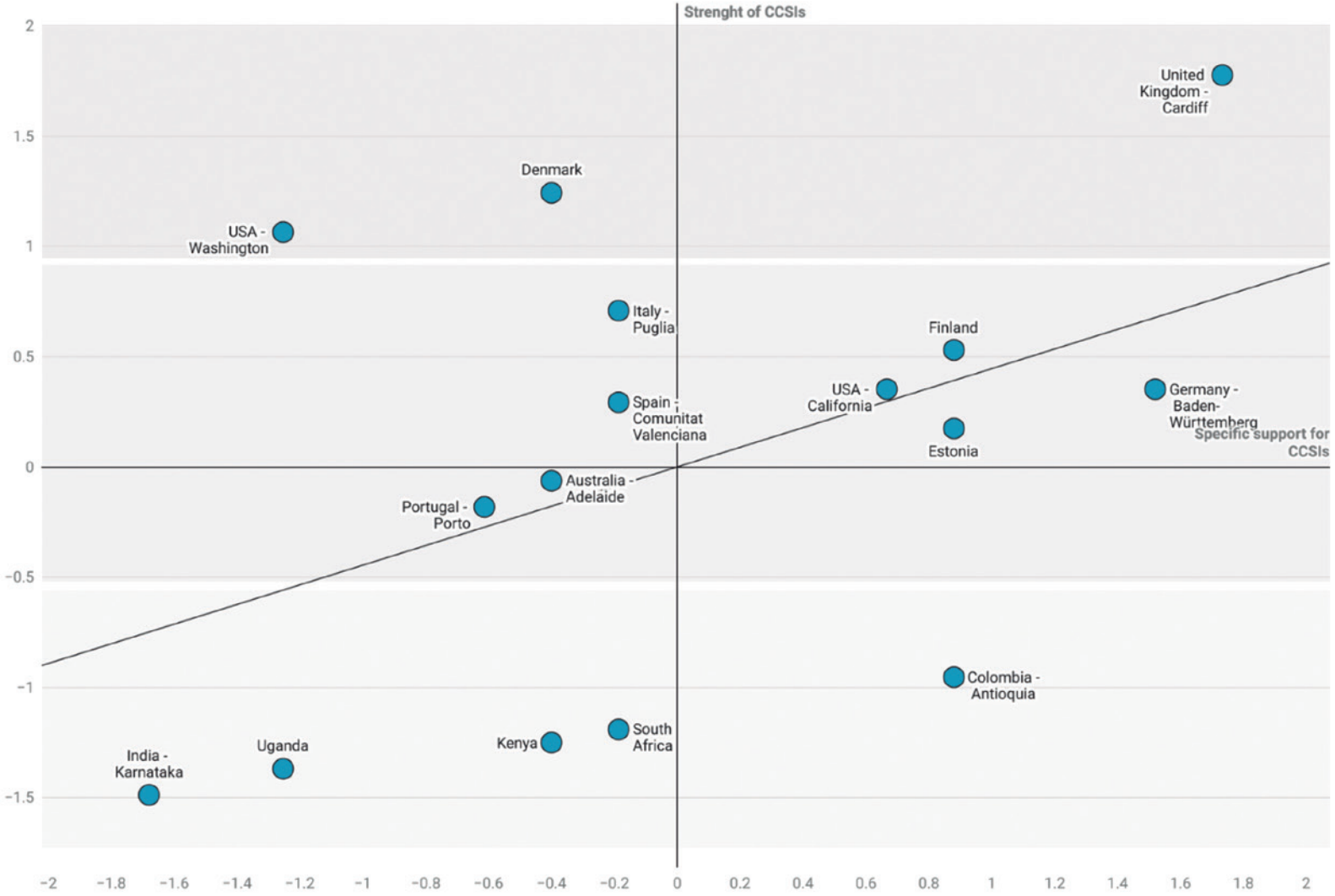
To obtain this view, data related to specific tools to support the sector and its innovation are combined with data on results and characteristics of the sector. Thus, two axes of analysis are created, which allow synthesizing all the information and classifying the different cases/ecosystems from both dimensions. These two axes relate the level of specific tools to the results of the CCSIs:

- In relation to sector-specific tools, the information from blocks D and E of the survey referring to the innovation environment (section 4.3) is combined with the existence of specific information regarding CCSIs and innovation (section 4.1).

- In relation to the results and characteristics of the CCSIs (strength of CCSIs), specific information related to the positioning of the region in terms of the importance of CCSIs survey is combined with external, objective information from the Global Innovation Index. This contributes to a better substantiation of the results of the CCSIs based on objective and common information.

- The information in the questionnaire itself is combined with the classification of each country in terms of Creative Outputs (differentiating between leading, advanced, and moderate/emerging, section 3.2.1). Specifically, the punctuation obtained from survey data is weighted considering each country's position in term of Creative Outputs from GII.

Figure 33. Positioning of the cases in two axes: strength of the CCSIs (vertical axis) and existence of specific programs for CCSIs (horizontal axis). The zero point of both is the average of the axes.



Source: Own elaboration based on survey data (Regional coordinators survey Contrast II) and Global Innovation Index data in Creative Outputs dimension (Section 3.2.1)

The exercise allows us to observe two main additional facts[9].

1. The existence of correlation between specific programs and strength of the CCSIs (Figure 33 shows the line of adjustment or linear relationship).

2. The existence of different "stratum" or blocks of cases in key of strength of the CCSIs (shaded areas of Figure 33).

a. Upper area: UK-Cardiff (CCR), Denmark and USA-Washington.

b. Intermediate zone: Portugal-Região do Norte, Australia-South Australia, Spain-Comunitat Valenciana, Italy-Puglia, USA-California, Finland, Estonia, and Germany-Baden-Württemberg.

› In this block, since it gathers a greater number of cases, the first four can be differentiated from the horizontal axis (very close, but slightly below, 0 that indicates the average) from the remaining four (right of 0, higher than the average).

c. Lower area: India-Karnataka, Uganda (East Africa), Kenya, South Africa-Western Cape and Colombia-Antioquia.

In general, a moderate linear relationship is observed (Pearson correlation coefficient of 0.446), so more complex environments tend to generate greater strength. But that's not always the case.

At the bottom are located the countries with a moderate/emerging innovation profile both at a general level and in terms of creative outputs according to the Global Innovation Index. In the independent consideration of these cases, a certain linearity is also observed, with the prominent position of Antioquia (Colombia) with a specific ecosystem of complex CCSIs (understood as the diversity of specific programs of CCSIs).

In the intermediate positions there is a large group of cases obtaining similar levels of strength of their CCSIs despite having ecosystems with different degrees of complexity. These cases are always located around the average or above.

Finally, at the top, Cardiff (CCR, United Kingdom), Denmark and Washington (USA) stand out with relevant differences in the complexity of their specific environments of CCSIs, although there is a certain linearity between the 3 cases. The cases of Washington (USA) and Denmark show the existence of contexts in which, despite having less complex CCSIs environments, their results are very relevant. Therefore, we can conclude that there are external variables, reasonably linked to more general social and economic issues, that produce this scenario.

Observing the region/country innovation ecosystems specificities in terms of results, strength, and the existence of specific measures for the CCSIs, appear some nuances. These nuances contribute to the analysis as, in some cases, contradict the preconceived ideas when it comes to understanding the contexts.

[9] In Annex 4 it is possible to find the same exercise without weighting the axis of strength of the CCSIs with external results and with the weighting from a classification based on the specific subdimension of the CCSIs (Creative goods and services). In all cases there is a relationship between both axes, but external information contributes to a better substantiation of the results of the CCSIs (vertical axis) based on objective information.

According to the regions classification arising from Figure 33, summarized in Table 8 in 4 profiles, it is possible to deepen in this line of analysis.

Table 8. Region's classification according to the strength of the cultural and creative industries and their adaptation to innovation ecosystems with CCSIs' specific tools (Figure 33).

Figure's area	Group label	Group's general description	Cases
Upper area	**Context I**	Leading results, with or without ecosystems adapted to CCSIs' specificities.	› UK-Cardiff (CCR) › Denmark › USA-Washington
Intermediate zone-right	**Context IIa**	Advanced results with highly adapted ecosystems to CCSIs' specificities.	› Germany-Baden-Württemberg › Finland › Estonia › USA-California
Intermediate zone-left	**Context IIb**	Advanced results with moderately adapted ecosystems to CCSIs' specificities.	› Italy-Puglia › Spain-Comunitat Valenciana › Portugal-Região do Norte › Australia-South Australia
Lower area	**Context III**	Emerging results including those ecosystems adapted to CCSIs' specificities.	› Colombia-Antioquia › South Africa-Western Cape › Kenya › Uganda (East Africa) › India-Karnataka

Looking at the innovation data of the organizations in each region/ country it is worth asking: Is it necessary to have a broad environment adapted to CCSIs to generate innovation? Does more specificity mean more innovation? Not necessarily.

According to data in Figure 33, **there is no linear relationship between the CCSIs contexts and the degree of innovation of their cases**. On one hand, there is a greater intensity of innovation in the contexts of emerging results (context III) than in the rest. On the other hand, it is important to bear in mind that the CCSIs good results are not necessarily due to innovation.

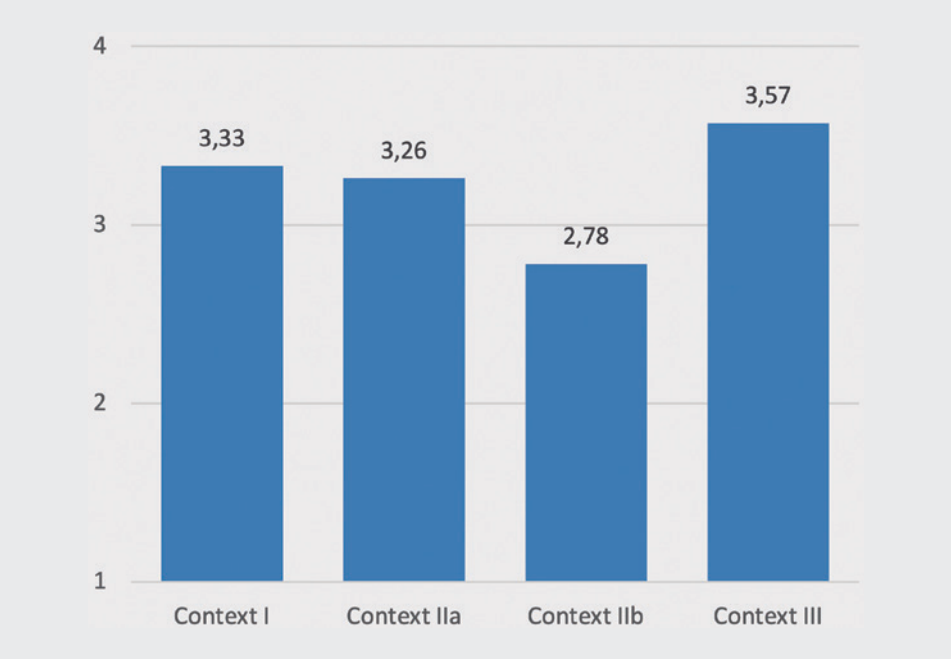


Figure 34. Organizations' innovation degree according to their CCSIs contexts.

Figure 34 shows the degree of innovation of the cases according to their CCSIs contexts. It is a combination of the variables "product innovation" and "process or methodological innovation". Level 1 is for cases that have either not innovated or have only made a minor change (either in product or process). Level 2 is for cases that have made minor changes in both product and process. Level 3 is for cases that have made a main change in one of the two and a minor change in the other. Finally, level 4 is for cases that have made major changes in both product and innovation.

Source: Own elaboration based on survey data (Organizations' survey Contrast II)

A first question in relation to this could be: How do they do it? The answer, in this case: with own resources (Figure 35). Figure 35 shows that in contexts III and IIb the cases, on average, use own resources and are more relevant. In the absence of a context with support structures, agents are looking for ways to boost their innovation projects with their own means. As a reward, there are projects that generate greater economic return as Figure 36 shows: contexts III and IIb the percentage of income due to products with significant changes stands at 69.1% and 61.1% respectively, and stands at 46.9% and 53.3% in contexts IIa and I.

Figure 35. Degree to which organizations consider that they innovate solely on their own resources (scale of 1, nothing, to 5, totally)

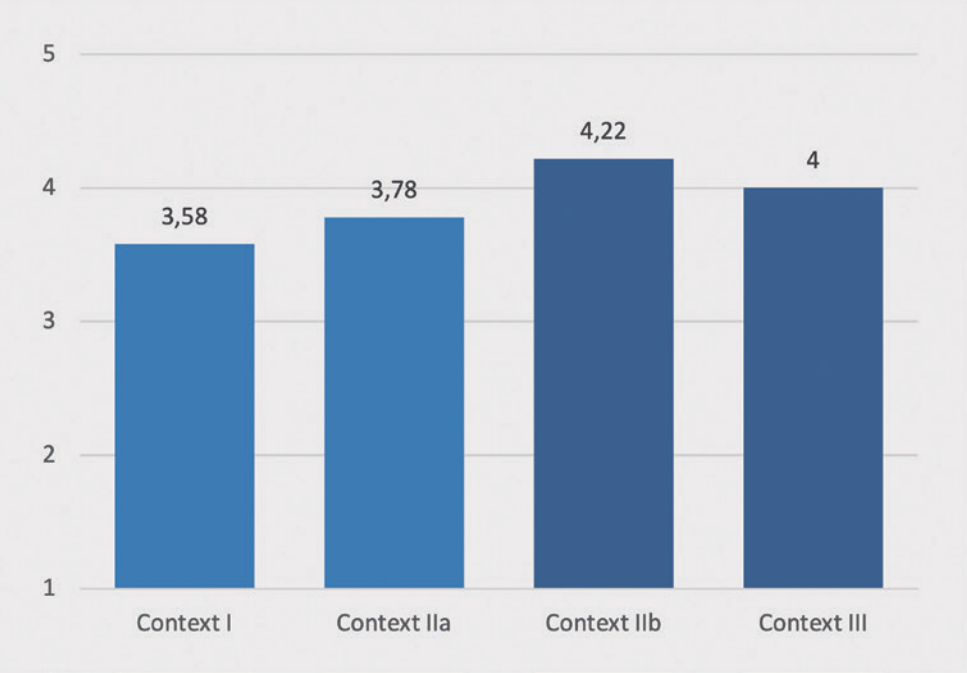
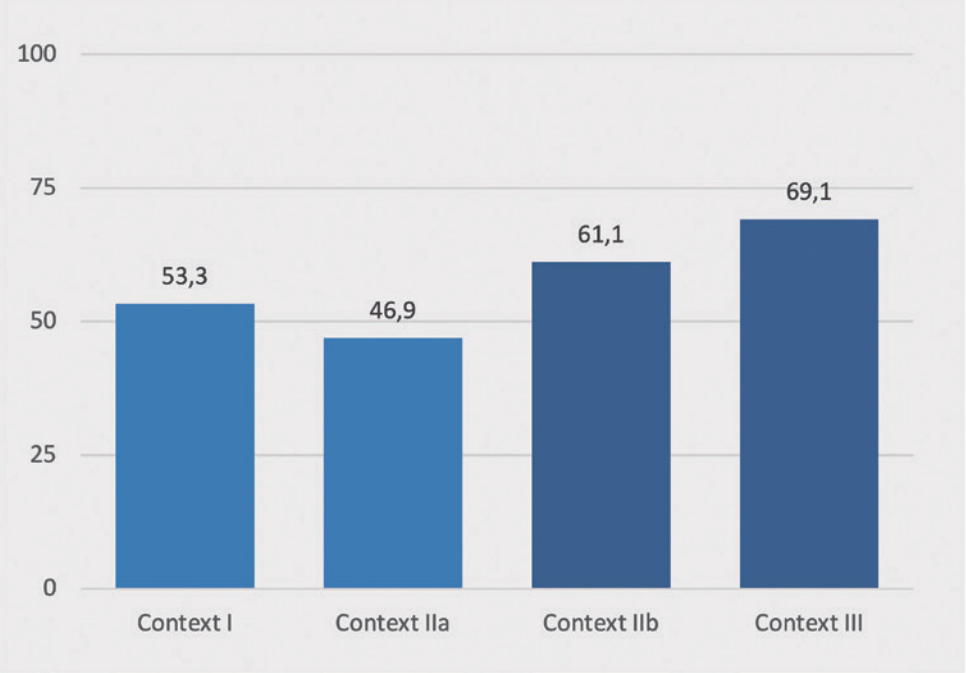


Figure 36. Percentage of revenue derived from innovative products (new or significantly improved) in the period 2020-2022.



Source: Own elaboration based on survey data (Organizations' survey Contrast II)

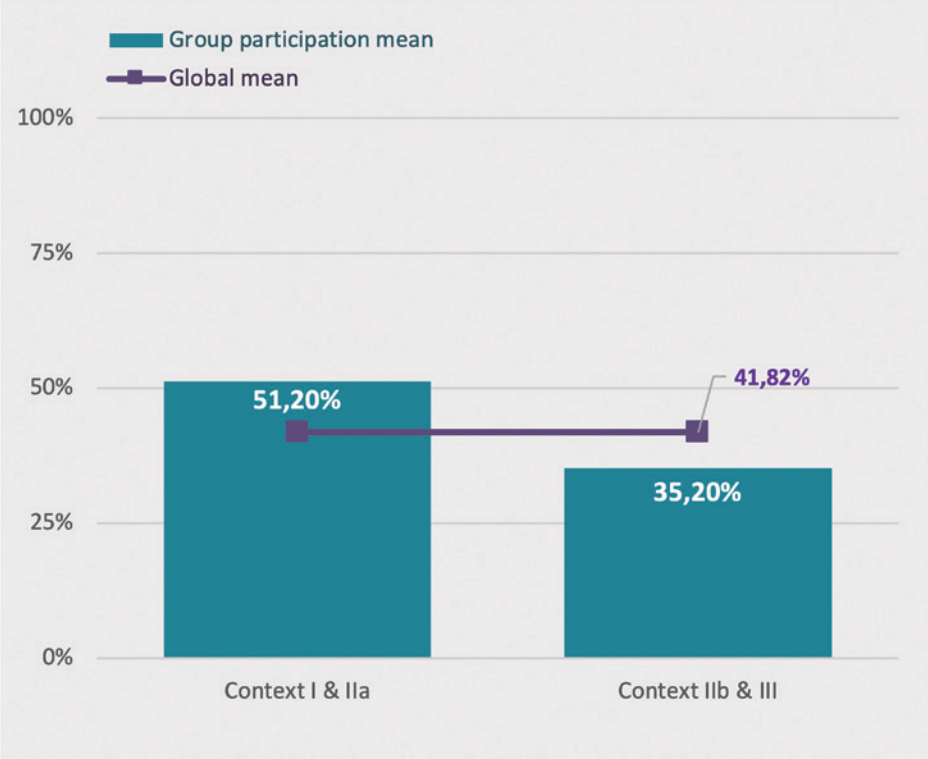
The results also show that, indeed, although with exceptions, in the best positioned contexts there is a greater number of tools or specific strategies in terms of CCSIs (Table 9, green predominates at the top indicating cases with greater specificity).

Moreover, they also show that organizations that are in these contexts use more frequently this type of tools. Contexts I and IIa are above average, and contexts IIb and III are below (Figure 37).

Table 9. Sum of the number of specific strategies or tools (minimum 0, maximum 9) used by the cases ordered according to figure Table 8 and Figure 33.

Case	CCSIs Context type	Specificity score (sum of CCSI-specific tools)
United Kingdom - Cardiff	Context I	**7**/9
Denmark - Denmark		**4**/9
USA - Washington		**1**/9
Germany - Baden-Württemberg	Context IIa	**6**/9
Finlandia - Finlandia		**7**/9
Estonia - Estonia		**5**/9
USA - California		**6**/9
Italy - Puglia	Context III	**2**/9
Spain - Comunitat Valenciana		**4**/9
Australia – South Australia		**3**/9
Portugal - Região do Norte		**3**/9
Colombia - Antioquia	Context III	**5**/9
South Africa - South Africa		**3**/9
Kenya - Kenya		**5**/9
Uganda - Uganda		**4**/9
India - Karnataka		**0**/9

Figure 37. Percentage of cases that are beneficiaries of: advice and training programs, R&D programs, clusters, platforms, incubators or scientific or technological parks.



Scale from red (low values) to green (high values)

Source: Own elaboration based on survey data (Organizations' survey Contrast II)

Thus, in the case of less complex contexts, with fewer specific tools for CCSIs, it is likely that organizations will be forced to better select innovation projects given the risk they assume. In other words, this firm commitment is also made in an economic key, by observing the benefits that return to them. **We can state that in certain contexts they are not licensed to fail, and they do not fail.**

It is a fact that the agents are committed to avoid failure and the results are positive, but it does not mean that the situation should be like this. On the contrary, **the possibility of having this license to fail has been one of the recurring ideas collected in the comments of the agents participating in the study.** Especially when dealing with innovation in CCSIs.

The lack of specific support tools to innovate, designed for and targeted to the CCSIs, does not prevent innovative projects from emerging. However, we can conclude that the fact of having a favourable ecosystem generates a favourable dynamic for innovation that can determine the type of innovation and the way of innovating.

This statement raises new questions about the adequacy of innovation policies to contexts: What measures are needed in different environments? What needs to be reinforced in more advanced environments, where innovation is more widespread? And in more emerging environments, where innovation is more punctual? Having a look at the use of existing measures can guide the response.

We observe some differences between economic support (aid, subsidies, credit lines, tax incentives...) and non-economic support (infrastructure, advice, training):

- In the contexts of emerging results (context III), self-financing, international agents and, to a lesser extent, but relatively higher than in the other contexts, banking foundations or private investors are used.
- In contexts with better results or with highly specific ecosystems (context I and IIa) it is very relevant the importance of regional and local actors both in financing innovation and in non-monetary measures.
- As shown in Figure 37, in contexts with better results (context I) or with highly specific ecosystems (context IIa) with robust and diverse support structures, the percentages of agents that are aware of their existence and use them are higher.

So, which could be the role of a favourable and/or adapted to specificity ecosystem? **Although other external factors (social and economic, macro, or contextual) may influence the results, a more favourable or specific ecosystem contributes to generating an innovative fabric. While a less adapted ecosystem generates only innovation projects**. It is, above all, a qualitative effect, and not necessarily quantitative or reflected in outputs in economic and productive terms.

In any case, the analysis of the regional coordinators' qualitative contributions in the survey allows us to approach their demands, challenges, and opportunities of each of the CCSIs contexts:

› **Context I** formed by regions/ countries with leading results with varying degrees of specificity or adaptation: for further development (even though they already generate good results due to intrinsic or extrinsic factors to the context characteristics in terms of CCSIs) **They would need to deepen the idea of the tailor-made suit, with economic strengthening tools according to the characteristics of the sector** (long pre-commercialization developments, unique monetization pathways, intellectual property…). **Strengthen skills, increase creative and innovative solutions in public tenders, internationalization and strengthen networks and spaces for interaction.**

› **Context IIa** formed by regions/ countries with advanced results with highly adapted/specific ecosystems: Maintain and expand diversity, equity and inclusion in CCSIs and their non-economic impacts. The main challenge arises in economic terms: to generate conditions to attract talent and business and increase the benefits of CCSIs and to disseminate the CCSIs key contributions to competitiveness.

› **Context IIb** formed by regions / countries with advanced results with moderately adapted or specific ecosystems: strengthen environments by enhancing the existing cross-innovation and cross-pollination between agents of the CCSIs and other scientific or technological sectors (for example hubs, R+D funds, Seed starts…) and favour synergies with the objective of economic development, with more network and internationalization.

› **Context III** formed by regions / countries with emerging results with varying degrees of adaptation/specificity: characterized by high rates of young people who need training programs, entrepreneurship support and imaginative tools to support CCSIs. Based on what has been observed, they need support tools that facilitate to a greater extent these "licenses to fail", with resources beyond their own. They face the difficulties related to the fact that they are contexts with greater difficulties for innovation in general terms, not specifically in terms of CCSIs.

5.2 Types and value of innovation in CCSIs

5.2.1. Innovating in CCSIs: An Overview

Once we have analysed the context elements involved to contribute to an "innovation mood", we will now focus on the type of innovation carried out by the cases.

Table 10. Summary of the key indicators characterizing innovation in CCSIs

Process or methodological innovation	Product innovation (goods, services, or artistic works)	Combined innovation	Technology-based innovation
% of cases that incorporated main changes	% of cases that incorporated main changes	% of cases that incorporated main changes in both product and process dimensions	% of cases that selected 'quite' or 'wholly' in response to the question '*To what extent do your innovations come from the usage of technology?*
67,1%	**63,6%**	**54,5%**	**51,1%**
Open or collaborative innovation	**Main partners who collaborated to develop innovations**	**Cross-sectoral innovation**	**Degree of innovatio with own means/resources**
% of cases that selected 'quite' or 'wholly' in response to the question '*To what extent did your innovation receive external* support?'	% of cases that selected those partners. Mostly selected partners	% of cases that selected 'always' in response to the question *'Was your innovation directly targeted at organizations in sectors other than yours?'*	% of cases that selected 'quite' or 'wholly' in response to the question '*To what extent was your innovation made with your own means/resources'*
59,1%	**Universities = 65,9%** **Consultants = 65,9%** **Organization in the same sector = 64,8%** **Organizations that are users or customers = 60,2%**	**29,6%**	**71,6%**

Source: Own elaboration based on survey data (Organizations' survey Contrast II)

First, it must be remembered that there is a high level of innovation in the sample. Priority has been given to organizations with innovative practices in the selection of cases. 67.1% of the cases have conducted significant process or methodological innovations in the periods 2020-2022, and 63.6% have made significant changes in terms of product innovation.

Up to 54.6% have made significant changes in both dimensions. This uncovers **a reinforced dynamic of innovation**, in which changes of both types are combined. This reveals a possible dynamic specific to the sector: **In terms of product innovations, due to the nature of the activity of the sector, many of them will be service-specific innovations.** Therefore, innovations may have this combined nature of process and service. Thus, it is not surprising that the main process innovations have to do with services that are offered, and that are grouped in the areas of: "methods for producing, developing goods or providing services" and "information processing or communication methods".

Concerning innovation process, it highlights:

- **A generally high degree of innovation carried out with own means and resources** (71.6% who state that they carry out "all" or "a lot of" their innovation thanks to their own means).

- **Use of technology as a basis for innovation very disparate**, 51,1% stating that innovations proceed "quite" or "wholly" from the use of technology. Despite this, a more relevant percentage of agents (69.3%) say they have purchased new technology not previously used, and 60.2% say that they bought technologies already used by the organization or upgraded them.

- **Most agents (59.1%) state that they collaborate to innovate in a fairly or regular basis**. Main partners are "universities or other higher education institutions", "consultants", "organizations in the same sector" or "organizations or companies that are users or customers".

- A significant, although a minority of the cases (three out of 10) state that their innovations are always directed to other sectors.

- Finally, in relation to intellectual property protection models and commercial differentiation, **it stands out that approximately 3 out of 10 agents have registered trademarks (31.8%) or claimed copyrights (27.3%) in the period 2020-2022.**

Less commonly, 14.8% have applied for standards or labels, 12.5% have used trade secrets, 11.4% have applied for patents and 7.9% have registered industrial designs.

Regarding the value and impact of innovation in the CCSIs (Figure 38), among the three usual dimensions of impact, its **social accent stands out, which is combined with a very relevant economic value**. Undoubtedly, and supporting the claimed uniqueness of the sector, the intrinsic cultural value is manifested as the dimension in which greater impacts are generated.

Additionally, it should be remembered, in economic terms, that by 2022 organizations state that 59.1% of their revenues came from products in which they applied significant changes. In total, **76.1% of the cases stated that more than 40% of their income came from innovative products.** This data points out that, for innovative organizations, this activity brings them relevant economic benefits.

Figure 38. Summary of impacts by dimension. Percentage of cases reporting a significant impact in each indicator and the mean for each dimension.

Therefore, innovation in the CCSIs not only produces favourable individual or private results (which, in aggregate, are so at a general level), but also important positive externalities, especially of a social and cultural nature. In fact, even in economic terms, the positive impacts in terms of increased employment and its quality also stand out. Thus, **results have a social welfare component.**

Taken together, **all this makes up a unique character of the value of innovation in CCSIs.**

Source: Own elaboration based on survey data (Organizations' survey Contrast II)

5.2.2 Going deeper: characteristics of innovation according to actors and contexts

According to organizations

To begin to delve into the characteristics of innovation, the gaze is directed first to the reasons that motivate innovation. Second, we explore whether these reasons differ for different innovation profiles.

At a general level, if the different motivations are observed, business motivations and cultural motivations tie in the lead with 31.8%. However, we must consider that the list of reasons is divisible between economic and non-economic reasons. And if educational, health, environmental, social, or urban reasons are added; non-economic reasons become the vast majority. Likewise, as already observed in section 4.4.3, **when the agents are asked about secondary reasons to innovate, the non-economic motivation is clearly visible.**

In any case, according to the innovation profiles of the agents, different motivational patterns are detected. These innovation profiles are shown in Figure 34 in section 5.1.2. The figure shows the depth and scope of the changes generated by the innovation process, giving rise to 4 profiles:

- **Low-level innovators** (no products with changes or just one minor change, whether it is in product or process dimension of innovation; 6,8%).
- **Medium-low level innovators** (minor changes in both product and process dimensions of innovation; 17,1%).
- **Medium-high level innovators** (one minor change in one dimension and one main change in the other; 21,6%).
- **Maximum level innovators** (main changes in both product and process dimension of innovation; 54,5%).

It is observed that the economic reasons are the predominant ones in the low-level and medium low-level innovator. In the case of the medium-high and maximum level innovators are mainly cultural motivations or other motivations different than the economic ones. (Table 11). If the focus is on those cases that incorporate significant changes in both process and product, the range of reasons is the widest.

Table 11. Main reasons to innovate according to the innovation profile of organizations

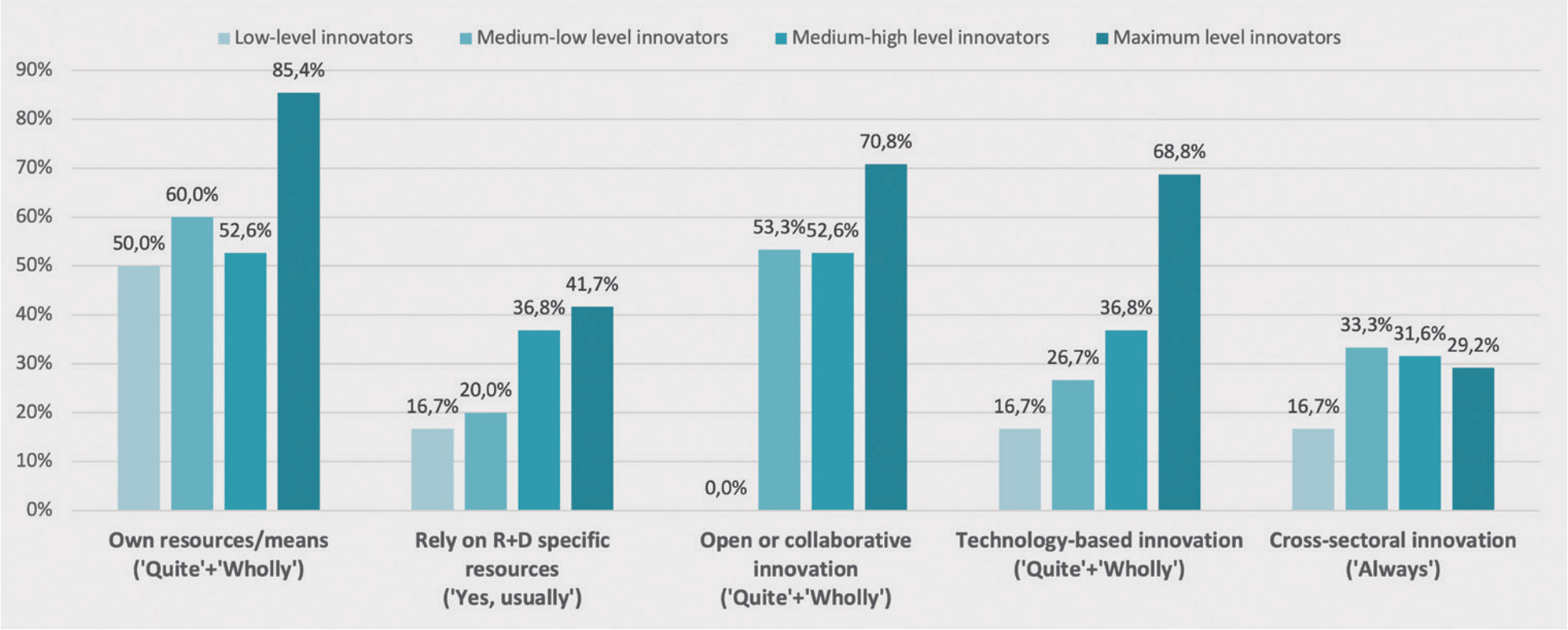
	Business (Improvement of strategies and own economic or third parties' results)	**Cultural** (Increase participation or enhance cultural experience)	**Educational** (Facilitate educational tasks and learning)	**Environmental** (Contribute to sustainability)	**Healthcare** (Improve health services)	**Social** (Facilitate citizen participation)	**Urban** (Transform environments and communities)	**Other**
Low-level innovators	**50,0%**	**16,7%**	**16,7%**	**0,0%**	**0,0%**	**0,0%**	**0,0%**	**16,7%**
Medium-low level innovators	**53,3%**	**26,7%**	**0,0%**	**6,7%**	**6,7%**	**0,0%**	**6,7%**	**0,0%**
Medium-high level innovators	**16,7%**	**44,4%**	**22,2%**	**0,0%**	**5,6%**	**0,0%**	**0,0%**	**11,1%**
Maximum level innovators	**28,6%**	**30,6%**	**14,3%**	**8,2%**	**0,0%**	**4,1%**	**6,1%**	**8,2%**
Mean	**31,8%**	**31,8%**	**13,6%**	**5,7%**	**2,3%**	**2,3%**	**4,6%**	**8,0%**

Scale from red (low values) to green (high values)

Source: Own elaboration based on survey data (Organizations' survey Contrast II)

The innovator profile is also related to other characteristics of the innovation process (Figure 39):

Figure 39. Procedures linked to innovation according to the organizations' innovative profile.



Source: Own elaboration based on survey data (Organizations' survey Contrast II)

› It is observed that in cases of **maximum innovation it is developed due to own resources**.
Thus, it is reasonable to think that **cases with less innovative activity may need to a greater extent external levers**. This fact will contribute to entering into an innovation dynamic that is quite based on own resources and means.

› **The more they innovate, the more support is also observed in specific R+D resources**, whether in terms of human or economic resources.

Therefore, it seems that skills do indeed play an important role in promoting innovative activity.

› Open Innovation, except for the least innovative, it is quite important in the organizations with more innovative profiles. **The most innovative ones are the ones showing most resort to collaboration to innovate**. Therefore, it is possible to think that promoting collaboration is also a key issue in the development of innovative activity.

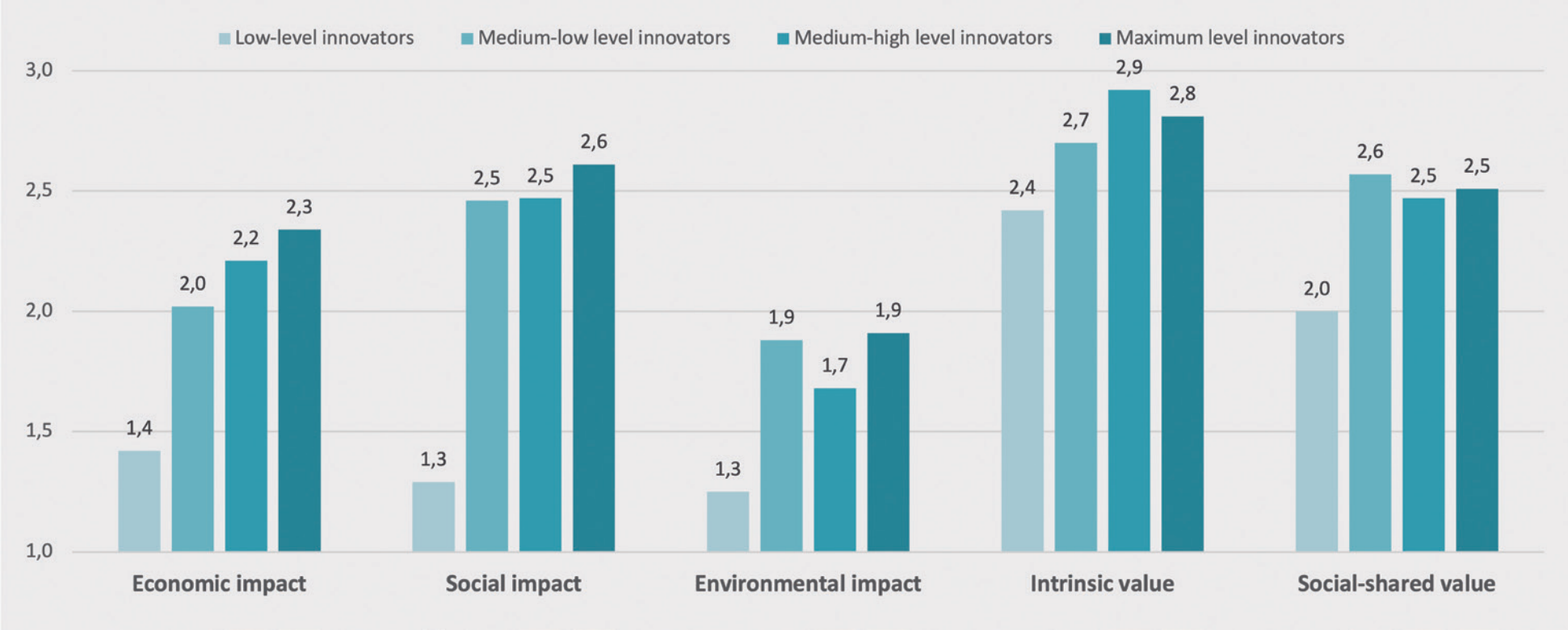
› As relevant points linked to the profile of maximum innovation, it is finally observed that the **resource and mastery of technology plays a very relevant role: the more intense the innovation profile is, the more use of innovation-oriented technology exists.**

› Finally, it is observed that the inclination to cross-sectoral innovation is quite transversal to all innovation profiles, grouping around 30% of cases in each group.

