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HOW TO INTEGRATE 'THE USER VOICE' INTO EVALUATING AND GUIDING CLUSTER STRATEGY

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ABSTRACT

As with other public policies, in the case of cluster policy, there is also a general interest in developing and applying evaluation methods, with the aim of adapting the policy to the new challenges identified through those processes. In the specific case of cluster policy, to evaluate the efficiency of implementation and development of these policies, one of the aspects to be analysed is the activity of the cluster management organisations (CMOs), testing the relationship between this activity and greater economic development.

SPRI (Basque Government) developed a questionnaire titled 'The User Voice' in order to: (1) better understand how cluster cooperation services and actions offered by the CMOs are perceived by users; and (2) the impact of those services and actions on the parameters of firms' competitiveness. The users of the cooperation services and actions offered by the CMOs in the framework of the Cluster Support Programme funded by the Basque Government completed the questionnaire.

This document provides a guide to interpret the responses to the questionnaire and reveals the usefulness of these analyses and results for different groups of stakeholders, especially the directors of the CMO and policy makers. It should be noted that the individual members, the technical structure and the strategic plan of the CMO are not being evaluated, but rather the set of activities carried out within the cluster policy. The aim is to evaluate the cluster policy itself, with the ultimate objective of directly influencing the initiatives launched by the CMOs and the Basque Government in future editions of the programme. Therefore, here evaluation should not be understood as monitoring, but rather as a process of learning and improvement, to guide the management of both the cluster policy as a whole and implementation of said policy in the different CMOs through their action plans.

RESUMEN

Al igual que en el resto de las políticas públicas, en el caso de la política clúster existe también un interés general en desarrollar y aplicar métodos de evaluación, con el fin de adaptar la política a los nuevos retos y desafíos que se identifiquen. En el caso específico de la política clúster, para evaluar la eficiencia en la implantación y desarrollo de estas políticas, uno de los aspectos a analizar es la actividad de las Organizaciones Dinamizadoras Clúster (ODCs) y, en su caso, demostrar que ésta se relaciona con un mayor desarrollo económico.

Con el objetivo de entender mejor cómo son percibidos por los usuarios los servicios y actuaciones de cooperación clúster ofrecidos por las ODCs y su impacto en los parámetros de competitividad de las empresas, desde SPRI (Gobierno Vasco) se elaboró un cuestionario denominado "La Voz del Usuario", que cumplimentaron los usuarios de los servicios y actuaciones de cooperación ofrecidos por las ODCs en el marco del Programa de Apoyo a Clústeres financiado por el Gobierno Vasco.

En este documento se establece una guía para interpretar las respuestas al cuestionario y revelar la utilidad de dichos análisis y resultados para diferentes grupos de *stakeholders*, especialmente los directores de las ODCs y los *policy makers*. Cabe destacar que no son objeto de evaluación los integrantes individuales, la estructura técnica o el plan estratégico de la ODC, sino el conjunto de actividades desarrolladas en el seno de la política clúster. Se trata de evaluar la política clúster en sí, con el objetivo último de incidir directamente en las iniciativas que lancen las ODCs y el Gobierno Vasco en próximas ediciones del Programa. No se entiende, por tanto, la evaluación como control, sino como un proceso de aprendizaje y mejora, para que oriente en la gestión, tanto de la política clúster en su totalidad como en la puesta en práctica de dicha política en las diferentes ODCs a través de sus planes de acción.

LABURPENA

Gainerako politika publikoetan bezala, kluster politikaren kasuan ere badago interes orokor bat ebaluazio metodoak garatzeko eta aplikatzeko, politika bertan identifikatzen diren erronka berrietara moldatu ahal izateko. Kluster politikei dagokienez, politika horien ezarpena eta garapenaren eraginkortasuna ebaluatzeko aztertu beharreko alderdietako bat da Klusterren Antolakunde Dinamizatzaileen (KAD) jarduera bera eta honek garapen ekonomikoarekin duen lotura frogatzea da.

KADek eskaintzen dituzten kluster lankidetza zerbitzu eta ekintzak eta hauek enpresen lehiakortasun parametroetan duten eragina erabiltzaileek nola hautematen dituzten ulertzeko, "Erabiltzailearen ahotsa" izeneko galdetegia prestatu zuen SPRI-k (Eusko Jaurlaritza). Eta galdetegia Eusko Jaurlaritzak finantzatutako Kluster Laguntza Programaren barruan KADek eskaintzen dituzten lankidetza zerbitzuen eta ekintzen erabiltzaileek erantzun zuten.

Dokumentu hau galdetegiko erantzunak interpretatzeko eta alderdi interesdunentzako (batez ere KADetako zuzendariak eta politika arduradunak) erantzunen eta emaitzen erabilgarritasuna jasotzeko gida bat da. Kontuan izan behar da ez direla ebaluazio honen helburu KADetako kide indibidualak, egitura teknikoa edo KADaren plan estrategikoa, baizik eta kluster politikaren barruan egiten diren jarduera multzoa. Helburua kluster politika bera ebaluatzea da, programaren etorkizuneko edizioetan KADek eta Eusko Jaurlaritzak abiarazitako ekimenetan zuzenean eragiteko. Beraz, ebaluazioa ez da kontrol gisa ulertzen, baizik eta ikasteko eta hobetzeko prozesu gisa, bai kluster politikan bere osotasunean eta baita KAD desberdinetan ekintza-planen bidez politika hori aplikatzerakoan beren kudeaketa gidatzeko.

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PREFACE

Since the early 1990s, the activities of the Basque Government have included a cluster support policy. And this has represented a key policy for the support and improvement of the competitiveness of the Basque industrial framework through cooperation among firms; the Basque Science, Technology and Innovation Network (RVCTI); academia and the government. Fostering this cooperation has been the specific mission of cluster management organisations (CMOs), which the policy has supported with technological and financial resources.

Orkestra and experts have been studying the evaluation of the policy and the performance of the CMOs throughout this period, publishing studies which are listed at the end of this publication. Although improvement in indicators of competitiveness must be attributed to a number of causes – internal to both firms and the market, as well the support of various public policies – it has been demonstrated that firms which are part of CMOs report higher rates and variations in exports, R&D&I, increases in turnover, and jobs than firms which are not members of these organisations and firms as a whole. There is also a general consensus, a perception, among stakeholders of the positive impact of CMOs.

With 'The User Voice', we set ourselves the task of going one step further and contributing to an evaluation which will serve to improve and reorient the annual strategies and action plans implemented by CMOs, which are analysed and supported by cluster policy. To this end, the opinions of CMO member firms are the raw material for this paper.

The idea was not so much to obtain a rating in terms of a score from 1 to 10 or high, medium, low. With the survey presented in 'The User Voice', we have captured the firms' needs and the potentialities of the projects and activities sponsored, and the services provided by each CMO to support them. This information provides guidance for considering the annual action plans of the CMOs for 2019 and subsequent years.

We included the question of whether the resources the CMO allocates to each activity and service should be increased, maintained or decreased. The purpose of this is to establish a connection with regard to the expectations for improving the services they expect to receive and the resulting increase or decrease in the contributions and total resources provided to the CMOs by firms and other financial stakeholders.

We hope to continue this process and make it a regular exercise every two or three years. New adjustments and improvements will be incorporated into the process, along with tools to boost significance and reduce complexity. Extending the territory covered beyond the Basque Country and the possibility of international comparison will also be an interesting development.

I would like to offer my most sincere thanks for the support and willingness of the heads of the CMOs and the team at ORKESTRA and SPRI, who have had faith in and worked on all stages of this initiative – design, pilot studies, implementation, analysis and conclusions – with enthusiasm, patience and perseverance.

Aitor Urzelai Inza

Director General, SPRI Group

EXECUTIVE SUMMARY

As with other public policies, in the case of cluster policy, there is a general interest in developing and applying evaluation methods, with the aim of learning and adapting the policy to the new challenges identified through those processes. Despite this interest and need, evaluating cluster policy presents significant challenges when seeking to measure and define the impact of these policies on competitiveness. Among the key aspects to be analysed is the activity of cluster management organisations (CMOs) in order to test the relationship between this activity and greater economic development. In response to the lack of research into the impact of CMOs, Orkestra and SPRI (Basque Government) have experimented with different methodologies and techniques, also relying on the activities of the TCI Network Cluster Evaluation Working Group. Among these is the creation of a questionnaire titled 'The User Voice', with the specific aim of better understanding how the cluster cooperation services and actions offered by the CMOs are perceived by users, and their impact on the parameters of firms' competitiveness.

This document analyses and interprets the responses to the questionnaire, completed by members of the CMOs that are served by the Basque Country's Cluster Support Programme. Highlights among the aggregate results of this process include the following:

- Companies feel that the 13 areas of cooperation which are the focus of CMO activity – and are included in the annual activity plans prepared and implemented by the CMOs within the framework of cluster policy – are important or potentially important. Of particular note is the area of cooperation related to 'Fostering relationships among cluster members', ranked highly for all the CMOs analysed in the Basque Country. This demonstrates the importance of networking, of getting to know each other, of approaching others, etc. This being the very reason for the existence of the CMOs, it would seem to indicate that firms participate in CMO activities for the right reason. At the opposite extreme, survey participants assign less importance to 'Joint procurement and purchasing' and 'Supply chain development (procurement, production, assembly/installation, distribution and logistics)'.

- In general, the areas of cooperation assigned greater importance are considered those in which the CMO should increase its involvement and resources, and the areas assigned lesser importance are also considered those to which less involvement and resources should be allocated.

- This provides guidance regarding what CMOs should do in the future, which type of activities they should make the focus of their actions, based on the opinion of CMO users. To this end, the following were identified: (1) priority areas of cooperation ('Relationship between cluster members', 'Talent', 'Strategic forecasting', and 'New customers and markets'); (2) areas to be tackled but not as urgently ('Investment and financing', 'New processes and products', and 'Cluster visibility'); (3) areas with a good scope in which the current level of involvement should be maintained ('Marketing', 'Product and process sustainability', 'Firm strategy', 'Supply chain', and 'Standards, rules and regulations'; (4) areas in which involvement and resources should be reconsidered, they should not continue working, or which should be supported differently ('Procurement').

- We have found that the majority of users perceive the impact of cluster cooperation on the different parameters of firms' competitiveness to have been moderate or low over the past five years. And they expect a somewhat more positive impact for the next five years.

- Although firms feel that it is difficult to quantify and attribute an impact on variables of competitiveness to cluster cooperation, they perceive the intangible benefits of cooperation: they report a high degree of satisfaction with the activities of the cluster group. The data also indicate that the CMOs as a whole possess a high degree of social capital, as firms believe that there is a shared vision within the cluster of its challenges and strategic aims, they feel part of the cluster, they view other members of the cluster as being open to collaboration on seeking solutions to common challenges, and they contact the cluster to seek a solution to a challenge that they cannot solve on their own within the firm.