Having seen the motivations that precede innovation and issues related to the process, it is now worth asking about the results. A look at the average impact declared by organizations **shows some linear relationship especially for economic and, to a lesser extent, social and intrinsic impact.** Environmental impacts and shared social value are the two dimensions where there is no clear relationship, although lower-level innovators showed smaller impacts.

In general terms, although the activity of the sector itself (innovative or not) already generates this type of social and cultural (intrinsic and social-shared) impact, innovative activity acts as a multiplier of positive effects.

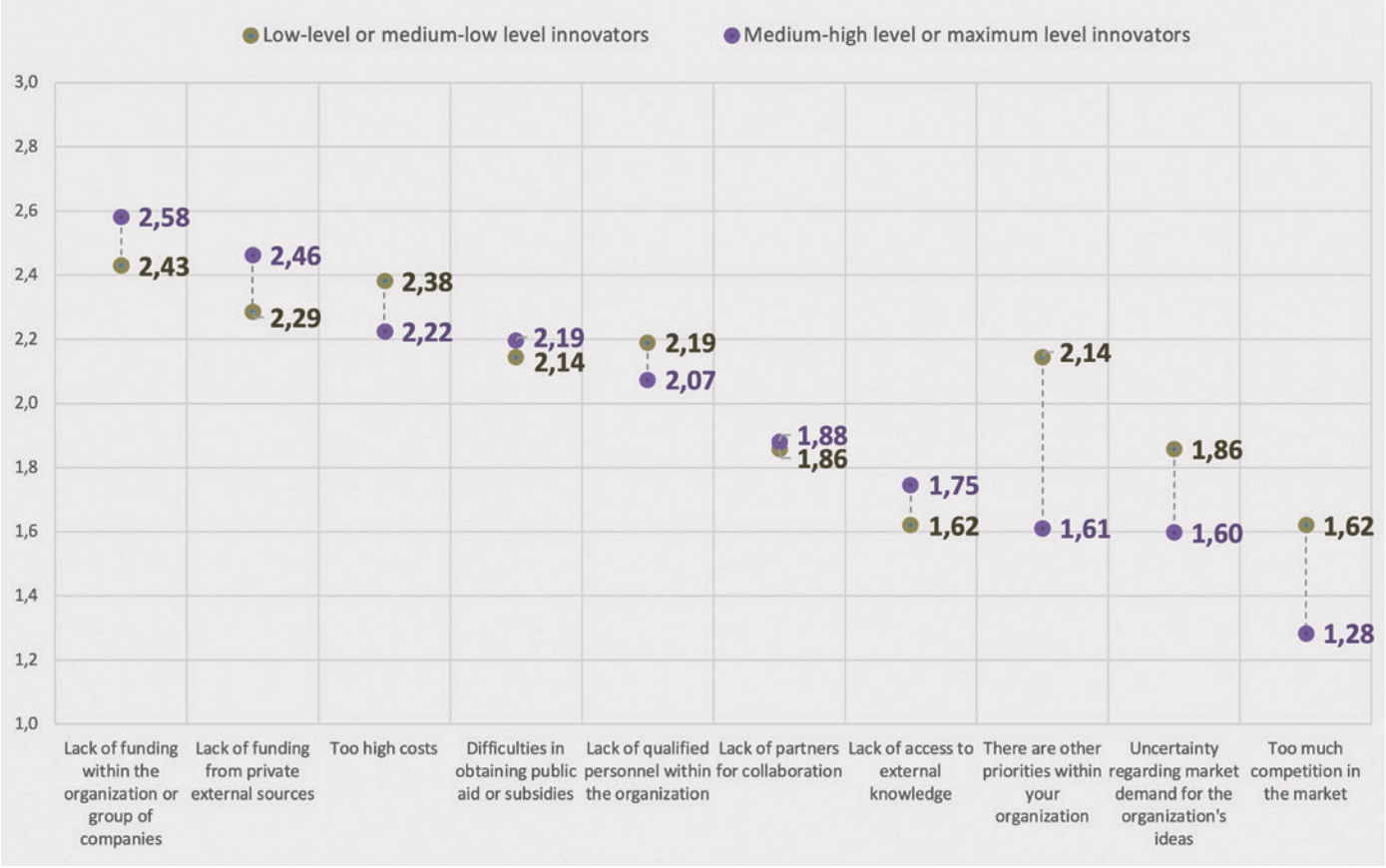
Figure 40. Impacts of innovation according to the innovative profile of organizations.



Source: Own elaboration based on survey data (Organizations' survey Contrast II)

Finally, despite differences in profile, considering that most cases have innovative activity, certain differences are perceived with respect to the challenges they encounter to innovate. Therefore, **the profiles of innovators are grouped in two groups:** the Low-level or medium-low level innovators and the Medium-high level or maximum level innovators (Figure 41).

Figure 41. Challenges to innovate according to the innovative profile of organizations. Scale from 1 (low-importance factors) to 3 (high-importance factors)



Iturria: geuk egina, inkestako datuetan oinarrituta (erakundeei egindako Contrast II inkesta)

Both groups agree on placing the lack of financing within the organization as the challenge with the greatest impact, although it is even more for the most innovative. For the most innovative the second challenge is also related to the lack of funds, in this case from external private sources. High costs, on the other hand, are the second most impactful factor for the least innovative. In any case, these three factors dominate the top of the table of challenges with minimal differences.

In the middle area of the figure there is an agreement in the assessment of potential challenges, but the greatest differences are observed in the factors of less impact. In this sense, **it is especially noteworthy that among the least innovative, a relevant impact factor is that there are other priorities within the organization. Likewise, uncertainty and market competition are more important among the less innovative than among the most innovative.**

According to contexts

To conclude investigating innovation in the CCSIs, this section is centred in the analysis supported by the CCSIs innovation contexts identified in the previous section (Table 8, section 5.1.2):

- Context I: Leading results, with or without ecosystems adapted to the specificity of the CCSIs.
- Context IIa: Advanced results with highly adapted or specific CCSIs ecosystems.
- Context IIb: Advanced results with moderately adapted or specific ecosystems.
- Context III: Emerging results, including ecosystems adapted or CCSIs specific.

It is important to bear in mind, as already seen, that there is no linear relationship between the contexts and the level of innovation (Figure 34, section 5.1.2). In the emerging results context (context III) innovation is, in fact, very intense. The least innovative are spread among the other contexts. Thus, although there is no linear relationship in quantitative or level terms, there are certain qualitative differences according to contexts.

Attending first to the motivations that dominate in each context (Table 12), we can see that:

Table 12. Main reasons to innovate according to organization's context

	Business (Improvement of strategies and own economic or third parties' results)	**Cultural** (Increase participation or enhance cultural experience	**Educational** (Facilitate educational tasks and learning)	**Environmental** (Contribute to sustainability)	**Healthcare** (Improve health services)	**Social** (Facilitate citizen participation)	**Urban** (Transform environments and communities)	**Other**
Context I	**41,7%**	**41,7%**	**0,0%**	**8,3%**	**0,0%**	**0,0%**	**8,3%**	**0,0%**
Context IIa	**30,4%**	**13,0%**	**21,7%**	**17,4%**	**4,4%**	**0,0%**	**4,4%**	**8,7%**
Context IIb	**26,1%**	**52,2%**	**8,7%**	**0,0%**	**4,4%**	**0,0%**	**4,4%**	**4,4%**
Context III	**33,3%**	**26,7%**	**16,7%**	**0,0%**	**0,0%**	**6,7%**	**3,3%**	**13,3%**
Mean	**31,8%**	**31,8%**	**13,6%**	**5,7%**	**2,3%**	**2,3%**	**4,6%**	**8,0%**

Scale from red (low values) to green (high values)

Source: Own elaboration based on survey data (Organizations' survey Contrast II)

› In the **contexts with leading results** (context I) **both cultural and business reasons are equated**, and it is concentrated in these two dimensions. On the contrary, in the contexts with advanced results and high complexity ecosystems (context IIa) there is a wider range of reasons, and educational and environmental issues stand out (In contrast, the cultural reason stand out less than in the rest of the contexts).

› In contexts with **advanced results and medium complexity** (context IIb), **cultural reasons group a significant majority of cases.**

› Finally, in the **contexts with emerging results** (context III), **there is again a broader distribution of reasons,** with cultural and business reasons being comparable in importance, but without the relevance that they acquire in context I. In this case, educational reasons also stand out (although to a lesser extent than in context IIa). A remarkable fact, in terms of context, has to do with the main partners in each case (Table 13), **since collaboration has stood out as a relevant factor to give rise to innovation.**

Table 13. Partners to innovate according to the organizations' context

	Context I	Context IIa	Context IIb	Context III	Global mean
Consultants	91,7%	52,2%	56,5%	73,3%	65,9%
Universities or other higher education institutions	50,0%	87,0%	69,6%	53,3%	65,9%
Organizations in the same sector	66,7%	69,6%	56,5%	66,7%	64,8%
Organization or companies that are users or customers	66,7%	69,6%	69,6%	43,3%	60,2%
Non-profit institutions	58,3%	73,9%	39,1%	43,3%	52,3%
Regional government	58,3%	65,2%	43,5%	30,0%	46,6%
International institutions	16,7%	47,8%	34,8%	66,7%	46,6%
Equipment suppliers, materials, components, or software	50,0%	47,8%	39,1%	43,3%	44,3%
Other companies or organizations	75,0%	47,8%	26,1%	43,3%	44,3%
Local government	33,3%	60,9%	34,8%	36,7%	42,1%
Informal partnerships	50,0%	34,8%	34,8%	43,3%	39,8%
State government	50,0%	47,8%	21,7%	36,7%	37,5%
Public sector users or customers	41,7%	43,5%	21,7%	16,7%	28,4%
Corporate and/or banking foundations	16,7%	30,4%	8,7%	26,7%	21,6%
Technology centres, science Parks...	8,3%	39,1%	17,4%	13,3%	20,5%
Other organizations of the same business group	25,0%	17,4%	4,4%	30,0%	19,3%

Scale from red (low values) to green (high values)

Source: Own elaboration based on survey data (Organizations' survey Contrast II)

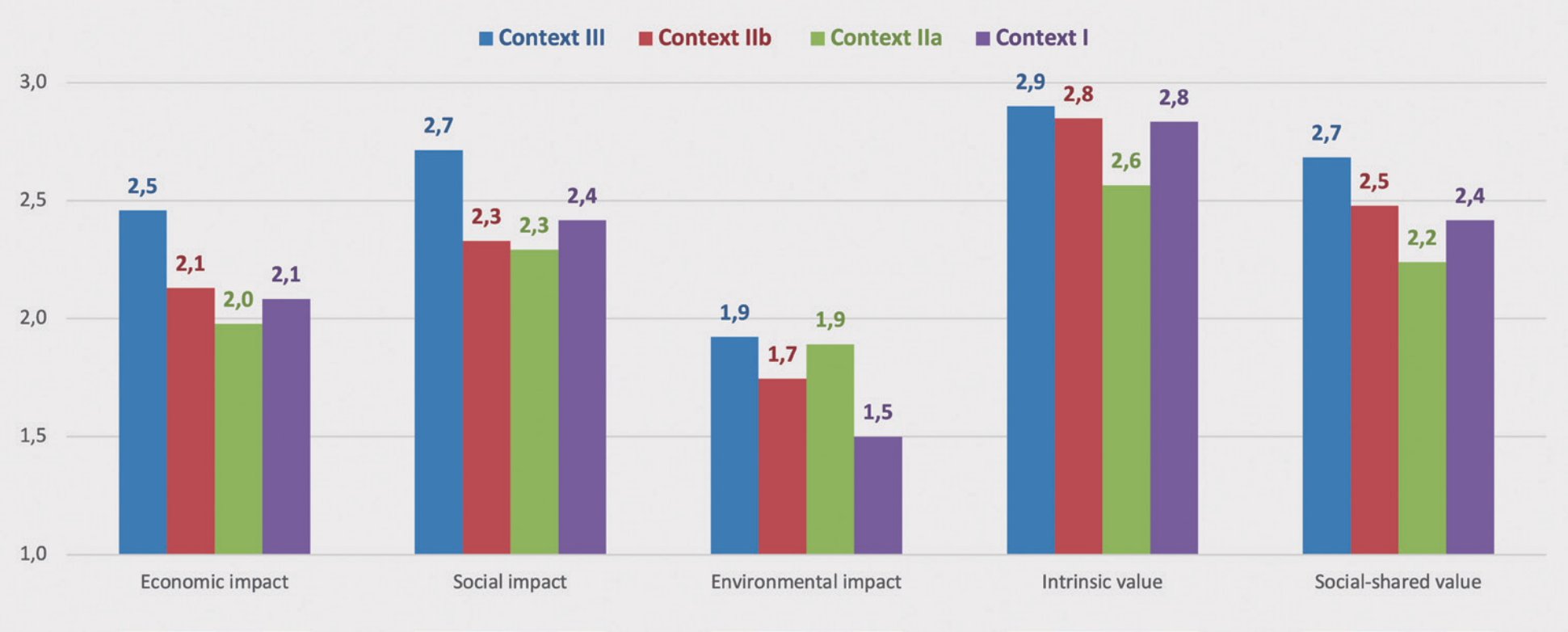
In the case of **contexts with leading results (context I), collaborations with consultants and with other companies or organizations (from different sectors and that are not clients) stand out**. These are two types of collaborators who have a presence in these contexts well above the global average.

Observing the contexts with **advanced results and with highly adapted ecosystems (context IIa), it stands out that they have the widest range of collaborators.** As can be observed, the green colour is prominent in this column, which means that collaborators' presence is more widespread in these contexts than in others. On the other hand, we find the context with advanced results but with moderately specific or adapted ecosystems (context IIb) in which collaboration is also relevant but with minor percentages.

Finally, **addressing the cases of emerging results contexts (context III), it is important to mention that consultants also play an important role alongside international institutions.** Organizations in the same sector are also relevant.

In terms of impacts, the results only show differences between the cases of contexts with emerging results (context III, emerging results in ecosystems with varying degrees of specificity) with the rest (context I, IIa and IIb), but not among the latter. And only in certain dimensions is this more evident: **especially in economic and social terms**, compared to the average, **in context III all the declared impacts are superior.**

Figure 42. Impacts of innovation according to organizations' context



Iturria: geuk egina, inkestako datuetan oinarrituta (erakundeei egindako Contrast II inkesta)

6. Measuring innovation in CCSIs: scope and limitations

Measurement in the *Contrast study* addresses two dimensions: **ecosystems and organizations.**

Regarding the innovation ecosystems measurement in the CCSIs, the *Contrast I* pilot study carried out an identification of the map of tools and agents that must be considered to approach the innovation ecosystems in the CCSIs. A scheme that has been applied and improved in Contrast II. The current map considers:

- Types of tools:
  - Economic (subsidies, credit lines, tax incentives…) and non-monetary (incubators/infrastructure, clusters, advice, training…).
- Types of agents and strategies:
  - Sectoral (CCSIs, specific) and generalist (linked to economic development, industry, science, and technology…).
- Administrative levels:
  - Local, regional, national, and international.

These dimensions allow us to cover the set of relevant elements for the characterization and analysis of ecosystems linked to CCSIs.

On the other hand, measuring innovation at the organizational level raised bigger questions. In fact, this dimension is directly related to one of the reasons that inspire the Contrast, which is:

- Show the uniqueness of CCSIs, identifying aspects that characterize cultural innovation, which are not reflected in the frameworks established for other sectors and that make them unique.

Thus, a basic part of the measurement in the CCSIs comes from the frameworks already established for innovation at a general level, which address aspects related to:

- Product innovation
- Methodological / Process innovation
- Open innovation
- Cross-sectoral innovation
- Technology role
- R+D resources
- Economic impact

To reflect on **the measurement of innovation at the organizational level**, *Contrast II* introduced two types of questions into the questionnaire:

A. Standardized items or questions, aimed at contrasting whether CCSI organizations feel represented and able to respond in existing general surveys.

B. Items or own questions, including singular aspects linked to impacts that allow to make visible in what sense the CCSIs are unique.

To carry out this exercise, the Community Innovation Survey of the European Union was selected as a reference[10]. It is a well-standardized and far-reaching tool, with which it is possible to contrast these ideas: how CCSIs adapt to general surveys and how they are unique.

[10] At the time of designing the Contrast questionnaire, the latest published wave corresponded to the year 2020, so the reference questionnaire dates to that year. The version used is the one adapted by the Basque Institute of Statistics (Eustat): https://www.eustat.eus/comun/ExtractorBlob.ashx?id=cu_223202_2020.pdf
The base version can be consulted on the Eurostat website: https://ec.europa.eu/eurostat/cache/metadata/Annexes/inn_cis12_esms_an2.pdf

How CCSIs adapt to innovation measurement established frameworks

The survey included the main concepts of process and product innovation with a slight adaptation that included the label "artistic works" in relation to product innovation.

In order to evaluate to what extent the concepts linked to each definition do represent the CCSIs, a specific question was included to assess whether the changes/innovations made by the surveyed organizations coincide with these concepts.

Process innovation considers, as part of its definition, changes in the following aspects:

1. Methods for producing, developing goods, or providing services.
2. Information processing or communication methods.
3. Business practices for organizational procedures or external relationships.
4. Organizational methods, decision making or human resources management.
5. Marketing methods for promotion, packaging, pricing, product positioning or after-sales services.
6. Methods of accounting or other administrative operations.
7. New or significantly improved logistics or delivery systems or distribution methods.

None of the cases who declared having made changes in the concept of process (whether minor or significant) has stated that none of the above items fits their case. In a global view, as highlighted in section 4.4.1, for the first five concepts of the previous list, the percentage of cases that state that these fields are not applicable to the changes they have made is between 11% and 24%. For the latter two, these percentages increase to 36% and 49% respectively.

The items with the highest percentage of cases declaring a "total or near-total match" are "Methods for producing, developing goods, or providing services" and "Information processing or communication methods", reaching 48% and 45%.

Undoubtedly, the percentages linked to each area of innovation show diversity of actions within the CCSIs with two items that are trending. Moreover, the fact that the cases that have made innovations recently have found on the survey list an item that represents its innovation, shows **that the standard concept of process innovation is suitable for CCSIs.**

Concerning product innovation, the exercise is carried out considering that the areas of innovation in this case are linked to the concepts of:

1. Quality
2. Credibility
3. Ease of use
4. Technical specifications or procedures
5. Accessibility
6. Suitability
7. Efficiency during use
8. Durability

Only one of the cases that have innovated in product (either minor or significant changes) states that none of the proposed concepts adapts to their case. For the first five concepts, between 9% and 18% state that the concepts are not applicable to their cases. Only for the last two concepts are slightly higher percentages reached, 26% and 28% respectively. In the cases of "quality" and "credibility", the percentages of "total or near-total match" of the changes made with this concept reach more than 50% (57% and 55% respectively).

In general, the percentages of non-applicability remain somewhat lower than in the case of process innovation. This indicates that, despite the diversity present in the sector, the organizations are generally represented by the areas that define product innovations in a standard way.

The questionnaire also added a question regarding the use of different forms of intellectual property protection as included in the Community Innovation Survey:

1. Trademarks
2. Copyrights
3. Labels
4. Trade secrets
5. Patents
6. Industrial designs

In this case, it is detected that up to 58% resort to some of these forms of intellectual property protection, mainly trademark registration (32%) and copyright claim (27%). This issue, and specifically these items, are intimately linked to cultural and creative activity, so despite the number of companies that make use of these legal forms, they are issues that adapt to CCSIs perfectly.

The last question considered relevant has to do with the economic impact within the organization itself of the innovations made. The basic indicator of the Community Innovation Survey is in this case the percentage of the turnover of the last year due to new or improved products (services, goods, or artistic works) with significant changes within a reference period of the last two years.

Although in almost all cases a valid answer is obtained (only four cases state, without explicit reasons, that this question is not applicable to them), some cases highlight certain difficulties. Despite this, they are not difficulties linked to the fact of being cultural or creative agents. For example:

- Five cases manifest the specificity of their start-up activity or other reasons related to entrepreneurship and the fact that their projects that do not have enough seniority to be correctly evaluated by this item (need to achieve the medium and long term to obtain the expected results).

- It must be considered that the survey was not limited to organizations in the private business sector, so five cases warn that the item is not adequate to measure its impact in the way they believe is most correct.

- In three cases they note that the formulation used is not adequate, giving rise to confusion because “turnover” can also be understood as “employee attrition” and not only as “revenue”.

These last answers, but also others, draw attention to the need to offer understandable definitions of all the items linked to what you want to measure and not take any knowledge for granted. While many of the questions related to the type of innovation already included these definitions, not all the survey did.

In this sense, it is necessary to emphasize that the same Community Innovation Survey filters the participation to organizations of more than 10 employees. It is understandable that smaller organizations have greater difficulties in monitoring this type of internal results and even difficulties in dealing properly with the language used.

CCSIs are generally composed of many small agents. Thus, in economic terms there are difficulties **that do not come so much from the specificity of the sector of activity,** but from the type of agents.

Extending the framework to incorporate CCSIs impact

The Community Innovation Survey itself asks a specific type of question to assess the environmental impact. It is a question of asking whether in "X" scope (for example, reduction of water use) there has been:

☐ A significant change
☐ A non-significant change
☐ No change

This question format has been used in the Contrast II questionnaire to ask both for additional economic impact issues (own items beyond income due to innovative products) and for new issues of a social and cultural nature, maintaining those established in the environmental dimension (sections 4.5.2 and 4.5.3).

For the construction of the items in the social and properly cultural dimensions, the questionnaire was again based on the theoretical framework that inaugurated the process of reflection and research of the Contrast project.

Table 14. Items proposed in the organizations' survey to evaluate CCSIs impacts in each dimension

Organization's innovation's grading in economic impact ☐ Increasing in employment in the organization ☐ Improving employment conditions ☐ Increasing benefits for the organization ☐ Increasing in copyright or patent benefits
Organization's innovation's grading in social impact ☐ Widening the level of access to culture and creativity ☐ Generation or strengthening of a collective identity or the sense of belonging to a community. ☐ Promotion of diverse social and cultural practices (social diversity) ☐ Promotion of social equality ☐ Promotion of gender equality ☐ Raising social awareness of environmental issues ☐ Promotion of health and well-being¡
Organization's innovation grading in environmental impact ☐ Reduction of materials o water use ☐ Reduction of energy use or CO2 footprint (reduction of CO2 emissions) ☐ Reduction of soil, acoustic, water or air pollution ☐ Replacement of materials with less polluting or hazardous ones ☐ Replacing a part of fossil energy with renewable energy ☐ Recycling of waste, water or materials for own use or sale
Intrinsic and social-shared value. Your innovation project … ☐ Increases people's knowledge. ☐ Generates a singular experience. ☐ Empowers shared governance. ☐ Considers the values and beliefs of the community where it takes place

Source: Own elaboration based on Organizations' survey Contrast II

Based on the results obtained, it is possible to affirm that the questionnaire design is valid to make visible the uniqueness of the CCSIs in terms of their social and cultural value.

The results obtained through the items used (section 4.5.2) are in line with the pattern declared in an initial general (subjective) approximation (section 4.5.1):

- A high social impact and slightly higher than the economic one.
- A limited environmental impact compared to the rest of the dimensions.
- A proper cultural impact (shared intrinsic and social value) as the main component.

It is necessary to emphasize, in terms of environmental impact, that the contribution of the CCSIs may differ from what is measured in a standard way, which refers to aspects of a very industrial nature. A feature that many sectors and agents of the CCSIs do not have.

In this sense, the explanation for this limited impact can be due to three reasons:

- Lack of adequacy of items: the limited impact may be since relevant issues specific to the sector and/or the type of agents are not measured.
- Less interest on these issues: the limited impact may be due to the lack of interest to deepen this type of impact.
- Lack of knowledge, resources, or capabilities: The limited impact may be due to the lack of means to work in this dimension.

To deepen the reflection, it is necessary to mention that an item linked to the environmental dimension was introduced in the social dimension. In fact, it is the one with the least impact within this social dimension ("raising social awareness of environmental issues"). This may be indicative that the environmental dimension is specific to certain projects or sectors but not to the entire sector. Likewise, the item linked to health in which a less relevant impact is also declared. On the other hand, aspects such as social and gender equality are much more shared by the sector as a whole and the declared impact is greater than in terms of environment or health.

In any case, from the technical point of view of impact measurement, **it seems clear that the design used in the survey is capable of revealing characteristics of the CCSIs in terms of potentialities and difficulties** (Table 14). In fact, in the open-ended questions designed to gather feedback about the proposed items, there have been no doubts or relevant comments in the opposite direction (that is, as inappropriate or incomprehensible items).

Final remark

This brief investigation, from a more technical than conceptual perspective, shows that the standard measurement of innovation is valid for CCSIs, although it has limitations. The question is how to deal with these limitations.

In the first place, it must be considered that participating in the established frameworks must serve to standardize itself in the economy as a whole and that the existing limitations are not enough to renounce being part of the whole. The limitations have to do with the non-visualization of certain specific aspects of the sector. In this connection it should be emphasized that the lack of adequacy to the specificity of the sector is not a unique fact of the CCSIs. Other sectors may also experience a lack of adequacy.

In this sense, a specific sector limitation has more to do with its more widespread type of agents than with the nature of its activity:

- For example, the Community Innovation Survey limits participation to companies with more than 10 employees, understanding that they have organizational structures and resources that allow them to collect more accurate and complete information. Likewise, there is also a type of agent that play a more active role in the investment of R+D and in the development and adoption of new technologies and have greater resources to have specialized personnel.
- In turn, another characteristic of the sector is the legal nature of its agents: the ecosystem is also conformed, in an important way in comparative terms with other sectors, by public agents and private agents of the third sector. Thus, this part of the cultural and creative ecosystem is also outside the gaze usually carried out by innovation surveys, focused on private commercial agents.

Given the limitations, it must first be considered that the claim to make visible other types of agents and impacts should not be justified mainly by the fact that they need to be adapted to the CCSIs: we must look beyond. **Adapting the established frameworks to new parameters should serve to promote a different and more complete look at the economy linked to innovation**. The strategy to make oneself visible thus involves recognizing broader motives and a greater complicity with other sectors.

Secondly, the existence of these limitations must continue to promote new actions aimed at better understanding of the sector by the sector and seeking its own spaces and motives with which to explain itself clearly and precisely, avoiding vagueness and unfounded speeches.

7. Highlights

7.1 To sum up: back to objectives, methodology and hypotheses

In line with the main objectives of the Contrast project, developed in two phases (pilot study and current extended study), this report has studied in greater depth and systematicity the characteristics of the innovation environments of the CCSIs and their types of innovation.
The diversity of regions and cases has allowed an analysis to be carried out from an objective and unprejudiced position. The sample is relevant to the objectives of the research, although in purely statistical terms it is not representative, it is theoretical.

On the other hand, the methodology used through two questionnaires designed ad *hoc*, has allowed us to visualize and study shared elements among all sectors and explore those that are unique to the CCSIs. These tools have enabled to know in objective terms key issues raised from the theoretical reflection initiated three years ago and to transfer them to the reality of innovation in the CCSIs. In addition, the research is not limited to a portrait of the situation (very valuable in itself), but also incorporates contributions of a qualitative nature on the barriers and opportunities for the future development of innovation in the CCSIs in diverse contexts.

Attending again to **the initial hypotheses of the study on the effect of the context at two levels** (the influence of the global context of the region on CCSIs specific context and, second, the influence of CCSIs specific context to the types and procedures of innovation). We must conclude that **the evidence is partial.**

The study confirms that there is a correlation between general contexts and innovation contexts in CCSIs, but **the correlation between specific contexts and case-level innovation is not that clear**. There is no linear relationship between the latter and the level of innovation of the cases. **At this level, the relationship is more qualitative (how you innovate) than quantitative (impact).**

7.2 Findings related to contexts and ecosystems

There are different general elements that dominate transversally the innovation ecosystems of the CCSIs:

- **The strategies to support and promote innovation in the CCSIs are mainly led by specific agents in the cultural field.** When they are not mainly led by specific agents, there is a co-leadership with generalist agents. In none of the ecosystems studied the leadership come from generalist agents. **There is a high degree of awareness of a certain need for specialization.**

- **Incubators, clusters, and economic support programs are the type of measures designed specifically for the most widespread CCSIs.** In the rest of the measures, the CCSIs are generally included, but they are not the only recipients of the programs. **Where CCSIs are least included, is in science and technology parks.**

- When specific tools for CCSIs exist, cultural and creative agents are aware of them and use them to boost their innovation projects.

- **Non-monetary support predominates at local and regional administrative levels. Monetary support is mainly driven by higher administrative levels (state and international).**

In terms of more general contexts, innovation with its possible differences, is present in all the regions analysed. More strength (better results) and specificity (better conditions) in the supporting ecosystem does not necessarily mean more innovation, **but it does have a logical effect in promoting a more innovation-friendly dynamic:**

- In the regions analysed, with their singularities, it is noted that the **open innovation model of the fourth helix (government-universities-industry-civil society) is assumed,** very consistent in fact with the characteristics of the CCSIs given their strong social imprint.

- Although other external factors (social and economic, macro, or contextual) may influence the results, an innovation ecosystem more adapted to the CCSIs (more specific) **contributes to generate innovative fabric and greater density of innovative initiatives.**

- On the contrary, despite having a more fragile ecosystem less adapted to the specificities of CCSIs, highly innovative projects can emerge with equally significant impacts. **In the absence of a context with support structures, agents are looking for ways to boost their innovation projects with their own means.** They are the projects that obtain the highest economic return. **It can be said that they are not licensed to fail, and, in view of the results, they do not fail.**

In conclusion, the lack of specific support tools to innovate, designed and directed to CCSIs, does not prevent innovative projects from emerging. In fact, some of the most impactful ones take place in emerging contexts. Despite this, **the fact of having an enabling ecosystem generates a dynamic favourable to innovation, a special groove that encourages to move in terms of innovation.**

While it is true that a general socio-economic framework is an external factor to the elements of the ecosystem of the CCSIs that can exert a favourable effect, innovation does not only occur in these contexts: **innovation happens everywhere, it is part of CCSIs DNA organizations, and it is possible to observe it wherever they exist.**

7.3 Findings related to types of innovation

More than half of the cases have an intense innovative activity and report having made significant changes in both product and process. **Thus, in the CCSIs innovation is mainly combined.** This fact seems to be related to the type of projects of CCSIs organizations, given that their offer is mainly services and, the improvements are also related to process innovation.

In relation to the procedures to innovate, the highlights are:

- **Own resources in high-level innovative profiles are very relevant.**
- **The more you innovate, the more support you see in specific R+D resources.** Skills play an important role in promoting innovative activity.
- **More innovative organizations are turning to collaboration to innovate.**
- Finally, **the more intense the innovation profile is, the more use of innovation-oriented technology there is.**
- **Cross-sectoral innovation is quite transversal to all innovation profiles: three out of ten cases innovate for other sectors.**
- **Trademark registration and copyright claims are the most used forms of intellectual property protection in CCSIs**; being less relevant to the acquisition of labels, trade secrets, the registration of patents and industrial designs.

Regarding the **value and impacts of innovation**, it is observed that innovation has an important economic return for the agents of the CCSIs: **59.1% of their revenues came from products in which they applied significant changes.**

In relation to value and impacts of innovation, it is important to mention:

› Innovation in the CCSIs not only produces favourable individual or private results (which, in aggregate, are so at a general level), **but also important positive externalities, especially of social and cultural nature.** This fact configures a unique character of innovation value in CCSIs.

› **Observing the different motivations, the inclination or the non-economic accent is clearly and definitively visible.** The reasons that induce innovation are not mainly of an economic nature, although it is present. The economic reasons are behind the profiles of low-level or medium-low level innovators. **Behind the medium-high and maximum level innovators (most of the sample) are the mainly cultural, social, educational motivations, etc.**

› As for the impacts of innovation, **social impact appears prominent**, in combination with the economic impact, so it is inferred that **social impact is not at odds with economic impact**. At a lower level is situated the environmental impact.

Finally, it highlights that the lack of funding within the organization (or from other private sources) appears as the main barrier to innovation. It is important to take this into consideration since seven out of ten cases innovate with their own means and resources.

7.4 Notes on the measurement of innovation in the CCSIs

The design of the questionnaires included a series of questions with a double intention: to obtain knowledge of certain aspects but also to assess their operation. This set of questions has served to:

- Assess whether the CCSIs feel represented in the standard concepts used in the established innovation measurement frameworks.

- Explore how the new elements added, aimed at highlighting the uniqueness of the CCSIs in tune with the established frameworks, have been useful.

The results have shown that the standard measurement of innovation is valid for CCSIs, although it has some limitations. The question is how to face these limitations, given that they are not enough to renounce being part of the whole and live outside the processes and concepts homologated and extended by the economy.

It has been acknowledged that **a limitation specific to the sector has more to do with its wide range of agents** (many small agents and relevance of public agents and the third sector) **than with the nature of its activity.**

The demand to make visible other types of agents and impacts should not be justified mainly by the fact of adapting the existent framework to the CCSIs: we must look further. **Adapting the established frameworks to new parameters should serve to promote a different and more complete look at the economy.** This is, in fact, a singularity of the sector: the importance of those reasons different than economic ones.

Given these limitations, it must continue **to promote new actions aimed at better understanding of the sector. Likewise, it must continue seeking its own spaces and motives with which to explain itself clearly and precisely, avoiding vagueness and unfounded speeches.**

Contrast

Innovation in the Cultural and Creative Industries

PART IV.
REPORT ON THE CONFERENCE

8. The conference

8.1 A contrast based on the analysis

The structure of the study, organised in three main sections dedicated to regional contexts and the innovation environment, the characteristics of innovation, and the outcomes, impacts and value of innovation, also guide the contents discussed at the open conference. Thus, these three main themes guided the three round tables held on the first day, leaving time for the presentation of ten case studies in the afternoon session.

This thematic approach was maintained on the second day, with the added richness offered by the policy-oriented view of specialists.

Finally, it should be added that the results of the study have been cross-checked with both regions and cases in an open working process.

8.2 The programme

DAY 1 (25 OCTOBER 2023)

› **9:00-9:30** Arrival of participants and registration.

› **9:30-9:45** Institutional welcome. Bingen Zupiria, Minister of Culture and Linguistic Policy. Basque Government.

› **9:45-13:30** Presentation and discussion of the Contrast II project: Pilot study and broadening the Contrast II analysis at a global scope.

› **9:45-10:00** Presentation: Background, objectives, and methodology.

› **10:00-11:00** Roundtable 1: The ecosystem as a catalyst for innovation. Innovation in CCIs occurs in a significant way in all the regions observed, although they have different institutional environments. Therefore, it makes sense to ask about the importance of policy tools: why they are relevant, how they relate to outcomes, what other external factors (social and economic) are relevant, or how policies fit the contexts they are intended to influence.

- Justin Lewis: Academic lead and cofounder - Creative Cardiff (Cardiff).
- Susanne Ast: Deputy head - Ministry of Economic Affairs, Labour and Tourism, Unit Information Technologies, and Creative Economy (Baden Wurttenberg).
- Faisal Kiwewa: Artistic Director - Bayimba Foundation (Uganda - East Africa).
- Cinzia Lagioia: Director - Distretto Produttivo Puglia Creativa (Puglia).
- Daniela Trejo: Secretary of Productivity and Competitiveness - Government of Antioquía (Antioquia).

Chair: Camila de Epalza, EU Policy Officer - Basque Government Delegation to the EU.
Content support: Xavier Fina, Founder and director - ICC Consultores Culturales and Elisenda Juanola, Project manager – ICC Consultores Culturales.

› **11:00-11:30** Coffee break.

› **11:30-12:30** Roundtable 2: Deepening the concept of innovation within CCIs.

In order to understand innovation in the CCIs it is important to pay attention to its reasons, conditions and procedures. This round table discussion will go more deeply into the functioning of an innovation process: the human, economic and material resources needed; the process as a work plan or stages of innovation; the sense of collaborating to innovate and the obstacles that can arise.

- Adam Fowler: Founding Partner – CVL Economics (California).
- Kendi Kamwamba: Partner and Investments & Compliance Lead - Heva Fund (Kenya).
- Nic Mercer: CEO - Light ADL (Adelaide).
- Anu-Katrina Perttunen: Chief Networking Officer – Creative Finland (Finland).
- Jamagdani Hirisave: Creative Innovation Platform (Karnataka).

Chair: Luca dal Pozzolo, Director - Piedmont Cultural Observatory.

Content support: Aintzane Larrabeiti, Partner & consultor – ICC Consultores Culturales and Elisenda Juanola, Project manager – ICC Consultores Culturales.

› **12:30-13:30** Roundtable 3: Enhancing relevance from the difference. Innovation in CCIs in terms of results has unique aspects, but at the same time it is comparable to standard approaches. Its economic value is important, and in a singular way the issues linked to the social and intrinsic value acquire a differential value. This roundtable proposes to reflect on the meaning of this singularity and to what extent (and how) it is possible to take advantage of it.

- Shannon Halberstadt: Creative Economy Sector Lead - Washington State Department of Commerce (Washington).
- Unathi Luthshaba: Executive Director - South African Cultural Observatory (South Africa).
- Eva Leemet: CEO – Creative Estonia (Estonia).
- Lukas Eedes: Project Manager – Creative Denmark (Denmark).
- Francesc Felipe: Deputy Director of Audiovisuals and Cinematography- Valencian Institute of Culture (Valencia).

Chair: Jabier Retegi, Orkestra - Basque Institute of Competitiveness.

Content support: Xavier Guijarro, Research Technician – ICC Consultores Culturales and Elisenda Juanola, Project manager – ICC Consultores Culturales.

› **13:30-14:30** Lunch break.

› **14:30-16:30** Workshop sessions (in paralell).

Workshop 1: Technology and Skills.

Chairs: Raúl Tabares, Senior Researcher / Industry & Mobility - Tecnalia and Itziar Vidorreta, Project manager – Basque District of Culture and Creativity (BDCC).

- Liliana Rodrigues, CEO and Head of innovation at 4Humanz (Porto), start-up focused on interactive design for the elderly. They consult in technology and adapt interfaces for the inclusion of elderly people.
- Mr. B.S. Srinivasan, vice-president of the Toy Cluster (Karnataka), helping to organize the centuries old classical toy makers (from local wood) to be impactful and expand integrating new technologies in toys.
- Nic Mercer, CEO of the Light ADL (Adelaide), a revolutionary social enterprise with a vision to provide a home for accessible excellence and innovation in creative expression, the arts, entertainment, hospitality and related technologies.
- Erika Elk, CEO of the Craft Design Institute (South Africa), a craft and design sector development agency with a mission to develop capable people and build responsible creative enterprises trading within local and international markets.
- Eija Tanninen-Komulainen, Executive Director at Design Union (Finland), Strengthens the role of design in society and helps companies create added value to their business through design. At the same time, we create opportunities for creative professionals to utilize their expertise in the business world.

Workshop 2: Sustainability and Social inclusion.

Chairs: Ruth Mayoral, Head of Higher Education Programmes - Euskampus Fundazioa and Gotzon Bernaola, General Coordinator of Business Innovation - Innobasque.

- Reet Aus, Founder of Aus Design (Estonia), have developed cycle economy-based business model for textile industries. This means producing clothing from pre-production leftover fabrics.
- Sarah Horner, Chief executive at Hijinx (Cardiff), a professional theatre company working to pioneer, produce and promote opportunities for actors with learning disabilities and/or autism to create outstanding productions.
- Matthew Richter, Senior Advisor at Cultural Space Agency (Washington), This mission-driven real estate development agency acquires cultural space in the competitive Seattle real estate market, with a particular focus on the needs of Black and Indigenous.

- Sarah Brown, Executive Director at Twispworks (Washington), increases the economic and cultural vitality of the Methow Valley. We envision a collaborative community where opportunities thrive. TwispWorks welcomes businesses, non-profit organizations, artists, craftspeople and the community at-large to our 6.4-acre campus to share, collaborate and celebrate the vibrant culture that makes the Methow Valley a special place to live, work and visit.
- Maria del Rosario Escobar, Director at Museo Antioquia, a contemporary art museum that constantly, critically and ethically engages and communicates, in different ways, content and art objects to all the communities in its context, in order to have an impact on them.

DAY 2 (26 OCTOBER 2023)

› **9:00-9:30** Arrival of participants and registration.

› **9:30-10:30** Roundtable on presentation of workshops' conclusions.

› **10:30-13:00** Keynote's final conclusions:

› **10:30-11:10** INNOVATIVE ECOSYSTEMS AND TYPES OF INNOVATION + Q&A.

Cinzia Lagioia, Director - Distretto Produttivo Puglia Creativa.
Jenny Kornmacher, Interim Innovation Director – EIT Culture & Creativity.

› **11:10-11:40** Coffee break.

› **11:40-12:20** MEASUREMENT OF INNOVATION + Q&A.

Valentina Montalto, Independent consultant & UNESCO expert.
Nico Degenkolb, Interim Action Programme Director - EIT Culture & Creativity.

› **12:20-13:00** INNOVATION RELATED TO POLICIES AND STRATEGIES + Q&A.

Pier Luigi Sacco, Interim Director AP 10 - EIT Culture & Creativity and Senior advisor- OECD Centre for Entrepreneurship, SMEs, Regions & Cities.
Luca dal Pozzolo, Director - Piedmont Cultural Observatory.

› **13:00-13:30** Final remarks. Andoni Iturbe, Deputy Minister of Culture. Basque Government. Basque Country as a collaborative territory in/ from the CCIs. Invitation to CWF2024.

8.3 Feedback from the round tables

The round tables held throughout the morning of the first day had a twofold objective: on the one hand, to learn in detail about the keys to the innovation ecosystems of the participating regions, and on the other hand, to discuss common themes previously raised with the participants. Using a question-and-answer format, the approach allowed the papers to be aligned around the central issues identified in the study. In all three cases, the debate is preceded by a brief summary of the most relevant results of the study on each of the issues raised.

8.3.1 Round table 1 - The ecosystem as a catalyst for innovation

Innovation in CCISs takes place to a significant extent in all the observed regions, even though they have different institutional environments. It therefore makes sense to ask about the importance of tools for policy: why they are relevant, how they relate to outcomes, what other external (social and economic) factors are relevant, or how policies fit into the contexts they are intended to influence.

Cinzia Lagiogia, from Puglia Creativa, reflected on the **dynamic relationship** between politics and context, on how instruments are adapted to different environments or moments. From her experience, she stressed that for the development of policies facilitating innovation, pre-existing contexts are important, but there is another key factor: **vision and will**. It must be a priority. This is shown, for example, by the case of Puglia with its Smart Specialisation strategy. After the pandemic, priorities changed, but they maintained their commitment by aligning it with the central themes in the European context: a productive system in line with sustainability and the circular economy, growth based on social cohesion and inclusion and the environment, and a commitment to health and well-being in the region.

The creation of a cluster of CCISs in the region, the first in Italy, was the key tool for the sector to mature in the aftermath of the pandemic. It is also worth highlighting the use of measures that are not strictly economic, such as training and skills enhancement, collaboration to advance as an autonomous sector, the definition of own business models and tools to develop skills.

From **Creative Cardiff**, **Justin Lewis** answers the question of the extent to which having a diverse and robust ecosystem guarantees the generation of innovation. In their case, with a network of 4,000 agents, the learning gained from managing it enabled them to develop successful innovation programmes in the region's creative industries and raise around 70 million euros to create an innovation ecosystem in Wales. *Creative Cardiff* is therefore a lever for development. He noted three key ideas:

› They had to **rethink traditional ideas about R&D&I to make it part of the creative process**. This may involve technology, but also new narratives or business models.

› Design tools suited to the creative fabric: 96% of companies have less than 10 people. Most do not have the time, resources or skills to engage in R&D&I. They need funding (time and space to do R&D), a support structure to guide them, connections to expertise and to develop business skills. **Successful innovation in the creative industries requires complex support structures.**

› The **importance of training and capacity building not only for the fabric, but also for those who work with the sector**. It requires a team with skills to map, build and engage the ecosystem, a mix of researchers, R&D producers, communication and participation specialists from academic and industrial backgrounds.

Susanne Ast, from Baden Wurttenberg, described the keys to a successful innovation policy for CCISs. Industry and engineering play an important role in the region, with a strong innovative component. In this context, creativity is very much present, albeit not very visible. The value of CCISs lies in their open-mindedness and their ability to generate new ideas. It highlights their **transformative power as providers of ideas**. In this regard, he highlighted four key policy issues:

› Understanding the **important role of CCISs in the innovation process**. Also for traditional industries (such as mechanical engineering), from the very beginning of a process, creativity should be taken more into account in the evaluation of innovation processes. It is important to underline that studies make it clear that CCIs have the strongest innovation dynamics, but we do not know much about their role in the innovation process in other sectors.

› Support **consensus building between CCIs and SMEs**, which requires a better understanding of the broad competences of CCIs and the needs of the economy, additional incentives and funding mechanisms, as well as examples of success stories.

› CCISs are **particularly important in the decade of digitisation and AI**. They help develop new business models and implement technologies.

He insisted that CCIs need an open society and an open economy to thrive. A strong creative economy is a precondition for successful and sustainable economic change and transformation.

It is difficult to compare ecosystems, but he highlighted aspects that he considers key for the development of CCISs: promoting competitiveness and visibility; strengthening also in rural areas; creating cross-sectoral networks especially for design issues; boosting innovative start-ups; training and R&D; facilitating the fit of creative services in existing funding programmes; generating tailor-made support measures. In any case, strengthening the collaboration of very small CCISs with larger industries poses a challenge that should not be ignored.

Faisal Kiwewa, from Uganda, provided insights into the role of innovation in CCISs in unsupported environments. In the last 15 years, CCISs have been able to develop in the region, although it should be borne in mind that:

› In their case, not only is there a context that does not support CCISs, but there are more global, external constraints (social and economic, macro and supranational) that need to be addressed. In the case of East African countries, the project of institutionalisation and enlargement of the region offers an opportunity for these sectors.

› Working in informal networks brings with it the problem of having data. In environments where there is no awareness of the capacity of CCISs, everything is left to the mercy of individual actors. They depend on their commitment, responsibility and individual involvement. They have to be creative in this effort: there is no data, nor will it be easy to obtain; nor are there financial resources, so non-financial tools have to be considered.

In this context, the need to constitute itself as a lobby is emphasised, confident that CCIs will always find a way to survive. Whether the environment is enabling or not, stakeholders have a responsibility to mitigate any risks and find ways to influence local, regional and international policies and investments; starting with linking their individual capacities, networks and connections to opportunities that would empower groups that are disproportionately affected by a disadvantaged environment. The agenda should be constructed taking into account the following:

1. **Redefining narratives** on CCIs - making everyone's voice heard, including rights holders' groups.

2. Fair distribution of information, resources and strengthening local solutions by promoting **equitable access** to CCI finance, technology and markets.

3. Gain power and influence so that innovators are not ignored by the status quo.

Daniela Trejo, from Antioquia, told the story of the path they are taking to consolidate the region's creative ecosystem. In their case, they are experiencing a boom in CCISs after the pandemic that is changing the brand image of the city of Medellín, once associated with violence; now with culture and creativity, in large part because of the music boom.

They have a **strategy** to strengthen the creative and cultural industries that seeks to boost culture, entrepreneurship, development and in turn to promote cultural and creative industries in the Region. Currently its action plan is focused on:

› Characterisation of cultural agents and organisations throughout the region.

› Strengthening cultural entrepreneurship: training, formalisation and delivery of incentives.

› Entrepreneurship fairs.

› Microcredits for the cultural and creative sector, through the Banco de la Gente. Particularly noteworthy for its impact.

› Business connections through entrepreneurship fairs, national and international events.

They are based on a model of shared governance, a meeting place for the university, the administration and companies to share, understand and collaborate. Among its **challenges** he pointed out:

› Financing and market: Availability of public and private funding for entrepreneurship and innovation and access to markets (consumers of innovation).

› Community: Coordinate and promote collaboration between agents.

› Business environment: Increase efficiency in the processes for doing business and promote political and regulatory stability of the environment.

› Talent: Ensure that the ecosystem has a population with a basic level of English and technical training (including digital and entrepreneurship).

› Culture: Promote a mindset of agility and entrepreneurship.

In the open debate on the type of policies needed for CCISs, generic for all sectors or tailor-made, there **is no definitive position**. It is necessary to distinguish between **innovation for** CCISs, which requires tailor-made policies given the specificities of the fabric (micro-enterprises, difficulties of access to funding, simplification of access mechanisms, etc.); and **innovation with** CCISs, where it would be useful to introduce the concept of **creative innovation** beyond the technological and digital, stimulating **methods of cross-collaboration** and the **humanisation** of technological research.

In any case, specific policies are a necessary condition for generic policies to be useful also for CCISs. Tailor-made tools allow the system to be adapted to the size of companies and their R&D&I experience, acting as diverse gateways to a support system that they can eventually join through mainstream programmes. The challenge is to connect the specific and the generic.

8.3.2 Round Table 2. Deepening the concept of innovation in CCISs

To understand innovation in CCISs, it is important to pay attention to their rationale, conditions and procedures. This round table explored the functioning of an innovation process: the human, economic and material resources needed; the process as a work plan or stages of innovation; the sense of collaborating to innovate and the obstacles that can arise.

Before starting with the experiences, three aspects of innovation need to be kept in mind:

› There are no clear linear effects: innovation happens everywhere.

› There are multiple factors; it is a complex scenario.

› Innovation is an emergent and unpredictable phenomenon.

The **Californian Adam Fowler** provided his point of view from one of the world's creative and innovative hubs in terms of both economic weight and trend-setting influence. Firstly, to the question on the link between support policies and the type of innovation that is generated, he clarified that, although innovation in his context depends mainly on private initiative, the public sector plays an important role through programmes such as Cultural Districts Designation, the percentage (1%) that some cities allocate to public artistic projects, tax incentives for the audiovisual industry, or artistic scholarship programmes.

As to whether they have a licence to fail, it seems that many incentives are not necessarily associated with results, although in this the US lags behind Europe. In terms of the type of outcomes, given the effects of climate change and socio-economic inequalities across the state, **innovation is increasingly geared towards sustainability and social justice. For the creative sectors that dominate the technological space (film, television, video games, etc.), the focus is more on pushing the boundaries of what is possible**. Games technology in particular (such as Unreal Engine or Unity) is reaching almost every sector of the economy and changing the way we design, produce and consume content.

On broader issues, he highlighted the importance of:

- Collecting data to make it useful for policy makers. They are trying to map creative works wherever they are. There is a need for data on creatives in non-creative fields.
- Working to place creative people in non-creative companies: connecting people to organisations.
- Slowly building innovation-focused teams within organisations.
- More than financial resources, a key aspect is to connect, to associate. Time and contacts are needed.

Nic Mercer, from Adelaide, pointed out in his speech aspects to take into account in open or collaborative innovation, emphasising:

- The importance of **values**. It is more important to be in tune with regard to values than to share objectives. There may be collaborations between companies from different sectors with different objectives, but if their values are aligned, collaboration will be more viable.

› Collaboration not only produces a differential impact, but in some cases a greater one. Obviously, it has a different impact as collaborating with others provides different points of view to address the same problem, but more collaborators does not necessarily mean greater impact.

› The **difficulties** involved in such collaboration include speed - you are only as fast as the slowest of your partners - and establishing a framework for working and dealing internally with competing priorities.

› Geographical proximity, small environments or clusters facilitate collaboration in a practical way by simply being together.

Anu-Katriina Perttunen from Finland emphasised **the guiding of innovation towards sustainability.**

› Business strategies should focus on sustainability and should have a realistic and effective sustainable business strategy. Companies that are not up to date on sustainability matters will be left behind. We can compare it to the digital revolution.

› Creating a purpose-driven culture. Being profitable is far from enough.

› Not having a sustainability strategy can mean losing a lot of talent. Being sustainable can also make employees more motivated to work because they see value in what the company does.

› Almost 90% of all Finnish innovations directly or at least partially include sustainability among their objectives.

› Diverse teams where all voices participate and are heard solve problems better and faster, creating a strategic advantage. A culture of openness and experimentation allows for visualisation and testing.

› Resources. Increasingly, financial support is made conditional on a sustainable development plan. Sustainability has become an important requirement in research funding.

› More smart capital is needed. Extending innovations to new, high value-added productions requires considerable risk-taking.

› Increasing the R&D intensity of the creative economy in the long term and strengthening cooperation between companies and research organisations in the creative economy, thereby promoting renewal.

› Cross-innovation has numerous advantages, starting with competitive advantage and improved business performance, but it also means higher levels of innovation and contribution to environmentally friendly solutions.

› We must involve people from diverse backgrounds, with diverse knowledge and perspectives.

In terms of **barriers**, she points to a lack of awareness of the potential of combining culture and creativity with technology, science and business, as well as insufficient exchange of best practices. In particular, the catalytic effect of cultural and creative industries on innovation in all sectors is still underestimated and under-utilised.

Sectors and policies are often still organised in silos, limiting synergies and the creation of innovative solutions.

› Lack of co-creation models and platforms that can be used to combine different skills and solutions, at least in Finland.

› Lack of willingness to change, ability to learn and renew oneself.

› Trying something new requires courage and a willingness to take risks. You shouldn't take stupid risks, but surprises are part of learning.

› Homogeneous teams. We need to increase diversity in the workplace: gender, race, age, ethnicity and religion, both in working groups and on the board.

Jamaddani Hirisave, of Creative Innovation Platform in Karnataka, discussed the relationship between CCISs and technological innovation and identified the challenges it presents in terms of:

› Technology maturity: varies by domain and local ecosystem.

› Investment in new technologies can be an obstacle.

› Technical expertise generally resides in universities and start-ups.

› Rapid absorption of technologies: they change rapidly, obsolescence must be considered. At the same time, there is a need to keep abreast of new and emerging technologies.

Regarding the differences in research between universities and industry, he points out that:

› Unlike industry, universities are interested in hot topics, not necessarily based on potential markets.

- In relation to curiosity, science is characterised by addressing fundamental problems; industry is characterised by niche issues.
- Academia has deep approaches to a problem; industry has fast product cycles, not necessarily deep ones.
- As far as deadlines are concerned, universities normally work on a long-term basis. Industry works in the short term.

Regarding barriers:

- The differences are cultural, incentive-based and communicative.
- Basic science sets priorities in a bottom-up approach; Industry adopts a top-down approach.
- Intellectual property issues.

This requires learning to relate research to the needs of industry, thinking in terms of routes from the classroom to the product. For its part, industry should seriously consider current research at universities and universities should gain a deeper understanding of industrial processes.

As for the debate, it focuses on two issues:

- Difficulty in **accessing finance**: Unlike sectors with significant tangible assets (such as real estate or manufacturing), the creative economy often deals with intangible assets, such as intellectual property. This can complicate the valuation process and make it difficult to obtain traditional loans. Another issue raised is that, even if there is sustained public support, it can generate a dynamic of competition between companies in the same sector. Another issue that arises is the lack of rapid initiatives such as venture capital.
- **Intellectual property**. The concept is evolving rapidly. Legal mechanisms are long overdue (especially with regard to the implications for artificial intelligence), and creatives in almost all sectors are very concerned about maintaining ownership of the ideas they generate and the content they produce. In any case, there is also a lack of awareness of their value within the CCISs, even if it is to their own detriment. It is a very complex issue for which specialists are needed. Finland aims to raise awareness of the importance of intellectual property protection, intellectual property management and intellectual property strategies for businesses. The Government's vision is to ensure that by 2030 Finland will have an intellectual property rights environment that effectively supports innovation and creative work.

8.3.3 Round Table 3. Gaining relevance from difference

Innovation in CCISs has unique aspects in terms of results, but at the same time it is comparable to standard approaches. Its economic value is important, and in a unique way, issues linked to social and intrinsic value acquire a differential value. This round table proposes to reflect on the meaning of this uniqueness and to what extent (and how) it can be exploited.

Unathi Lutshaba of the South African Cultural Observatory opened the debate by arguing for the importance of **standardisation with other sectors and acceptance of the uniqueness of CCISs**. The question lies in finding a critical balance between the two, because standardisation is essential to identify common issues, facilitate communication and enable cross-sectoral collaboration. It can also be an opportunity to access a wider range of resources by aligning language and data with traditional sectors. Finally, it ensures a level playing field and facilitates benchmarking with established industries, which helps in performance assessment.

The advantages of highlighting the specificity of CCISs lie in the fact that they have unique characteristics, such as artistic creativity, cultural preservation and social impact, which differentiate them from traditional industries. Accepting them is vital to preserve the intrinsic value of CCISs and maintain their distinctiveness. Highlighting them allows us to emphasise their social and cultural importance, promoting innovation, creativity and diversity within society. CCISs are at the core of our societies. They give us meaning.

Shannon Halberstadt, from Washington, explained the situation of the creative economy in her state, a leader in innovation in the USA, and brought to the table a reality that may be experienced in the future in other contexts. The question she had previously been asked referred to the **relationship between economic value and social value**. It should not be forgotten that the study reveals that around 60% of the profits of innovative organisations are due to products in which they have applied that innovation. This is not contradicted by the significant social impact they generate. Its case is paradigmatic for the strength and growth that the technology-driven creative economy is experiencing (10.8% of GDP). Creative technology is by far the strongest industry in Washington's creative economy. They have the second largest video game industry in the country as well as tech giants such as Amazon and Microsoft. These companies rely on creative talent to develop new products and solutions, pushing the boundaries of innovation. Washington's creative economy also provides social value, shapes cultural identity, fosters a sense of community and pride, and improves the overall quality of life. The cultural offer is attractive to workers in the technology sector who appreciate cultural and artistic experiences. But they are encountering a problem that stems from the presence of the tech giants: **inequality**.

While the creative economy is growing overall, artists and cultural institutions in the region have not experienced the same economic growth, disrupting the cultural ecosystem. The economic boom in the technology sector has led to the fastest rising cost of living in the USA. This makes affordability a major issue for artists and cultural institutions. This problem is compounded by the very low support for the arts; Washington ranks 32nd nationally in terms of per capita government support for the arts. Added to this is the significant impact of the COVID-19 pandemic on cultural organisations, with closures, reduced audiences and financial difficulties affecting their sustainability. Artists and cultural institutions in our region have historically operated on a tight financial margin and it is now almost impossible for them to afford to live and work in our region. There is a real risk of losing the cultural fabric.

They are **focused on creating a healthy creative economy ecosystem**, harnessing commercial and social value across all industries in the creative economy. They have programmes that seek to balance this disparity and are about to publish a strategic plan that identifies policies and programmes that can grow and protect the sector, including workforce development, business support and infrastructure development. **The Washington situation raises a profound question: the need to distribute, in the sense of harnessing, the prosperity created by the big players.**

Eva Leemet from Estonia focused on **sustainability**. It should be recalled that in the study the impacts of the cases analysed put it in third position, behind social and economic impacts. Estonia is a small state, which necessarily leads them to think about global markets. Intense business competition means that only the best companies prevail and that is a driving force to be better.

In terms of sustainability, he explained that the most advanced are design and fashion. In any case, the creative fabric is very sensitive to sustainability and must be harnessed. But the market needs to demand sustainability to pull on supply. We should increase demand for sustainable products through greater awareness of green and sustainable lifestyles. The vision of the CCISs brand will be to reduce the footprint so that customers value more sustainable design and so that recycled/redesigned products are more competitive.

In this, **institutions must play an intermediary role**. Intermediaries are needed to support the innovation processes of CCIs, as most CCIs are micro-companies and lack resources (human, financial, skills and knowledge). Such a role comprises offering services to introduce new technologies and opening doors to establish contacts with scientists and other economic sectors to collaborate on new materials and product development, which would help to initiate innovation processes.

Creative people are socially sensitive and will act as pioneers in the search for the best solutions to solve global problems.

Lukas Eedes of Creative Denmark discussed the relationship between CCISs and regional competitiveness. He began by saying that there is agreement that CCISs can play a **crucial role in improving** regional **competitiveness**, as cultural and creative activities can attract talent, tourists and businesses, contributing to economic growth. Moreover, these sectors act as catalysts for innovation and entrepreneurship, leading to job creation and economic diversification.

That said, it is relevant to highlight that they make a **unique contribution**, because cultural and creative activities have the potential to create local identity, distinguishing one region from another. They often build on the historical and cultural heritage of a region, creating a competitive advantage in the global marketplace. In the case of Denmark, fashion and design are contributing to the creation of a regional brand image. The capacity of CCISs to promote social inclusion and community cohesion, which can enhance regional attractiveness, also stands out.

In terms of economic impact, it goes beyond traditional industries, generating income through tourism, cultural exports and intellectual property. Cultural districts often lead to the development of local businesses that support the creative ecosystem. In terms of innovation, their potential lies in fostering **collaboration** between artists, designers, technologists and entrepreneurs. They serve as hubs for cross-sector partnerships, generating new products, services and business models. This collaborative environment contributes to the unique innovation landscape of the CCISs. Challenges, including limited financial capacity and talent retention, should not be forgotten.

In conclusion, the relationship between the Cultural and Creative Sectors and Industries and regional competitiveness is generally accepted, but their unique contribution is not always fully recognised. They play a unique role in shaping a region's identity, fostering innovation and driving economic growth. To maximise this contribution, it is essential to promote collaboration, invest in creative talent and address the challenges facing the sector. Denmark, with its rich cultural heritage and innovative spirit, can be an excellent example.

Francesc Felipe, from Valencia, reflected on one of the key concepts that is most difficult to explain about the contribution of the CCISs: their **intrinsic value**. Intrinsic value is the boundary that separates CCISs from other non-creative industries, but this boundary, like any other, may change at some point. Their relevance differs according to the radius of action. The aesthetic dimension of the intrinsic value of CCISs is relevant for universities and civil society; the heritage dimension is relevant for universities, government and civil society; and the cognitive dimension has an impact on the universities and industry. **The complexity lies in its measurement**. The adaptation of the Frascati criteria to these sectors is not straightforward and generates debate regarding their application. However, it makes sense to look for and be able to measure their specificities. The University of Valencia has participated in the measurement and analysis of the Strategic Plan for Culture.

He concluded his contribution with an interesting **reflection on the idea of intrinsic value as a limit or boundary**. In fact, all non-creative industries can cross this frontier and generate CCISs intrinsic values (heritage, aesthetic or cognitive). For example, connectivity and the mobile ecosystem, through innovative applications, exponentially increase human creative capacities to the same extent as the invention of a musical instrument. Any industry as a process could end up being a CCI; the more intrinsic value it has, the closer it is to becoming one. In fact, more and more non-creative industries are trying to move closer to creative industries because this frontier is an area of cross-fertilisation of innovation.

On the question of **innovative models for evaluating and monitoring** CCISs, essential to capture the full spectrum of their contributions, the **South African Cultural Observatory** points to issues such as:

- **New impact indicators** not previously considered: not only economic, but also social. Considering tools that measure creative influence, cultural diversity and contributions to social welfare. Incorporating qualitative data that captures narratives and stories of transformation resulting from the CCISs.

- **Increased specialisation** of existing observatories/institutions in the fields of CCISs: dedicated institutions should become more specialised in the analysis of their unique characteristics. They can create customised evaluation models that consider the different aspects of creativity, cultural heritage and social impact. In this respect, collaboration between specialised CCISs and traditional evaluators can help to bridge the gap.

- **Adapting new indicators to measure open innovation and cross-fertilisation**: it should be recognised that CCISs often thrive on open innovation and cross-fertilisation with other sectors. This involves designing indicators that measure successful cross-sectoral collaborations and innovative processes that emerge from this interaction. It is important to highlight the role of CCISs as catalysts for innovation in wider industrial settings.

- **Empowering the CCI Sector in Innovation processes**: it is necessary to ensure that innovation models consider their role as drivers of creativity and innovation within society. This requires developing metrics that reflect the role of CCISs in shaping cultural identities, stimulating artistic expression and fostering cultural dialogue, as well as their value as a source of inspiration for other sectors.

As Francesc pointed out, we can and should always rethink the models for assessing and monitoring innovation in CCISs in all directions, **the question is to adapt and find if there are new indicators to measure open innovation and cross-fertilisation without overlooking the relevance of standardisation with other sectors in terms of standard approaches**. In fact, finding shared indicators in different cross-fertilisation centres around the world (one example is Hibridalab, in Araba) could help to rethink whether or not it is necessary to change the models of evaluation and monitoring of innovation in CCISs.

8.4 Conclusions of the workshops

Technology and skills	Specific scores
Liliana Rodrigues, CEO and Head of Innovation at 4Humanz (Porto), a start-up focused on interactive design for the elderly. They advise on technology and adapt interfaces for the inclusion of elderly people.	Reet Aus, Founder of Aus Design (Estonia), has developed a business model based on the cyclical economy for the textile industries. This means producing clothes from pre-production surplus fabrics.
Mr. B.S. Srinivasan, Vice Chairman of Laghu Udyog Bharati-division of Karnataka and leader of the innovation team at Toy Clusters (Karnataka), which helps century-old classic (local wooden) toy manufacturers make an impact and expand by integrating new technologies into the toys.	Sarah Horner, Executive Director of Hijinx (Cardiff), a professional theatre company working to pioneer, produce and promote opportunities for actors with learning disabilities and/or autism to create outstanding productions.
Nic Mercer, CEO of Light ADL (Adelaide), a revolutionary social enterprise with a vision to provide a home for accessible excellence and innovation in creative expression, arts, entertainment, hospitality and related technologies.	Matthew Richter, Advisor to Cultural Space Agency (Washington), a real estate development agency that acquires cultural space in Seattle's competitive real estate market, with a special focus on the needs of black and indigenous people.
Erika Elk, CEO of the Craft Design Institute (South Africa), a craft and design sector development agency with a mission to develop capable people and build responsible creative enterprises that trade in local and international markets.	Sarah Brown, Executive Director of TwispWorks (Washington) TwispWorks advocates for a liveable Methow Valley through the arts, education and economic development. TwispWorks offers a campus for businesses, artists, educators and community events, and provides business support through a variety of programmes, including a local investment network.
Eija Tanninen-Komulainen, Executive Director of Design Union (Finland), Strengthens the role of design in society and helps companies to create added value to their business through design. At the same time, we create opportunities for creative professionals to use their expertise in the business world.	Maria del Rosario Escobar, Director of the Museum of Antioquia, a contemporary art museum that constantly, critically and ethically engages and communicates art content and objects in different ways to all communities in its context, in order to have an impact on them.

Technology and skills Topics covered	Specific scores Topics covered
Technological approaches Technology as a tool or at the centre CCISs contribute content Innovation takes place outside technology	**Focus on needs** Tailor-made support depending on needs Win-win projects Narrative to be meaningful
Opening Curiosity Critical thinking + Self-criticism Collaboration/Networking Collaboration, different from connection, conversation or empathy	**Importance of the process** Bottom-up processes are slower but more sustainable Permeability towards the community Co-creation Trust is crucial Inclusive leadership
Creativity As a skill to be promoted Cross-cutting nature of creativity, present in CCISs As a different way of thinking	**Creativity and resilience** Global climate emergency: there is no planet B Necessity to think differently Promoting sustainability + making it profitable Radical way to change reality
Dynamic reality Society evolves quickly, technology also evolves quickly Keeping up to date	**Policy design** Inclusion of green-local-fair growth requirements Conditions for increasing women-led innovation Market-driven transformations vs. Governed by policies
Skills Mutual learning processes: creative skills to be developed across sectors	**Collaboration** Two-way skills enhancement
Problem-solving orientation	Shared language: translation exercise between CCISs and other sectors Taking care of the different rhythms and the intermediate spaces
Value of technology Strengthens the business Connects and engages communities Enriches processes	

8.5 Keynote speeches

The focus of the second day was on the keynote speakers' presentations, organised in pairs and maintaining the common thread around the three main issues: innovative ecosystems and types of innovation, measuring innovation, and innovation linked to policies and strategies. It is worth highlighting the opportunity to be able to count on experts of recognised prestige in the European field of CCISs and innovation, whose conclusions enrich the project.

8.5.1 Innovative ecosystems and types of innovation. Cinzia Lagiogia and Jenny Kornmacher

To begin their intervention, they presented some global and European data to contextualise the weight of the CCISs in economic and employment terms.

Creative Economy Outlook 2022 Report		**Single Market Report 2022 EU**	
3.1% of world GDP (2022)	**3% of** world **product exports** (2020)	**8.02 million jobs**	**3.95% of Added Value**
6.2% of employment (2022)	**21% of** world **service exports** (2020)	**1.2 million companies (99.9% SMEs)**	

In terms of the challenges common to the CCISs they identify:

- Size: large number of small enterprises, micro-enterprises and self-employed professionals.
- Need to develop new content and business models.
- The crisis has increased fragmentation, financial fragility and skills shortages. Digital skills are also needed, as well as entrepreneurship and management skills.
- North America leads the audiovisual and music market; Asia leads in video games; in Europe, the press is well positioned in publishing.

› In the absence of a robust policy to overcome industry fragmentation, the huge investments in content by large platforms risk relegating independent players to mere service providers.

To strengthen the ecosystem, action is needed on all 5 of these key factors: innovation, investment, talent and skills, exports and the wider business context.

An **innovation ecosystem is defined as a set that includes actors, activities, artefacts, institutions and relationships, including collaborative and competitive relationships, that are important for the innovative performance of an actor or group of actors.**

Within this framework, the Contrast II study shows that **most of the components of innovation are present in the regions studied**; all of them are aware that innovation is the seed that feeds the sector and that investments fertilise the ecosystem, given that in all of them there are financial aid programmes, in some cases specifically for CCISs. However, **greater presence of non-financial aid is desirable** (only one third of the cases have this type of measure aimed at the sector), as is **greater collaboration** between agents.

In terms of the key elements that can be deduced from the study, the influence of context is important, but there is another essential, more intangible element: vision. **The sum of context and vision makes the difference**. In this respect, they point to the British strategy as a reference point *Creative Industries Sector Vision 2030* (June 2023), with targets relating to growth, workforce and impacts. The European vision is embodied in the Council Conclusions for building a European strategy for the CCISs ecosystem (2022/c 160/06).

With regard to the type of innovation, they suggest the need to highlight the concept of creative innovation and, more specifically, art-driven innovation, an idea generation methodology developed by In4Art, which combines innovative technologies, sustainable development objectives and artistic works to create a new playing field for open innovation and strategic decisions. It questions and humanises technology, takes science out of the laboratory and takes it to human scale, draws new scenarios and explores new territories.

They also put emphasis on **cross-innovation**, where tools such as pop-up offices (networking among professionals), cross-innovation classes (prototyping with students), and labs (bringing together teams from companies with experts from CCISs) are being applied. It is a fresher, more diverse, user-centred approach, seeking community involvement, based on market trend analysis, storytelling and branding, prototyping and visualisation, as well as risk-taking and experimentation.

Faced with this, the big question is how the public sector can act as an intermediary or promoter. Programmes such as the New European Bauhaus and the EIT Culture and Creativity are conceived as a framework for collaboration in this field. The cultural and creative sectors and industries are in dire need of new solutions and support for innovation. It should be noted that they play a key role in the transformation of our society.

8.5.2 Measuring innovation. Valentina Montalto and Nico Degenkolb

Firstly, the reflection is based on the clear awareness that **innovation is a multifaceted and dynamic concept**, which makes it difficult to find complete indicators or suitable proxy variables. A correlation exercise between the level of innovation in terms of intellectual property and the cultural vitality of European cities in the Cultural and Creative Cities Monitor shows that the correlation is very weak. Among the possible reasons are that culture may impede innovation, or at least relegate it to the background; it may also be due to the fact that, since they belong to two different areas, joint policies are inefficient and ineffective; or that there is little relationship between the indicators that measure one and the other, and they only measure what can be measured.

In this context, it is clear that the measurement of innovation should be extended, but always bearing in mind that:

› Firstly, it is necessary to be clear about the **strategy**: addressing current social challenges.

› Secondly, be clear about the **purpose**.

› Thirdly, now **measure**.

In second place, the usefulness of the Oslo Manual's standard definition of innovation is questioned. It is noted that the definition has a Schumpeterian bias, linking innovation to the market. From this position, the market is the only possible actor for innovation, leaving out much of the innovation that is being done. New indicators should therefore be considered. The question is how and where to start.
The first step is to rethink strategy. Metrics need to be linked to objectives defined prior to action, not after. Ex ante targets rather than ex post measurements.

Define an idea of **social innovation**, both in terms of objectives and means. In this sense, Mulgan points out that innovations are social in their aims because they are motivated by the objective of satisfying a social need. And they are social in their means because they leave behind a stronger social capacity to act.

The impacts of cross-cultural innovation can affect technologies, health and wellbeing, cohesion, sustainability, entrepreneurship, learning, local identity and soft diplomacy.

In terms of art-related innovation, White indicates that it can be artistic innovation, which is the creation, dissemination and support of new art forms; it can be art movement innovation, which is the introduction, dissemination and acceptance of an ideology that guides a new art movement; or it can be art experience innovation, if it is a structured experience design for visual, literary or performing arts audiences.