In this process carried out with the 17 Basque CMOs, the evaluation should be understood as a tool for learning and strategic improvement, to guide the management of both cluster policy as a whole and the implementation of said policy in the different CMOs through their action plans. Thus, the personalised reports supplied to the CMOs provided information which allows them to reflect on the situation in the cluster and act accordingly. These reports also provide guidance for considering the annual action plans of the CMOs for 2019 and subsequent years. The results and conclusions of this process are also being used by the SPRI, in collaboration with the CMOs, to set up programmers and initiatives to respond to the needs identified through the same (actions aimed at reinforcing technological capacity, integrating the Sustainable Development Goals (SDGs) into the strategies of the CMOs and their member firms, among other things).

In order to see the impact of this first data collection and subsequent reflection by the different CMOS – whose conclusions were incorporated into the action plans of the CMOs and the actions and initiatives implemented by SPRI – we need to monitor the different indicators. Periodically collecting and analysing data will make it possible to do this monitoring and evaluate the potential impact of actions implemented in the CMO action plans on the actions and initiatives implemented by SPRI. Administering the questionnaire 'The User Voice' in clusters from other regions will also make it possible to learn from best practices by comparing results at the international level.

1 INTRODUCTION

Economic activity is geographically concentrated in clusters of firms and other stakeholders engaged in related activities (research or specialised training centres, government agencies, etc.). Policies aimed at strengthening the competitiveness of these clusters are an important element of competitiveness policies in many countries and regions, policies that are often based on support for intermediary institutions that drive collaboration within the clusters as a complement to competition.

Together with Catalonia and Scotland, the Basque Autonomous Community (Basque Country) was among the pioneering regions in setting up a cluster-based competitiveness policy. Although some changes to adapt it to the situation in the clusters have been made in this policy since it was implemented in the early 1990s, the Basque Country continues to have a cluster policy, which is one of the main foundations of the Basque Government's competitiveness policy. Throughout this period, the Basque Country's cluster policy has been implemented by creating and supporting cluster management organisations (CMOs). The organisation and operation of these institutions have also evolved. At the time of this study, 17 CMOs were supported by the Basque Government's cluster policy.[1]

As with other public policies, in order to optimise the use of limited public resources, in the case of cluster policy, there is also a general interest in developing and applying evaluation methods, with the aim of adapting the policy to the new challenges identified through those evaluation processes. Despite this interest and need, from both an academic research and practical perspective, evaluating cluster policy presents significant challenges when seeking to measure and define the impact of these policies on competitiveness. These challenges include the methodological difficulties involved in measuring the intangible impact of fostering collaboration, as well as the wide variety of policies employed and the lack of relevant data (Aranguren et al., 2014; Maffioli et al, 2016; Schmiedeberg, 2010; Smith et al., 2020; Wilson, 2019). Lastly, the challenges involved in this evaluation may even lead us to question cluster policies as we are unable to effectively demonstrate their impact.

To evaluate the efficiency of implementation and development of these cluster policies, one of the aspects to be analysed is the activity of the CMOs, testing the relationship between this activity and greater economic development. In an attempt to move forward with research and practice on the evaluation of cluster policy, Orkestra and SPRI (Basque Government) have worked together to experiment with different methodologies and techniques, also relying on the activities of the TCI Network Cluster Evaluation Working Group.[2] Among these methodologies is the creation of a questionnaire titled 'The User Voice',[3] with the specific aim of better understanding how the cluster cooperation services and actions offered by the CMOs are perceived by users, and their impact on the parameters of firms' competitiveness. This questionnaire is divided into five main parts which collect information about different aspects:

[1] In this document, we use the term 'cluster management organisation' (CMO) to refer to the collaborative institutions or cluster organisations that are supported by the Basque Government's cluster policy. For its part, the term 'cluster' refers to the 'natural cluster' that encompasses both CMOs and the firms and other stakeholders making up the cluster in the territory, and which are supported by the cluster cooperation actions provided by the CMOs.

[2] See: www.tci-network.org

[3] See Appendix 1.

- PROFILE of the firm
- Firm's level of INVOLVEMENT in CMO activities
- AREAS OF CLUSTER COOPERATION to improve the firm's competitiveness
- IMPACT of cluster cooperation on the firm's parameters
- PERCEPTION of cooperation within the cluster

In order to carry out this learning-focused evaluation process, the CMOs and SPRI asked the users of the cooperation services and actions offered by the CMOs as part of the Cluster Support Programme funded by the Basque Government to complete the aforementioned questionnaire. In the pilot study, the questionnaire was sent to users of four CMOs. When the responses were received, they were analysed, and a workshop was held with representatives of these CMOs to obtain their feedback on the questionnaire and the information gathering process. Following this, some changes were made in the questionnaire, and users of the cooperation services and actions provided by the other CMOs were asked to respond. The preliminary analyses of the responses received, and the final conclusions of the analyses were presented and discussed at two workshops held with representatives of the CMOs. Additionally, a personalised report was prepared and shared with each CMO, comparing their results with the aggregate results.[4]

This document has two purposes: One, to provide a guide to analyse and interpret the responses to the questionnaire, while also presenting what use these analyses and results can be to different groups of stakeholders, especially the management teams of the CMOs and policy makers. Two, to provide an example of analysis and interpretation, it includes the main aggregate results of this process and an evaluation of these.

It should be noted that the individual members, the technical structure and the strategic plan of the CMO are not being evaluated in this process, but rather the set of activities carried out within the cluster policy. The aim is to evaluate the cluster policy itself, with the ultimate objective of directly influencing the initiatives launched by the CMOs and the Basque Government in future editions of the programme. Therefore, here evaluation should not be understood as monitoring, but rather as a process of learning and improvement, to guide the management of both cluster policy as a whole and the implementation of said policy in the different CMOs through their action plans.

In preparing this document, we have received technical support from the heads of SPRI and the Basque Government, Orkestra – Basque Institute of Competitiveness, and contributions from the persons responsible for managing the CMOs in the Basque Country. Their participation in the activities and working groups at Basque Cluster Day 2018 and their contributions as part of subsequent workshops and breakout sessions have been extremely valuable in putting together this guide.

[4] Appendix 2 shows an example of the report sent to a CMO (anonymised).

2 GUIDE TO ANALYSING AND INTERPRETING THE DATA

Following some preliminary remarks on the level of participation and percentage of response to the questionnaire, this section analyses the different parts of 'The User Voice' questionnaire. For each part, we specify what is being asked or measured, how to interpret the responses, and what use these analyses and results can be to different groups of stakeholders, especially the persons responsible for the CMOs and cluster policy. In addition, to provide an example of analysis and interpretation, each section includes the main aggregate results of this process and an assessment of these.

2.1 Level of participation

The **level of participation**, measured as the percentage of responses received in relation to the total number of user organisations in each CMO, is an important parameter, as it can be a preliminary indicator of firms' **awareness**, degree of **engagement** and **commitment** with regard to the CMO.

Table 1 Level of participation

CLUSTER MANAGEMENT ORGANISATION	No. responses	No. members*	% participation
Aeronautics (HEGAN)	39	58	67%
Paper (CLUSPAP)	22	33	67%
Environment (ACLIMA)	43	76	57%
Bio-Health (BHC)	21	39	54%
Audiovisual, Content, etc. (EIKEN+...)	45	84	54%
Railway (MAFEX)	16	30	53%
Energy (CLUST. ENERGIA)	64	128	50%
Foundries (AFV, FUNDIGEX)	32	77	42%
Trans. Mobility and Logistics (BCLM)	80	224	36%
Habitat and Furniture (HABIC)	32	96	33%
Construction (ERAIKUNE)	21	67	31%
Steel (SIDEREX)	13	44	30%
Food (CAE)	23	85	27%
Automotive (ACICAE)	43	189	23%
Maritime Industry (FMV)	30	139	22%
EICT and Knowledge (GAIA, AVIC, ...)	45	242	19%
Advanced Manufacturing (AFM/ESKUIN/ADDIMAT/AFMEC)	28	175	16%
TOTAL	**597**	**1786**	**33%**

*Source: Compiled by authors. * PSEC 2018 Certified.*

Table 1 shows the level of participation for the 17 CMOs that were supported by the Basque Government's cluster policy in 2018. We can see significant variation in participation rates among the different CMOs, with 67% being the highest level of participation and 16% being the lowest. It is also noteworthy that those clusters which are in theory more powerful and established has lower participation, while other clusters which would seem to be made up of a more fragmented group had a higher level of participation.

Given this **variation in response level**, we need to the **reason** for this. Behind these figures, there appears to be some reason related to users' awareness, degree of engagement and commitment with regard to the CMO. It is essential for all stakeholders involved to be aware of and familiar with the role each and every one of them plays in the process of evaluating the policy, as the aim of this evaluation is to tease out learnings which will help to improve the activities of CMOs so that they have a greater impact on users' competitiveness.

In this regard, when interpreting the results, we must also take into account that there may be a certain positive bias in the responses, as it is possible that those who answer the questionnaire are the most active users and the ones who participate most in the CMO's different activities.

Another significant element in interpreting and trying to improve the survey response rate is that some CMOs already have their own survey. In these cases, it would be advisable to consider **integrating** the two **surveys**, adding specific questions for each CMO to 'The User Voice' or adapting the survey to the specific context of the CMO.

An additional analysis to be performed by the different CMOs would be a **comparison between the profile of the firms in the sample and the profile of the firms in the CMO as a whole**, based on the variables collected to describe the participating firms: jobs, value of production, level of internationalisation, R&D investment. This analysis would provide information about the representativeness of the sample and would help in the reflection on users' engagement with and commitment to the CMO mentioned above.

Box 1 summarises the questions to be analysed by the CMO's management team and board of directors regarding the level of participation:

Box 1: Survey participation level

- What is level of survey participation among CMO users?
    - Are there differences between the profile of the firms participating in the survey and firms in the CMO as a whole (size, level of internationalisation, etc.)?
- Is there a significant difference between the level of participation in the CMO compared to other CMOs? If so:
    - What might the reasons for this be?
    - If participation is lower, what could be done to increase it?
- How could 'The User Voice' be integrated into the CMO's other surveys to improve the response rate and adapt the survey to the specific context of the CMO?

2.2 Involvement

In the involvement section of the questionnaire, firms are asked about their level of participation in the CMO's different activities over the last two years. Specifically, it asks about six activities: (1) receive regular information (email, social media, news, newsletters, observatory, etc.); (2) participate in seminars, training activities and the like; (3) participate in CMO committees and working groups; (4) involved in carrying out specific R&D&I projects within the cluster; (5) participate in international activities (missions, trade shows and fairs, conferences, networks and the like); (6) part of the board of directors.