Finally, and with a view to the future of measuring innovation in the CCISs, three avenues of work are proposed:

- **Designing Innovation systems towards positive change in the triple transition** (Ex Ante Objectives, Key Performance Indicators (KPIs) and Measurement).
- Developing **comprehensive innovation indices** for CCISs beyond technological innovation, taking into account cross-innovation.
- **Adding perspectives to the measurement** of innovation, such as the SDGs, the Freedom House Index, which measures individual and civil liberties around the world, the UN's World Happiness Report, or the Monitor itself.

8.5.3 Designing policies and strategies for innovation and CCISs. Pier Luigi Sacco and Luca dal Pozzolo

A creative context is an important resource for innovation, even if not in linear terms. In this regard, there is no specific policy or tool that is decisive for innovation, but rather **the favourable conditions are the result of a combination of different factors**: universities, the existence of incubators, trained consultants, clusters of innovative activities. The relationship is much more indirect, it is not a cause-effect dynamic linked to a single factor.

The emergence of innovation seems to follow Schumpeter's paradigm. For most of the cases analysed in the Contrast study, the innovation factor or dynamic is the result of a single organisation, which depends on its own creativity and its own economic resources. Whether or not it is technology-driven, it seems to depend on a kind of "focus" on a product or process, the "core" of the "entrepreneurial phase" according to Schumpeter's theory.

While having the **right environment is important in the initial phase** (e.g. relations with universities, incubators, etc.), the trigger for an innovation process is independent, which implies that **specific support policies and tools** are required for the next steps, for the commercial exploitation of the innovation and for the growth of the company, such as:

› Financial and economic aid adapted to the type and size of the companies: many of them are small and have less than 10 employees;

› Specific policies and financial support for those activities and industries able to buy innovation from innovative CCIs;

› Support to improve communication, the commercial phase and the extension of social demand;

To put it very succinctly, policies can be divided into two typologies:

1. **Tools and support to build better conditions for a creative social environment**: investment in universities, R&D, incubators, digital literacy, entrepreneurship education.

2. **Tools directly targeting organisations and companies** in economic terms and empowering staff and leaders.

In short, CCISs are not "a sector" but "a domain": the consequence is that **it is impossible to provide a single policy, but requires a set of policies** appropriate to the issue, the business model and the characteristics of the organisation in terms of size and type of leadership. And, of course, to apply an approach according to the specific geographical environment.

In procedural terms, innovation must respond to a prior strategy: identify a problem, define a strategy and then innovate. Once realised, the question arises as to how to exploit it.

With regard to measurement, it reflects on the frequent confusion between measurement and objectives: the risk of adapting action to indicators, and not vice versa. A global, holistic view and assessment is required, combining different sources for each dimension. Another reflection is the difference between value and impact. Value is a condition, it is generative in nature. Unlike impact, which is linked to achievement, value should be seen as a process.

Another area for reflection is that **the paradigm of cultural creation or production has changed substantially**. Artists are no longer the only ones who create and imagine; in fact, the idea of creativity is a very western concept. People want to participate and they do participate. This has implications for innovation and policy design: the role of

collective intelligence, which is vital for its potential, and inclusion must be prioritised in a practical and not just theoretical way, given that those who participate in and benefit from policies are often not those who need it most.

Cultural policies need to start rethinking in a **behavioural** way: understanding the culture of culture as a platform for behavioural change, especially due to the emotional responses it generates. This set of elements, linked to social change, impacts on policy in a variety of ways. To capture, understand and respond appropriately, new tools are needed.

From a **policy design** perspective, tools such as:

› Living labs.

› Computer simulation.

› Behavioural experiments creating conditional scenarios.

From the perspective of **cultural policy implementation**:

› Creating communities of encounter between policy makers and citizens.

› Making contingency plans: integrate new developments, adjust, be flexible, leave room for discussion.

From a **measurement** perspective:

› Decentralised monitoring and aggregation of different sources.

› Distinguishing between cause and effect, make causal assessments.

› Including participation in the evaluation.

Contrast

Innovation in the Cultural and Creative Industries

PART V.

FINAL SUMMARY

9. Final conclusion

9.1. Recap

9.1.1 The project

The *Contrast II* study is an extension and refinement of the analysis of regional contexts of innovation in CCISs begun in the project *Contrast I.* Its global scale and its methodological design add analytical density to the research by having a greater number of ecosystems and a greater variety of study cases.

It maintains the same objectives (the exploratory and descriptive character of innovation ecosystems) and general hypothesis, but, having a sample of very different realities from a geopolitical and socioeconomic point of view, the analysis about the effect of the context in the development of innovation has bigger impact.

The two cornerstones upon which the Contrast II study is based are the contexts or ecosystems of 16 regions and the particular cases of innovation (88 organisations). The common thread of the whole project intertwines two levels: the political, administrative and strategic levels; and the agents in the field (companies, associations, NGOs...).

The methodological approach carried out has followed three steps:

1. Selection of a coordinator for each of the regions.

2. The coordinators have answered a questionnaire and have selected between 5 and 10 practices from their respective regions based on their informed criteria.

3. The 88 organizations have answered a specific questionnaire about their innovation project and the characteristics of their innovation environment.

It is important to note that the design of the surveys is itself a proposal for measuring innovation in CCSIs.

The structure of the study, organized in three large sections dedicated to regional contexts and the innovation environment, the characteristics of innovation, and the results, impacts and the value of innovation guided the contents debated in the open conference. The conference served as a presentation and validation of results. This led to an improvement and expansion of results, integrating the content generated in the study.

9.1.2 Objectives, methodology and hypotheses

In line with the main objectives of the Contrast project, developed in two phases (pilot study and current extended study), this report has studied in greater depth and systematicity the characteristics of the innovation environments of the CCSIs and their types of innovation.

The diversity of regions and cases has allowed an analysis to be carried out from an objective and unprejudiced position. The sample is relevant to the objectives of the research, although in purely statistical terms it is not representative, it is theoretical.

On the other hand, the methodology used was based on two ad hoc questionnaires and a conference to present and validate the results, has allowed us to visualize and study shared elements among all sectors and explore those that are unique to the CCSIs. These tools have enabled to know in objective terms key issues raised from the theoretical reflection initiated three years ago and to transfer them to the reality of innovation in the CCSIs. In addition, the research is not limited to a portrait of the situation (very valuable in itself), but also incorporates contributions of a qualitative nature on the barriers and opportunities for the future development of innovation in the CCSIs in diverse contexts.

Attending again to the initial hypotheses of the study on **the effect of the context at two levels** (the influence of the global context of the region on CCSIs specific context and, second, the influence of CCSIs specific context to the types and procedures of innovation). We must conclude that **the evidence is partial**.

The study confirms that there is a correlation between general contexts and innovation contexts in CCSIs, but **the correlation between specific contexts and case-level innovation is not that clear**. There is no linear relationship between the latter and the level of innovation of the cases. **At this level, the relationship is more qualitative (how you innovate) than quantitative (impact).**

9.2. Conclusions

The main conclusions of the study and the debate are extracted below. Innovation in the cultural and creative industries and sectors is a complex, multifaceted and dynamic phenomenon. It is unpredictable and can surface in any context. The creative power of these sectors and their transformative capacity are ideal for bringing about social change.

1. **Context.** Innovation is present in all the regions analysed; it is part of the DNA of cultural and creative organisations. This does not contradict their need for support adapted to their specificities. The main barrier to innovation is the lack of financial aid. A favourable context helps to achieve better results. It helps to generate a fabric and greater density of innovative initiatives. In conclusion, the lack of specific innovation support tools designed and targeted at CCISs does not prevent innovative projects from emerging, but having a conducive ecosystem encourages progress in innovation.

2. **Types of innovation.** Innovation in these sectors combines product and process improvements. The weight of own resources is very relevant, as well as support from specific R&D resources. The most innovative organisations make greater use of collaboration and technology. It is worth noting that three out of ten cases innovate for other sectors. In terms of the value and impacts of innovation, it is observed that it has a significant economic return and positive externalities, especially of a social and cultural nature. This characterises the value of innovation in CCISs.

3. **Policies and tools.** Different contexts and stages of development require different policies and instruments. A robust support ecosystem needs to act simultaneously in different areas: innovation, investment, talent, export and business fabric. With their differences, the study shows that these variables are present in all regions. In any case, non-economic support tools have considerable room for

improvement. It is necessary to carry out innovation support policies for CCISs, given the specificities of the fabric (micro-enterprises, difficulties in accessing funding, training needs, simplification of access mechanisms; etc.); and policies with CCISs aimed at gaining influence, where the concept of creative innovation would come into play, stimulating cross-collaboration methods and the humanisation of technological research. There is value in the CCISs' own innovation, and there is also value in the innovation they carry out in external sector teams.

4. **Vision.** But it is not enough to work on the consolidation of an innovation support ecosystem from a policy perspective. The prerequisite is intangible: it requires strategic vision and a strong will. The sum of context and vision makes the difference. In the most advanced regions, innovation in CCISs is a priority.

5. **Collaboration.** This is another crucial issue. Collaboration adds richness and density to innovation processes, even if it involves challenges. From the point of view of rhythm, it slows down processes; from the point of view of values, it makes them more complex. In collaborative projects, it is more important (and more difficult) to share values than objectives. Sharing physical spaces, finding a common language, coming up with an understandable narrative, understanding the needs of the parties, are essential elements to promote collaborative projects within and across sectors, between CCISs and traditional sectors; between creative people and technologists; between universities and businesses; between industry, universities and governments. In this framework of innovation and cross-fertilisation, there is a lack of data to measure the presence of CCISs in other sectors.

6. **Fifth helix.** Innovation in the 21st century, and even more so in the CCISs, is articulated according to the fourth helix model, fully incorporating civil society as a key actor, in addition to the industrial fabric, academia and administrations. Participation, community, inclusion, behavioural change and collective intelligence are at the heart of the innovation ecosystem in the CCISs. Sustainability has been found to rank third, for the time being, in terms of impacts of the innovation cases analysed. However, the climate emergency and growing inequalities make it urgent to focus on the quintuple helix model, even in contexts of strong market dominance. Innovation in CCISs today cannot be understood without taking into account the 5 helices.

7. **Measurement.** Between standardisation with other sectors and the uniqueness of CCISs, the challenge of measurement is once again to strike a critical balance. Standardisation helps to identify common issues, facilitates communication and cross-sectoral collaboration. By aligning language and data with other sectors, it facilitates benchmarking and access to a wider range of support. Highlighting the specificity of CCISs is vital to preserve their intrinsic value and maintain their distinctive character. Regarding the measurement process, it is stressed that it is necessary to be clear about the strategy to respond to current social challenges and the objectives before starting to measure. It is about designing innovation monitoring systems with ex ante targets, KPIs and measurement systems, thinking about including composite indices and a combination of different sources.

Contrast

Innovation in the Cultural and Creative Industries

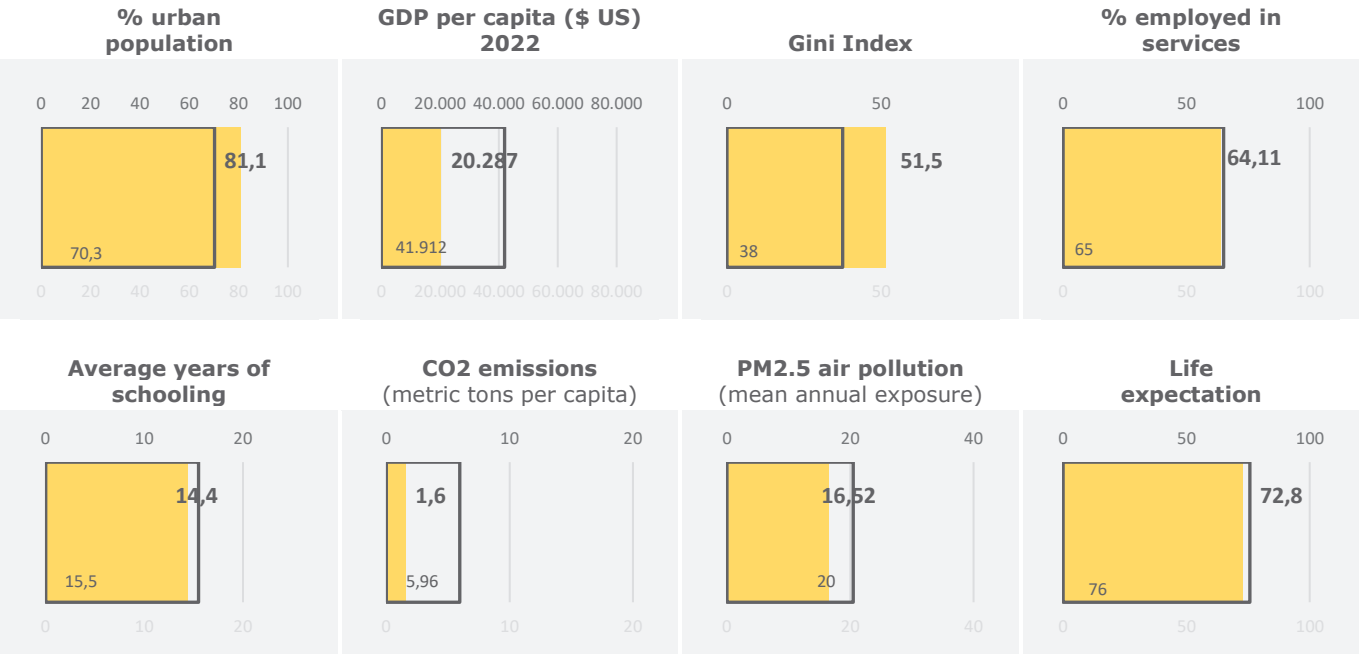
ANNEXES

ANNEX 1. Regional fact sheets

Antioquia (Colombia)

Regional context

Socio-economic profile
[Country-level data, compared to mean. Secondary source information]



Sources: United Nations and World Bank

Global Innovation Index position

[Country-level data, compared to mean. Secondary source information]

	General GII	Specific "Creative outputs" dimension	
	Position	Position	Score
Case	**63**	**75**	**17,9**
Sample mean	36	38	33,1

Source: GII (World Intellectual Property Organization – WIPO)

Considered general profile attending this data | **Moderate/Emerging**

CCSIs innovation ecosystem

Results that align with the general trend are highlighted in green

CCSIs and innovation monitoring

Cultural observatories	ICC statistics	Innovation statistics
Yes	**Yes**	**Yes**
General trend: Yes (87,5%)	General trend: Yes (81,25%)	General trend: Yes (75%)

Source: Regional coordinators' survey

Strategic approach for CCSIs

Main strategic agent type	Main administrative level involved in non-monetary support	Main administrative level involved in monetary support	Public CCSIs strategy in economic development
Sectoral	**Lower levels**	**Lower levels**	**CCSIs specific**
General trend: Sectoral agents leading CCSIs development (50%)	General trend: Lower administrative levels (56,25%)	General trend: Higher administrative levels (50%)	General trend: CCSIs specific strategies (37,5%, weak trend)

Source: Regional coordinators' survey

Innovation environment

[Tools tailored for CCSIs]

Incubators	Clusters or platforms	Science and tech parks	Economic programs
CCSIs specific	**CCSIs specific**	**Not specific, but CCSIs included**	**CCSIs specific**
General trend: CCSIs specific (81,25%)	General trend: CCSIs specific (68,75%)	General trend: Not specific, but CCSIs included (56,26%)	General trend: CCSIs specific (62,5%)

Specific CCSIs innovation programs	Counselling and training for innovation	Counselling and training for entrepreneurship	Awards
CCSIs specific	**Not specific, but CCSIs included**	**Not specific, but CCSIs included**	**Not specific, but CCSIs included**
General trend: CCSIs specific (43,75%, weak trend)	General trend: Not specific, but CCSIs included (50%)	General trend: CCSIs specific (37,5%, weak trend)	General trend: Not specific, but CCSIs included (37,5%, weak trend)

Source: Regional coordinators' survey

Specific CCSIs context
Determined by the interplay between CCSIs specific tools (survey data) and CCSIs strength (survey and GII data)

»»

Context III
Emerging results including those ecosystems adapted to CCSIs' specificities.

The study has classified the 16 regions into 4 profiles:

- ☐ Context I → Leading results, with or without ecosystems adapted to CCSIs' specificities.
- ☐ Context IIa → Advanced results with highly adapted ecosystems to CCSIs' specificities.
- ☐ Context IIb → Advanced results with moderately adapted ecosystems to CCSIs' specificities.
- ☐ Context III → Emerging results including those ecosystems adapted to CCSIs' specificities.

Participating organizations

Museo de Antioquia

https://museodeantioquia.co/sitio/

It is a contemporary art museum that disturbs and communicates, in different ways and constantly, critically and ethically, contents and art objects to all the communities in its context, to impact them.

Orquesta Filarmónica de Medellín

https://filarmed.org

It is a professional orchestra, whose highest purpose is to transform the local and national territory with symphonic music, in conditions of proximity. Under four axes of work - training, circulation, appropriation and entrepreneurship - Filarmed democratizes symphonic music and promotes the growth, strengthening and competitiveness of each of the music actors in the city and the region.

Impact Hub Medellín

https://medellin.impacthub.net

It's an impact and innovation community that undoubtedly connects, articulates and manages the ecosystem. Mainly with the purpose of creating value in the local, national and also global entrepreneurship sector.

diidoo®

https://diidoo.co

Helping you find architectural design services, topography, soil study, structural design, builders, carpentry, and materials. diidoo® connects you with the best construction professionals based on your location.

Pantolocos de la Corporación Casa Arte

https://casaarte.com.co

They are a theater company from Medellín with 20 years of experience. We explore forms of clowning, physical theater and Dramatic Body Mime.

Corporación Hérmetus

https://www.facebook.com/corporacionhermetus/

Dramatic arts oriented towards:

- User experience
- Emotional and aesthetic impact
- Accessibility and diversity
- Cultural and social impact
- Sustainability and viability

Additional information on CCSIs

[links provided in the survey]

CCSIs statistics and cultural monitoring

https://www.dane.gov.co/index.php/estadisticas-por-tema/cuentas-nacionales/cuentas-satelite/cuenta-satelite-de-cultura-en-colombia

https://www.observatorioeccmm.com/qui%C3%A9nes-somos

https://geoportal.dane.gov.co/geovisores/economia/economia-naranja-siena/?lt=4.181390112341817&lg=-74.34930964783457&z=6

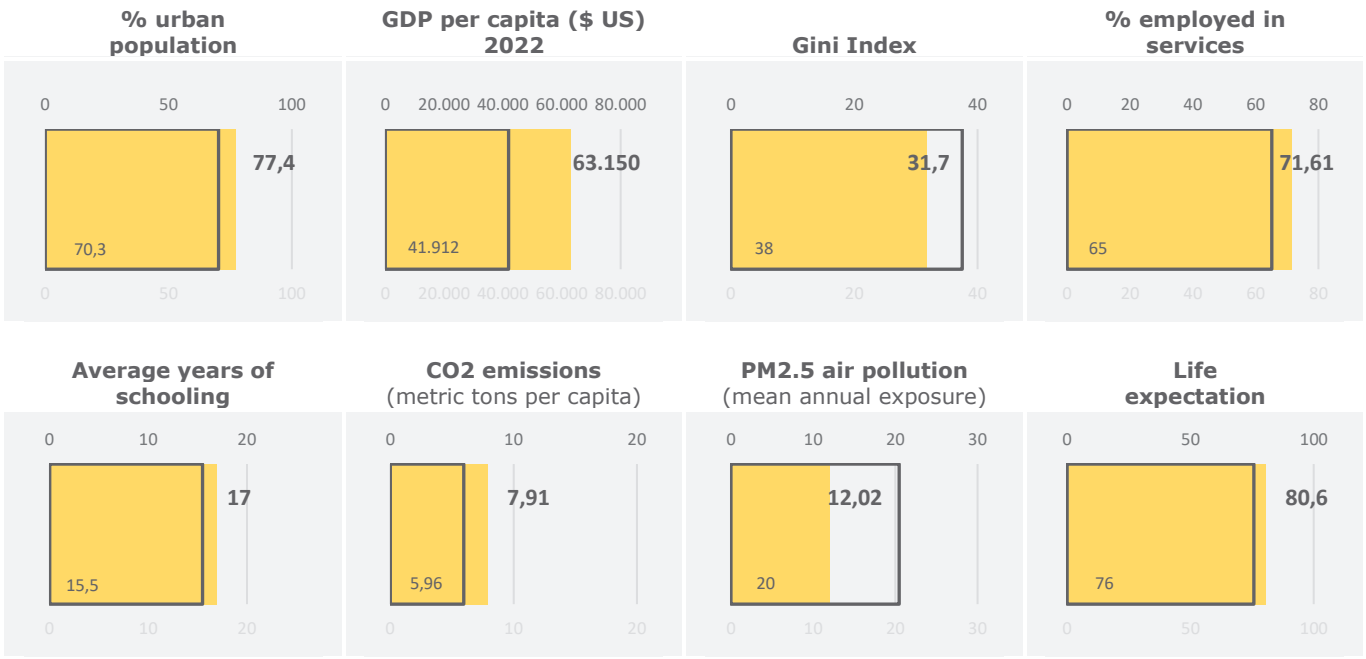
Innovation statistics

https://www.udea.edu.co/wps/portal/udea/web/inicio/extension/innovacion/comite-universidad-empresa-estado

Baden-Württemberg (Germany)

Regional context

Socio-economic profile
[Country-level data, compared to mean. Secondary source information]



Sources: United Nations and World Bank

Global Innovation Index position

[Country-level data, compared to mean. Secondary source information]

	General GII	Specific "Creative outputs" dimension	
	Position	Position	Score
Case	**8**	**7**	**52,3**
Sample mean	36	38	33,1

Source: GII (World Intellectual Property Organization – WIPO)

Considered general profile attending this data | **Leading**

CCSIs innovation ecosystem

Results that align with the general trend are highlighted in green

CCSIs and innovation monitoring

Cultural observatories	ICC statistics	Innovation statistics
Yes	**Yes**	**Yes**
General trend: Yes (87,5%)	General trend: Yes (81,25%)	General trend: Yes (75%)

Source: Regional coordinators' survey

Strategic approach for CCSIs

Main strategic agent type	Main administrative level involved in non-monetary support	Main administrative level involved in monetary support	Public CCSIs strategy in economic development
Sectoral	**Lower levels**	**Lower levels**	**Do not exist (neither specific nor generic)**
General trend: Sectoral agents leading CCSIs development (50%)	General trend: Lower administrative levels (56,25%)	General trend: Higher administrative levels (50%)	General trend: CCSIs specific strategies (37,5%, weak trend)

Source: Regional coordinators' survey

Innovation environment

[Tools tailored for CCSIs]

Incubators	Clusters or platforms	Science and tech parks	Economic programs
CCSIs specific	**CCSIs specific**	**Not specific, but CCSIs included**	**CCSIs specific**
General trend: CCSIs specific (81,25%)	General trend: CCSIs specific (68,75%)	General trend: Not specific, but CCSIs included (56,26%)	General trend: CCSIs specific (62,5%)

Specific CCSIs innovation programs	Counselling and training for innovation	Counselling and training for entrepreneurship	Awards
No data	**CCSIs specific**	**CCSIs specific**	**CCSIs specific**
General trend: CCSIs specific (43,75%, weak trend)	General trend: Not specific, but CCSIs included (50%)	General trend: CCSIs specific (37,5%, weak trend)	General trend: Not specific, but CCSIs included (37,5%, weak trend)

Source: Regional coordinators' survey

Specific CCSIs context

Determined by the interplay between CCSIs specific tools (survey data) and CCSIs strength (survey and GII data)

»»

Context IIa

Advanced results with highly adapted ecosystems to CCSIs' specificities

The study has classified the 16 regions into 4 profiles:

- Context I → Leading results, with or without ecosystems adapted to CCSIs' specificities.
- Context IIa → Advanced results with highly adapted ecosystems to CCSIs' specificities.
- Context IIb → Advanced results with moderately adapted ecosystems to CCSIs' specificities.
- Context III → Emerging results including those ecosystems adapted to CCSIs' specificities.

Participating organizations

Popakademie Baden-Württemberg GmbH

https://www.popakademie.de/de/

As higher education institution and competence centre for the music and creative industries and their pop cultural scenes, Popakademie offers an academic education that is unique in Germany's public university landscape.

NEXT Mannheim

https://next-mannheim.de/sections/creative-economy/

Cultural Place and City Making, different startup centers for different cultural and creative industries, e.g. for textile (Textilerie), for music (Musikpark), for technology (Mafinex), for creative industries in film, branding … and coworking (C-Hub).

Hochschule der Medien Stuttgart

https://www.hdm-stuttgart.de/startup-center/en/students/accelerator/sandbox_program

Accelerator and Generator startup center for cultural and creative industries.

K3 Kultur- und Kreativwirtschaftsbüro Karlsruhe

https://www.k3-karlsruhe.de/ | https://alterschlachthof-karlsruhe.de/areal_und_nutzer/#nutzer/

Creative Place "Alter Schlachthof" in the UNESCO City of Media Arts Karlsruhe, Perfect Futur and FUX = funded places for startups and growths in cultural and creative industries

Wirtschaft und Stadtmarketing Pforzheim /EMMA - Kreativzentrum Pforzheim

https://www.emma-pf.de/

Creative place for cultural and creative industries and "bar-tower" for impact driven exhibitions and performances.

MFG Baden-Württemberg

https://games-bw.mfg.de/gameshub-heidelberg/

Cross-Innovation between games industry and health//life science for VR-therapy and serious games; startup programm and accelerator.

Participating organizations

Virtual Dimension Center (VDC) w.V.

https://www.vdc-fellbach.de

Network for virtual engineering and pilot service for virtual technologies and business models

Tinkertank, Interactive Media Foundation gGmbH

https://tinkertank.de/

Tinkertank is an initiative of the internationally active Creative Office created in 2013 as one of the first initiatives of the Interactive Media Foundation gGmbH. Organizer of workshops and summer camps, based in their Creative Lab in Ludwigsburg but mobile with a complete maker space all over Baden-Württemberg.

AMCRS - Animation Media Cluster Region Stuttgart

www.amcrs.de

Unique cluster and business network for animation and visual effects, games, event programm with a high density of animation and VFX studios; important role in events like tech talks, animation conferences and festivals

SkySpirit GmbH

https://www.skyspirit.com/en/home/

Private undertaking in the field of AI technology and art, event performance and research, product and service. Sky Spirit explores new technologies and research the latest trends hand in hand, inspired by nature, robotics, and the dream of being able to fly.

Additional information on CCSIs

[links provided in the survey]

CCSIs statistics and cultural monitoring

https://www.kultur-kreativ-wirtschaft.de/KUK/Navigation/DE/Home/home.html

https://www.destatis.de/DE/Themen/Staat/Steuern/Umsatzsteuer/_inhalt.html
https://kreativ-bund.de/

https://www.prognos.com/de/kultur-kreativwirtschaft

https://www.goldmedia.com/en/publications/

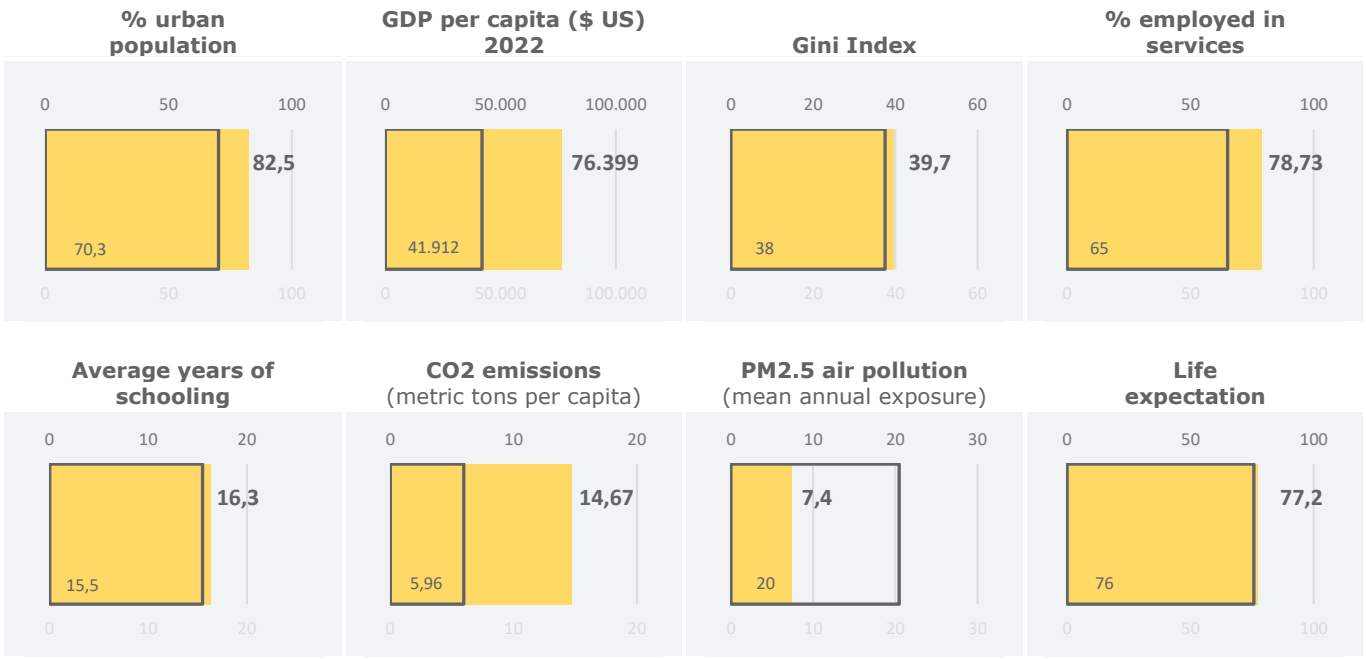
Innovation statistics

https://www.statistik-bw.de/GesamtwBranchen/ForschEntwicklung/Innovation-I_BW.jsp

California (United States)

Regional context

Socio-economic profile
[Country-level data, compared to mean. Secondary source information]



Sources: United Nations and World Bank

Global Innovation Index position

[Country-level data, compared to mean. Secondary source information]

	General GII	Specific "Creative outputs" dimension	
	Position	Position	Score
Case	**2**	**12**	**48,4**
Sample mean	36	38	33,1

Source: GII (World Intellectual Property Organization – WIPO)

Considered general profile attending this data | **Leading**

CCSIs innovation ecosystem

Results that align with the general trend are highlighted in green

CCSIs and innovation monitoring

Cultural observatories	ICC statistics	Innovation statistics
Yes	**Yes**	**Yes**
General trend: Yes (87,5%)	General trend: Yes (81,25%)	General trend: Yes (75%)

Source: Regional coordinators' survey

Strategic approach for CCSIs

Main strategic agent type	Main administrative level involved in non-monetary support	Main administrative level involved in monetary support	Public CCSIs strategy in economic development
Sectoral	**Lower levels**	**Higher levels**	**CCSIs specific**
General trend: Sectoral agents leading CCSIs development (50%)	General trend: Lower administrative levels (56,25%)	General trend: Higher administrative levels (50%)	General trend: CCSIs specific strategies (37,5%, weak trend)

Source: Regional coordinators' survey

Innovation environment

[Tools tailored for CCSIs]

Incubators	Clusters or platforms	Science and tech parks	Economic programs
CCSIs specific	**CCSIs specific**	*No data*	**Not specific, but CCSIs included**
General trend: CCSIs specific (81,25%)	General trend: CCSIs specific (68,75%)	General trend: Not specific, but CCSIs included (56,26%)	General trend: CCSIs specific (62,5%)

Specific CCSIs innovation programs	Counselling and training for innovation	Counselling and training for entrepreneurship	Awards
CCSIs specific	**CCSIs specific**	**CCSIs specific**	**Not specific, but CCSIs included**
General trend: CCSIs specific (43,75%, weak trend)	General trend: Not specific, but CCSIs included (50%)	General trend: CCSIs specific (37,5%, weak trend)	General trend: Not specific, but CCSIs included (37,5%, weak trend)

Source: Regional coordinators' survey

Specific CCSIs context

Determined by the interplay between CCSIs specific tools (survey data) and CCSIs strength (survey and GII data)

»»

Context IIa

Advanced results with highly adapted ecosystems to CCSIs' specificities

The study has classified the 16 regions into 4 profiles:

- ☐ Context I → Leading results, with or without ecosystems adapted to CCSIs' specificities.
- ☐ Context IIa → Advanced results with highly adapted ecosystems to CCSIs' specificities.
- ☐ Context IIb → Advanced results with moderately adapted ecosystems to CCSIs' specificities.
- ☐ Context III → Emerging results including those ecosystems adapted to CCSIs' specificities.

Participating organizations

Center for Cultural Innovation

https://ambitio-us.org

Ambitio*US* is an initiative of the Center for Cultural Innovation encourage the development of burgeoning alternative economies and fresh social contracts in ways that artists and cultural communities can achieve financial freedom.

Destination Crenshaw

https://urbanland.uli.org/public/destination-crenshaw-a-model-for-community-engagement-in-los-angeles/

Destination Crenshaw is a transformative 1.3-mile (2 km) infrastructure project aiming to boost Los Angeles's Crenshaw community through economic development, job creation, and environmental healing while elevating Black art and culture. Destination Crenshaw is an outdoor art and cultural experience that includes pocket parks, public art installations featuring more than 100 local artists, and 12 unapologetically Black narratives that tie the Crenshaw community's history to its future as a neighborhood.

Arts for LA

https://www.artsforla.org

Arts for LA is the only cross-sector and cross-discipline arts advocacy organization in Los Angeles County. Our powerful community includes 75,000 supporters, 400 Member Advocates, 185+ Member Organizations. To connect arts and culture stakeholders spread throughout the vast region, Arts for LA implements a digital advocacy and communication strategy linking 75,000+ subscribers in Los Angeles County's 88 municipalities and 81 school districts.

BRIC Foundation

https://www.bricfoundation.org

BRIC Foundation has one main goal: to increase representation in Entertainment, Gaming, Media and Tech. By strategically engaging with leaders across these industries, along with Government and Education Partners, BRIC strives to Break, Reinvent, Impact and Change the foundations of these businesses and create inclusive opportunities for women and underrepresented people to be successful.