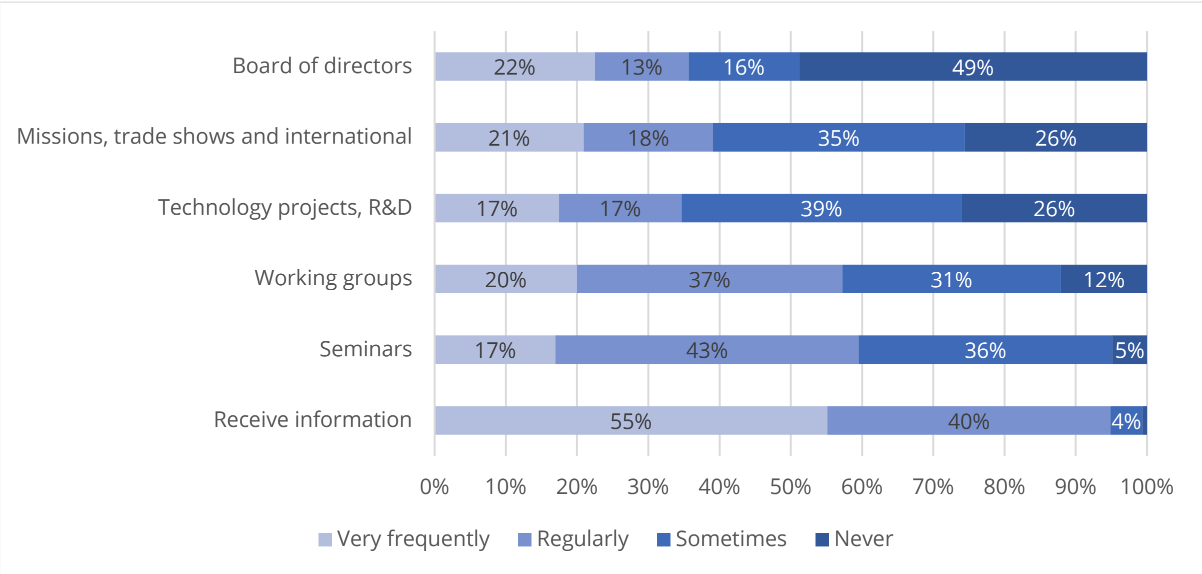
In the pilot study, the answers were given in terms of number of persons at the firm participating in each of the activities (0, 1–2, up to 5, up to 10, more than 10). However, given the difficulty of answering in these terms, it was decided to simplify the answer, using a four-level response: (1) never, (2) sometimes, (3) regularly, and (4) very frequently.

Within the part on involvement, the second section also asks users how much they agree with two statements relating to active participation in the initiatives presented within the cluster and whether the firm regularly proposes its own initiatives of interest to the cluster. The answer is divided into five levels, on scale from (1) strongly disagree to (5) strongly agree.

We start by analysing the responses to determine the **activities with higher and lower levels of involvement**, both within the cluster and in comparison with other clusters. Should there be differences in participation in these activities compared to the overall sample, it is necessary to investigate the reasons for this – especially in the event of lower participation than the overall sample – and suggest what action can be taken to increase participation. This analysis can be supplemented by an analysis comparing different groups of users within the same CMO – for example, by firm size – and studying whether there are differences between them in involvement in different activities. Should there be differences, it will be necessary to investigate the reasons behind this and suggest what action can be taken to reduce them.

Graph 1 shows involvement in different activities for the overall sample analysed. As expected, in general, level of participation is directly related to the **level of engagement** required by each type of activity. Thus, the 'receive regular information' activity is the one with the highest level of participation, and the 'part of the board of directors' activity is the one with the lowest level of involvement, due to both the level of engagement required by the activity and the fact that this activity is limited to a certain number of firms. However, we must take into account that the level of engagement required by each type of activity may vary considerably from one cluster to another. To give an example, from the information collected during the different activities carried out by the CMOs, some participants highlighted that, in their case, the engagement required to belong to a committee or working group might be much greater than that required to participate in international activities.

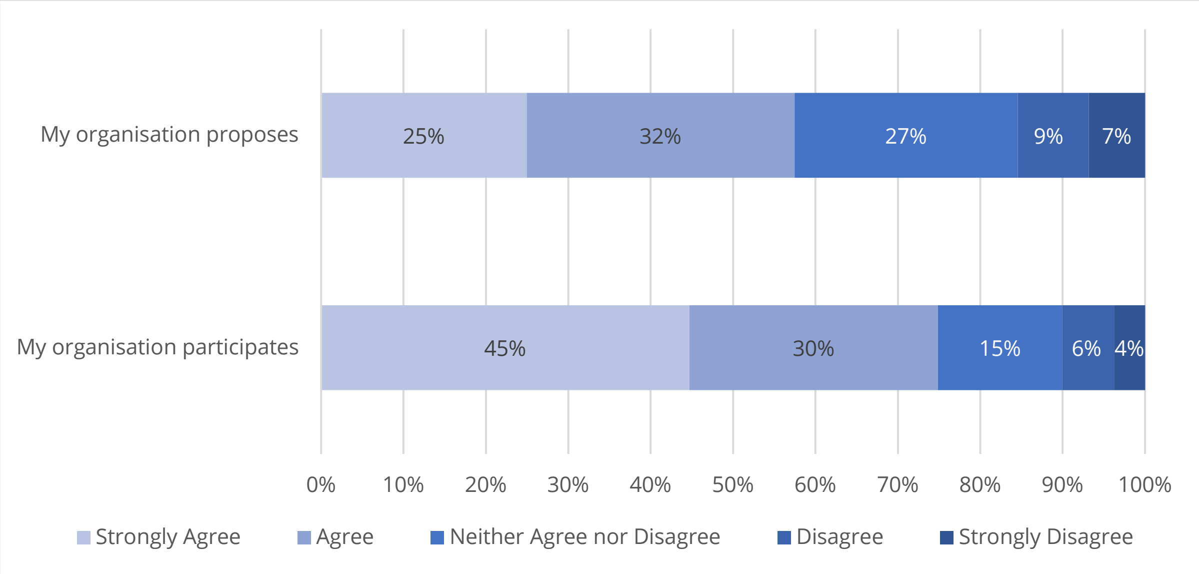
Graph 1 Involvement



Source: Compiled by authors.

As expected, the responses in Graph 2 point to higher **participation in the CMO's activities** compared to the level of **initiatives proposed**, as the latter is a more active type of participation, which requires greater engagement.

Graph 2 Participation and proposals



Source: Compiled by authors.

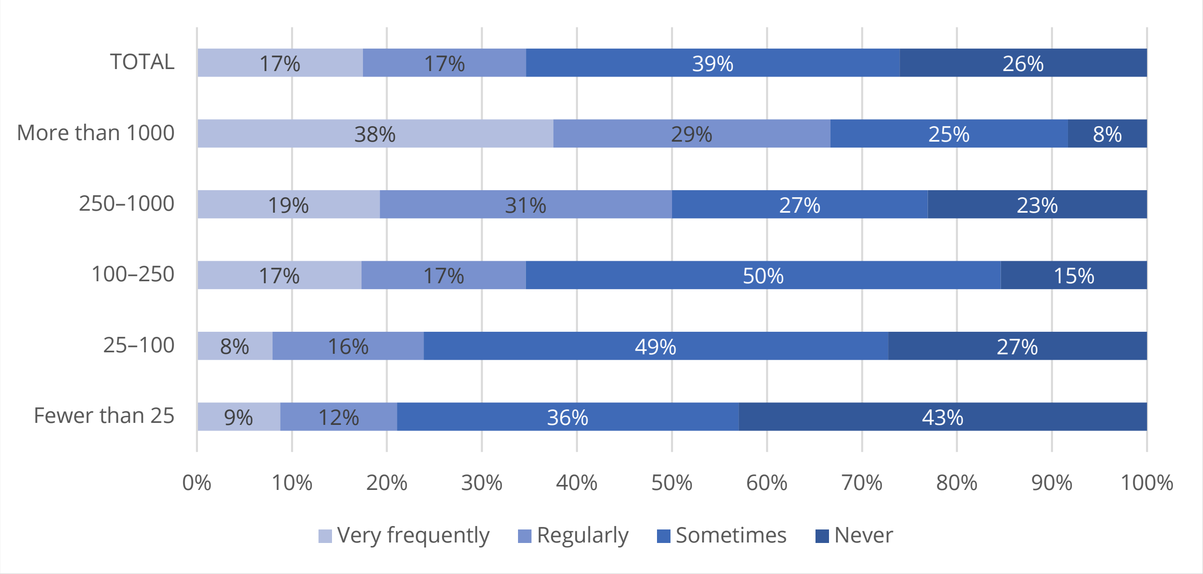
Having analysed the overall level of participation, we focused on three types of activities: (1) participation in committees and working groups, (2) R&D projects, and (3) international activities, as these are activities which require a certain level of engagement by users. Among these activities, the most noteworthy result is that participation in committees and working groups is higher than in R&D projects and internationalisation activities. One possible explanation for this may be that some firms participate in working groups more as observers than as proactive members. However, as mentioned earlier, in some cases, the involvement required to belong to a committee or working group can be much greater than that required to participate in international activities. Therefore, it would be interesting to analyse the different configurations and functioning of the committees and working groups in the different clusters.

Based on the qualitative comments collected in the questionnaire, it is possible to identify a number of factors which may explain user participation or lack thereof in the CMO's different activities, as well as how other aspects included in the questionnaire are rated. Noteworthy among these are the following:

- For many firms, **their length of time in the CMO**, how many years the firm has been a CMO member, is an important factor when it comes to explaining the level of involvement with CMO activities. Some recent members of the different CMOs explain/justify their low level of participation in these terms, also stating their interest in increasing it in some cases.
- Participation is also determined by the **resources** the firm has available. Small firm **size** and lack of **time** are reasons which numerous firms that are members of different CMOs mention to justify their limited participation in cluster activities. Likewise, some firms also state that due to their small size, what they receive from the CMO is more than what they can contribute.

  Analysis of the sample segmented by firm size also corroborates this. To give an example, Graph 3 shows the involvement of firms in R&D projects within the cluster. We can see higher participation in this type of activity among larger firms than smaller ones. While it is not the aim of this document to conduct a detailed analysis of the sample by firm size – and therefore, the breakdown by size is not included for the other activities on the questionnaire – it should be noted that in these cases, we also see differences in involvement depending on firm size, with lower levels or participation among the smallest firms. We may thus conclude that *cooperation readiness* is an important element of firms' engagement with CMO activities. A minimum level of resources and capacity is required for said engagement.

Graph 3 Development of R&D projects, by firm size



Source: Compiled by authors.

- The scope of the **sectors of activity** that make up the CMO is another aspect to be considered, in other words, how the cluster's **value chain** is defined within the CMO and which links in the chain the CMO focuses on. Thus, on some occasions, a given firm's greater or lesser affinity with the sectors, sub-sectors or value chains with greater weight in the CMO may be another reason for greater or lesser involvement.
- Likewise, if we see lower involvement, it is also worth asking if this lower participation is due to the fact that it is always the same users that participate. In this case, it would be necessary to analyse for example, if this is because the **type of activities** presented are focused on certain types of firms, if the requirements for participation pose a challenge for other firms, etc.

  In some specific cases, there may be a perception that the projects may be more focused on firms that are economic drivers or the same partnerships, underlining the need to take account of all the industries covered by the cluster, shifting to activities and projects in which other users can participate more actively, especially the smaller SMEs. CMOs thus face the challenge of managing the diversity among their members, establishing strategies that adapt to the different groups.[5] It is also necessary to think about the fact that each firm's own particular characteristics and possible expectations of the CMO differ. Therefore, with the available resources, it is not always possible to offer the personalised service each CMO would like to provide, and which the firm surely expects.

Box 2 summarises the questions to be analysed by the CMO's management team and board of directors regarding involvement:

[5] This need to manage diversity coincides with one of the main conclusions of the previous study on CMOs in the Basque Country conducted by Orkestra in 2009 (Aranguren et al., 2009).

Box 2: Involvement

- Which cluster activities have the highest and lowest level of involvement?
- Are there significant differences between involvement in the different CMO activities compared to other CMOs? If so:
  - What might the reasons for this be?
  - If involvement is lower, what could be done to increase it?
- Are there significant differences in involvement between different groups of users within the CMO, for example, by firm size? If so:
  - What might the reasons for this be?
  - What could be done to increase involvement among the groups with lower involvement?

2.3 Areas of cooperation

The 'areas of cooperation' section is the main part of the questionnaire, collecting information about 13 areas of cooperation. These are the main areas which are the focus of CMO activity – the same areas included in the annual activity plans prepared and implemented by Basque CMOs within the framework of cluster policy:

1. Strategic forecasting and knowledge of markets, products, services, technologies, procedures, etc.
2. Access to new customers and international markets
3. Supply chain development (procurement, production, assembly/installation, distribution and logistics)
4. Joint procurement and purchasing
5. Joint marketing and brand / product and service integration / joint projects and bids
6. Research and development of new processes and products
7. Product and process sustainability (energy efficiency, environmental impact, etc.)
8. Development of standards, rules and regulations
9. Promoting cluster visibility and awareness abroad
10. Fostering interaction among cluster members and getting to know each other
11. Attracting talent, developing human resources and specialised training
12. Attracting specialised investment and financing
13. Innovating and improving the firm's management and strategy

2.3.1. Importance

The aim of this sub-section of the survey is to measure how important cooperating with other firms in each of the areas selected is for the firm's competitiveness. To this end, we measure the importance each firm assigns to the different areas of cooperation identified, with three response options: (1) not very important or unimportant for us; (2) potential, it may be important for us to cooperate with other firms in the future; and (3) very important and urgent for us to cooperate with other firms.

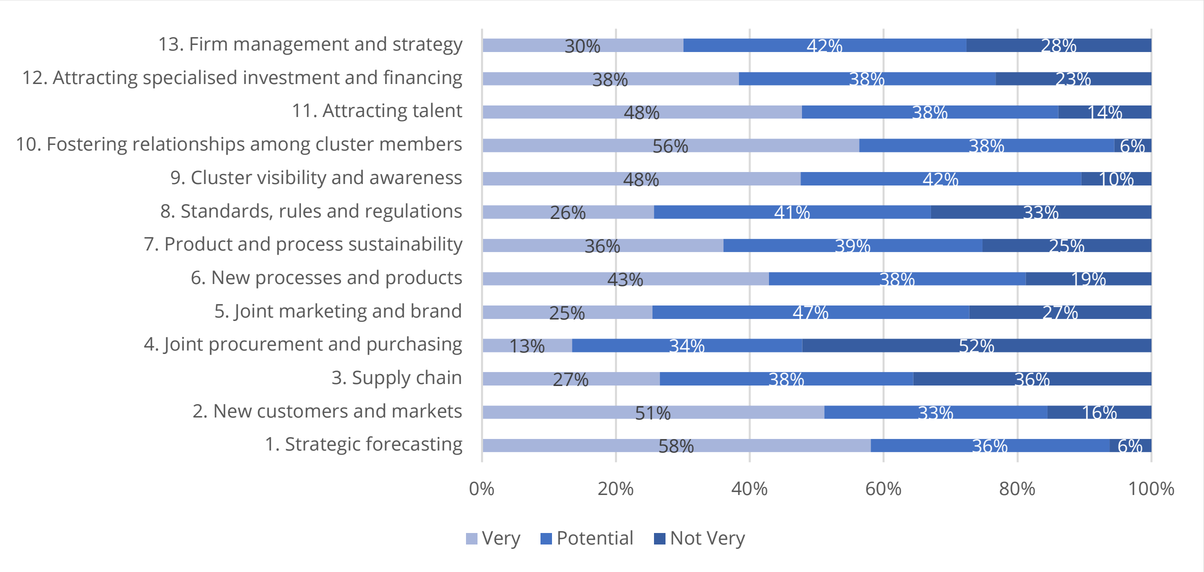
Based on the responses, it is possible to see which **areas of cooperation** survey participants assign **greater or lesser importance**, both in general and in the specific cluster. Once this has been determined, we must analyse the **logic** behind the results. For example, we might expect areas such as (10), 'Fostering relationships among cluster members', to be assigned a high level of importance, as they are directly linked to the very **reason for the CMO's existence**. For areas of cooperation to which members assign less importance, it is necessary to ask the reason for this: Are they areas of cooperation in which firms truly believe that the role of the CMO is not as important? Do firms believe these activities can be done better on their own than in cooperation with other cluster stakeholders? Is this an important area of cooperation, but given the situation in the cluster (e.g., a highly fragmented cluster), do they not see implementing it within the cluster as feasible?

After analysing the areas to which greater or lesser importance is assigned within the CMO, the next step is to **compare the results with those of other CMOs**. The first aim would be to determine whether the users of a specific CMO generally assign greater or lesser importance to different areas of cooperation than the overall sample. Secondly, it should be determined if the areas to which greater or lesser importance is given are the same in the overall sample and the particular cluster. And if there are differences, what reasons might explain these.

Graph 4 shows the results of the analysis of the importance assigned to the areas of cooperation for the overall sample in the Basque Country. We can see that generally speaking, firms perceive cooperation **activities** sponsored or carried out by CMOs as **important or potentially important**. This may be somewhat expected, especially when the 'potential' importance of the activities is included as a response, as firms do not want to exclude any activity on which the CMO might be working at a given moment from the list of activities.

In the comparison of the importance assigned to the different areas of cooperation, we can see that area of cooperation (10), '**Fostering relationships among cluster members**', is ranked highly in all the CMOs analysed in the Basque Country. This shows the importance of networking, of getting to know each other, of approaching others, etc. This being the very reason for the existence of the CMOs, it would seem to indicate that firms participate in CMO activities for the right reason. At the opposite extreme, survey participants assign less importance to (4) 'Joint procurement and purchasing', and (3) 'Supply chain development (procurement, production, assembly/installation, distribution and logistics)'.

Graph 4 Areas of cooperation - Importance

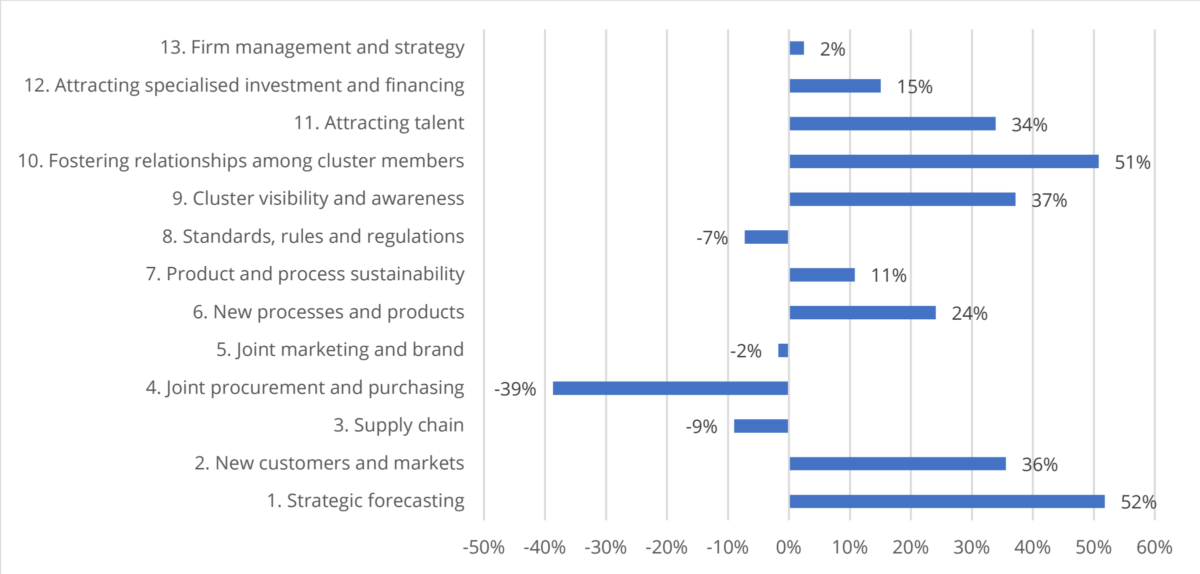


Source: Compiled by authors.

2.3.2. Consensus with regard to importance

To complete the analysis, in Graph 5 we calculate the difference between users who assign high importance and those who assign low importance to each area of cooperation, thus identifying those areas of cooperation where there is more or less consensus in user responses regarding the importance of the different areas of cooperation. Of particular note is that in the case of (1) 'Strategic forecasting' and (10) 'Fostering relationships among cluster members', the percentage of users who assign them high importance is much greater than those who assign them low importance, with a difference of more than 50 percentage points. At the other extreme is (4) 'Joint procurement and purchasing', where the users who assign low importance to this area considerably exceed those who assign it high importance.

Graph 5 Consensus in the importance assigned (high–low) by area of cooperation



Source: Compiled by authors.