Additional information on CCSIs

[links provided in the survey]

CCSIs statistics and cultural monitoring

https://www.icpsr.umich.edu/web/pages/NADAC/index.html

https://www.arts.gov/impact/research/arts-data-profile-series

https://www.otis.edu/creative-economy

https://www.bea.gov/data/special-topics/arts-and-culture

Innovation statistics

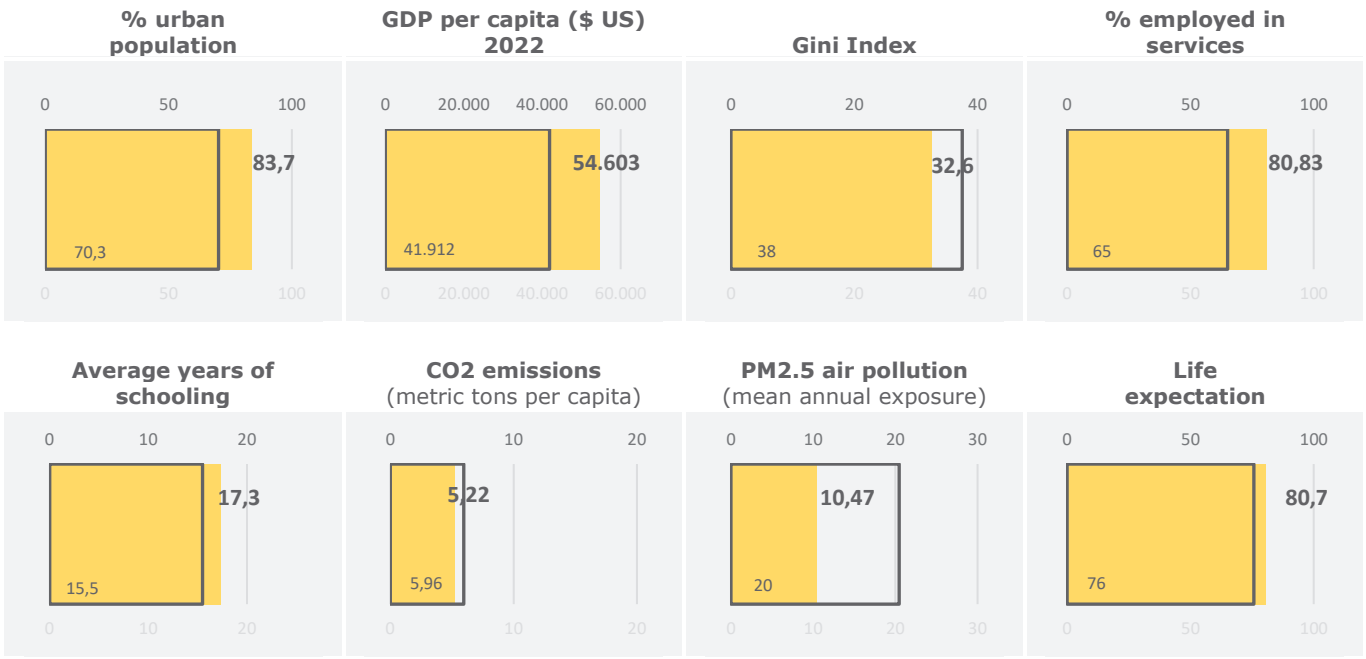
https://www.statsamerica.org/innovation/

https://www.nber.org/programs-projects/programs-working-groups/productivity-innovation-and-entrepreneurship?facet=contentType%3Ainterview&page=1&perPage=50

Cardiff (United Kingdom)

Regional context

Socio-economic profile
[Country-level data, compared to mean. Secondary source information]



Sources: United Nations and World Bank

Global Innovation Index position

[Country-level data, compared to mean. Secondary source information]

	General GII	Specific "Creative outputs" dimension	
	Position	Position	Score
Case	**4**	**3**	**55,9**
Sample mean	36	38	33,1

Source: GII (World Intellectual Property Organization – WIPO)

Considered general profile attending this data | **Leading**

CCSIs innovation ecosystem

Results that align with the general trend are highlighted in green

CCSIs and innovation monitoring

Cultural observatories	ICC statistics	Innovation statistics
Yes	**Yes**	**Yes**
General trend: Yes (87,5%)	General trend: Yes (81,25%)	General trend: Yes (75%)

Source: Regional coordinators' survey

Strategic approach for CCSIs

Main strategic agent type	Main administrative level involved in non-monetary support	Main administrative level involved in monetary support	Public CCSIs strategy in economic development
Sectoral	**Equal (Highers and lowers levels)**	**Higher levels**	**CCSIs specific**
General trend: Sectoral agents leading CCSIs development (50%)	General trend: Lower administrative levels (56,25%)	General trend: Higher administrative levels (50%)	General trend: CCSIs specific strategies (37,5%, weak trend)

Source: Regional coordinators' survey

Innovation environment

[Tools tailored for CCSIs]

Incubators	Clusters or platforms	Science and tech parks	Economic programs
CCSIs specific	**CCSIs specific**	**Not specific, but CCSIs included**	**CCSIs specific**
General trend: CCSIs specific (81,25%)	General trend: CCSIs specific (68,75%)	General trend: Not specific, but CCSIs included (56,26%)	General trend: CCSIs specific (62,5%)

Specific CCSIs innovation programs	Counselling and training for innovation	Counselling and training for entrepreneurship	Awards
CCSIs specific	**CCSIs specific**	**Not specific, but CCSIs included**	**CCSIs specific**
General trend: CCSIs specific (43,75%, weak trend)	General trend: Not specific, but CCSIs included (50%)	General trend: CCSIs specific (37,5%, weak trend)	General trend: Not specific, but CCSIs included (37,5%, weak trend)

Source: Regional coordinators' survey

Specific CCSIs context

Determined by the interplay between CCSIs specific tools (survey data) and CCSIs strength (survey and GII data)

»»

Context I

Leading results, with or without ecosystems adapted to CCSIs' specificities

The study has classified the 16 regions into 4 profiles:

- ☐ Context I → Leading results, with or without ecosystems adapted to CCSIs' specificities.
- ☐ Context IIa → Advanced results with highly adapted ecosystems to CCSIs' specificities.
- ☐ Context IIb → Advanced results with moderately adapted ecosystems to CCSIs' specificities.
- ☐ Context III → Emerging results including those ecosystems adapted to CCSIs' specificities.

Participating organizations

BWLB Ltd

https://www.bwlb.co.uk

Development of a patent for a system to accommodate length of podcasts to your time and interest. Size: Individual.

Object Matrix

https://object-matrix.com

Technological improvement: Use algorithms to improve access to audiovisual files. Recently acquired by a larger company. Data management.

Hijinx Theatre

https://www.hijinx.org.uk

Not-for-profit theatre company. Project aimed at practices to improve representation, inclusion and accessibility for people with disabilities in the screen industries.

edge21 studio ltd

https://www.edge21studio.co.uk

Development of new and interesting forms of immersive storytelling using augmented reality.

Y Pod Cyf

https://www.ypod.cymru/about/

It presents a useful strategy to Improve access to podcasts in Welsh, promoting local cultural heritage.

gorilla TV

https://gorillagroup.tv

Evidence of a service development that increased retention of audiovisual production in Wales, via of a toolkit to enable remote editing for audiovisual products.

Additional information on CCSIs

[links provided in the survey]

CCSIs statistics and cultural monitoring

https://clwstwr.org.uk/publications

https://media.cymru

https://www.cardiff.ac.uk/creative-economy

https://www.gov.wales/sites/default/files/statistics-and-research/2022-10/creative-wales-industry-survey-2022-804.pdf

https://pec.ac.uk/news/national-statistics-on-the-creative-industries

https://mmd.research.southwales.ac.uk

Innovation statistics

https://clwstwr.org.uk/publications

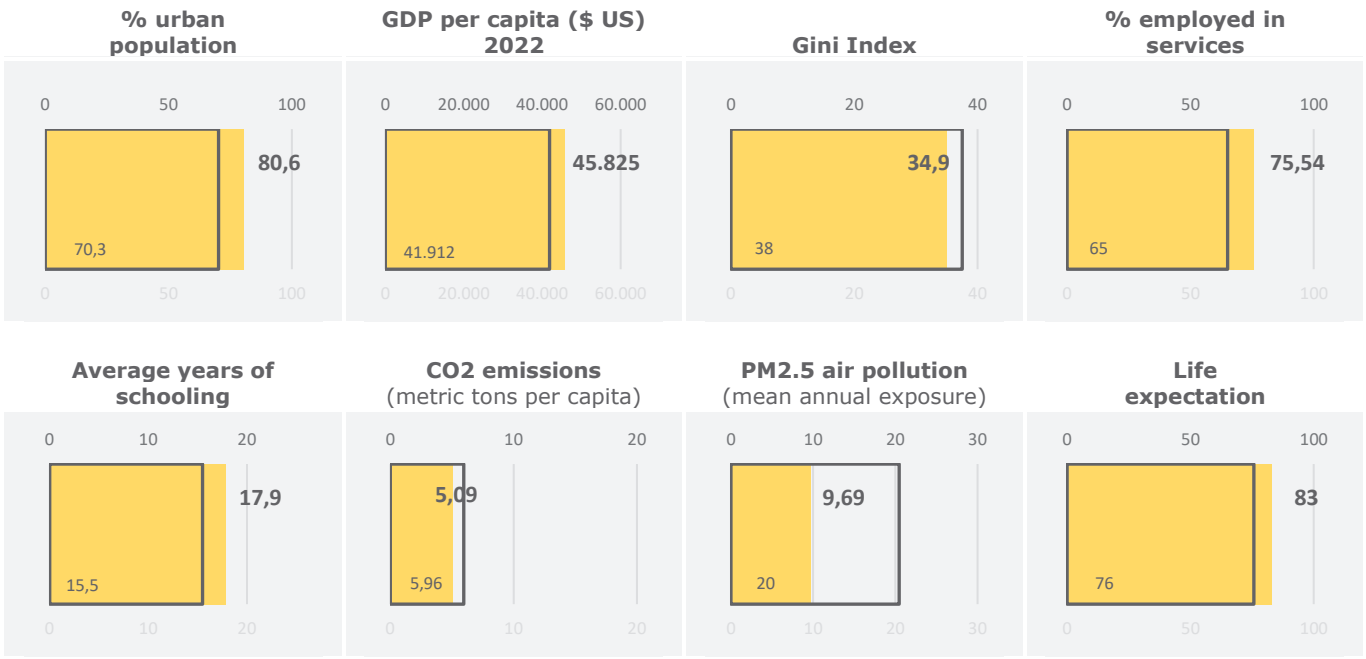
https://www.gov.uk/government/collections/uk-innovation-survey

https://statswales.gov.wales/Catalogue/Business-Economy-and-Labour-Market/Businesses/Innovation/businessesthatareinnovationactive-by-year

Comunitat Valenciana

Regional context

Socio-economic profile
[Country-level data, compared to mean. Secondary source information]



Sources: United Nations and World Bank

Global Innovation Index position

[Country-level data, compared to mean. Secondary source information]

	General GII	Specific "Creative outputs" dimension	
	Position	Position	Score
Case	**29**	**28**	**36,8**
Sample mean	36	38	33,1

Source: GII (World Intellectual Property Organization – WIPO)

Considered general profile attending this data | **Advanced**

CCSIs innovation ecosystem

Results that align with the general trend are highlighted in green

CCSIs and innovation monitoring

Cultural observatories	ICC statistics	Innovation statistics
Yes	**Yes**	**Yes**
General trend: Yes (87,5%)	General trend: Yes (81,25%)	General trend: Yes (75%)

Source: Regional coordinators' survey

Strategic approach for CCSIs

Main strategic agent type	Main administrative level involved in non-monetary support	Main administrative level involved in monetary support	Public CCSIs strategy in economic development
Generic	**Higher levels**	**Lower levels**	**Generic cultural, not CCSIs specific**
General trend: Sectoral agents leading CCSIs development (50%)	General trend: Lower administrative levels (56,25%)	General trend: Higher administrative levels (50%)	General trend: CCSIs specific strategies (37,5%, weak trend)

Source: Regional coordinators' survey

Innovation environment

[Tools tailored for CCSIs]

Incubators	Clusters or platforms	Science and tech parks	Economic programs
CCSIs specific	**CCSIs specific**	**Not specific, but CCSIs included**	**CCSIs specific**
General trend: CCSIs specific (81,25%)	General trend: CCSIs specific (68,75%)	General trend: Not specific, but CCSIs included (56,26%)	General trend: CCSIs specific (62,5%)
Specific CCSIs innovation programs	**Counselling and training for innovation**	**Counselling and training for entrepreneurship**	**Awards**
No data	**CCSIs specific**	**Not specific, but CCSIs included**	*No data*
General trend: CCSIs specific (43,75%, weak trend)	General trend: Not specific, but CCSIs included (50%)	General trend: CCSIs specific (37,5%, weak trend)	General trend: Not specific, but CCSIs included (37,5%, weak trend)

Source: Regional coordinators' survey

Specific CCSIs context

Determined by the interplay between CCSIs specific tools (survey data) and CCSIs strength (survey and GII data)

»»

Context IIb

Advanced results with moderately adapted ecosystems to CCSIs' specificities

The study has classified the 16 regions into 4 profiles:

- ☐ Context I → Leading results, with or without ecosystems adapted to CCSIs' specificities.
- ☐ Context IIa → Advanced results with highly adapted ecosystems to CCSIs' specificities.
- ☐ Context IIb → Advanced results with moderately adapted ecosystems to CCSIs' specificities.
- ☐ Context III → Emerging results including those ecosystems adapted to CCSIs' specificities.

Participating organizations

Palau de les Arts Reina Sofía, Fundació de la Comunitat Valenciana

https://www.lesarts.com/es/palau-de-les-arts/fundacio-palau-de-les-arts-reina-sofia/

Project that aims to bring opera closer to smaller municipalities. A large truck is transformed into the stage where a live opera will be performed, with singers from the Centre de Perfeccionament de les Arts and piano accompaniment. High quality shows available to all citizens.

Centre del Carme Cultura Contemporània - Consorci de Museus de la Comunitat Valenciana

https://www.consorcimuseus.gva.es/centro-del-carmen/

It is a reference cultural space in the city of Valencia. All of its projects have a high degree of innovation and that is why it has become the largest space for cultural agitation in the city.

IVAM

https://ivam.es

Knowledge, expansion, protection, promotion and diffusion of modern and contemporary art are its principal objectives.

Espai LaGranja- IVC

https://ivc.gva.es/es/escena/programacion-escena/espailg

Space for creation, experimentation and cultural disruption on dance and living arts.

Participating organizations

Institut Valencià de Cultura

https://ivc.gva.es

This is a public entity that falls under the Department of Education, Research, Culture, and Sports. It is responsible for the development and execution of the cultural policy and initiatives of the Generalitat de València.

Fira Trovam

https://firatrovam.com

Main meeting place of the Valencian music industry. It plays a fundamental role in the music sector and its professionals are the true protagonists of the meeting. Essential for the growth of the sector.

Espai d'Art Contemporani de Castelló

https://eacc.ivc.gva.es/es

It has established itself as an essential space to understand and enjoy contemporary art in Castelló. He does a great job of mediation for the entire city

Additional information on CCSIs

[links provided in the survey]

CCSIs statistics and cultural monitoring

https://ovc.gva.es

https://ovc.gva.es/es/observatori-valencia-de-la-cultura

https://www.uv.es/econcult/publicaciones/

Innovation statistics

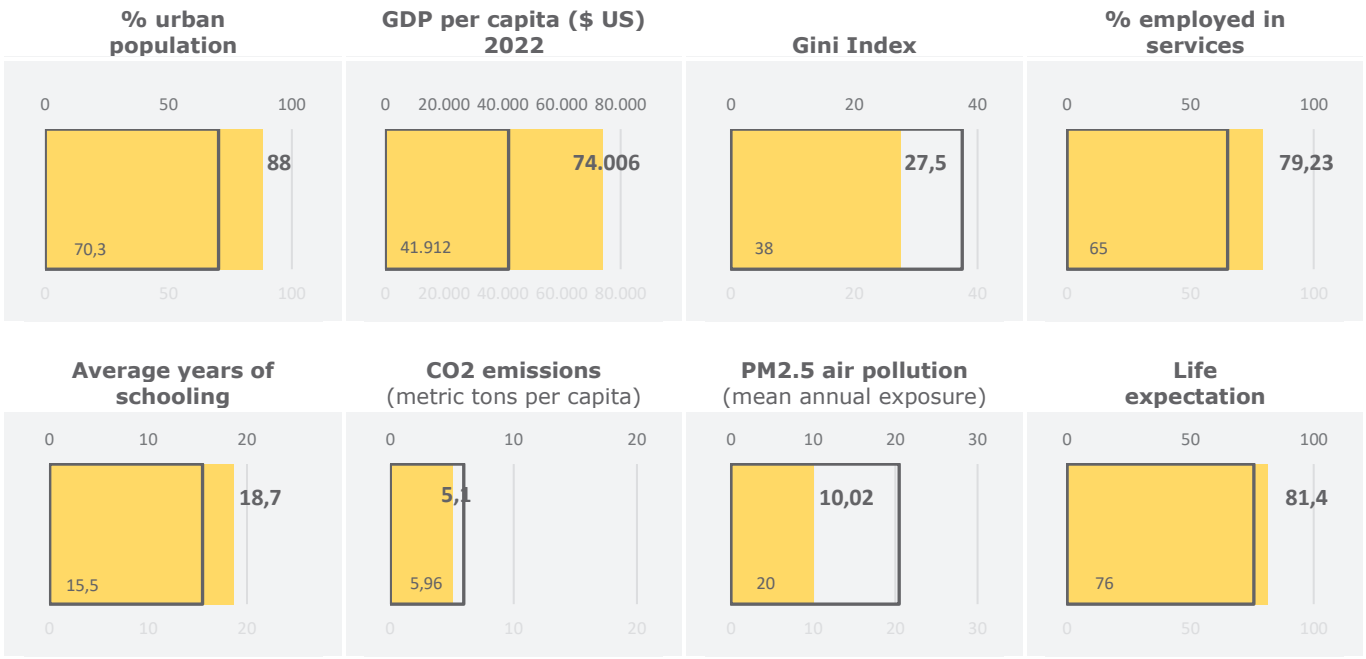
https://innoavi.es/wp-content/uploads/2019/01/05_Informe-Situaci%C3%B3n-Sistema-Valenciano-de-Innovaci%C3%B3n-CAST_b2.pdf

Denmark

Regional context

Socio-economic profile

[Country-level data, compared to mean. Secondary source information]



Sources: United Nations and World Bank

Global Innovation Index position

[Country-level data, compared to mean. Secondary source information]

	General GII	Specific "Creative outputs" dimension	
	Position	Position	Score
Case	**10**	**14**	**29,9**
Sample mean	36	38	33,1

Source: GII (World Intellectual Property Organization – WIPO)

Considered general profile attending this data | **Leading**

CCSIs innovation ecosystem

Results that align with the general trend are highlighted in green

CCSIs and innovation monitoring

Cultural observatories	ICC statistics	Innovation statistics
Yes	**Yes**	**Yes**
General trend: Yes (87,5%)	General trend: Yes (81,25%)	General trend: Yes (75%)

Source: Regional coordinators' survey

Strategic approach for CCSIs

Main strategic agent type	Main administrative level involved in non-monetary support	Main administrative level involved in monetary support	Public CCSIs strategy in economic development
Equal (mix of sectoral and general agents)	**Lower levels**	**Higher levels**	**CCSIs specific**
General trend: Sectoral agents leading CCSIs development (50%)	General trend: Lower administrative levels (56,25%)	General trend: Higher administrative levels (50%)	General trend: CCSIs specific strategies (37,5%, weak trend)

Source: Regional coordinators' survey

Innovation environment

[Tools tailored for CCSIs]

Incubators	Clusters or platforms	Science and tech parks	Economic programs
CCSIs specific	**CCSIs specific**	*No data*	**Not specific, but CCSIs included**
General trend: CCSIs specific (81,25%)	General trend: CCSIs specific (68,75%)	General trend: Not specific, but CCSIs included (56,26%)	General trend: CCSIs specific (62,5%)

Specific CCSIs innovation programs	Counselling and training for innovation	Counselling and training for entrepreneurship	Awards
No data	**Not specific, but CCSIs included**	*No data*	**CCSIs specific**
General trend: CCSIs specific (43,75%, weak trend)	General trend: Not specific, but CCSIs included (50%)	General trend: CCSIs specific (37,5%, weak trend)	General trend: Not specific, but CCSIs included (37,5%, weak trend)

Source: Regional coordinators' survey

Specific CCSIs context

Determined by the interplay between CCSIs specific tools (survey data) and CCSIs strength (survey and GII data)

»»

Context I

Leading results, with or without ecosystems adapted to CCSIs' specificities

The study has classified the 16 regions into 4 profiles:

- ☐ Context I → Leading results, with or without ecosystems adapted to CCSIs' specificities.
- ☐ Context IIa → Advanced results with highly adapted ecosystems to CCSIs' specificities.
- ☐ Context IIb → Advanced results with moderately adapted ecosystems to CCSIs' specificities.
- ☐ Context III → Emerging results including those ecosystems adapted to CCSIs' specificities.

Additional information on CCSIs

[links provided in the survey]

CCSIs statistics and cultural monitoring

https://www.creativedenmark.com/

https://ldcluster.com/en/home/

https://www.visiondenmark.dk/?lang=en

https://www.statistikbanken.dk/statbank5a/selectvarval/saveselections.asp?MainTable=RAS309&PLanguage=1&TableStyle=&Buttons=&PXSId=225696&IQY=&TC=&ST=ST&rvar0=&rvar1=&rvar2=&rvar3=&rvar4=&rvar5=&rvar6=&rvar7=&rvar8=&rvar9=&rvar10=&rvar11=&rvar12=&rvar13=&rvar14=

https://www.statistikbanken.dk/statbank5a/selectvarval/saveselections.asp?MainTable=ERHV1&PLanguage=1&TableStyle=&Buttons=&PXSId=225694&IQY=&TC=&ST=ST&rvar0=&rvar1=&rvar2=&rvar3=&rvar4=&rvar5=&rvar6=&rvar7=&rvar8=&rvar9=&rvar10=&rvar11=&rvar12=&rvar13=&rvar14=

Innovation statistics

https://www.dst.dk/en/Statistik/emner/uddannelse-og-forskning/forskning-udvikling-og-innovation/innovation-og-patenter

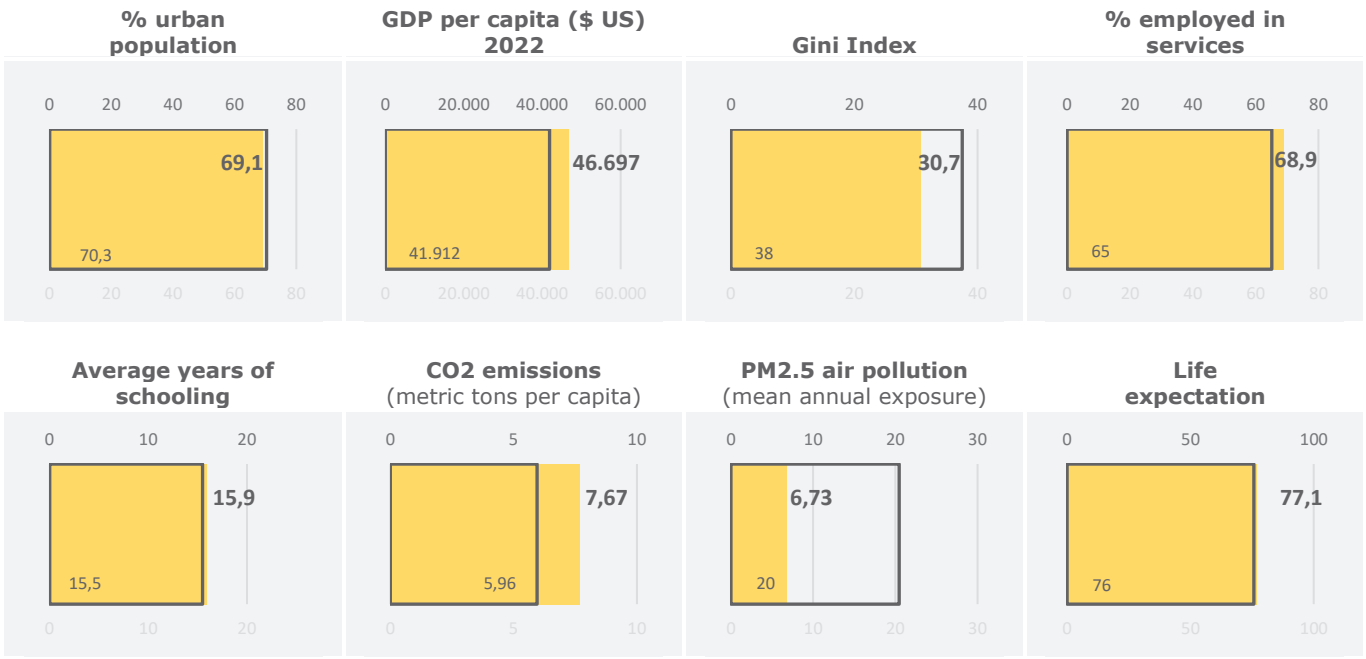
Case note: For the Denmark case, no organizations were found to participate in the study during the fieldwork

Estonia

Regional context

Socio-economic profile

[Country-level data, compared to mean. Secondary source information]



Sources: United Nations and World Bank

Global Innovation Index position

[Country-level data, compared to mean. Secondary source information]

	General GII	Specific "Creative outputs" dimension	
	Position	Position	Score
Case	**18**	**24**	**38,2**
Sample mean	36	38	33,1

Source: GII (World Intellectual Property Organization – WIPO)

Considered general profile attending this data | **Advanced**

CCSIs innovation ecosystem

Results that align with the general trend are highlighted in green

CCSIs and innovation monitoring

Cultural observatories	ICC statistics	Innovation statistics
Yes	**Yes**	**Yes**
General trend: Yes (87,5%)	General trend: Yes (81,25%)	General trend: Yes (75%)

Source: Regional coordinators' survey

Strategic approach for CCSIs

Main strategic agent type	Main administrative level involved in non-monetary support	Main administrative level involved in monetary support	Public CCSIs strategy in economic development
Sectoral	**Higher levels**	**Higher levels**	**Generic cultural, not CCSIs specific**
General trend: Sectoral agents leading CCSIs development (50%)	General trend: Lower administrative levels (56,25%)	General trend: Higher administrative levels (50%)	General trend: CCSIs specific strategies (37,5%, weak trend)

Source: Regional coordinators' survey

Innovation environment

[Tools tailored for CCSIs]

Incubators	Clusters or platforms	Science and tech parks	Economic programs
CCSIs specific	**CCSIs specific**	**Do exist, but without including CCSIs**	**CCSIs specific**
General trend: CCSIs specific (81,25%)	General trend: CCSIs specific (68,75%)	General trend: Not specific, but CCSIs included (56,26%)	General trend: CCSIs specific (62,5%)

Specific CCSIs innovation programs	Counselling and training for innovation	Counselling and training for entrepreneurship	Awards
No data	**Not specific, but CCSIs included**	**CCSIs specific**	**CCSIs specific**
General trend: CCSIs specific (43,75%, weak trend)	General trend: Not specific, but CCSIs included (50%)	General trend: CCSIs specific (37,5%, weak trend)	General trend: Not specific, but CCSIs included (37,5%, weak trend)

Source: Regional coordinators' survey

Specific CCSIs context

Determined by the interplay between CCSIs specific tools (survey data) and CCSIs strength (survey and GII data)

»»

Context IIa

Advanced results with highly adapted ecosystems to CCSIs' specificities

The study has classified the 16 regions into 4 profiles:

- ☐ Context I → Leading results, with or without ecosystems adapted to CCSIs' specificities.
- ☐ Context IIa → Advanced results with highly adapted ecosystems to CCSIs' specificities.
- ☐ Context IIb → Advanced results with moderately adapted ecosystems to CCSIs' specificities.
- ☐ Context III → Emerging results including those ecosystems adapted to CCSIs' specificities.

Participating organizations

Filaret OÜ

www.filaret3d.com

Green-tech company collecting and upcycling cigarette butt waste into a sustainable compostable and nature friendly 3D printing filament.

Aus Design OÜ

www.reetaus.com

They have developed cycle economy-based business model for textile industries. This means producing clothing from pre-production leftover fabrics.

Myceen

www.myceen.com

Growing carbon-negative materials combining mushroom Mycelium and industrial by-products.

RAIKU Packaging

www.raiku.com

100% compostable, beautiful and protective packaging to substitute single use plastic.

Additional information on CCSIs

[links provided in the survey]

CCSIs statistics and cultural monitoring

https://kul.ee/en/arts-and-creative-economy/creative-economy
https://www.ki.ee/en/index.html
https://www.ki.ee/publikatsioonid/valmis/1_Eesti_loomemajanduse_olukorra_uuring_ja_kaardistus_2021.pdf

Innovation statistics

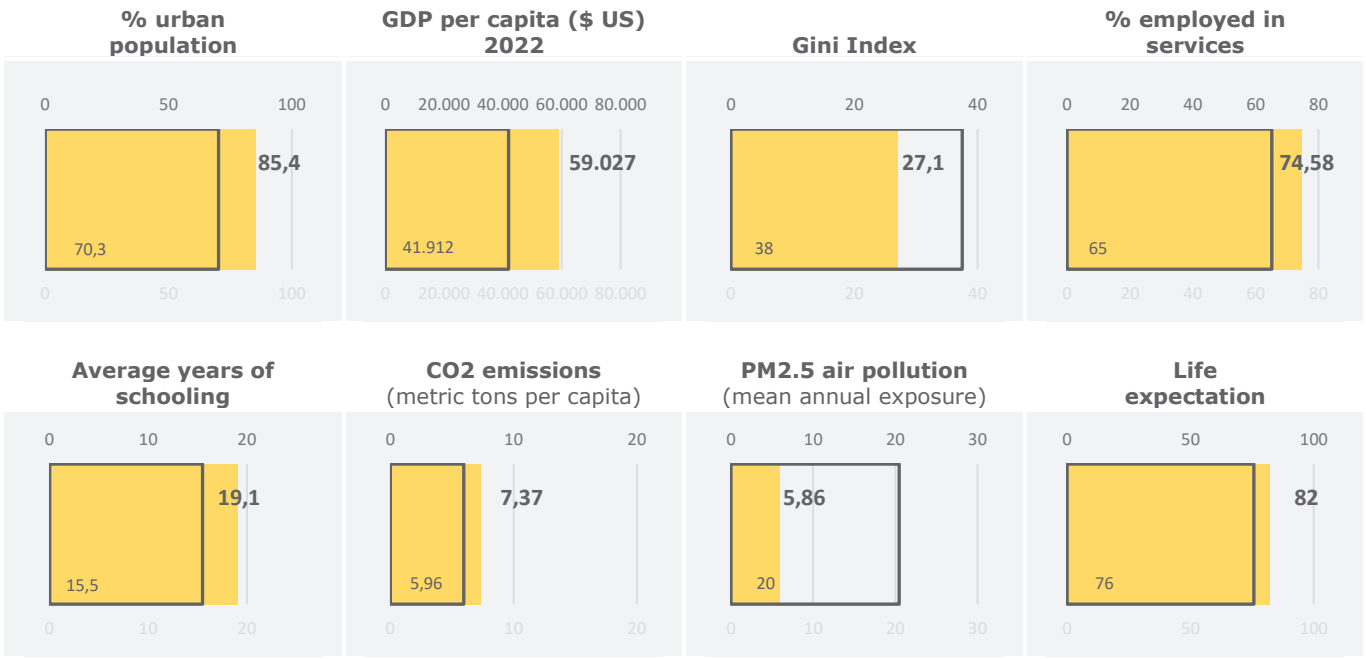
https://www.stat.ee/en/find-statistics/statistics-theme/technology-innovation-and-rd/innovation

Finland

Regional context

Socio-economic profile

[Country-level data, compared to mean. Secondary source information]



Sources: United Nations and World Bank

Global Innovation Index position

[Country-level data, compared to mean. Secondary source information]

	General GII	Specific "Creative outputs" dimension	
	Position	Position	Score
Case	**9**	**18**	**39,0**
Sample mean	36	38	33,1

Source: GII (World Intellectual Property Organization – WIPO)

Considered general profile attending this data | **Leading**

CCSIs innovation ecosystem

Results that align with the general trend are highlighted in green

CCSIs and innovation monitoring

Cultural observatories	ICC statistics	Innovation statistics
Yes	**Yes**	**Yes**
General trend: Yes (87,5%)	General trend: Yes (81,25%)	General trend: Yes (75%)

Source: Regional coordinators' survey

Strategic approach for CCSIs

Main strategic agent type	Main administrative level involved in non-monetary support	Main administrative level involved in monetary support	Public CCSIs strategy in economic development
Equal (mix of sectoral and general agents)	**Lower levels**	**Lower levels**	**CCSIs specific**
General trend: Sectoral agents leading CCSIs development (50%)	General trend: Lower administrative levels (56,25%)	General trend: Higher administrative levels (50%)	General trend: CCSIs specific strategies (37,5%, weak trend)

Source: Regional coordinators' survey

Innovation environment

[Tools tailored for CCSIs]

Incubators	Clusters or platforms	Science and tech parks	Economic programs
CCSIs specific	**CCSIs specific**	*No data*	**CCSIs specific**
General trend: CCSIs specific (81,25%)	General trend: CCSIs specific (68,75%)	General trend: Not specific, but CCSIs included (56,26%)	General trend: CCSIs specific (62,5%)

Specific CCSIs innovation programs	Counselling and training for innovation	Counselling and training for entrepreneurship	Awards
CCSIs specific	**CCSIs specific**	**CCSIs specific**	**Do not exist (neither specific nor generic)**
General trend: CCSIs specific (43,75%, weak trend)	General trend: Not specific, but CCSIs included (50%)	General trend: CCSIs specific (37,5%, weak trend)	General trend: Not specific, but CCSIs included (37,5%, weak trend)

Source: Regional coordinators' survey

Specific CCSIs context

Determined by the interplay between CCSIs specific tools (survey data) and CCSIs strength (survey and GII data)

»»

Context IIa

Advanced results with highly adapted ecosystems to CCSIs' specificities

The study has classified the 16 regions into 4 profiles:

- Context I → Leading results, with or without ecosystems adapted to CCSIs' specificities.
- Context IIa → Advanced results with highly adapted ecosystems to CCSIs' specificities.
- Context IIb → Advanced results with moderately adapted ecosystems to CCSIs' specificities.
- Context III → Emerging results including those ecosystems adapted to CCSIs' specificities.

Participating organizations

The Ladies Association of Kuopio / Design Union

https://www.designunion.fi/en/665/1/0/frontpage

Design Union strengthens the role of design in society and helps companies create added value to their business through design. Design Union creates opportunities for creative professionals to utilize their expertise in the business world.

Helsinki Xr Center/Metropolia Univeristy of Applied sciences

https://helsinkixrcenter.com/

Helsinki XR Center, the home of Extended Realities, is an incubator for talent, a cultural hub for co-creation and learning for all XR artists, entrepreneurs, engineers, scientists, students, and enthusiasts in the field of virtual and augmented reality.

Creative Export Innovations

https://www.creativeexport.fi

We believe that creative industries are the industry of the future, which generates not only export income but also comprehensive well-being. We want to help in the development of creative industries. We offer our expertise especially for development projects and export efforts in the creative industries. Particularly interested in sustainable development and the intersection of creative industries and new technologies.

Aalto University

https://digitalcreatives.aalto.fi/

Aalto Digital Creatives pre-incubator program aims to help creative industry students, researchers, and practitioners on their path towards entrepreneurship. The business idea could be inspired by, but is not limited to, the following topics: new methods and formats for audiovisual storytelling, technology-enhanced art, design, and entertainment, augmentation of human creativity through computational methods, creation of novel interactive experiences, platforms for/by the creative industries

Uniarts Helsinki

https://www.uniarts.fi/en/campaigns/develop-your-arts-based-business-idea-in-our-pre-incubator/

The programme gives a comprehensive understanding on entrepreneurship in artistic and creative businesses.

Additional information on CCSIs

[links provided in the survey]

CCSIs statistics and cultural monitoring

https://pxdata.stat.fi/PXWeb/pxweb/en/StatFin/StatFin__klts/?tablelist=true
https://julkaisut.valtioneuvosto.fi/handle/10024/161083
https://www.utu.fi/en/research/thematic-collaborations-in-research/cultural-memory-and-social-change
https://www.muova.fi/en/research-and-development/
https://ennakointiakatemia.fi/in-english/
https://uudenmaanliitto.fi/en/projects/luoto-outlines-for-sustainable-future-in-creative-industry/
https://www.aalto.fi/en/our-strategy/radical-creativity

Innovation statistics

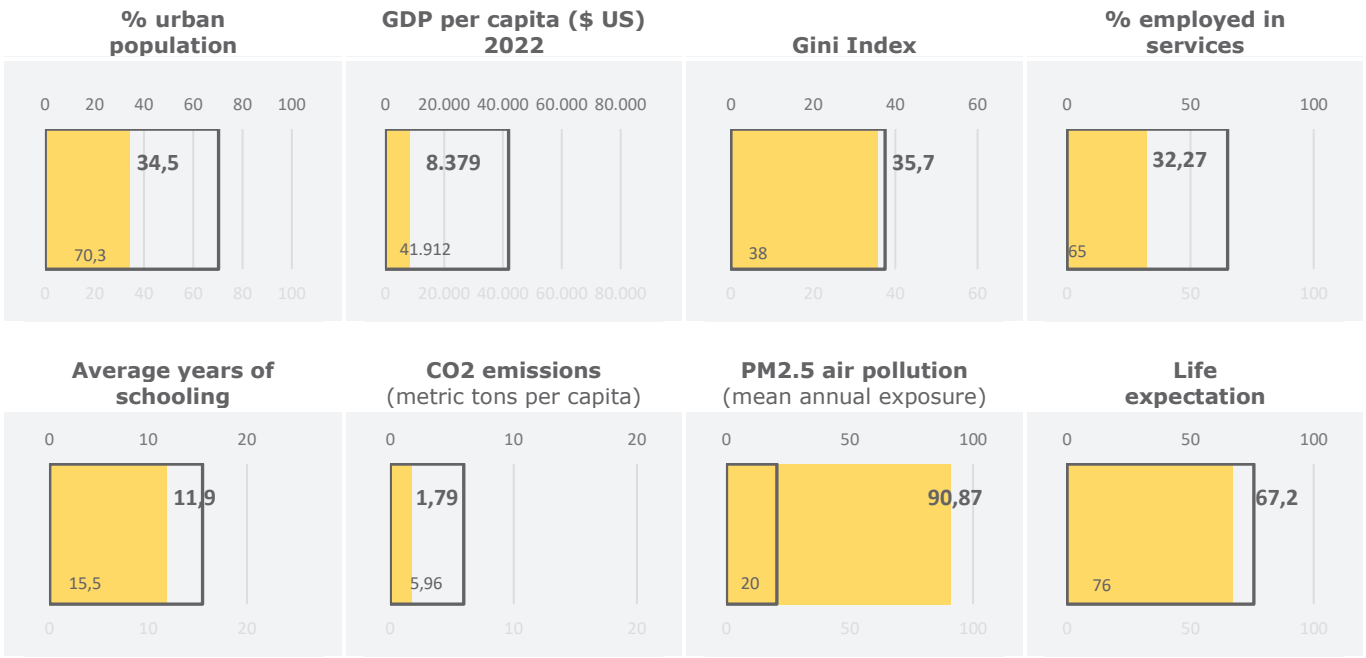
https://uefconnect.uef.fi/en/group/economic-evaluation-of-cultural-health-and-wellbeing-project/
https://tietokayttoon.fi/-/10616/selvitys-koettu-hyvinvointi-kulttuurihyvinvoinnin-arvioinnin-keskioon
https://www.cupore.fi/en/publications/cupore-s-publications

Karnataka (India)

Regional context

Socio-economic profile

[Country-level data, compared to mean. Secondary source information]



Sources: United Nations and World Bank

Global Innovation Index position

[Country-level data, compared to mean. Secondary source information]

	General GII	Specific "Creative outputs" dimension	
	Position	Position	Score
Case	**40**	**52**	**24,3**
Sample mean	36	38	33,1

Source: GII (World Intellectual Property Organization – WIPO)

Considered general profile attending this data | **Moderate/Emerging**

CCSIs innovation ecosystem

Results that align with the general trend are highlighted in green

CCSIs and innovation monitoring

Cultural observatories	ICC statistics	Innovation statistics
No	**No**	**No**
General trend: Yes (87,5%)	General trend: Yes (81,25%)	General trend: Yes (75%)

Source: Regional coordinators' survey

Strategic approach for CCSIs

Main strategic agent type	Main administrative level involved in non-monetary support	Main administrative level involved in monetary support	Public CCSIs strategy in economic development
Generic	**Lower levels**	**Lower levels**	**Do not exist (neither specific nor generic)**
General trend: Sectoral agents leading CCSIs development (50%)	General trend: Lower administrative levels (56,25%)	General trend: Higher administrative levels (50%)	General trend: CCSIs specific strategies (37,5%, weak trend)

Source: Regional coordinators' survey

Innovation environment

[Tools tailored for CCSIs]

Incubators	Clusters or platforms	Science and tech parks	Economic programs
Not specific, but CCSIs included	**Not specific, but CCSIs included**	**Not specific, but CCSIs included**	**Not specific, but CCSIs included**
General trend: CCSIs specific (81,25%)	General trend: CCSIs specific (68,75%)	General trend: Not specific, but CCSIs included (56,26%)	General trend: CCSIs specific (62,5%)

Specific CCSIs innovation programs	Counselling and training for innovation	Counselling and training for entrepreneurship	Awards
No data	**Not specific, but CCSIs included**	**Not specific, but CCSIs included**	**Not specific, but CCSIs included**
General trend: CCSIs specific (43,75%, weak trend)	General trend: Not specific, but CCSIs included (50%)	General trend: CCSIs specific (37,5%, weak trend)	General trend: Not specific, but CCSIs included (37,5%, weak trend)

Source: Regional coordinators' survey

Specific CCSIs context
Determined by the interplay between CCSIs specific tools (survey data) and CCSIs strength (survey and GII data)

»»

Context III
Emerging results including those ecosystems adapted to CCSIs' specificities.