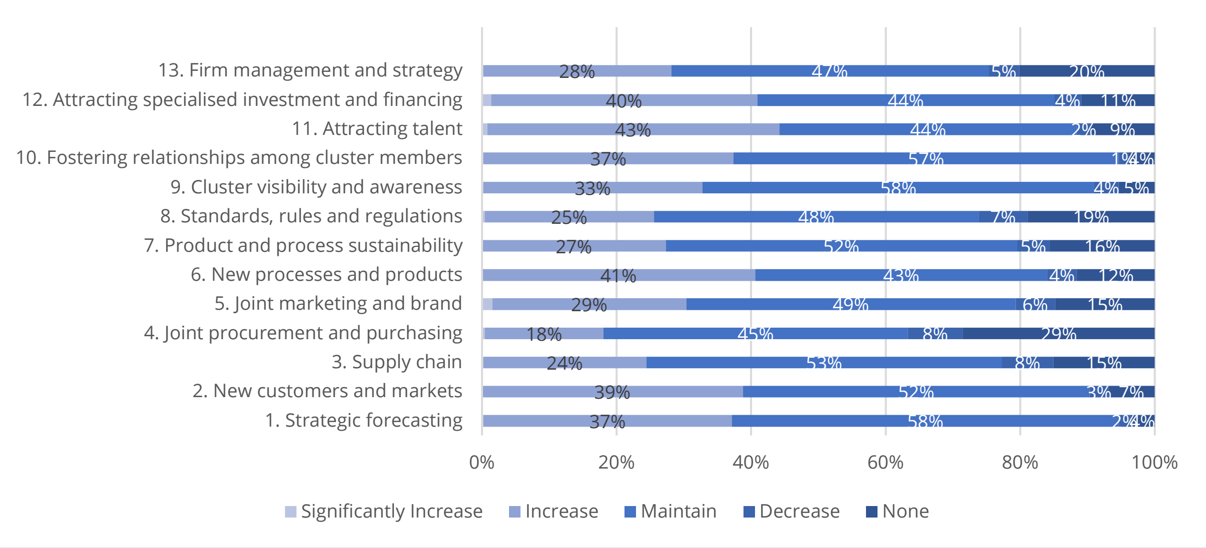
2.3.3. Involvement and resources

Within the part on areas of cooperation, the second thing asked is the role the CMO should play in each of them. During the pilot study, users were asked about the current role and the ideal role of the CMO. In each case, a distinction was made among: (1) not involved (no involvement of the CMO or not necessary), (2) secretary (the CMO occasionally support/assists the firms leading the project), (3) facilitator (the CMO directs the proposals, facilitating the communication and participation of firms and stakeholders), and (4) leadership (the CMO takes the initiative, drives and is key to sponsoring the project). However, given the complexity of the questions, both in answering and when interpreting the results, the decision was made to simplify the responses, asking if the **involvement and resources of the CMO** in each area of cooperation should be **significantly increased, increased, maintained, decreased, or there should be no involvement (none)**.

Based on the responses, it is possible to see which **areas of cooperation** users believe the CMO's involvement and resources should be increased or decreased. And as in the case of importance, we can analyse the **logic** behind the results. Thus, after analysing the areas in which users feel there should be greater or lesser variation in involvement and resources, the next step is to **compare the results with those of other CMOs**. The first aim would be to determine whether the desired increase or decrease in the CMO's involvement and resources for the different areas of cooperation generally felt by the users of a specific CMO is more or less than in the overall sample. Secondly, it should be determined if the areas where it is felt that the involvement and resources should be increased or decreased the most are the same in the overall sample and the particular cluster. And if there are differences, what reasons might explain these.

As shown in Graph 6, from the responses in the overall sample, it is possible to conclude that CMOs should **maintain their current role or adopt a somewhat more active role** than currently in the different areas of cooperation.

Graph 6 Areas of cooperation – Involvement and resources



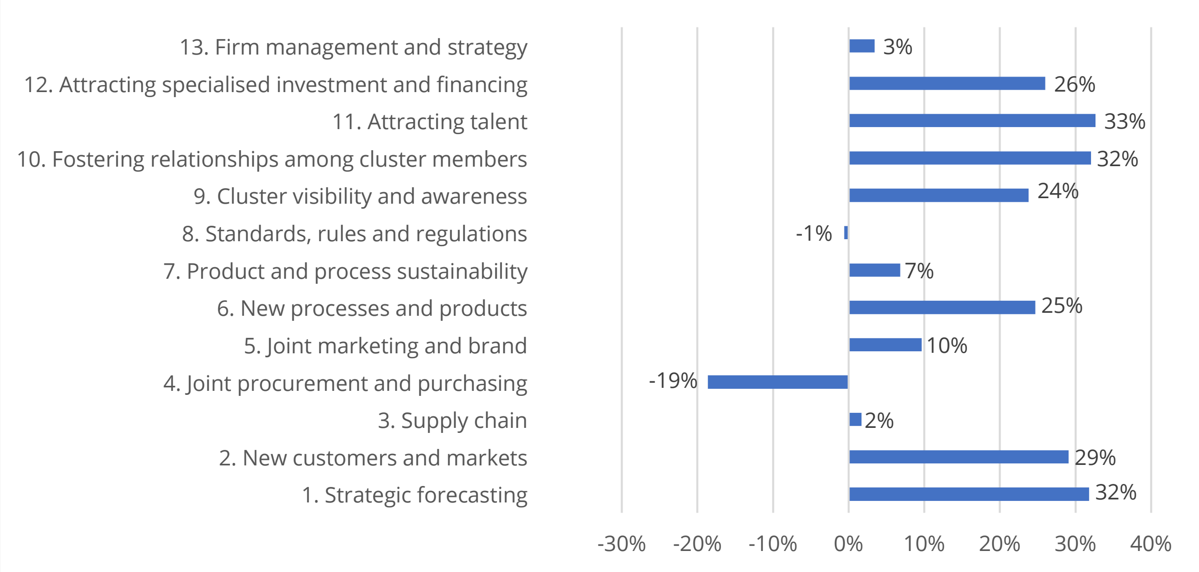
Source: Compiled by authors.

2.3.4. Consensus with regard to involvement and resources

To complete the assessment, it is possible to analyse which areas of cooperation have the highest **net balances** in terms of resources to be allocated, this being understood as the difference between 'increase' (or 'significantly increase') and the sum of 'decrease' and 'none', thus identifying those areas of cooperation where there is more or less consensus in user responses regarding involvement and resources. This analysis can be conducted at both the overall and CMO level, comparing the results for each CMO with the results for the overall sample or other CMOs, identifying whether the areas of cooperation with higher or lower net balances for the CMO are the same in comparison with others, and trying to determine the reasons explaining the existing differences.

Graph 7 shows the net balances by area of cooperation. We can see that except in the case of (8) 'Standards, rules and regulations' and (4) 'Joint procurement and purchasing', the net balances are positive. Of particular note are the following areas: (11) 'Attracting talent', (10) 'Fostering relationships among cluster members' and (1) 'Strategic forecasting', where the differences between those who feel that involvement and resources should be increased and those who consider that they should be decreased, or no resources should be allocated to this area exceed thirty percentage points. This indicates a high degree of consensus among users regarding the suitability of increasing the involvement and resources allocated to this area of cooperation. However, CMOs have **limited resources** and must prioritise. Therefore, in this regard, the CMO's governing bodies may ask themselves if the member firms would be willing to agree to an additional contribution of resources to finance this more active role by the CMOs.

Graph 7 Consensus on involvement and resources (increase–decrease/none) by area of cooperation



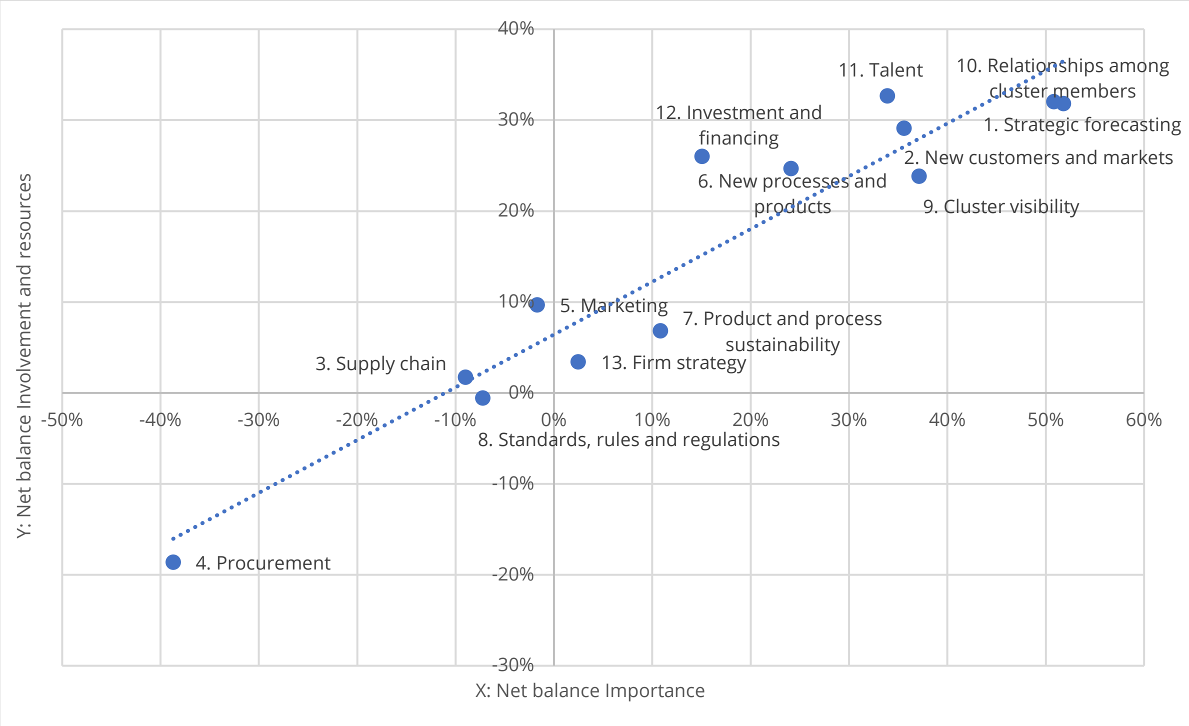
Source: Compiled by authors.

Additionally, of special note among the comments made by participants is the request by users to strengthen the training activities at the different CMOs, including training for the unemployed in strategic areas for the member firms, worker training, and executive-level training.

2.3.5. Relationship between importance and resources

Based on these results, both overall and for the specific cluster, it is also possible to establish a **relationship** between the **importance** assigned to each of the areas of cooperation and the **involvement and resources** users feel should be allocated to each of the areas of cooperation. To provide an example, it is possible to draw a graph like the one shown below (see Graph 8). In this graph, the values on the horizontal axis (X) correspond to the net balance for the importance assigned to the areas of cooperation, in other words, the difference between users who assign it high importance and low importance. For their part, the values on the vertical axis (Y) correspond to the net balance for involvement and resources, in other words, the difference between significantly increase and increase, on one hand, and decrease or none on the other. Based on the points where the different areas of cooperation are situated on the graph and the trend line, we can see a clear relationship between the two variables analysed. Thus, the areas of cooperation assigned higher importance are considered those in which the CMO should increase its involvement and resources. In contrast, the areas assigned lower importance are also considered those to which less involvement and fewer resources should be allocated. However, these results should be interpreted with caution, as the survey provides information regarding whether or not involvement and resources should be increased, but the starting point is not known. No information is collected on how many resources are currently allocated to each area of cooperation.

Graph 8 Areas of cooperation – relationship between importance & involvement and resources



Source: Compiled by authors.