The study has classified the 16 regions into 4 profiles:
- ☐ Context I → Leading results, with or without ecosystems adapted to CCSIs' specificities.
- ☐ Context IIa → Advanced results with highly adapted ecosystems to CCSIs' specificities.
- ☐ Context IIb → Advanced results with moderately adapted ecosystems to CCSIs' specificities.
- ☐ Context III → Emerging results including those ecosystems adapted to CCSIs' specificities.

Participating organizations

VIPROF ELECTRONICS

https://ramanagara.nic.in/en/district-produce/handicraft/

Helping to organize the centuries old classical toy makers (from local wood) to be impactful and expand integrating new technologies in toys

Indian Institute of Science

http://www.iiscmsmecoe.in

Centre supported by Government of India to promote and fund innovative small industries across India.

Edunet Foundation

www.edunetfoundation.org

This organisation is training more than 100, 000 students across the country after their education to equip them with employability skills. The students covered are school dropouts to engineering graduates, especially from non-urban background and underprivileged sections of society

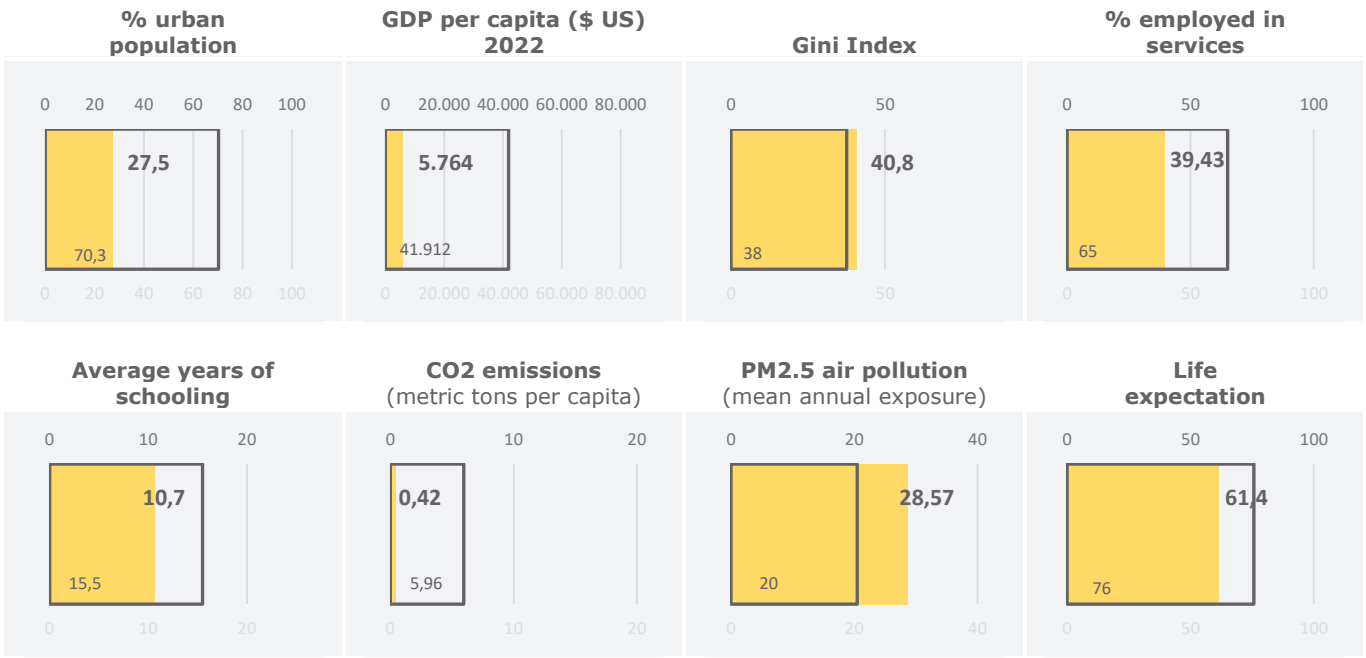
Case note: For the Karnataka case, there is no additional information available regarding innovation, cultural statistics, and monitoring

Kenya

Regional context

Socio-economic profile

[Country-level data, compared to mean. Secondary source information]



Sources: United Nations and World Bank

Global Innovation Index position

[Country-level data, compared to mean. Secondary source information]

	General GII	Specific "Creative outputs" dimension	
	Position	Position	Score
Case	**88**	**79**	**15,6**
Sample mean	36	38	33,1

Source: GII (World Intellectual Property Organization – WIPO)

Considered general profile attending this data | **Moderate/Emerging**

CCSIs innovation ecosystem

Results that align with the general trend are highlighted in green

CCSIs and innovation monitoring

Cultural observatories	ICC statistics	Innovation statistics
Yes	**No**	**No**
General trend: Yes (87,5%)	General trend: Yes (81,25%)	General trend: Yes (75%)

Source: Regional coordinators' survey

Strategic approach for CCSIs

Main strategic agent type	Main administrative level involved in non-monetary support	Main administrative level involved in monetary support	Public CCSIs strategy in economic development
Equal (mix of sectoral and generic agents)	**Higher levels**	**Higher levels**	**Generic cultural**
General trend: Sectoral agents leading CCSIs development (50%)	General trend: Lower administrative levels (56,25%)	General trend: Higher administrative levels (50%)	General trend: CCSIs specific strategies (37,5%, weak trend)

Source: Regional coordinators' survey

Innovation environment

[Tools tailored for CCSIs]

Incubators	Clusters or platforms	Science and tech parks	Economic programs
CCSIs specific	*No data*	*No data*	**CCSIs specific**
General trend: CCSIs specific (81,25%)	General trend: CCSIs specific (68,75%)	General trend: Not specific, but CCSIs included (56,26%)	General trend: CCSIs specific (62,5%)

Specific CCSIs innovation programs	Counselling and training for innovation	Counselling and training for entrepreneurship	Awards
CCSIs specific	**CCSIs specific**	**CCSIs specific**	*No data*
General trend: CCSIs specific (43,75%, weak trend)	General trend: Not specific, but CCSIs included (50%)	General trend: CCSIs specific (37,5%, weak trend)	General trend: Not specific, but CCSIs included (37,5%, weak trend)

Source: Regional coordinators' survey

Specific CCSIs context

Determined by the interplay between CCSIs specific tools (survey data) and CCSIs strength (survey and GII data)

»»

Context III

Emerging results including those ecosystems adapted to CCSIs' specificities.

The study has classified the 16 regions into 4 profiles:

- ☐ Context I → Leading results, with or without ecosystems adapted to CCSIs' specificities.
- ☐ Context IIa → Advanced results with highly adapted ecosystems to CCSIs' specificities.
- ☐ Context IIb → Advanced results with moderately adapted ecosystems to CCSIs' specificities.
- ☐ Context III → Emerging results including those ecosystems adapted to CCSIs' specificities.

Participating organizations

BlackRhino VR

https://www.blackrhinovr.com

Founded in 2015, we see ourselves as agents of change accelerating the adoption of immersive technologies in Africa by empowering the youth to be the XR innovators and inventors of the future. As creative technologists, we leverage XR knowledge to expand opportunities for significant socio-economic and cultural growth among the youth that will help create jobs, reduce poverty, and contribute to overcoming our continent's development challenges.

Kenya Private Sector Alliance

https://kepsa.or.ke

KEPSA brings together local and foreign business associations, chambers of commerce, professional bodies, corporates from multinational companies, medium, SMEs, and start-ups from all sectors of the economy to enable them to speak with one voice when engaging government, development partners and other stakeholders on cross-cutting policy issues and programs for Social – Economic Development of the Country

Standup Collective

https://standupcollective.co.ke/

The outgrowth of Saturday Night Comedy – Nairobi, Standup Collective was launched in 2017 as the incubators of English language and experimental comedy in Kenya and beyond. Besides growing a comedy club culture in Kenya, we also strived to create a community of funny people and comedy lovers in general.

The Art of Music Foundation

https://www.artofmusic.co.ke

The Art of Music was founded in 2009; with a mission to promote the performance and appreciation of art music in Kenya and use its transformative power to change lives, particularly of those living in underprivileged areas of the country. We believe art music, with its traditions of structure, discipline, and excellence, can offer a great awakening and opportunity to a broad spectrum of Kenyan youth.

Participating organizations

Circle Art Agency

https://circleartagency.com/

Founded in 2012, and based in Nairobi, Kenya, Circle promotes contemporary art from Eastern Africa. Our intention is to create a strong and sustainable art market for East African artists by supporting and promoting the most innovative and exciting artists currently practicing in the region. Through group and solo exhibitions, as well as participation in international art fairs, the gallery has increased visibility for established and emerging artists, both internationally and at home. Working closely with regional and international collectors and curators, we are building a strong and sustainable market for East African artists. In response to the current global crisis, we are adapting our programming and enhancing our online platforms to continue promoting challenging and thought-provoking contemporary art from East Africa.

Art at Work Limited

http://www.artatwork.co.ke

A savings and credit society whose aim is to give financial services to creatives that improve their opportunity to generate sustainable income to mobilize savings and facilitate credit to facilitate financial inclusion.

Kariboo Creative

http://kariboocreative.co.ke

A collective of audiovisual artists changing how corporates and organisations communicate to audiences by making human interest stories through film and cinematography.

Trio Media Kenya

https://www.triomedia.co.ke

Trio Media is your affordable one stop shop for all things podcasting and online streaming. From as simple as a Live unedited recording to a ready-to-broadcast edited recording of up to 4 people. Trio Media fills a gap in the market for high quality podcast content, and a growing demand among the youth for high-quality audio-visual equipment; production and editing services.

Additional information on CCSIs

[links provided in the survey]

CCSIs statistics and cultural monitoring

https://www.britishcouncil.co.ke/programmes/arts/east-africa-creative-economy-scoping-reports

www.hevafund.com

https://globaldevincubator.org/wp-content/uploads/2020/11/201019-Mombasa-Creatives-Sector-Report-GAN-GDI-vF.pdf

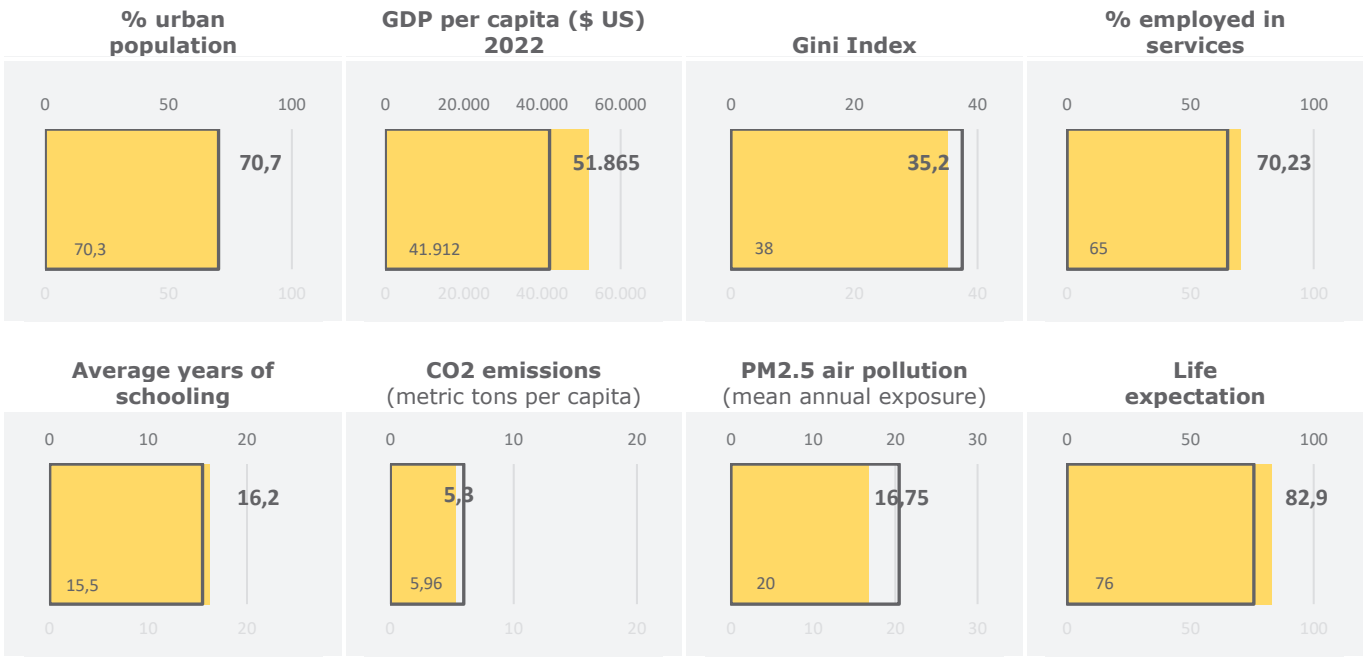
https://jahazi.co.ke/wp-content/uploads/2021/02/JAHAZI-9-2021.pdf-.pdf

https://cchub.africa/

Puglia (Italy)

Regional context

Socio-economic profile
[Country-level data, compared to mean. Secondary source information]



Sources: United Nations and World Bank

Global Innovation Index position

[Country-level data, compared to mean. Secondary source information]

	General GII	Specific "Creative outputs" dimension	
	Position	Position	Score
Case	**28**	**16**	**41,3**
Sample mean	36	38	33,1

Source: GII (World Intellectual Property Organization – WIPO)

Considered general profile attending this data | **Advanced**

CCSIs innovation ecosystem

Results that align with the general trend are highlighted in green

CCSIs and innovation monitoring

Cultural observatories	ICC statistics	Innovation statistics
Yes	**Yes**	**Yes**
General trend: Yes (87,5%)	General trend: Yes (81,25%)	General trend: Yes (75%)

Source: Regional coordinators' survey

Strategic approach for CCSIs

Main strategic agent type	Main administrative level involved in non-monetary support	Main administrative level involved in monetary support	Public CCSIs strategy in economic development
Equal (mix of sectoral and general agents)	**Lower levels**	**Lower levels**	**Generic cultural, not CCSIs specific**
General trend: Sectoral agents leading CCSIs development (50%)	General trend: Lower administrative levels (56,25%)	General trend: Higher administrative levels (50%)	General trend: CCSIs specific strategies (37,5%, weak trend)

Source: Regional coordinators' survey

Innovation environment

[Tools tailored for CCSIs]

Incubators	Clusters or platforms	Science and tech parks	Economic programs
Not specific, but CCSIs included	**CCSIs specific**	**Not specific, but CCSIs included**	**CCSIs specific**
General trend: CCSIs specific (81,25%)	General trend: CCSIs specific (68,75%)	General trend: Not specific, but CCSIs included (56,26%)	General trend: CCSIs specific (62,5%)

Specific CCSIs innovation programs	Counselling and training for innovation	Counselling and training for entrepreneurship	Awards
No data	**Not specific, but CCSIs included**	**Not specific, but CCSIs included**	**Not specific, but CCSIs included**
General trend: CCSIs specific (43,75%, weak trend)	General trend: Not specific, but CCSIs included (50%)	General trend: CCSIs specific (37,5%, weak trend)	General trend: Not specific, but CCSIs included (37,5%, weak trend)

Source: Regional coordinators' survey

Specific CCSIs context

Determined by the interplay between CCSIs specific tools (survey data) and CCSIs strength (survey and GII data)

»»

Context IIb

Advanced results with moderately adapted ecosystems to CCSIs' specificities

The study has classified the 16 regions into 4 profiles:

- ☐ Context I → Leading results, with or without ecosystems adapted to CCSIs' specificities.
- ☐ Context IIa → Advanced results with highly adapted ecosystems to CCSIs' specificities.
- ☐ Context IIb → Advanced results with moderately adapted ecosystems to CCSIs' specificities.
- ☐ Context III → Emerging results including those ecosystems adapted to CCSIs' specificities.

Participating organizations

Applicazioni di Ingegneria ed Informatica s.r.l.

https://www.ai2.it

Ai² is a company from Bari that has been engaged for years in consultancy and SW development aimed at activating innovative processes in different application contexts. Thanks to a systemic approach and full and shared awareness of the context and problematic situations, Ai² has been able to effectively address the challenges and complexity of innovation projects, whether Human Centered or Mission Critical.

Espero s.r.l

http://www.netespero.it/

EspérO srl, a spin-off company of the University of Salento, was born in the context of human and social sciences, with the mission of designing and creating complex intervention devices in organizational, community and social contexts, the result of the application of scientific research conducted by its researchers, with the intention of contributing to the production of social innovation, also with the support of telematic, audiovisual and multimedia communication technologies. One of the thematic areas developed is cultural heritage education.

Didap s.r.l.s.

https://www.didap.it

Didap is a young innovative start up working in the field of Non fungible token applied to heritage and other cultural goods. They are committed also in the development of app.

Università del Salento

https://www.unisalento.it

The University of Salento is a community, made up of students, teachers and technical-administrative staff, which recognizes itself in the free promotion of research and teaching as tools for human development, for the affirmation of pluralism and the pursuit of equal social dignity, in full independence from any ideological, political, religious or economic orientation.

Participating organizations

Tou.Play ETS

https://www.touplay.it/

Tou.Play is a brand that produces stories to experience guided tours in an innovative way. Tou.Play wants to change the fruition of culture and the promotion of the territory mixing the passion for the territory and tis culture with the passion for the playful world. It propose experience and exciting adventure to discover cities, landscape and heritage by participating in plays and missions.

IMAGO

https://www.imagocoop.it/

The project introduces an innovative technological and methodological framework aimed at facilitating collaborative creation and sharing of cultural narrative experiences. The reference framework starts from the research and systematization of cultural heritage contents, which are then digitized and virtually reconstructed in order to create interactive and engaging experiences.

34° Fuso APS

https://www.swapmuseum.com/

Swap Museum is a cultural participation project aimed at creating a cultural welfare that enhances the empowerment of young citizens. The innovativeness of the project can be found in the involvement of young citizens (aged between 16 and 29) through advanced volunteering consisting of small activities to be carried out in museums and cultural spaces in the area called "Call 4 Swappers". The calls enable the volunteers, the swappers, to express themselves through experimenting with new ways of communicating and producing culture, as well as approaching the cultural environment through new languages, such as music, photography, digital storytelling. Swap museum win the Europa Nostra Award

Additional information on CCSIs

[links provided in the survey]

CCSIs statistics and cultural monitoring

https://www.pugliacreativa.it/pubblicazioni/
https://www.uniba.it/it/corsi/dams
https://www.dse.unisalento.it/home_page

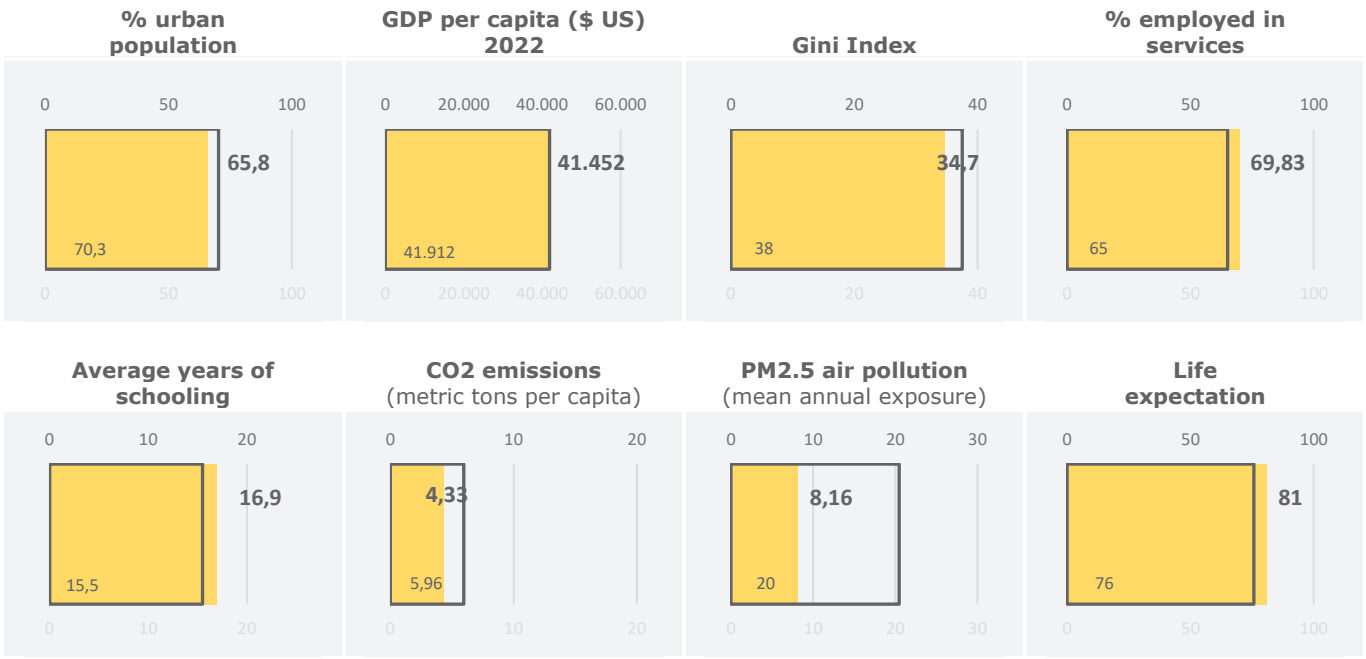
Innovation statistics

https://apulianinnovationoverview.arti.puglia.it/indice-dellapulian-innovation-overview

North Region (Portugal)

Regional context

Socio-economic profile
[Country-level data, compared to mean. Secondary source information]



Sources: United Nations and World Bank

Global Innovation Index position

[Country-level data, compared to mean. Secondary source information]

	General GII	Specific "Creative outputs" dimension	
	Position	Position	Score
Case	**32**	**25**	**38,1**
Sample mean	36	38	33,1

Source: GII (World Intellectual Property Organization – WIPO)

Considered general profile attending this data | **Advanced**

CCSIs innovation ecosystem

Results that align with the general trend are highlighted in green

CCSIs and innovation monitoring

Cultural observatories	ICC statistics	Innovation statistics
No	**Yes**	**Yes**
General trend: Yes (87,5%)	General trend: Yes (81,25%)	General trend: Yes (75%)

Source: Regional coordinators' survey

Strategic approach for CCSIs

Main strategic agent type	Main administrative level involved in non-monetary support	Main administrative level involved in monetary support	Public CCSIs strategy in economic development
Sectoral	**Higher levels**	**Higher levels**	**Generic cultural, not CCSIs specific**
General trend: Sectoral agents leading CCSIs development (50%)	General trend: Lower administrative levels (56,25%)	General trend: Higher administrative levels (50%)	General trend: CCSIs specific strategies (37,5%, weak trend)

Source: Regional coordinators' survey

Innovation environment

[Tools tailored for CCSIs]

Incubators	Clusters or platforms	Science and tech parks	Economic programs
CCSIs specific	**CCSIs specific**	**CCSIs specific**	**Not specific, but CCSIs included**
General trend: CCSIs specific (81,25%)	General trend: CCSIs specific (68,75%)	General trend: Not specific, but CCSIs included (56,26%)	General trend: CCSIs specific (62,5%)

Specific CCSIs innovation programs	Counselling and training for innovation	Counselling and training for entrepreneurship	Awards
No data	**Not specific, but CCSIs included**	**Do exist, but without including CCSIs**	**Do exist, but without including CCSIs**
General trend: CCSIs specific (43,75%, weak trend)	General trend: Not specific, but CCSIs included (50%)	General trend: CCSIs specific (37,5%, weak trend)	General trend: Not specific, but CCSIs included (37,5%, weak trend)

Source: Regional coordinators' survey

Specific CCSIs context

Determined by the interplay between CCSIs specific tools (survey data) and CCSIs strength (survey and GII data)

»»

Context IIb

Advanced results with moderately adapted ecosystems to CCSIs' specificities

The study has classified the 16 regions into 4 profiles:

- ☐ Context I → Leading results, with or without ecosystems adapted to CCSIs' specificities.
- ☐ Context IIa → Advanced results with highly adapted ecosystems to CCSIs' specificities.
- ☐ Context IIb → Advanced results with moderately adapted ecosystems to CCSIs' specificities.
- ☐ Context III → Emerging results including those ecosystems adapted to CCSIs' specificities.

Participating organizations

TikitWorld

https://www.tikitworld.com

TikitWorld is a decentralized first-class tamper-proof tikitig platform and ecosystem that opens new possibilities for event owners, customers, and brands while also putting a stop to the present unjust and unsafe secondary market.

Canal180

https://www.canal180.pt

EspérO srl, a spin-off company of the University of Canal180 celebrates uniqueness and voice diversity by producing inspiring experimental audiovisual content about both pioneering and emerging creators.

Everythink, Lda

https://everythink.com

Design for change. We like to think of things that don't exist yet: products, services or experiences that impact people's lives in a positive, easy and happy way.

4Humanz - Consultancy and research for humanz

https://pt.linkedin.com/company/4humanz

4Humanz, aims at the consultancy and research for humans, enhancing the human potential throughout life, through innovative projects in health and education and human-centred design services. 4Humanz, envisions to generate value for its clients and partners, supporting creative and playful solutions to elderly people towards a happier, sustainable and intergenerational society improving wellbeing and economic growth.

Additional information on CCSIs

[links provided in the survey]

CCSIs statistics and cultural monitoring

https://www.ine.pt/xportal/xmain?xpgid=ine_tema&xpid=INE&tema_cod=1111
https://www.pordata.pt/portugal/despesa+das+camaras+municipais+em+cultura+e+desporto+total+e+por+dominio+cultural+(2013+)-2755

Innovation statistics

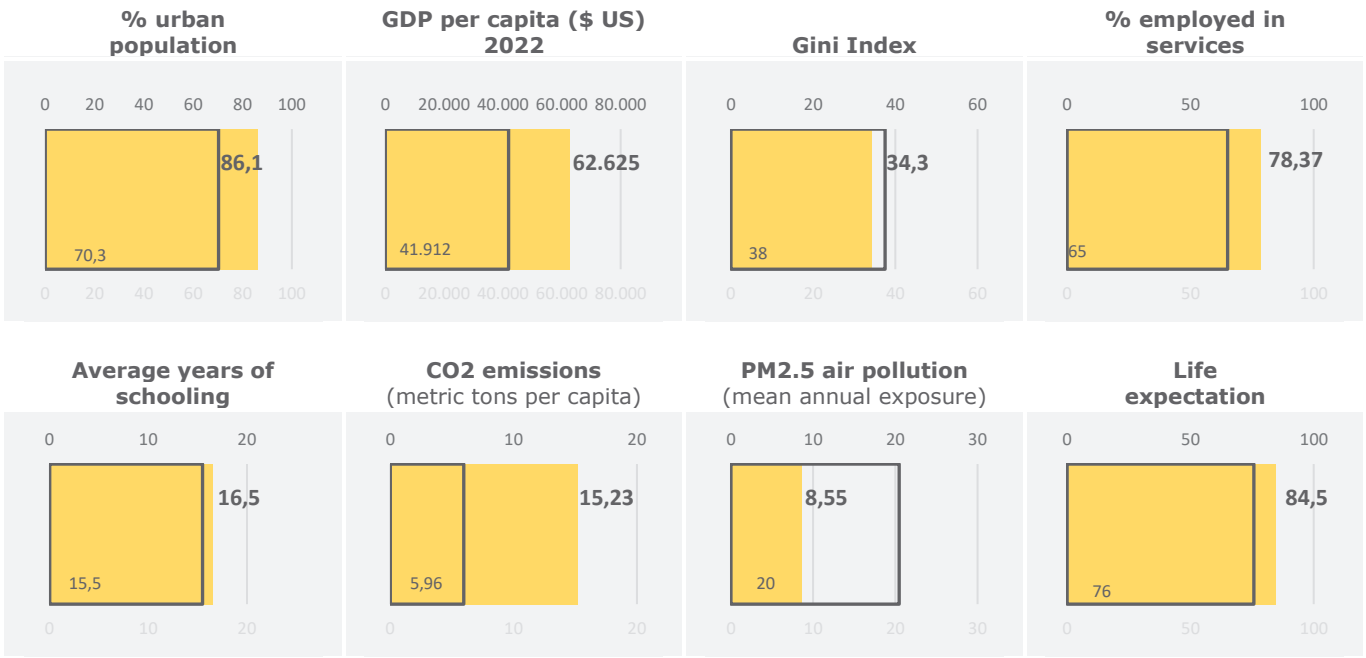
https://www.ani.pt/pt/avalia%C3%A7ao-e-monitorizacao/monitoriza%C3%A7%C3%A3o/rankings-e-indicadores/
https://www.iapmei.pt/PRODUTOS-E-SERVICOS/Industria-e-Sustentabilidade/Informacao-Setorial.aspx

South Australia (Australia)

Regional context

Socio-economic profile

[Country-level data, compared to mean. Secondary source information]



Sources: United Nations and World Bank

Global Innovation Index position

[Country-level data, compared to mean. Secondary source information]

	General GII	Specific "Creative outputs" dimension	
	Position	Position	Score
Case	**25**	**27**	**37,8**
Sample mean	36	38	33,1

Source: GII (World Intellectual Property Organization – WIPO)

Considered general profile attending this data | **Advanced**

CCSIs innovation ecosystem

Results that align with the general trend are highlighted in green

CCSIs and innovation monitoring

Cultural observatories	ICC statistics	Innovation statistics
Yes	**Yes**	**Yes**
General trend: Yes (87,5%)	General trend: Yes (81,25%)	General trend: Yes (75%)

Source: Regional coordinators' survey

Strategic approach for CCSIs

Main strategic agent type	Main administrative level involved in non-monetary support	Main administrative level involved in monetary support	Public CCSIs strategy in economic development
Sectoral	**Higher levels**	**Higher levels**	**Do not exist (neither specific nor generic)**
General trend: Sectoral agents leading CCSIs development (50%)	General trend: Lower administrative levels (56,25%)	General trend: Higher administrative levels (50%)	General trend: CCSIs specific strategies (37,5%, weak trend)

Source: Regional coordinators' survey

Innovation environment

[Tools tailored for CCSIs]

Incubators	Clusters or platforms	Science and tech parks	Economic programs
CCSIs specific	**CCSIs specific**	**Not specific, but CCSIs included**	**CCSIs specific**
General trend: CCSIs specific (81,25%)	General trend: CCSIs specific (68,75%)	General trend: Not specific, but CCSIs included (56,26%)	General trend: CCSIs specific (62,5%)

Specific CCSIs innovation programs	Counselling and training for innovation	Counselling and training for entrepreneurship	Awards
No data	*No data*	*No data*	**Not specific, but CCSIs included**
General trend: CCSIs specific (43,75%, weak trend)	General trend: Not specific, but CCSIs included (50%)	General trend: CCSIs specific (37,5%, weak trend)	General trend: Not specific, but CCSIs included (37,5%, weak trend)

Source: Regional coordinators' survey

Specific CCSIs context

Determined by the interplay between CCSIs specific tools (survey data) and CCSIs strength (survey and GII data)

»

Context IIb

Advanced results with moderately adapted ecosystems to CCSIs' specificities.

The study has classified the 16 regions into 4 profiles:

- ☐ Context I → Leading results, with or without ecosystems adapted to CCSIs' specificities.
- ☐ Context IIa → Advanced results with highly adapted ecosystems to CCSIs' specificities.
- ☐ Context IIb → Advanced results with moderately adapted ecosystems to CCSIs' specificities.
- ☐ Context III → Emerging results including those ecosystems adapted to CCSIs' specificities.

Participating organizations

Realities Extended at the University of Adelaide

https://www.tikitworld.com

Realities Extended is a transformational initiative delivering cutting-edge immersive technology and research services.

Flinders University - The Void

https://www.flinders.edu.au/college-humanities-arts-social-sciences/thevoid

The Void is a multipurpose production stage housed in Flinders University's acclaimed Drama Centre. Incorporating motion capture and virtual production capability with Unreal Engine as unifying technology, The Void is a platform for creating screen experience of any kind.

Light ADL

www.lightadl.com.au

Light Adelaide is a revolutionary social enterprise with a vision to provide a home for accessible excellence and innovation in creative expression, the arts, entertainment, hospitality and related technologies.

Illuminate Adelaide

www.Illuminateadelaide.com

South Australia's premier winter event, lluminate Adelaide celebrates that idea by bringing together the best and boldest in art, music, technology and invention from around Australia and the world.

ModelFarm

ModelFarm.com.au

ModelFarm is a Virtual Art Department specializing in VFX, Animation and Virtual Production.

Additional information on CCSIs

[links provided in the survey]

CCSIs statistics and cultural monitoring

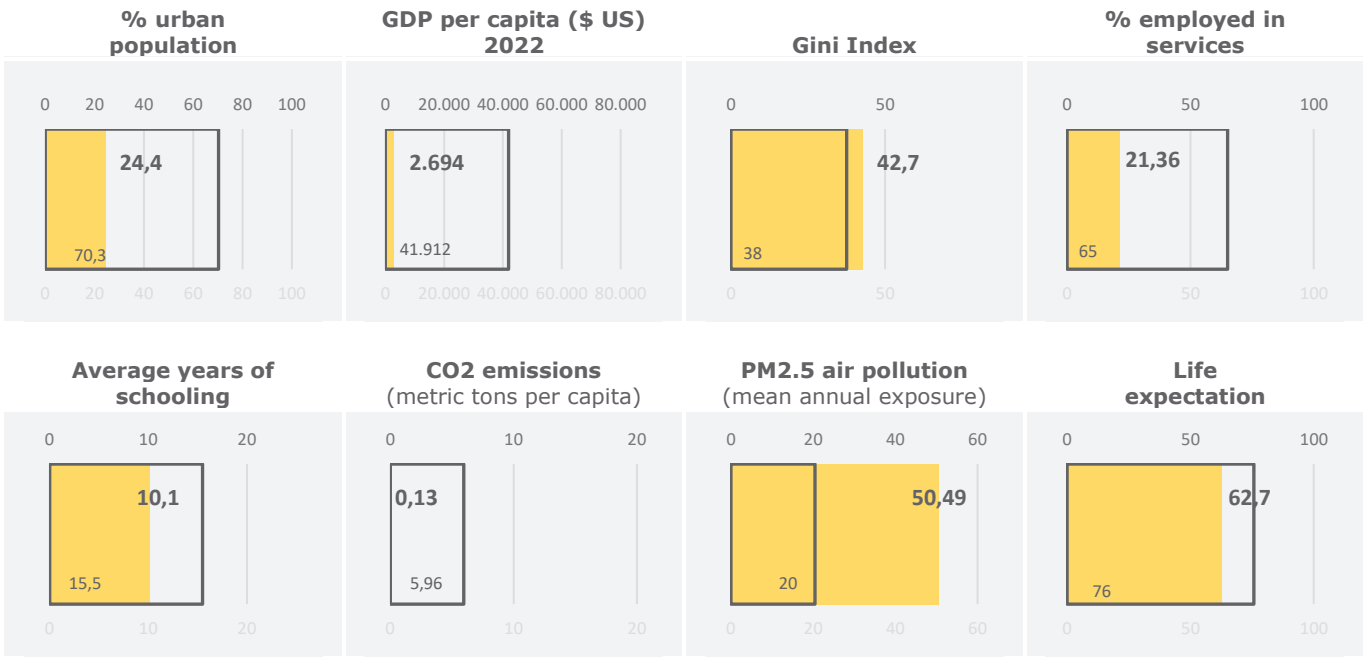
https://cms.dis.frame.hosting/assets/uploads/downloads/creativeSouthAustralia/DIS-creative-industries-report.pdf
https://www.unisa.edu.au/about-unisa/academic-units/creative/
https://www.safilm.com.au/wpcontent/uploads/2020/01/Economic-contribution-of-SA-screen-production-2019.pdf

Uganda

Regional context

Socio-economic profile

[Country-level data, compared to mean. Secondary source information]



Sources: United Nations and World Bank

Global Innovation Index position

[Country-level data, compared to mean. Secondary source information]

	General GII	Specific "Creative outputs" dimension	
	Position	Position	Score
Case	**119**	**123**	**2,2**
Sample mean	36	38	33,1

Source: GII (World Intellectual Property Organization – WIPO)

Considered general profile attending this data | **Moderate/Emerging**

CCSIs innovation ecosystem

Results that align with the general trend are highlighted in green

CCSIs and innovation monitoring

Cultural observatories	ICC statistics	Innovation statistics
Yes	**Yes**	**Yes**
General trend: Yes (87,5%)	General trend: Yes (81,25%)	General trend: Yes (75%)

Source: Regional coordinators' survey

Strategic approach for CCSIs

Main strategic agent type	Main administrative level involved in non-monetary support	Main administrative level involved in monetary support	Public CCSIs strategy in economic development
Equal (mix of sectoral and generic agents)	**Lower levels**	**Higher levels**	**CCSIs specific**
General trend: Sectoral agents leading CCSIs development (50%)	General trend: Lower administrative levels (56,25%)	General trend: Higher administrative levels (50%)	General trend: CCSIs specific strategies (37,5%, weak trend)

Source: Regional coordinators' survey

Innovation environment

[Tools tailored for CCSIs]

Incubators	Clusters or platforms	Science and tech parks	Economic programs
CCSIs specific	**Do not exist**	**Not specific, but CCSIs included**	**CCSIs specific**
General trend: CCSIs specific (81,25%)	General trend: CCSIs specific (68,75%)	General trend: Not specific, but CCSIs included (56,26%)	General trend: CCSIs specific (62,5%)

Specific CCSIs innovation programs	Counselling and training for innovation	Counselling and training for entrepreneurship	Awards
CCSIs specific	**Do not exist**	**Do not exist**	**Do exist, but without including CCSIs**
General trend: CCSIs specific (43,75%, weak trend)	General trend: Not specific, but CCSIs included (50%)	General trend: CCSIs specific (37,5%, weak trend)	General trend: Not specific, but CCSIs included (37,5%, weak trend)

Source: Regional coordinators' survey

Specific CCSIs context
Determined by the interplay between CCSIs specific tools (survey data) and CCSIs strength (survey and GII data)

»»

Context III
Emerging results including those ecosystems adapted to CCSIs' specificities.

The study has classified the 16 regions into 4 profiles:

- ☐ Context I → Leading results, with or without ecosystems adapted to CCSIs' specificities.
- ☐ Context IIa → Advanced results with highly adapted ecosystems to CCSIs' specificities.
- ☐ Context IIb → Advanced results with moderately adapted ecosystems to CCSIs' specificities.
- ☐ Context III → Emerging results including those ecosystems adapted to CCSIs' specificities.

Participating organizations

Marahaba Music expo

https://www.marahabafestival.com

They are empowering young people in the arts within the toughest developing cities of Burundi.

Malafi'arts production

https://www.youtube.com/channel/UC0wq_cJo1I7gHeUJQOTOWtQ

Malafi has brought to Congo new forms of innovation and creativity in the slams of Kinshasa, Congo.

Orupaap Cultural Foundation

https://orupaap.org

From the establishment of South Sudan as a new country, Stephen left his good life in Khartoum and moved to Juba to set up a performance art space and he built it to also train young entertainers

Culture and Development East Africa (CDEA)

https://www.cdea.or.tz

CDEA helps facilitate processes of capacity and professional development in Dar es Salaam, Tanzania

MOTIV

https://motiv.africa

They have set up a multi-functional space for the young entrepreneurs in Uganda which serves as a hub for creative development and financial empowerment.

Quad - A Group

https://www.quad-a.com

It's the first Ugandan sound production company to venture into soundtrack production for Nollywood and Netflix. They have invested in developing capacities of many young people in Uganda.

The GoDown Arts Centre

https://thegodown.org

It's the first East African arts space to develop a space for music productions, performances and dance theatre in Nairobi Kenya.

Case note: In the Uganda case, the scope for selecting organizations has been extended to the broader East Africa region

Additional information on CCSIs

[links provided in the survey]

CCSIs statistics and cultural monitoring

https://en.unesco.org/creativity/sites/creativity/files/qpr/uganda_cultural_mapping_report_final-2014-min.pdf
https://africanofilter.org/new-report-on-africas-creative-and-cultural-industries
https://hivos.org/assets/2018/09/ubunifu_report_1.pdf
https://www.ubos.org

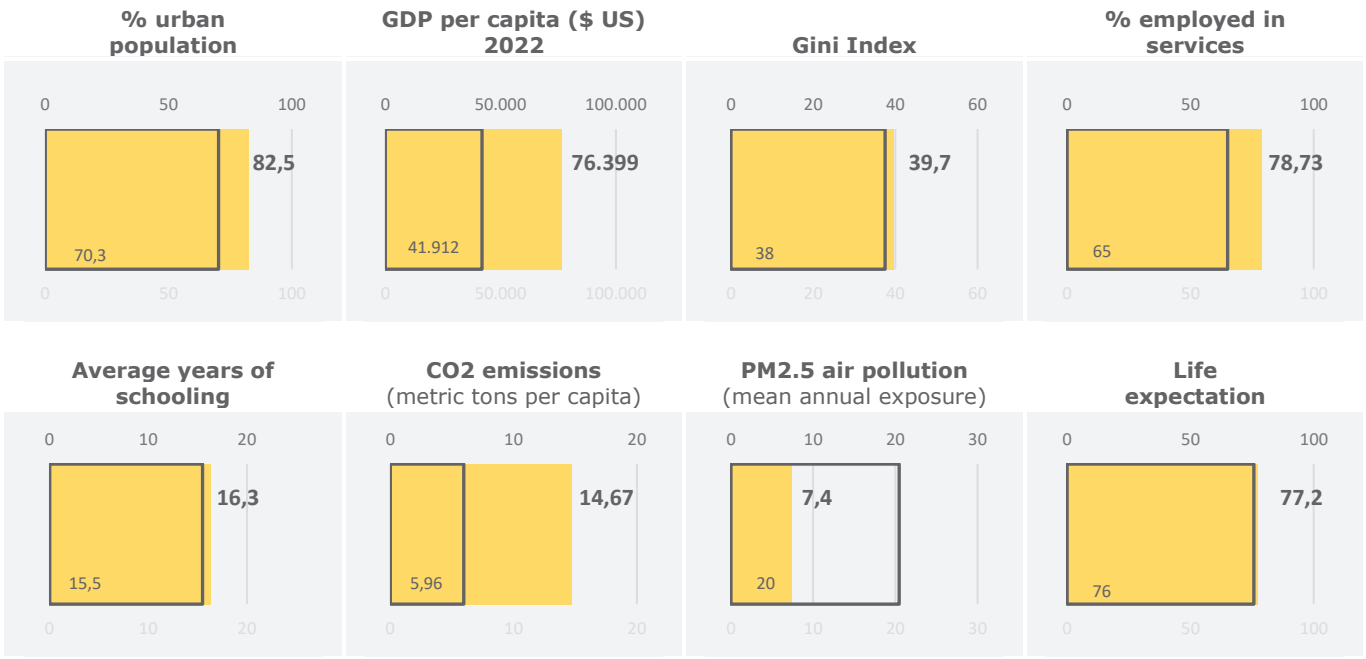
Innovation statistics

https://jamlab.africa/the-state-of-innovation-and-media-viability-in-east-africa/
https://www.unesco.org/en/articles/science-technology-and-innovation-policy-east-african-community-validated-adoption-member-states?TSPD_101_R0=080713870fab2000fb0c9f487899d81d251c537782ba2414dbb23da095d21b03fe356fcb7da741aa0812ae57951430000790ab098ba85ff8849dddba201bbd36d1ddbdbec506980f15724d967d51c50b57ee79bcf9c4a096108f9da53622c770

Washington (United States)

Regional context

Socio-economic profile
[Country-level data, compared to mean. Secondary source information]



Sources: United Nations and World Bank

Global Innovation Index position

[Country-level data, compared to mean. Secondary source information]

	General GII	Specific "Creative outputs" dimension	
	Position	Position	Score
Case	**2**	**12**	**48,4**
Sample mean	36	38	33,1

Source: GII (World Intellectual Property Organization – WIPO)

Considered general profile attending this data | **Leading**

CCSIs innovation ecosystem

Results that align with the general trend are highlighted in green

CCSIs and innovation monitoring

Cultural observatories	ICC statistics	Innovation statistics
Yes	**No**	**No**
General trend: Yes (87,5%)	General trend: Yes (81,25%)	General trend: Yes (75%)

Source: Regional coordinators' survey

Strategic approach for CCSIs

Main strategic agent type	Main administrative level involved in non-monetary support	Main administrative level involved in monetary support	Public CCSIs strategy in economic development
Sectoral	**Equal (Highers and lowers levels)**	**Higher levels**	**Generic cultural, not CCSIs specific**
General trend: Sectoral agents leading CCSIs development (50%)	General trend: Lower administrative levels (56,25%)	General trend: Higher administrative levels (50%)	General trend: CCSIs specific strategies (37,5%, weak trend)

Source: Regional coordinators' survey

Innovation environment

[Tools tailored for CCSIs]

Incubators	Clusters or platforms	Science and tech parks	Economic programs
Not specific, but CCSIs included	**Not specific, but CCSIs included**	*No data*	**Not specific, but CCSIs included**
General trend: CCSIs specific (81,25%)	General trend: CCSIs specific (68,75%)	General trend: Not specific, but CCSIs included (56,26%)	General trend: CCSIs specific (62,5%)

Specific CCSIs innovation programs	Counselling and training for innovation	Counselling and training for entrepreneurship	Awards
No data	**Not specific, but CCSIs included**	**Not specific, but CCSIs included**	**CCSIs specific**
General trend: CCSIs specific (43,75%, weak trend)	General trend: Not specific, but CCSIs included (50%)	General trend: CCSIs specific (37,5%, weak trend)	General trend: Not specific, but CCSIs included (37,5%, weak trend)

Source: Regional coordinators' survey

Specific CCSIs context

Determined by the interplay between CCSIs specific tools (survey data) and CCSIs strength (survey and GII data)

»»

Context I
Leading results, with or without ecosystems adapted to CCSIs' specificities

The study has classified the 16 regions into 4 profiles:

- ☐ Context I → Leading results, with or without ecosystems adapted to CCSIs' specificities.
- ☐ Context IIa → Advanced results with highly adapted ecosystems to CCSIs' specificities.
- ☐ Context IIb → Advanced results with moderately adapted ecosystems to CCSIs' specificities.
- ☐ Context III → Emerging results including those ecosystems adapted to CCSIs' specificities.

Participating organizations

Path with Art

https://www.pathwithart.org/

Since 2008, Path with Art has been at the forefront of a growing international movement that utilizes the power of art as a mean to bring dignity, awareness, and healing to the complexities of the issues surrounding homelessness, and recovery from trauma.

Terrain Programs dba Terrain

https://www.terrainspokane.com/

Terrain produces annual events highlighting hundreds of artists and attracting tens of thousands of attendees; a retail storefront; and business technical assistance for artists and creative entrepreneurs.

Cultural Space Agency

https://culturalspace.agency

This mission-driven real estate development agency acquires cultural space in the competitive Seattle real estate market, with a particular focus on the needs of Black and Indigenous.

Mighty Tieton Production

https://www.mightytieton.com

This rural artisan business incubator is located in re-purposed agricultural warehouses and small town storefronts, reimagining a previously nearly abandoned rural town by attracting creative.

TwispWorks Foundation

https://twispworks.org

A 6.4 acre rural campus transforms a previous forestry outpost into space for economic and cultural growth, housing active art studios and local producers.

King County Creative

https://kingcountycreative.com

King County has long been home to artists, filmmakers, musicians, union crews, and content creators who help make this region culturally vibrant and economically strong. The Creative Economy Initiative is focusing on Film and Music in particular as key elements of our creative economy.

Additional information on CCSIs

[links provided in the survey]

CCSIs statistics and cultural monitoring

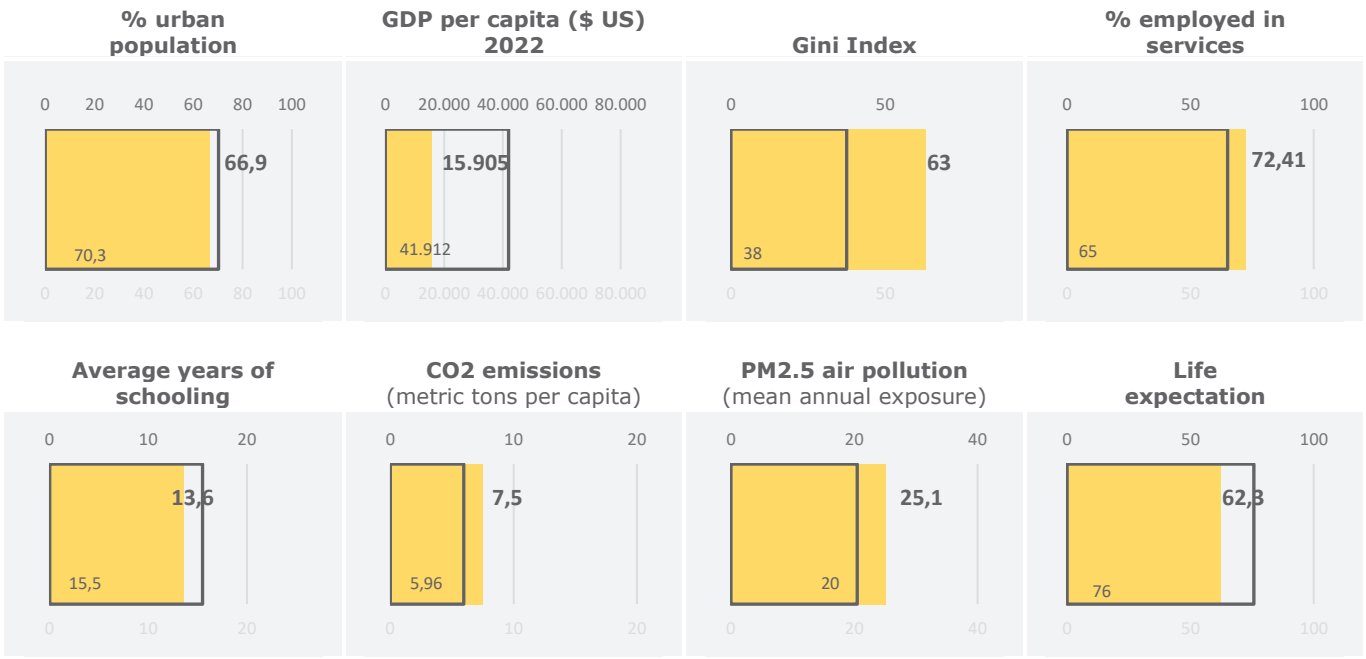
https://www.artsfund.org/

Western Cape (South Africa)

Regional context

Socio-economic profile

[Country-level data, compared to mean. Secondary source information]



Sources: United Nations and World Bank

Global Innovation Index position

[Country-level data, compared to mean. Secondary source information]

	General GII	Specific "Creative outputs" dimension	
	Position	Position	Score
Case	**61**	**64**	**19,5**
Sample mean	36	38	33,1

Source: GII (World Intellectual Property Organization – WIPO)

Considered general profile attending this data | **Moderate/Emerging**

CCSIs innovation ecosystem

Results that align with the general trend are highlighted in green

CCSIs and innovation monitoring

Cultural observatories	ICC statistics	Innovation statistics
Yes	**Yes**	**No**
General trend: Yes (87,5%)	General trend: Yes (81,25%)	General trend: Yes (75%)

Source: Regional coordinators' survey

Strategic approach for CCSIs

Main strategic agent type	Main administrative level involved in non-monetary support	Main administrative level involved in monetary support	Public CCSIs strategy in economic development
Equal (mix of sectoral and general agents)	**Lower levels**	**Equal (mix of higher and lower levels)**	**Do not exist (neither specific nor generic)**
General trend: Sectoral agents leading CCSIs development (50%)	General trend: Lower administrative levels (56,25%)	General trend: Higher administrative levels (50%)	General trend: CCSIs specific strategies (37,5%, weak trend)

Source: Regional coordinators' survey

Innovation environment

[Tools tailored for CCSIs]

Incubators	Clusters or platforms	Science and tech parks	Economic programs
CCSIs specific	*No data*	**Not specific, but CCSIs included**	**Not specific, but CCSIs included**
General trend: CCSIs specific (81,25%)	General trend: CCSIs specific (68,75%)	General trend: Not specific, but CCSIs included (56,26%)	General trend: CCSIs specific (62,5%)

Specific CCSIs innovation programs	Counselling and training for innovation	Counselling and training for entrepreneurship	Awards
CCSIs specific	**Not specific, but CCSIs included**	**CCSIs specific**	**Not specific, but CCSIs included**
General trend: CCSIs specific (43,75%, weak trend)	General trend: Not specific, but CCSIs included (50%)	General trend: CCSIs specific (37,5%, weak trend)	General trend: Not specific, but CCSIs included (37,5%, weak trend)

Source: Regional coordinators' survey

Specific CCSIs context
Determined by the interplay between CCSIs specific tools (survey data) and CCSIs strength (survey and GII data)

»»

Context III
Emerging results including those ecosystems adapted to CCSIs' specificities.

The study has classified the 16 regions into 4 profiles:

- ☐ Context I → Leading results, with or without ecosystems adapted to CCSIs' specificities.
- ☐ Context IIa → Advanced results with highly adapted ecosystems to CCSIs' specificities.
- ☐ Context IIb → Advanced results with moderately adapted ecosystems to CCSIs' specificities.
- ☐ Context III → Emerging results including those ecosystems adapted to CCSIs' specificities.

Participating organizations

Chocolate Tribe

https://www.thecdi.org.za

This is a very unique entity. Founded by the world-famous artist William Kentridge it is centre that commissions, performs and stages 'rough' works that are the result of creatives from different disciplines. It is an incubator in a sense for interdisciplinary works.

The Craft and Design Institute

https://www.thecdi.org.za

The CDI is a craft and design sector development agency with a mission to develop capable people and build responsible creative enterprises trading within local and international markets. The CDI is a non-profit company with over 20 years of success in developing creative people, small businesses and the craft and design sector at large in South Africa. The CDI is a catalytic agent of change, and passionate about developing appropriately skilled, resourced and digitally proficient practitioners who can successfully leverage opportunities for growth and development.

Nyamakop

https://nyamakop.co.za

This is the only known gaming company in SA that are making gaming content that is self-consciously African – none of the others do for the simple fact that African audiences are found to be too small to tailor content for them. Nyamakop however, have devised an innovative business model supported by a large American publisher that is looking to appeal to African Americans – who are interested in connecting with their African roots.

Empatheatre

https://www.empatheatre.com

Their approach to making plays is truly innovative – it is research driven, employing academic research but also through involvement of the community that is directly implicated by the material/themes addressed in the play. In this way they have evolved an innovative model for not only storytelling, but employing in such a way that it can have a real impact on a community and society at large. Their findings on the ground and via academic research is then filtered to policy-makers as well as audiences.

Participating organizations

Free Lives

https://freelives.net

They are the most successful gaming company in terms of the number of IP gaming products they have created. Their games are unique and different – they are innovative in terms of the content they create – the concepts are innovative. In this way this gaming company is driven by innovation in terms of its content – it relies on this quality.

The Centre for the Less Good Idea

https://lessgoodidea.com

It is an interdisciplinary incubator space for the arts based on Maboneng, Johannesburg.

Additional information on CCSIs

[links provided in the survey]

CCSIs statistics and cultural monitoring

https://southafricanculturalobservatory.org.za

Innovation statistics

https://www.dst.gov.za/index.php/resource-center/rad-reports/business-innovation-survey

ANNEX 2. Samples and questionnaires

Regions' analysis

The regional coordinators questionnaire was distributed digitally (LimeSurvey platform) between 21 February 2023 and 23 May 2023. The total responses were 16 cases that are spread across five global areas:

Country	Australia	Colombia	Denmark	Estonia	Finland	Germany	India	Italy	Kenya	Portugal	South Africa	Spain	Uganda	UK	USA	USA
Case type	Region	Region	Country	Country	Country	Region	Region	Region	Country	Region	Region	Region	Country	Region	Region	Region
Case	South Australia	Antioquia	Denmark	Estonia	Finland	Baden-Württemberg	Karnataka	Puglia	Kenya	Região do Norte	Western Cape	Comunitat Valenciana	Uganda	Cardiff Capital Region (CCR)	Washington	California

Europe	Africa	Asia-Pacific	North America	Latin America
> Baden-Württemberg (Germany) > Cardiff (CCR-UK) > Comunitat Valenciana (Spain) > Denmark > Estonia > Finland > Região do Norte (Portugal) > Puglia (Italia)	> Kenya > Western Cape (South Africa) > Uganda	> South Australia (Australia) > Karnataka (India)	> Washington (USA) > California (USA)	> Antioquia (Colombia)

Coordinators survey:

A) Sources of information

In this initial block, the questions relate to:

1. Existing official statistical agencies.

2. Existing statistics on the cultural and creative sectors.

3. The existence of cultural observatories or research organizations in this field.

4. Other relevant information such as reports, institutions, etc.

In each case, it is requested to provide identifying references, with names and web links.

What are the official statistical agencies in the region? Please, include web links	**Which ones? Please, include web links**
Do you know any statistics related to innovation in the region or country?	**Are there specific observatories or research entities in the field of cultural and creative sectors?**
o Yes o No o I don't know	o Yes o No o I don't know
Which ones? Please, include web links	**Which ones? Please, include web links**
Are there any statistics regarding the number of companies and/or employment in the cultural and creative sectors? Whether specific or not, but with the ability to analyze the cultural and creative sectors in particular	**Is there any other relevant information on CCSIs or innovation? (Reports, institutions, organizations) If yes, please write it below and including web links:**
o Yes o No o I don't know	o Yes o No o I don't know

B) Positioning of the region in terms of innovation and CCSIs

The region's positioning block in terms of innovation and CCSIs includes a subjective view of the coordinator in his/her capacity as a key informant.

This is a short section in which:

1. Different aspects of the cultural and creative context in the region are assessed on a valuation scale.
2. It is requested to classify the region in a stage of development of the CCSIs differentiating between: Emergent, Moderate, Advanced or Cutting Edge.

Two open-ended questions are included regarding the opportunities and constraints that the coordinator identifies as relevant in their region.

In your opinion, on a scale of 1, totally disagree, to 7, totally agree, what do you think in relation to the following statements?

	1	2	3	4	5	6	7
Regional administration confers strategic importance to innovation							
Regional administration confers strategic importance to cultural and creative sectors							
The cultural and creative sectors of the region have a high level of structure and organization							
The cultural and creative sectors are making an important contribution to regional competitiveness							
Internationalization of the cultural and creative sectors of the region is being encouraged							
Support for innovation in the cultural and creative sectors is relevant in the region							
The participation of the cultural and creative sectors in joint projects with other sectors is promoted							
Training in the cultural and creative sectors is included in the education system							

How do you assess the development of the cultural and creative sectors in the region?

- o Emergent
- o Moderate
- o Advanced
- o Cutting Edge
- o Other: _____

Can you briefly explain what elements you take into consideration in making this assessment?

What development opportunities for CCSIs do you see in the region?

And what limitations or challenges do you see in the region?

C) Overall strategic approach

This block aims to explore:

- Type of actors involved:
  - Cultural or non-cultural.
  - Nonspecific (such as ministries) or specific (agencies).
- Administrative levels involved.
- Existence of plans or strategies.

Questions are included for the differentiation of the role played by each agent. If necessary, additional information can be added by pointing out references and web links.

What are the main areas or departments involved in economic development and innovation policies and programs in the region? (Ministries, departments, or other bodies in other fields than culture)
And in the specific area of cultural and creative sectors, who are the main actors developing policies and programs? (Specification of ministries, departments, or other cultural bodies)
What kind of actors carry out active policies in the cultural and creative sectors in the region?
o Ministries, areas, or departments in other fields than culture. o Cultural ministries, areas, or departments. o Development agencies or similar of a general nature (several sectors). o Development agencies or similar specialized in CCSIs. o Others: Please name the actors:

On a scale of 1, less relevant, to 7, very relevant, what role do the different agents have in the development of strategies for the cultural and creative sectors?

	Not selected in the previous question as an active agent	1 Less relevant	2	3	4	5	6	7 Very relevant
Ministries, areas, or departments in other fields than culture.								
Ministries, areas, or cultural departments.								
Development agencies or similar of a general nature (several sectors)								
Development agencies or similar specialized in CCSIs								
Others								

On a scale of 1, less relevant, to 7, very relevant, what role does each administrative level play in terms of non-monetary support to the CCSIs (infrastructure, advice, training ...)?

	1 Less relevant	2	3	4	5	6	7 Very relevant
Local government							
Regional government							
State government							
International level							

On a scale of 1, less relevant, to 7, very relevant, what role does each administrative level play in terms of monetary support to the CCSIs (aid, subsidies, credit lines, tax incentives...)?

	1 Less relevant	2	3	4	5	6	7 Very relevant
Local government							
Regional government							
State government							
International level							

Is there any known public plan or strategy incorporating the cultural and creative sectors as a whole or in part as a strategic priority in the regional economic development?

- o Yes, in specific CCSIs plans
- o Yes, in cultural planning
- o Yes, in innovation plans, science and/or technology
- o Yes, others. Please indicate which ones:
- o No
- o I don't know

If yes, is any specific sector standing out in these plans or strategies?

- o Yes. Please, indicate which one:
- o No, all CCSIs sectors
- o I don't know

Thinking about administrative power, on a scale of 1, no autonomy, to 7, high degree of autonomy, to what extent can you develop policies and programs aimed at the CCSIs in the region?

1 No autonomy	2	3	4	5	6	7 High degree of autonomy

Is there a known public plan or strategy in the region that deals with sustainability and innovation issues?

- o Yes. Please, indicate which one:
- o No, all CCSIs sectors
- o I don't know

D) Innovation ecosystem and CCSIs

D.1) Generation and transfer of knowledge

This block is mainly focused on the tools to support generation and transfer of knowledge in the CCSIs:

- Incubators (services and infrastructures for business creation) and accelerators (aimed at promoting projects under development through financing or other resources).
- Clusters or other similar networks of companies and institutions.
- Science or technology parks where innovation and knowledge-generation companies and institutions are promoted.

Coordinators are asked to evaluate if the existing tools are CCSIs specific, nonspecific but involving CCSIs, or nonspecific and not involving CCSIs. When an action is specific or related to CCSIs, coordinators are asked to indicate references, web links, and responsible bodies.

Are there incubators (services and infrastructures for business creation) and accelerators (aimed at promoting projects under development through financing or other resources)?	
o Yes, CCSIs specific o Yes, not CCSIs specific, but including CCSIs o Yes, not CCSIs specific, but CCSIs are not included	o No o I don't know
If there are CCSIs specific clusters or networks, please enter names and web links:	
Who manages these spaces? Indicate responsible bodies and web link	
Are there clusters or other similar networks of companies and institutions?	
o Yes, CCSIs specific o Yes, not CCSIs specific, but CCSIs are included o Yes, not CCSIs specific, but CCSIs are not included	o No o I don't know
If there are CCSIs specific clusters or networks, please enter names and web links	
Who leads these programs? Indicate responsible bodies and web links	
Are there science or technology parks where the culture of innovation and competitiveness of knowledge-generating companies and institutions are promoted?	
o Yes, CCSIs specific o Yes, not CCSIs specific, but including CCSIs o Yes, not CCSIs specific, but CCSIs are not included	o No o I don't know
If there are there CCSIs specific science or technology parks, please enter names and web links	
Who manages these parks? Indicate responsible bodies and web links	

D.2) Innovation ecosystem and CCSIs: Conditions and support for innovation

The last block is focused on the existing conditions and support for innovation:

- Financing and economic support programs (subsidies, credit lines, tax incentives...).
- Specific programs to boost innovation in the CCSIs.
- Advisory and training programs in the field of innovation.
- Entrepreneurship programs: Counselling, training, mentoring.
- Awards/recognitions to innovation projects.
- A final assessment table to evaluate the importance of each type of program.

Are there financing and economic support programs (subsidies, credit lines, tax incentives...) for the cultural and creative sectors?
o Yes, CCSIs specific o Yes, not CCSIs specific, as they concur with other sectors o No o I don't know
Which financing and economic programs are specific to CCSIs? Indicate program names and web links
How much is the total budget of these programs (approximate amount in monetary terms)? Please, indicate the type of currency in brackets.

Who manages the programs? Indicate responsible bodies and web links

Are any of these programs specific to innovation projects in the cultural and creative sectors?

- o Yes: Please indicate which ones
- o No
- o I don't know

On a scale of 1, unlikely, to 7, likely, to what extent do you think innovation is done mainly by private initiatives and with its own self-financing?

1	2	3	4	5	6	7

Are there advisory and training programs in the field of innovation?

- o Yes, CCSIs specific
- o Yes, not CCSIs specific, but including CCSIs.
- o Yes, not CCSIs specific, but CCSIs are not included
- o No
- o I don't know

Which are the CCSIs specific or involving CCSIs advisory and training programs? Enter names and web links

Who manages the programs? Indicate responsible bodies and web links

Are there counseling and training programs in the field of entrepreneurship?
o Yes, CCSIs specific o Yes, not CCSIs specific, but including CCSIs. o Yes, not CCSIs specific, but CCSIs are not included o No o I don't know
Which are the CCSIs specific or involving CCSIs counselling and training programs? Enter names and web links
Who manages the programs? Indicate responsible bodies and web links
Are there awards/recognitions for innovation projects?
o Yes, CCSIs specific o Yes, not CCSIs specific, but CCSIs are included o Yes, not CCSIs specific, and CCSIs are not included o No o I don't know
Which awards/recognitions are CCSIs specific or CCSIs are involved? Enter names and web link
Who manages the awards/recognitions? Indicate responsible bodies and web links

Looking at them globally, how do you assess the importance of each type of program supporting development of innovation in the CCSIs in the region?

	Non-existent	1 Less important	2	3	4	5	6	7 Very important
Funding and financial support for CCSIs in general								
Financing and financial support for innovation in general								
Advice and training for innovation								
Advice and training for entrepreneurship								
Awards and recognitions								
Incubators and accelerators								
Clusters or other networks and platforms								
Science or technology parks								

How do you assess the development of knowledge generation and transfer mechanisms? Which actions are working or could work? Which are the main difficulties?

What about the conditions and tools to support innovation? What actions are working, or could it work? Which are the main difficulties?

Organizations' analysis

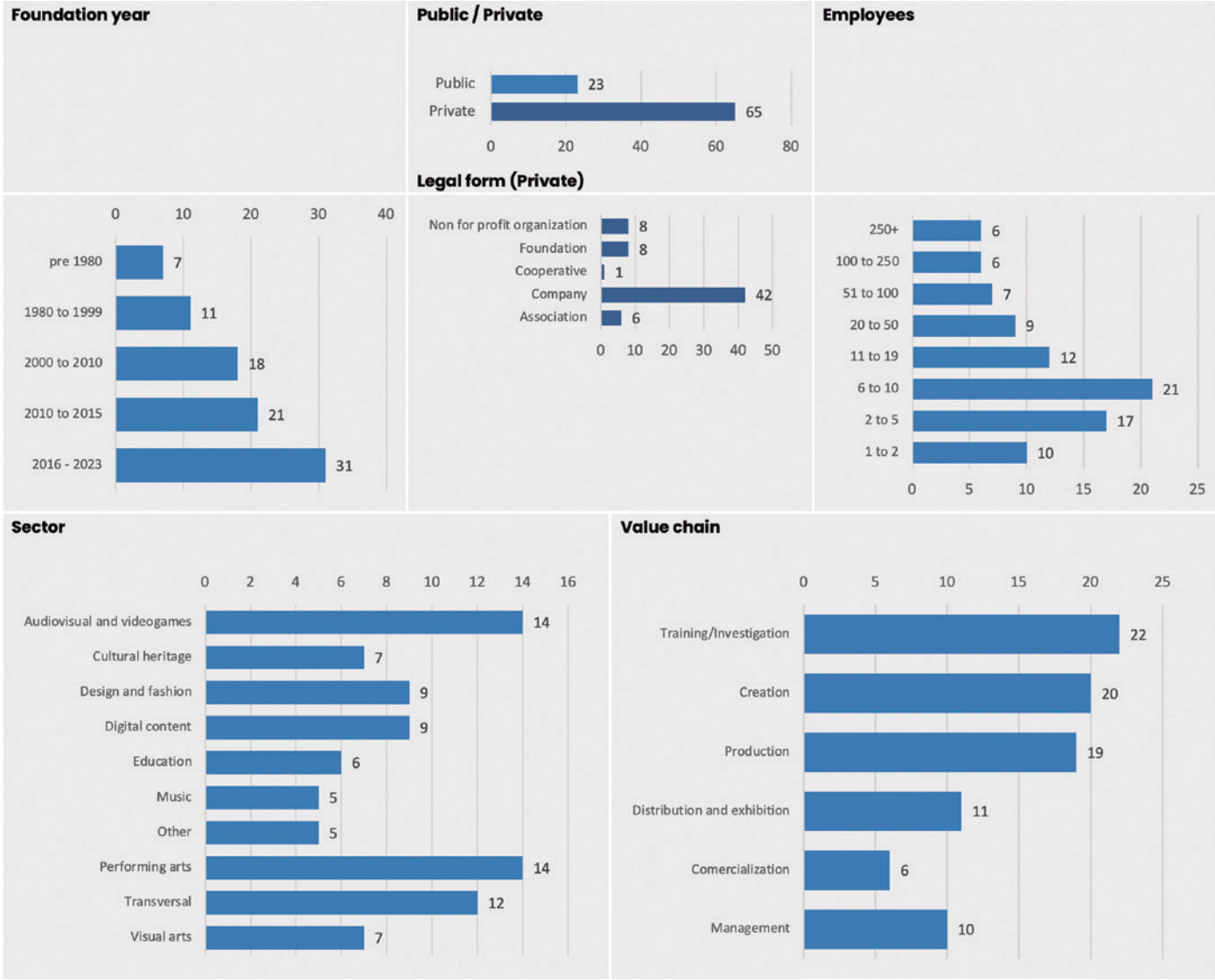
The questionnaire to organizations was distributed online (LimeSurvey platform) between April 25, 2023 and July 19, 2023.

The total responses have been 88, organized by regions as follows:

Region	Organizations
Western Cape	5
Antioquia	6
Baden-Württemberg	10
California	4
Cardiff (CCR)	6
Comunitat Valenciana	7
Denmark	0
Estonia	4
Finland	5
Karnataka	3
Kenya	9
Região do Norte	4
Puglia	7
South Africa	6
Uganda/East Africa*	6
Washington	6

* In the case of Uganda, the territorial focus was broadened to include other countries in concept of East Africa during the fieldwork process.

Organization's basic data:



Organizations' survey:

1. GENERAL DATA ABOUT YOUR ORGANIZATION	
E-mail	
Company/Organization name	
Region	
City	
Foundation year	
Legal form	
Private o Company o Cooperative o Free-lance o Association o Foundation Public o Public company o Institution /Cultural venue o Education centre and/or investigation centre Others:	
Does your organization belong to a business group?	
o Yes o No	
Number of employees	

Main sector of activity:
Indicate the activity that reports the highest percentage of income to the organization

- o Cultural heritage
- o Performing arts
- o Visual arts
- o Music
- o Publishing
- o Audiovisual
- o Architecture
- o Advertising
- o Design
- o Fashion
- o Videogames
- o Language industry
- o Gastronomy
- o Craftmanship
- o Digital content
- o Other:

Other sectors of activity: (multiple choice)

- o Cultural heritage
- o Performing arts
- o Visual arts
- o Music
- o Publishing
- o Audio-visual
- o Architecture
- o Publishing
- o Design
- o Fashion
- o Videogames
- o Language industry
- o Gastronomy
- o Craftmanship
- o Digital content
- o Other:

What is your main field of activity with respect to the value chain?
Indicate the activity that reports the highest percentage of income to the organization

- o Training/Investigation
- o Creation
- o Production
- o Distribution
- o Exhibition
- o Commercialization
- o Management
- o Others:

2. INNOVATION ENVIRONMENT

STAKEHOLDERS. On a scale of 1, never, to 5, usually, how regular is the contact that your organization maintains with each of the possible stakeholders.