Based on the above graph, it is possible to identify various zones and action areas:

- **Zone 1**: Areas of cooperation to which users assign high importance and feel that involvement and resources should be increased. These are therefore priority areas of cooperation. In this specific case, these would be the following areas of cooperation: 10. Relationship between cluster members, 11. Talent, 1. Strategic forecasting, and 2. New customers and markets.
- **Zone 2**: Areas of cooperation to which users assign high importance and feel that involvement and resources should be increased, but to a lesser extent than in Zone 1. These are therefore areas of cooperation which it is important to focus on, but not as urgently. In this specific case, these would be the following areas of cooperation: 12. Investment and financing, 6. New processes and products, and 9. Cluster visibility.
- **Zone 3**: This is the zone in the centre of the graph, where we can see a balance between users' perceptions: they feel that these areas of cooperation have a good scope in terms of involvement and resources, given the importance assigned to them. Therefore, these are areas of cooperation where the current level of involvement should be maintained. In this specific case, these are the following areas of cooperation: 5. Marketing, 7. Product and process sustainability, 13. Firm strategy, 3. Supply chain, and 8. Standards, rules and regulations.
- **Zone 4**: These are areas of cooperation to which users assign less importance and feel that the involvement and resources allocated to these areas of cooperation by the CMO should be lower. These are therefore areas on which the CMO may consider not continuing to work, or if applicable, determine if they may be of interest for some users and see if they can be supported another way. In the case of users of Basque CMOs, the area of cooperation in this zone is 4. Procurement.

2.3.6. Areas of cooperation summary

The part on areas of cooperation is the core of the survey, as it provides **guidance** regarding what CMOs should be doing in the **future**, which type of activities they should make the focus of their actions, according to the opinion of the different CMO users. Specifically, the importance assigned to each area of cooperation and the involvement and resources to be allocated to the different areas of cooperation by each CMO may lead to reflection on various aspects. Box 3 summarises the questions to be analysed by the CMO's management team and board of directors, as well as policy makers, regarding the areas of cooperation:

Box 3: Areas of cooperation

- Which are the areas of cooperation to which users assign greater or lesser **importance**?
  - Are the areas of cooperation to which users assign greater importance directly linked to the reason for the existence of the CMOs?
  - In the case of areas of less importance:
    - Are they areas in which firms truly believe that the role of the CMO is not as important?
    - Do firms believe these activities can be done better on their own than in cooperation with other cluster stakeholders?
    - Is this an important area of cooperation, but one for which they do not see implementing it within the cluster as feasible?
- In comparison with other CMOs:
  - Do the users of this CMO generally assign greater or lesser importance to different areas of cooperation than the overall sample?
  - Are the areas assigned greater or lesser importance the same in the overall sample and this cluster in particular? What reasons might explain these differences?
- Which areas of cooperation have the highest net balances in terms of **involvement and resources** to be allocated, those in which the difference between 'increase' (or 'significantly increase') and the sum of 'decrease' and 'none' is greater?
- In comparison with other CMOs, are the areas of cooperation with higher and lower net balances the same? What factors could explain the differences?
- Do these results coincide with the CMO's priorities? Are any of the results surprising or noteworthy?
- Is there a need to rethink the CMO's activities or areas of cooperation?
- Should the areas of cooperation be adapted to the situation in each CMO? Should the areas of cooperation on which each CMO focuses be different, for example, based on the CMO's main type of activity, or what phase in the life cycle the CMO is in?
- Should CMOs adapt to their users' different speeds? Are the priorities of different types of firms different, for example, depending on firm size or value chain?

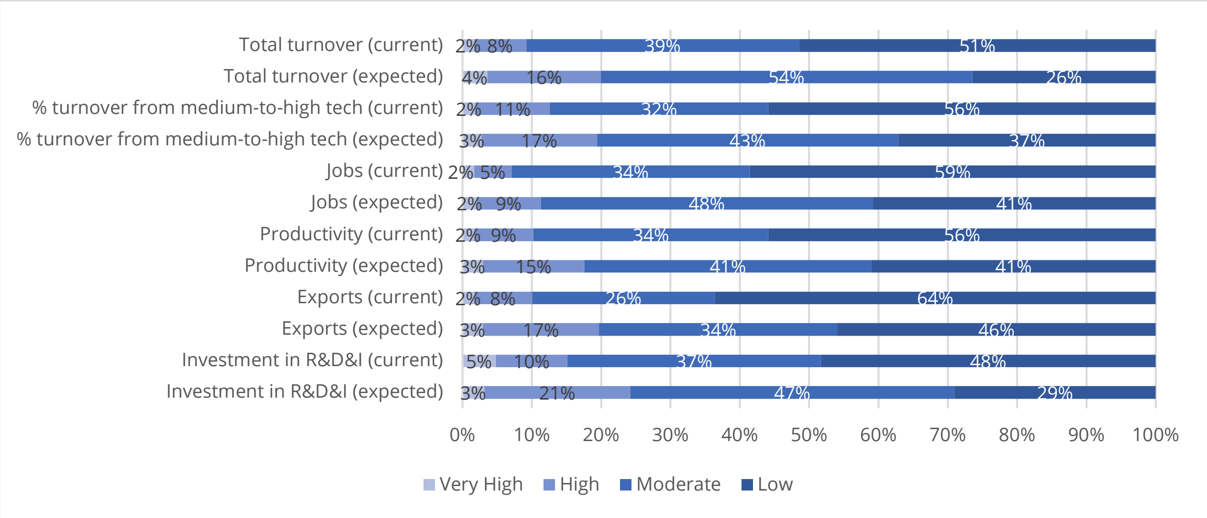
2.4 Perception of the impact of cluster cooperation on the firm's competitiveness

The next part of the survey analyses the perception of the impact cluster cooperation has on the firm's different parameters of competitiveness. Specifically, it analyses the perception of the estimated impact over the last 5 years and the expected impact over the next 5 years on: (1) total turnover, (2) % turnover from medium-to-high tech, (3) jobs, (4) productivity, (5) R&D investment, and (6) exports. This is measured on a four-level scale: low, moderate, high and very high.

Based on the data collected, it is possible to analyse the differences between perceptions of past impact and expectations of impact in the near future. How do the results for the CMO compare to the rest? For example, is there a CMO with a worse perception of past impact than the overall sample, but higher expectations for the future than the rest? This would indicate the actions being taken by the CMO are heading in the right direction, and although they have not borne fruit, they are expected to start doing so in the future. Exports and R&D&I being the variables on which CMO activities probably have the most direct impact, it would also be possible to analyse whether there is a perception that the impact (both past and expected) on these variables of competitiveness is greater than on the rest.

Graph 9 shows the information on the perceptions firms have of the impact over the last five years and expectations for impact in the next five years for the six variables of competitiveness considered. We can see that the majority of users perceive the impact of cluster cooperation on the different variables of competitiveness to have been moderate or low. And they expect a somewhat more positive impact in upcoming years. Although this pattern of responses is repeated for each of the six variables of competitiveness included, we can see certain differences among them. Thus, in terms of impact over the last five years, the areas where fewer users feel that the impact has been very high or high, and more users feel that the impact has been low, are jobs and exports. On the opposite end, the most noteworthy variable is R&D&I, which received the highest number of responses in the 'very high' and 'high' categories, and the lowest number of responses in the 'low' category. As regards expected impact, we can see that the highest expected impact is on the R&D&I and turnover variables, whereas it is jobs for which the smallest percentage of users expect a high or very high impact and a larger percentage of users expect a low impact.

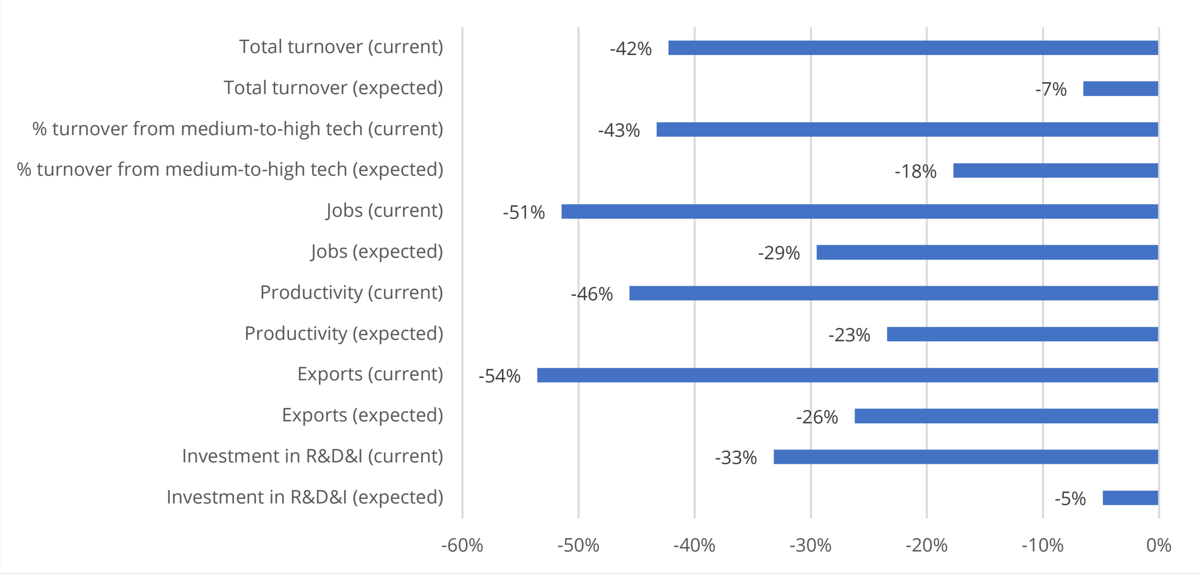
Graph 9 Perception of impact on competitiveness



Source: Compiled by authors.

To supplement the previous analysis, in Graph 10 we have calculated the differences between the percentage of users who feel that the impact on each variable of competitiveness is very high or high and those who feel that it is low. In line with the comments in the preceding paragraph, we can see that users have the most positive perception regarding the impact on R&D&I investment, for both the last five years and the next five years. In contrast, the jobs and exports variables stand out given the larger percentage of users who feel that the impact is low, compared to those who feel the impact is very high or high. The perception of the impact on exports is particularly noteworthy, as due to the nature of CMO activities, it might be expected that this variable would be the one on which, together with R&D&I, they had the most impact. In the comparison between the (perceived) impact over the last five years compared to the expected impact in the next five years, the variation in the turnover variable is particularly noteworthy, with a very considerable drop in the difference between those who perceive a very high or high impact and those who consider it to be low.

Graph 10 Consensus in perceptions on impact (high–low)

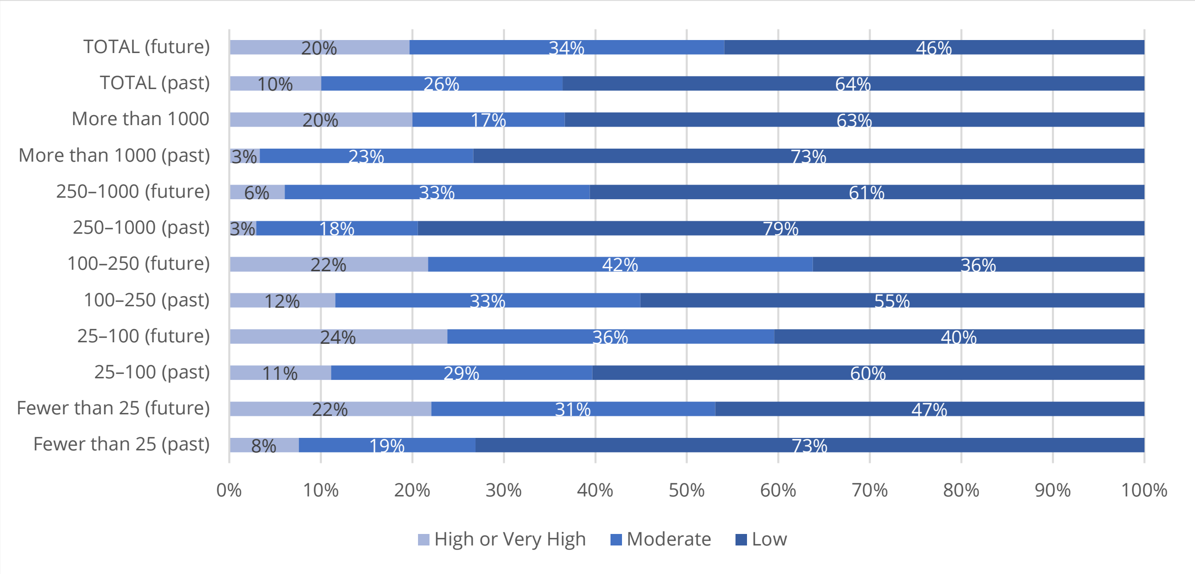


Source: Compiled by authors.

2.4.1. Perception according to firm size and length of time in the CMO

In the analysis of the sample segmented by firm size, the differences between the different groups are particularly noteworthy. To provide an example, Graph 11 shows the perception of past impact and future impact on exports by firm size. In both this case and the case of other variables such as turnover and jobs, we can see certain differences in perceptions regarding impact, both past and future, depending on firm size. Thus, it appears that it is smaller firms (fewer than 25 employees) and large firms (more than 250 employees) which have the least optimistic perceptions, and firms with between 25 and 250 employees are where perceptions are more positive. In the case of large firms, this could be due to the fact that they do not need to collaborate as much to compete as do small- and medium-sized firms. And for those with fewer than 25 employees, as mentioned above, it is more difficult for them to participate in CMO activities due to their small structure. These results appear to corroborate some perceptions discussed in previous sections about the opportunity to balance activities so that other users can participate more actively, especially the smallest firms, among which both participation in CMO activities and the perceived impact are lower.

Graph 11 Perception of the impact of cooperation on exports, by firm size



Source: Compiled by authors.

Lastly, it is worth mentioning that, as with the other aspects analysed, **length of time in the CMO**, how many years the firm has been a member of the CMO, is also an aspect to be considered when trying to explain the impact, as firms with a short history in the cluster have not yet had the opportunity or time to see the impact.

2.4.2. Other intangible benefits related to social capital

The remarks and comments made by different users in this section of the questionnaire provide very useful information for interpreting the above results. From these, it is possible to conclude that in general, firms feel that it is difficult to attribute an impact on variables of competitiveness to cluster cooperation. Although they may have the feeling that they do have an impact, quantifying that impact, putting numbers to it, is difficult for them. However, in the same comments, they state that they perceive intangible benefits such as the following:

- Making contact with other stakeholders (firms and other organisations) and having a trusted environment among members, making it possible for them to collaborate.
- Considering common issues of interest; sharing problems, knowledge and experiences; obtaining information about the market, stakeholders, trends and opportunities, etc.
- Identifying and exploiting synergies among members to be more efficient in seeking shared solutions and responding better to customer needs.
- Obtaining better positioning and greater visibility as an industry in different meeting spaces and with potential customers.
- Greater visibility and better dialogue with public bodies.

Box 4 summarises the questions to be analysed by the CMO's management team and board of directors regarding the perception of the impact on competitiveness:

Box 4: Perception of the impact on competitiveness

- What results are obtained when comparing perceptions of the impact on competitiveness over the last 5 years and perceptions of the impact on competitiveness over the next 5 years?
    - Which variables of competitiveness are perceived to have received the greatest impact? Are the results to be expected based on the CMO's type of activities?
    - Are expectations about future impact better or worse than perceptions about the impact over the last five years?
- How do the results for the CMO compare to the others?

2.5 Perception of willingness to collaborate within the cluster

This final part measures how firms perceive the cluster's willingness to collaborate or collaborative attitude, in terms of:

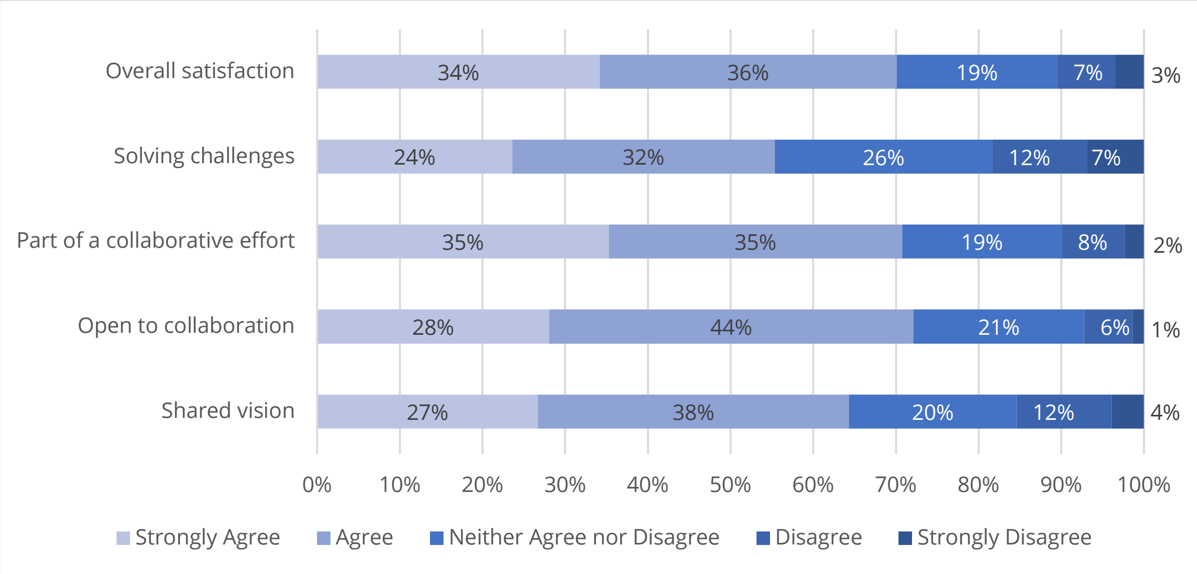
- Existence of a shared vision within the cluster of its challenges and strategic aims
- Openness of other members of the cluster to collaboration in search of solutions to common challenges
- Feeling of belonging to a collaborative effort and identifying as part of the cluster
- Contact with the group and/or other members of the cluster to seek a solution to a challenge that cannot be solved by the firm alone
- Level of satisfaction with collaborative activities within the cluster.

To some extent, the items included in this part complement the answers in the previous section regarding the impact of cluster cooperation on competitiveness, as here what is measured is perception regarding variables of a more intangible (soft) nature than in the previous section, those linked to the existence of social capital within the cluster. These questions are consistent with those developed by the TCI Network Cluster Evaluation Working Group, making it possible to do an international comparison with other regions and countries where it has piloted these questions. The answers are measured on a five-level scale, from (1) strongly disagree to (5) strongly agree.

Based on the answers in this section, in line with the preceding ones, we begin by analysing how the firms evaluate the different items related to 'perception of willingness to collaborate' and whether these results are consistent with those in the other sections. Additionally, the results for each specific CMO are compared with those for the overall sample or other CMOs to see if they are similar. If differences are found, it will be necessary to investigate what factors might be behind these differences.

Graph 12 summarises the responses obtained from users of the cluster cooperation services and actions provided by Basque CMOs. Overall, we can see a high degree of satisfaction with the collaborative activities within the cluster. The data also indicate that the CMOs as a whole possess a high degree of social capital, as firms believe that there is a shared vision within the cluster of its challenges and strategic aims, they feel part of the cluster, they view other members of the cluster as being open to collaboration on seeking solutions to common challenges, and they contact the cluster to seek a solution to a challenge that they cannot solve on our own within the firm.

Graph 12 Perception of collaboration within the cluster



Source: Compiled by authors.

We can see that the aspects included in this part are in line with what is emphasised in the qualitative remarks on the impact of cluster cooperation. It is thus clear that even though users do not see the impact of cluster cooperation as much in terms of a direct impact on economic variables, the level of satisfaction with the cluster group's activities is high. And there is generally a positive perception of the attitude and willingness to collaborate within the cluster. We can also see consistency between the responses in this section and responses in other sections of the questionnaire. To give an example, in the specific case of one CMO, based on the results in this section, it can be concluded that the level of social capital found in this CMO is lower than in other CMOs. This result is consistent with another result for the same CMO, in which the percentage of users who believe that the involvement and resources allocated by the CMO to 'fostering interaction among cluster members and getting to know each other' should be increased is higher than for the overall sample.

Box 5 summarises the questions to be analysed regarding the perception of cluster collaboration:

Box 5: Perception of cooperation within the cluster

- How do firms evaluate the different items related to 'perception of collaboration'? Are these results consistent with those in other sections?
- When the overall sample and particular clusters are compared, are the results similar? If there are differences, what could they be due to?

2.6 Explanatory variables

This section provides a summary of the variables which have been identified in the different sections of the document. These may have had some impact on the results obtained and should therefore be taken into account when interpreting the results:

- Firm size appears to possibly be related to some results, such as level of participation in CMO activities and perception of the impact of cluster collaboration on the firm's economic variables.
- In terms of industry, the main activities in the CMO may be a variable which helps to explain aspects such as the importance assigned and the resources that should be allocated to each of the areas of cooperation.
- Additionally, the diversity of CMO members, in terms of links in the value chain or sub-industries they belong to and how the activities sponsored by the CMO align with the interests of these members may also help explain the responses obtained in the survey.
- The maturity and life cycle of the natural cluster, as well as the history, experience and maturity of the CMO may also help to understand the type of activities on which the CMO focuses and the results obtained in terms of, for example, level of collaboration within the cluster.
- Likewise, length of time in the CMO, how many years the firm has been a member of the CMO, is also an aspect to be taken into account, as it may help explain variables such as the level of involvement in CMO activities or the perceived impact on economic variables.

Lastly, the representativeness of the sample should also be taken into account. For if it is the most active users who participate most in the different CMO activities that respond, there will be a bias towards more positive responses than those which might be expected from CMO users as a whole.

3 CONCLUSIONS AND FINAL REMARKS

In order to move forward in evaluating the Basque Government's cluster policy, the SPRI services and Orkestra created a questionnaire titled 'The User Voice', with the specific aim of measuring how the cluster cooperation services and actions offered by the CMOs are perceived by users, and their impact on the parameters of firms' competitiveness. This document has provided a guide on how to analyse and interpret the questionnaire responses. And for illustrative purposes, we have presented and considered the major aggregate results of this evaluation process.