	1 Never	2 Hardly ever	3 Sometimes	4 Often	5 Usually
Consultants					
Suppliers of equipment, materials, components, or software					
Organizations or companies that are users or customers					
Organizations in the same sector					
Other companies or organizations					
Technology centres, science parks...					
Other organizations of the same business group					
Universities (or other higher education institutions) and research centres					
Local government					
Regional government					
State government					
International institutions					
Users or customers in the public sector					
Non-profit institutions					
Corporate and/or banking foundations					

R & D PROGRAMS. In your region, do you know programs aimed at supporting Research, development, and innovation?

- o Yes, but I have not been a recipient.
- o Yes, and I have been a recipient.
- o No.

On a scale of 1, irrelevant, to 5, maximum relevance, how do you rate these initiatives to improve the development of your organization?

1 Irrelevant	2 Not so relevant	3 Medium relevance	4 High relevance	5 Maximum relevance

ADVICE AND TRAINING PROGRAMS. In your region, do you know programs aimed at offering training and advice for entrepreneurship and innovation?

- o Yes, but I have not been a recipient.
- o Yes, and I have been a recipient.
- o No.

On a scale of 1, irrelevant, to 5, maximum relevance, how do you rate these initiatives to improve the development of your organization?

1 Irrelevant	2 Not so relevant	3 Medium relevance	4 High relevance	5 Maximum relevance

PLATFORMS/INCUBATORS. Do you know platforms or infrastructures acting as creative incubators in your region?

- o Yes, but my organization is not a member.
- o Yes, and my organization is a member.
- o No.

On a scale of 1, irrelevant, to 5, maximum relevance, how do you rate these initiatives to improve the development of your organization?

1 Irrelevant	2 Not so relevant	3 Medium relevance	4 High relevance	5 Maximum relevance

CLUSTERS. Are you aware of any cluster or similar in the same sector as your organization, in your region?

- o Yes, but my organization is not a member.
- o Yes, and my organization is a member.
- o No

On a scale of 1, irrelevant, to 5, maximum relevance, how do you rate these initiatives to improve the development of your organization?

1 Irrelevant	2 Not so relevant	3 Medium relevance	4 High relevance	5 Maximum relevance

SCIENTIFIC AND TECHNOLOGICAL PARKS. Do you know science, technology, or similar facilities in your region?

- o Yes, but I am not a member and I have not been in contact.
- o Yes, and I am an active member
- o No

On a scale of 1, irrelevant, to 5, maximum relevance, how do you rate these initiatives to improve the development of your organization?

1 Irrelevant	2 Not so relevant	3 Medium relevance	4 High relevance	5 Maximum relevance

FINANCING. On a scale of 1, irrelevant, to 5, maximum relevance, which role have these actors had in the financing of innovation projects in your organization?

	1 Irrelevant	2 Not so relevant	3 Medium relevance	4 High relevance	5 Maximum relevance
Self-financing (own organization)					
International actors					
State actors					
Regional actors					
Local actors					
Corporate and/or banking foundations					
Private investors					
Crowdfunding					

NON-ECONOMIC SUPPORT. What role have the same agents had in the provision of support other than economic support (advice, training, infrastructures ...)?

	1 Irrelevant	2 Not so relevant	3 Medium relevance	4 High relevance	5 Maximum relevance
Own resources and capacities (own organization)					
International actors					
State actors					
Regional actors					
Local actors					
Corporate and/or banking foundations					
Private investors					
Crowdfunding					

3. INNOVATION TYPES

PROCESS/METHODOLOGICAL INNOVATION. Has your organization made innovations aimed at improving the organization internally between 2020 and 2022?

***Includes novelties or improvements for the organization itself and novelties or improvements for the sector, whether originally developed by the organization itself or initially developed by others.**
Examples: changes in the forms and tools of creation and production, in sales and marketing channels, in the administration and management of accounting and human resources...

- o Yes, main changes.
- o Yes, minor changes.
- o No

To what extent do you think user-oriented innovation (product, artistic or service innovation) is assessable through the following criteria in your field of activity?

	1 Not applicable	2 Partial match	3 Total or near-total match
Methods for producing, developing goods, or providing services			
New or significantly improved logistics or delivery systems or distribution methods			
Information processing or communication methods			
Methods of accounting or other administrative operations			
Business practices for organizational procedures or external relationships			
Organizational methods, decision making or human resources management			
Marketing methods for promotion, packaging, pricing, product positioning or after-sales services			

USER-ORIENTED INNOVATION. Has your organization made innovations aimed at improving or expanding the services or goods (including artistic works) offered on the market between 2020 and 2022?

***This includes new features or improvements for the organization itself and novelties or improvements for the sector, whether originally developed by the organization itself or initially developed by others.**
Examples: improvement of materials, incorporation or improvement of software, environmental improvements, digital services...

- o Yes, main changes.
- o Yes, minor changes.
- o No.

To what extent do you think user-oriented innovation (product, artistic or service innovation) is assessable through the following criteria in your field of activity?

	1 Not applicable	2 Partial match	3 Total or near-total match
Quality			
Technical specifications or procedures			
Credibility			
Durability			
Efficiency during use			
Accessibility			
Suitability			
Ease of use			

What criteria would you propose to best evaluate user-oriented innovation (product, artistic or service innovation) in your sector?

INNOVATION WITH OWN RESOURCES. On a scale of 1, nothing, to 5, wholly, to what extent has your organization made innovations only with its own means/resources?

1 Nothing	2 Barely	3 Some	4 Quite	5 Wholly

OPEN OR COLLABORATIVE INNOVATION. On a scale of 1, nothing, to 5, wholly, to what extent has your organization made innovations with external support (collaboration, external knowledge, advice, transactions...)?

1 Nothing	2 Barely	3 Some	4 Quite	5 Wholly

PARTNERS. With which of the following actors have you collaborated during the period 2020-2022 to develop your innovation activities

- o Consultants
- o Equipment suppliers, materials, components, or software
- o Organization or companies that are users or customers.
- o Organizations in the same sector
- o Other companies or organizations
- o Technology centres, science Parks...
- o Other organizations of the same business group
- o Universities or other higher education institutions
- o Local government
- o Regional government
- o State government
- o International institutions
- o Public sector users or customers
- o Non-profit institutions
- o Corporate or banking foundations
- o Informal partnerships
- o Others:

TECHNOLOGY-BASED INNOVATION. On a scale of 1, nothing, to 5, wholly, to what extent has your organization made innovations through the application, renovation, combination, or development of technologies?

1 Nothing	2 Barely	3 Some	4 Quite	5 Wholly

REASONS TO INNOVATE. What is the main need that your organization's innovations aim to cover?

- o Business (Improvement of strategies and own economic or third parties' results)
- o Cultural (Increase participation or enhance the cultural experience)
- o Urban (Transform environments and communities)
- o Educational (facilitate educational tasks and learning)
- o Social (facilitate citizen participation)
- o Environmental (Contribute to sustainability)
- o Healthcare (Improve health services)
- o Other:

Which are other needs that your organization's innovations aim to cover?

- o Business (Improvement of strategies and own economic or third parties' results)
- o Cultural (Increase participation or enhance the cultural experience)
- o Urban (Transform environments and communities)
- o Educational (facilitate educational tasks and learning)
- o Social (facilitate citizen participation)
- o Environmental (Contribute to sustainability)
- o Healthcare (Improve health services)
- o Other:

CROSS-SECTORAL INNOVATION. During the reference period, are the innovations generated by your organization directly targeted at companies or organizations in sectors other than yours?

- o Never or hardly ever
- o Sometimes
- o Always

In the reference period, your organization...

	Yes	No
Did your organization claim copyright?		
Did your organization register any industrial designs?		
Did your organization register any trademarks?		
Did your organization apply for any patents?		
Did your organization use trade secrets?		
Did your organization buy any technology (machinery, equipment, or software) already used by the organization or an upgrade to it?		
Has your organization purchased any new technology (machinery, equipment, or software) not previously used?		
Did you apply for any standards and/or labels?		

How would you describe your organization's innovation activities in your own words?
Please use this space to supplement the above data, especially if you feel that your innovation activities are not listed in this survey.

- o Yes, but I am not a member and I have not been in contact.
- o Yes, and I am an active member
- o No

DIFFICULTY FACTORS. On a scale of 1, low importance, to 3, high importance, how do you rate the role of the following factors in making innovations?

	1 Low	2 Medium	3 High
Lack of funding within the organization or group of companies			
Lack of funding from private external sources			
Difficulties in obtaining public aid or subsidies			
Too high costs			
Lack of qualified personnel within the organization			
Lack of partners for collaboration			
Lack of access to external knowledge			
Uncertainty regarding market demand for the organization's ideas			
Too much competition in the market			
There are other priorities within your organization			

R+D. Could you rely or have relied on specific resources for R+D (human or economic resources)?

- o Yes, usually.
- o Yes, sometimes.
- o No

4. RESULTS AND IMPACTS OF INNOVATION

SELF-ASSESSMENT IMPACTS. On a scale of 1, no impact, to 5, much, to what extent do you consider that the impacts of your organization's innovations to be?

	No impact	Low impact	Moderate impact	Relevant impact	Not applicable
Economic					
Social					
Environmental					

ECONOMIC IMPACT

IMPACT OF PRODUCT INNOVATIONS. Indicate the approximate percentage of turnover for the year 2022 due to:

	%
Products (services, goods, or artistic works) with significant changes (new or improved) in the period 2020-2022	
All other products unchanged or with minor changes in the period 2020-2022	
Total	100

Please, if you consider that the previous item is difficult to answer or not suitable for measuring the economic impact of innovations in your organization, please describe the reasons why.

Organization's innovation's grading in...

	Yes, significantly	Yes, but insignificantly	No
Increasing in employment in the organization			
Improving employment conditions			
Increasing benefits for the organization			
Increasing in copyright or patent benefits			

Organization's innovation's grading in social impact

	Yes, significantly	Yes, but insignificantly	No
Widening the level of access to culture and creativity			
Generation or strengthening of a collective identity or the sense of belonging to a community			
Promotion of diverse social and cultural practices (social diversity)			
Promotion of social equality			
Promotion of gender equality			
Raising social awareness of environmental issues			
Promotion of health and well-being			

Organization's innovation grading in environmental impact

	Yes, significantly	Yes, but insignificantly	No
Reduction of materials or water use			
Reduction of energy use or CO2 footprint (reduction of CO2 emissions)			
Reduction of soil, acoustic, water or air pollution			
Replacement of materials with less polluting or hazardous ones			
Replacing a part of fossil energy with renewable energy			
Recycling of waste, water or materials for own use or sale			

Please, if you consider that the previous items are not accurate enough in terms of your organization's innovation impact, please describe the ones you think are more accurate here.

Intrinsic and social-shared value. Your innovation project ...

	Yes, significantly	Yes, but insignificantly	No
Increases people's knowledge			
Generates a singular experience			
Empowers shared governance			
Considers the values and beliefs of the community where it takes place.			

Please, if you consider that the previous items are not accurate enough in terms of your organization's innovation impact, please describe the ones you think are more accurate here.

ANNEX 3. Characterisation at country level

Table 1. Country-level characterization data for each case

	Country	Source (most recent year available)	Australia	Colombia	Denmark	Estonia	Finland	Germany	India	Italy
	Case type		Region	Region	Country	Country	Country	Region	Region	Region
	Case		South Australia	Antioquia	Denmark	Estonia	Finland	Baden-Württemberg	Karnataka	Puglia
Demography	**Surface (m2)**	UN World Statistics	7.692.024	1.141.748	42.938	45.261	336.884	357.581	3.287.263	302.068
	Population (thousand)	UN World Statistics	26.177	51.874	5.882	1.326	5.541	83.370	1.417.173	59.038
	Pop. Density (per km2)	UN World Statistics	3,4	46,2	138,8	30,5	18,3	239,2	476,7	199,5
	% urban population	UN World Statistics	86,1	81,1	88	69,1	85,4	77,4	34,5	70,7
Economy and society	**GDP million** (US$ 2022)	World Bank ICP Database	1.626.940	1.052.389	436.857	62.797	328.004	5.309.606	11.874.583	3.052.609
	GDP per capita (US$ 2022)	World Bank ICP Database	62.625	20.287	74.006	46.697	59.027	63.150	8.379	51.865
	% unemployment (modelled ILO estimate)	World Bank SDGs Database	6,5	15,0	5,6	6,8	7,8	3,8	8	9,2

	Country	Source (most recent year available)	Australia	Colombia	Denmark	Estonia	Finland	Germany	India	Italy
	Case type		Region	Region	Country	Country	Country	Region	Region	Region
	Case		South Australia	Antioquia	Denmark	Estonia	Finland	Baden-Württemberg	Karnataka	Puglia
Economy and society	Gini index	World Bank SDGs Database	34,3	51,5	27,5	30,7	27,1	31,7	35,7	35,2
	% employed services	World Bank SDGs Database	78,37	64,11	79,23	68,12	74,58	71,61	32,27	70,23
	% employed industry	World Bank SDGs Database	19,05	20,12	18,54	28,7	21,63	27,18	25,12	25,87
	% employed agriculture	World Bank SDGs Database	2,5	15,7	2,2	3,17	3,77	1,2	42,5	3,89
	External Debt Stocks (% of GNI)	World Bank SDGs Database	&	58,3	&	&	&	&	21,4	&
Education	Mean schooling years	UN Development Programme	16,5	14,4	18,7	15,9	19,1	17	11,9	16,2
	Adolescents out of school	World Bank SDGs Database	1,97	3,34	0,14	1,34	0,14	4,3	&	2,44

	Country	Source (most recent year available)	Australia	Colombia	Denmark	Estonia	Finland	Germany	India	Italy
	Case type		Region	Region	Country	Country	Country	Region	Region	Region
	Case		**South Australia**	**Antioquia**	**Denmark**	**Estonia**	**Finland**	**Baden-Württemberg**	**Karnataka**	**Puglia**
Education	**Educational attainment, at least completed short-cycle tertiary,** population 25+	World Bank SDGs Database	46,4	22,5	37,7	39,4	&	&	&	16,5
Environment	**CO2 emissions (metric tons per capita)**	World Bank SDGs Database	15,23	1,6	5,1	7,67	7,37	7,91	1,79	5,31
	PM2.5 air pollution, mean annual exposure	World Bank SDGs Database	8,55	16,52	10,02	6,73	5,86	12,02	90,87	16,75
	Energy intensity level of primary energy	World Bank SDGs Database	4,3	2,51	2	4,49	5,19	2,76	4,28	2,45
Health	**Life expectancy**	UN Development Programme	84,5	72,8	81,4	77,1	82	80,6	67,2	82,9

Source: Own elaboration based on UN World Statistic Pocketbook 2023, World Bank Sustainable Development Goals (SDGs) Database (2022 update), World Bank International International Comparison Program (ICP) 2022, and UN Development Programme (Human Development Report 2021-2022) data.

	Country	Source (most recent year available)	Kenya	Portugal	South Africa	Spain	Uganda	United Kingdom	United States of America	United States of America
	Case type		Country	Region	Region	Region	Country	Region	Region	Region
	Case		**Kenya**	**Região Norte**	**Western Cape**	**Comunitat Valenciana**	**Uganda**	**Cardiff CCR**	**Washington**	**California**
Demography	**Surface (m2)**	UN World Statistics	591.958	92.226	1.221.037	506.008	241.550	242.495	9.833.517	9.833.517
	Population (thousand)	UN World Statistics	54.028	10.271	59.894	47.559	47.250	67.509	338.290	338.290
	Pop. Density (per km2)	UN World Statistics	93	111,7	49,1	94,7	236,5	278,1	37	37
	% urban population	UN World Statistics	27,5	65,8	66,9	80,6	24,4	83,7	82,5	82,5
Economy and society	**GDP million** (US$ 2022)	World Bank ICP Database	311.410	430.227	952.603	2.181.968	127.282	3.656.809	25.462.700	25.462.700
	GDP per capita (US$ 2022)	World Bank ICP Database	5.764	41.452	15.905	45.825	2.694	54.603	76.399	76.399
	% unemployment (modelled ILO estimate)	World Bank SDGs Database	5,7	6,8	29,2	15,5	2,8	4,5	8,1	8,1
	Gini index	World Bank SDGs Database	40,8	34,7	63	34,9	42,7	32,6	39,7	39,7
	% employed services	World Bank SDGs Database	39,43	69,83	72,41	75,54	21,36	80,83	78,73	78,73

	Country	Source (most recent year available)	Kenya	Portugal	South Africa	Spain	Uganda	United Kingdom	United States of America	United States of America
	Case type		Country	Region	Region	Region	Country	Region	Region	Region
	Case		**Kenya**	**Região Norte**	**Western Cape**	**Comunitat Valenciana**	**Uganda**	**Cardiff CCR**	**Washington**	**California**
Economy and society	**% employed industry**	World Bank SDGs Database	6,2	24,68	22,3	20,43	6,51	18,12	19,9	19,9
	% employed agriculture	World Bank SDGs Database	54,3	5,5	5,28	4,03	72,1	1,04	1,36	1,36
	External Debt Stocks (% of GNI)	World Bank SDGs Database	38,45	&	51,77	&	46,53	&	&	&
Education	**Mean schooling years**	UN Development Programme	10,7	16,9	13,6	17,9	10,1	17,3	16,3	16,3
	Adolescents out of school	World Bank SDGs Database	&	0,13	10,3	0,36	&	0,16	&	&
	Educational attainment, at least completed short-cycle tertiary, population 25+	World Bank SDGs Database	&	22,5	&	33,4	&	47,2	48	48

	Country	Source (most recent year available)	Kenya	Portugal	South Africa	Spain	Uganda	United Kingdom	United States of America	United States of America
	Case type		Country	Region	Region	Region	Country	Region	Region	Region
	Case		**Kenya**	**Região Norte**	**Western Cape**	**Comunitat Valenciana**	**Uganda**	**Cardiff CCR**	**Washington**	**California**
Environment	**CO2 emissions (metric tons per capita)**	World Bank SDGs Database	0,42	4,33	7,5	5,09	0,13	5,22	14,67	14,67
	PM2.5 air pollution, mean annual exposure	World Bank SDGs Database	28,57	8,16	25,1	9,69	50,49	10,47	7,4	7,4
	Energy intensity level of primary energy	World Bank SDGs Database	5,31	2,54	8,03	2,64	9,98	2,3	4,51	4,51
Health	**Life expectancy**	UN Development Programme	61,4	81	62,3	83	62,7	80,7	77,2	77,2

Source: Own elaboration based on UN World Statistic Pocketbook 2023, World Bank Sustainable Development Goals (SDGs) Database (2022 update), World Bank International International Comparison Program (ICP) 2022, and UN Development Programme (Human Development Report 2021-2022) data.

ANNEX 4. Indicators and sources of the *Global Innovation Index*

NUM	NAME	LEVEL	SOURCE
	Global Innovation Index	Index	
IN	Innovation inputs	SubIndex	
IN.1	Institutions	Pillar	
IN.1.1	Political environment	SubPillar	
IN.1.1.1	Political and operational stability	Indicator	IHS Markit
IN.1.1.2	Government effectiveness	Indicator	World Bank, Worldwide Governance Indicators
IN.1.2	Regulatory environment	SubPillar	
IN.1.2.1	Regulatory quality	Indicator	World Bank, Worldwide Governance Indicators
IN.1.2.2	Rule of law	Indicator	World Bank, Worldwide Governance Indicators
IN.1.2.3	Cost of redundancy dismissal	Indicator	World Bank, Employing Workers Project
IN.1.3	Business environment	SubPillar	
IN.1.3.1	Policies for doing business	Indicator	World Economic Forum, Executive Opinion Survey (EOS)
IN.1.3.2	Entrepreneurship policies and culture	Indicator	Global Entrepreneurship Monitor
IN.2	Human capital and research	Pillar	
IN.2.1	Education	SubPillar	
IN.2.1.1	Expenditure on education, % GDP	Indicator	UNESCO Institute for Statistics
IN.2.1.2	Government funding/pupil, secondary, % GDP/cap	Indicator	UNESCO Institute for Statistics
IN.2.1.3	School life expectancy, years	Indicator	UNESCO Institute for Statistics
IN.2.1.4	PISA scales in reading, maths and science	Indicator	OECD, PISA
IN.2.1.5	Pupil-teacher ratio, secondary	Indicator	UNESCO Institute for Statistics
IN.2.2	Tertiary education	SubPillar	
IN.2.2.1	Tertiary enrolment, % gross	Indicator	UNESCO Institute for Statistics
IN.2.2.2	Graduates in science and engineering, %	Indicator	UNESCO Institute for Statistics; Eurostat; OECD
IN.2.2.3	Tertiary inbound mobility, %	Indicator	UNESCO Institute for Statistics
IN.2.3	Research and development (R&D)	SubPillar	

NUM	NAME	LEVEL	SOURCE
IN.2.3.1	Researchers, FTE/mn pop.	Indicator	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
IN.2.3.2	Gross expenditure on R&D, % GDP	Indicator	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
IN.2.3.3	Global corporate R&D investors, top 3, mn USD	Indicator	European Commission\'s Joint Research Centre
IN.2.3.4	QS university ranking, top 3	Indicator	QS Quacquarelli Symonds Ltd
IN.3	Infrastructure	Pillar	
IN.3.1	Information and communication technologies (ICTs)	SubPillar	
IN.3.1.1	ICT access	Indicator	World Intellectual Property Organization
IN.3.1.2	ICT use	Indicator	World Intellectual Property Organization
IN.3.1.3	Government's online service	Indicator	Division for Public Administration and Development Management (DPADM), United Nations Department of Economic and Social Affairs (DESA).
IN.3.1.4	E-participation	Indicator	Division for Public Administration and Development Management (DPADM), United Nations Department of Economic and Social Affairs (DESA).
IN.3.2	General infrastructure	SubPillar	
IN.3.2.1	Electricity output, GWh/mn pop.	Indicator	International Energy Agency
IN.3.2.2	Logistics performance	Indicator	Logistics Performance Index, World Bank; Arvis et al., 2018
IN.3.2.3	Gross capital formation, % GDP	Indicator	International Monetary Fund
IN.3.3	Ecological sustainability	SubPillar	
IN.3.3.1	GDP/unit of energy use	Indicator	International Energy Agency
IN.3.3.2	Environmental performance	Indicator	Yale University
IN.3.3.3	ISO 14001 environmental certificates/bn PPP$ GDP	Indicator	International Organization for Standardization; International Monetary Fund
IN.4	Market sophistication	Pillar	
IN.4.1	Credit	SubPillar	
IN.4.1.1	Finance for startups and scaleups	Indicator	Global Entrepreneurship Monitor
IN.4.1.2	Domestic credit to private sector, % GDP	Indicator	International Monetary Fund; World Bank
IN.4.1.3	Loans from microfinance institutions, % GDP	Indicator	International Monetary Fund, Financial Access Survey (FAS)
IN.4.2	Investment	SubPillar	
IN.4.2.1	Market capitalization, % GDP	Indicator	World Federation of Exchanges; World Bank
IN.4.2.2	Venture capital investors, deals/bn PPP$ GDP	Indicator	Refinitiv; International Monetary Fund
IN.4.2.3	Venture capital recipients, deals/bn PPP$ GDP	Indicator	Refinitiv; International Monetary Fund

NUM	NAME	LEVEL	SOURCE
IN.4.2.4	Venture capital received, value, % GDP	Indicator	Refinitiv; International Monetary Fund
IN.4.3	Trade, diversification, and market scale	SubPillar	
IN.4.3.1	Applied tariff rate, weighted avg., %	Indicator	World Bank
IN.4.3.2	Domestic industry diversification	Indicator	United Nations Industrial Development Organization
IN.4.3.3	Domestic market scale, bn PPP$	Indicator	International Monetary Fund
IN.5	Business sophistication	Pillar	
IN.5.1	Knowledge workers	SubPillar	
IN.5.1.1	Knowledge-intensive employment, %	Indicator	International Labour Organization
IN.5.1.2	Firms offering formal training, %	Indicator	World Bank Enterprise Surveys
IN.5.1.3	GERD performed by business, % GDP	Indicator	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
IN.5.1.4	GERD financed by business, %	Indicator	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
IN.5.1.5	Females employed w/advanced degrees, %	Indicator	International Labour Organization
IN.5.2	Innovation linkages	SubPillar	
IN.5.2.1	University-industry R&D collaboration	Indicator	World Economic Forum, Executive Opinion Survey (EOS)
IN.5.2.2	State of cluster development and depth	Indicator	World Economic Forum, Executive Opinion Survey (EOS)
IN.5.2.3	GERD financed by abroad, % GDP	Indicator	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
IN.5.2.4	Joint venture/strategic alliance deals/bn PPP$ GDP	Indicator	Refinitiv; International Monetary Fund
IN.5.2.5	Patent families/bn PPP$ GDP	Indicator	World Intellectual Property Organization; International Monetary Fund
IN.5.3	Knowledge absorption	SubPillar	
IN.5.3.1	Intellectual property payments, % total trade	Indicator	World Trade Organization and United Nations Conference on Trade and Development
IN.5.3.2	High-tech imports, % total trade	Indicator	United Nations Comtrade Database; World Trade Organization and United Nations Conference on Trade and Development
IN.5.3.3	ICT services imports, % total trade	Indicator	World Trade Organization and United Nations Conference on Trade and Development
IN.5.3.4	FDI net inflows, % GDP	Indicator	International Monetary Fund; World Bank
IN.5.3.5	Research talent, % in businesses	Indicator	UNESCO Institute for Statistics; Eurostat; OECD; RICYT

NUM	NAME	LEVEL	SOURCE
OUT	Innovation outputs	SubIndex	
OUT.6	Knowledge and technology outputs	Pillar	
OUT.6.1	Knowledge creation	SubPillar	
OUT.6.1.1	Patents by origin/bn PPP$ GDP	Indicator	World Intellectual Property Organization; International Monetary Fund
OUT.6.1.2	PCT patents by origin/bn PPP$ GDP	Indicator	World Intellectual Property Organization; International Monetary Fund
OUT.6.1.3	Utility models by origin/bn PPP$ GDP	Indicator	World Intellectual Property Organization; International Monetary Fund
OUT.6.1.4	Scientific and technical articles/bn PPP$ GDP	Indicator	Clarivate; International Monetary Fund
OUT.6.1.5	Citable documents H-index	Indicator	SCImago
OUT.6.2	Knowledge impact	SubPillar	
OUT.6.2.1	Labor productivity growth, %	Indicator	The Conference Board
OUT.6.2.2	New businesses/th pop. 15–64	Indicator	World Bank, Enterpreneurship Database
OUT.6.2.3	Software spending, % GDP	Indicator	IHS Markit
OUT.6.2.4	ISO 9001 quality certificates/bn PPP$ GDP	Indicator	International Organization for Standardization; International Monetary Fund
OUT.6.2.5	High-tech manufacturing, %	Indicator	United Nations Industrial Development Organization
OUT.6.3	Knowledge diffusion	SubPillar	
OUT.6.3.1	Intellectual property receipts, % total trade	Indicator	World Trade Organization and United Nations Conference on Trade and Development
OUT.6.3.2	Production and export complexity	Indicator	Harvard University, Growth Lab
OUT.6.3.3	High-tech exports, % total trade	Indicator	United Nations Comtrade Database; World Trade Organization and United Nations Conference on Trade and Development; Trade Data Monitor.
OUT.6.3.4	ICT services exports, % total trade	Indicator	World Trade Organization and United Nations Conference on Trade and Development
OUT.7	Creative outputs	Pillar	
OUT.7.1	Intangible assets	SubPillar	
OUT.7.1.1	Intangible asset intensity, top 15, %	Indicator	Brand Finance
OUT.7.1.2	Trademarks by origin/bn PPP$ GDP	Indicator	World Intellectual Property Organization; International Monetary Fund
OUT.7.1.3	Global brand value, top 5,000, % GDP	Indicator	Brand Finance; International Monetary Fund

NUM	NAME	LEVEL	SOURCE
OUT.7.1.4	Industrial designs by origin/bn PPP$ GDP	Indicator	World Intellectual Property Organization; International Monetary Fund
OUT.7.2	Creative goods and services	SubPillar	
OUT.7.2.1	Cultural and creative services exports, % total trade	Indicator	World Trade Organization and United Nations Conference on Trade and Development
OUT.7.2.2	National feature films/mn pop. 15–69	Indicator	OMDIA; United Nations, World Population Prospects
OUT.7.2.3	Entertainment and media market/th pop. 15–69	Indicator	PwC, GEMO; United Nations, World Population Prospects; International Monetary Fund
OUT.7.2.4	Printing and other media, % manufacturing	Indicator	United Nations Industrial Development Organization
OUT.7.2.5	Creative goods exports, % total trade	Indicator	United Nations Comtrade Database; World Trade Organization and United Nations Conference on Trade and Development
OUT.7.3	Online creativity	SubPillar	
OUT.7.3.1	Generic top-level domains (TLDs)/th pop. 15–69	Indicator	ZookNIC Inc.; United Nations, World Population Prospects
OUT.7.3.2	Country-code TLDs/th pop. 15–69	Indicator	ZookNIC Inc.; United Nations, World Population Prospects
OUT.7.3.3	GitHub commit pushes received/mn pop. 15–69	Indicator	GitHub; United Nations, World Population Prospects
OUT.7.3.4	Mobile app creation/bn PPP$ GDP	Indicator	data.ia; International Monetary Fund

ANNEX 5. Summary of scatter plots on two axes

Chart made with data from the coordinator survey

Chart made weighting the vertical axis with the external results of the specific subdimension *Creatives goods and services* of the Global Innovation Index.

ANNEX 6. Summary table of the general elements of innovation ecosystems

Table 7. Comparative characterization (colour scale) of the Regional Coordinators survey on the context of the CCSIs in each region, ordered according to their position in the Global Innovation Index general ranking.

Country/Case (according global GII ranking)	Cultural observatories	ICC statistics	Innovation statistics	Regional administration CCSIs positive intentions (1 min-7 max)	CCSIs strength characteristics (1 min-7 max)	CCSIs contribution to regional competitiveness (1 min-7 max)	Strategic agent type	Non-monetary level support	Monetary level support	Public strategy CCSIs in economic development	Incubators	Clusters or platforms	Science and tech parks	Economic programs	Specific CCSIs innovation programs		Counselling and training entrepreneurship	Awards
USA - Washington	Yes	No	No	4,6	5,0	7,0	More sectoral	Equal	Higher levels	General culture	Not specific, included	Not specific, included	&	Not specific, included	&	Not specific, included	Not specific, included	CCSIs specific
USA - California	Yes	Yes	Yes	3,0	3,0	7,0	More sectoral	Lower levels	Higher levels	CCSIs specific	CCSIs specific	CCSIs specific	&	Not specific, included	CCSIs specific	CCSIs specific	CCSIs specific	Not specific, included
United Kingdom - Cardiff (CCR)	Yes	Yes	Yes	6,8	7,0	7,0	More sectoral	Equal	Higher levels	CCSIs specific	CCSIs specific	CCSIs specific	Not specific, included	CCSIs specific	CCSIs specific	CCSIs specific	Not CCSIs specific, but included	CCSIs specific
Germany - Baden-Württemberg	Yes	Yes	Yes	4,4	3,5	6,0	More sectoral	Lower levels	Lower levels	No	CCSIs specific	CCSIs specific	Not specific, included	CCSIs specific	&	CCSIs specific	CCSIs specific	CCSIs specific
Finland	Yes	Yes	Yes	3,8	5,5	3,0	Equal	Lower levels	Lower levels	CCSIs specific	CCSIs specific	CCSIs specific	&	CCSIs specific	CCSIs specific	CCSIs specific	CCSIs specific	No
Denmark	Yes	Yes	Yes	6,0	6,0	6,0	Equal	Lower levels	Higher levels	CCSIs specific	CCSIs specific	CCSIs specific	&	Not CCSIs specific, but included	&	Not specific, included	&	CCSIs specific
Estonia	Yes	Yes	Yes	5,4	6,5	5,0	More sectoral	Higher levels	Higher levels	General culture	CCSIs specific	CCSIs specific	NOT included	CCSIs specific	&	Not specific, included	CCSIs specific	CCSIs specific
Australia - South Australia	Yes	Yes	Yes	5,2	4,5	7,0	More sectoral	Higher levels	Higher levels	No	CCSIs specific	CCSIs specific	Not specific, included	CCSIs specific	&	&	&	Not specific, included

Country/Case (according global GII ranking)	Cultural observatories	ICC statistics	Innovation statistics	Regional administration CCSIs positive intentions (1 min-7 max)	CCSIs strength characteristics (1 min-7 max)	CCSIs contribution to regional competitiveness (1 min-7 max)	Strategic agent type	Non-monetary level support	Monetary level support	Public strategy CCSIs in economic development	Incubators	Clusters or platforms	Science and tech parks	Economic programs	Specific CCSIs innovation programs		Counselling and training entrepreneurship	Awards
Italy - Puglia	Yes	Yes	Yes	4,6	5,0	5,0	Equal	Lower levels	Lower levels	General culture	Not CCSIs specific, but included	CCSIs specific	Not specific, included	CCSIs specific	&	Not specific, included	Not specific, included	Not specific, included
Spain - Comunitat Valenciana	Yes	Yes	Yes	6,6	6,0	7,0	More general	Higher levels	Lower levels	General culture	CCSIs specific	CCSIs specific	Not specific, included	CCSIs specific	&	CCSIs specific	Not specific, included	&
Portugal - Região do Norte	No	Yes	Yes	3,4	4,0	7,0	More sectoral	Higher levels	Higher levels	General culture	CCSIs specific	CCSIs specific	CCSIs specific	Not specific, included	&	Not specific, included	NOT included	NOT included
India - Karnataka	No	No	No	3,4	3,0	2,0	More general	Lower levels	Lower levels	No	Not specific, included	Not specific, included	Not specific, included	Not specific, included	&	Not specific, included	Not specific, included	Not specific, included
South Africa – Western Cape	Yes	Yes	No	3,0	4,5	4,0	Equal	Lower levels	Equal	No	CCSIs specific	&	Not specific, included	Not specific, included	CCSIs specific	Not specific, included	CCSIs specific	Not specific, included
Colombia - Antioquia	Yes	Yes	Yes	6,6	6,0	5,0	More sectoral	Lower levels	Lower levels	CCSIs specific	CCSIs specific	CCSIs specific	Not specific, included	CCSIs specific	CCSIs specific	Not specific, included	Not specific, included	Not specific, included
Kenya	Yes	No	No	5,4	2,5	7,0	Equal	Higher levels	Higher levels	General culture strategy	CCSIs specific	&	&	CCSIs specific	CCSIs specific	CCSIs specific	CCSIs specific	&
Uganda	Yes	Yes	Yes	6,0	2,5	5,0	Equal	Lower levels	Higher levels	CCSIs specific	CCSIs specific	No	Not specific, included	CCSIs specific	CCSIs specific	No	No	NOT included

Source: Own elaboration based on surveys data (Regional Coordinators' survey Contrast II)

BIBLIOGRAPHY

Department for Culture, Media and Sport (DCMS) (2023) *Creative Industries sector vision: a joint plan to drive growth, build talent and develop skills*. DCMS
Available at: https://www.gov.uk/government/publications/creative-industries-sector-vision

Department of Culture and Language Policy of the Basque Government (2021) *Conceptual framework for the application of R&D&I in the cultural and creative sectors*. Basque Government Department of Language Policy and Culture
Available at: https://www.euskadi.eus/contenidos/informacion/ksi_contrast_proiektua/es_def/adjuntos/CCIs-and-Innovation_Marco_Conceptual.pdf

Basque Government Department of Language Policy and Culture (2022) *Innovation context within CCISs in 5 European regions*. Basque Government Department of Language Policy and Culture
Available at: https://www.euskadi.eus/contenidos/informacion/ksi_cwf_workshop_20220719/eu_def/adjuntos/Basque_Country_Innovation_CCIs_pilot_draft.pdf

European Commission (2022) *Annual Single Market Report 2022*. Staff Working Document (SWD). Brussels: European Commission
Available at: https://ec.europa.eu/docsroom/documents/48877

Official Journal of the European Union (2022) *Council Conclusions on building a European Strategy for the Cultural and Creative Industries Ecosystem (2022/C 160/06)*. Publications office of the European Union
Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022XG0413(01)

United Nations Conference on Trade and Development (UNCTAD) (2022) *Creative Economy Outlook 2022. The International Year of Creative Economy for Sustainable Development: Pathway to resilient creative industries*. Geneva: United Nations Publications
Available at: https://unctad.org/publication/creative-economy-outlook-2022

World Intellectual Property Organization (WIPO) (2022) *Global Innovation Index 2022:What is the future of innovation-driven growth?* Geneva: WIPO
Available at: https://www.wipo.int/global_innovation_index/en/2022/

Contrast

Innovation in the Cultural and Creative Industries

EUSKO JAURLARITZA
GOBIERNO VASCO

KULTURA ETA HIZKUNTZA POLITIKA SAILA

DEPARTAMENTO DE CULTURA Y POLITICA LINGÜISTICA