As emphasised in the introduction, in this process, the evaluation should be understood as a tool for learning and strategic improvement, to guide the management of both cluster policy as a whole and the implementation of said policy in the different CMOs through their action plans.

Therefore, the different CMOs have had access to personalised reports, allowing them to compare themselves to the aggregate results. In some cases, these have served to corroborate some of their existing perceptions regarding the situation in the cluster. And in others, they have provided new information with which to reflect on the situation in the cluster and the action to be taken based on this situation, presenting the results of the report to the board of directors and taking measures accordingly. The personalised reports were also used in the meetings SPRI held with each of the CMOs during the first quarter of 2019, in which they reviewed the 2019 action plans and budgets submitted. In general, the tool was received positively, and the results of the analysis were taken into account when preparing or revising the 2019 and subsequent plans.

The results and conclusions of this process have also been used to set up programmes and initiatives to respond to the needs identified. In this context, in collaboration with the CMOs, SPRI implemented an action in 2019 aimed at reinforcing the technological capacity of the CMOs, combining training with a community of practice to exchange experiences and learn together. Along these same lines, another initiative was implemented, aimed at integrating the Sustainable Development Goals (SDG) into the strategies of the CMOs and their member firms.

In order to see the impact of this first data collection and subsequent reflection by the different CMOS – whose conclusions were incorporated into the action plans of the CMOs and the actions and initiatives implemented by SPRI – we need to monitor the different indicators. Periodically collecting and analysing data will make it possible to do this monitoring and evaluate the potential impact of actions implemented in the CMO action plans on the actions and initiatives implemented by SPRI.

As emphasised in the introduction, in this process, the evaluation should be understood as a tool for learning and strategic improvement, to guide the management of both cluster policy as a whole and the implementation of said policy in the different CMOs through their action plans.

Administering the questionnaire in clusters from other regions will make it possible to learn from best practices by comparing results at the international level.

REFERENCES

Aranguren M.J., De La Maza X., Parrilli M.D. and Wilson J.R. (2009) *Asociaciones clúster de la CAPV: desempeño y retos*. Bilbao: Deusto Publicaciones.

Maffioli A., Pietrobelli C. and Stucchi R. (Eds.) (2016) *The Impact Evaluation of Cluster Development Programs: Methods and Practices*. Washington D.C.: Inter-American Development Bank.

Schmiedeberg C. (2010) Evaluation of cluster policy: A methodological overview. *Evaluation* 16 (4): 389–412.

Smith M., Wilson J.R. and Wise E. (2020) *Evaluating clusters: Where theory collides with practice*. Regional Science Policy and Practice, (3): 413–430. https://doi.org/10.1111/rsp3.12279.

Wilson, J.R. (2019) Cluster Policy Resilience: New Challenges for a Mature Policy. *International Journal of Business Environment* 10(4): 371–382.

APPENDIX 1. 'THE USER VOICE' QUESTIONNAIRE

SURVEY OF CLUSTER MANAGEMENT ORGANISATION (CMO) MEMBERS

The cluster management organisations (CMOs) and the Basque Government – SPRI kindly request that you complete this questionnaire, which is intended for members and users of the cooperation services and actions offered by said organisations as part of the Cluster Support Programme funded by the Basque Government.

The purpose of the study is to better understand how the cooperation services and actions offered by the CMOs are perceived by members, and their impact on the parameters of firms' competitiveness.

This assessment will have a direct impact on the initiatives launched by the CMOs and the Basque Government in future editions of the programme.

The estimated time required to complete the questionnaire is 15 minutes. Please complete just one questionnaire per firm. However, you may include the opinion of more than one person on your team.

The fields marked * are required.

The answers I give on this form refer to the CMO indicated below, of which my organisation is a member. *
Should your firm/organisation belong to more than one CMO on the list, please complete one form for each of the organisations of which it is a member.

Involvement of your firm/organisation in CMO activities ____________________

Indicate how frequently people in your organisation participate in the cluster activities shown below *

	Never	Sometimes	Regularly	Very frequently
Receive regular information (email, social media, news, newsletters, observatory, etc.)	☐	☐	☐	☐
Participate in seminars, training activities and the like	☐	☐	☐	☐
Participate in CMO committees and working groups	☐	☐	☐	☐
Involved in carrying out specific R&D&I projects within the cluster	☐	☐	☐	☐
Participate in international activities (missions, trade shows and fairs, conferences, networks and the like)	☐	☐	☐	☐
Part of the board of directors	☐	☐	☐	☐

On a scale of 1 to 5, indicate to what extent you agree with the following statements *

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. My organisation actively participates in initiatives proposed by the CMO	☐	☐	☐	☐	☐
2. My organisation regularly suggests and proposes initiatives of interest to the CMO	☐	☐	☐	☐	☐

Comments. Your firm's involvement

Areas of Cluster Cooperation: to improve the competitiveness of your firm/organisation *

Indicate how important cooperating with other firms/organisations in the cluster in each of the areas indicated below is for the competitiveness of your firm/organisation, using the following scale:

NOT VERY important or unimportant for us
POTENTIAL. It may be important for us to cooperate with other organisations in the future
VERY important and urgent for us to cooperate with other organisations in this area to improve our competitiveness

Also indicate the level of INVOLVEMENT and RESOURCES which, in your opinion, the CMO should allocate to each area, according to the following scale:

NONE: The CMO should not allocate resources to this area
DECREASE: The CMO should DECREASE its involvement and the resources allocated to this area
MAINTAIN: The CMO should MAINTAIN the same level of involvement and resources allocated to this area
INCREASE: The CMO should INCREASE its involvement and the resources allocated to this area
SIGNIFICANTLY INCREASE: The CMO should SIGNIFICANTLY INCREASE its involvement and the resources allocated to this area

	Importance			CMO Involvement and Resources			
	Not Very	**Potential**	**Very**	**None**	**Decrease**	**Maintain**	**Increase**
1. Strategic forecasting and knowledge of markets, products, services, technologies, procedures, etc.	☐	☐	☐	☐	☐	☐	☐
2. Access to new customers and international markets	☐	☐	☐	☐	☐	☐	☐
3. Supply chain development (procurement, production, assembly/installation, distribution and logistics)	☐	☐	☐	☐	☐	☐	☐
4. Joint procurement and purchasing	☐	☐	☐	☐	☐	☐	☐
5. Joint marketing and brand / product and service integration / joint projects and bids	☐	☐	☐	☐	☐	☐	☐
6. Research and development of new processes and products	☐	☐	☐	☐	☐	☐	☐
7. Product and process sustainability (energy efficiency, environmental impact, etc.)	☐	☐	☐	☐	☐	☐	☐
8. Development of standards, rules and regulations	☐	☐	☐	☐	☐	☐	☐
9. Promoting cluster visibility and awareness abroad	☐	☐	☐	☐	☐	☐	☐
10. Fostering interaction among cluster members and getting to know each other	☐	☐	☐	☐	☐	☐	☐
11. Attracting talent, developing human resources and specialised training	☐	☐	☐	☐	☐	☐	☐
12. Attracting specialised investment and financing	☐	☐	☐	☐	☐	☐	☐
13. Innovating and improving the firm's management and strategy	☐	☐	☐	☐	☐	☐	☐

Comments. Areas of Cooperation (other important areas and methods of cooperation for your firm, which the CMO and firms should take on, etc.)

Impact of cluster cooperation on your firm's parameters *

If your firm's cooperation within the cluster has had or will have an impact on its socioeconomic variables, indicate the ESTIMATED impact over the last 5 years and the EXPECTED impact over the next 5 years.

	Impact last 5 years				Impact next 5 years			
	Low	Moderate	High	Very High	Low	Moderate	High	Very High
Total turnover								
Jobs								
Exports								
% turnover from medium-to-high tech								
Investment in R&D&I								
Productivity								

Comments. Influence of Cooperation (other significant impacts, etc.)

Perception of cooperation within the CMO

On a scale of 1 to 5, indicate to what extent you agree with the following statements *

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. There is a shared vision within the CMO of its challenges and strategic aims	☐	☐	☐	☐	☐
2. Other members of the CMO are open to collaboration	☐	☐	☐	☐	☐
3. At my firm, we feel part of a collaborative effort and identify as part of the CMO	☐	☐	☐	☐	☐
4. When we have a challenge that we cannot solve on our own within the firm, we contact the CMO team and/or member organisations to find a solution	☐	☐	☐	☐	☐
5. Overall, my firm is highly satisfied with collaborative activities within the CMO	☐	☐	☐	☐	☐

Qualitative outcome of work to foster cooperation within the CMO

In your opinion, what are the CMO's main strengths and opportunities for improvement?

Main Strengths:

Opportunities for Improvement (current activities and new activities of interest to be undertaken by the CMO):

Firm profile *

	Less than €1 MM	€1–5 MM	€5–25 MM	€25–150 MM	More than €150 MM
Production in the Basque Country (€MM)	☐	☐	☐	☐	☐
Production worldwide (€MM)	☐	☐	☐	☐	☐

	Less than 10%	10–25%	25–50%	50–75%	More than 75%
% of production in the Basque Country that is exported	☐	☐	☐	☐	☐

	Less than 1%	1–3%	3–6%	6–10%	More than 10%
% of R&D in the Basque Country (over production in the Basque Country)	☐	☐	☐	☐	☐
% of R&D worldwide (over production worldwide)	☐	☐	☐	☐	☐

	Fewer than 25	25–100	100–250	250–1000	More than 1000
No. of direct jobs in the Basque Country (FTE)	☐	☐	☐	☐	☐
No. of direct jobs worldwide (FTE)	☐	☐	☐	☐	☐

Does your firm have a headquarters outside the Basque Country? *

Background of the person completing the questionnaire

What is your area of responsibility within the firm? *

	Position	Department
Area of responsibility		

Contact Details (optional)

If you wish, you may provide your contact details so that we may clarify any questions or information and share the results of this study with you.

Name:

Email:

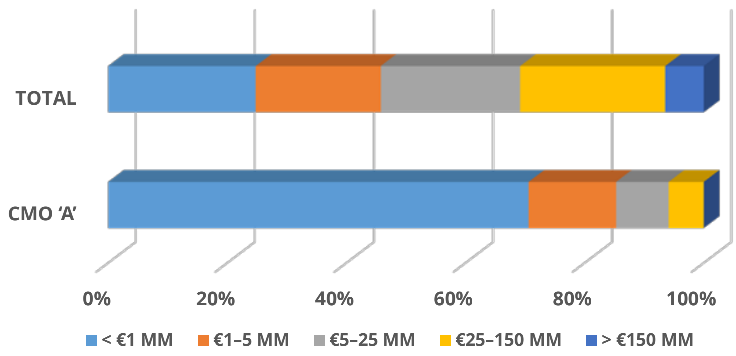
Telephone:

When you have finished, click the Submit button below to send us your response.

APPENDIX 2. EXAMPLE OF PERSONALISED REPORT FOR CMOS.

The User Voice – CMO 'A'

Participant size – Production in the Basque Country

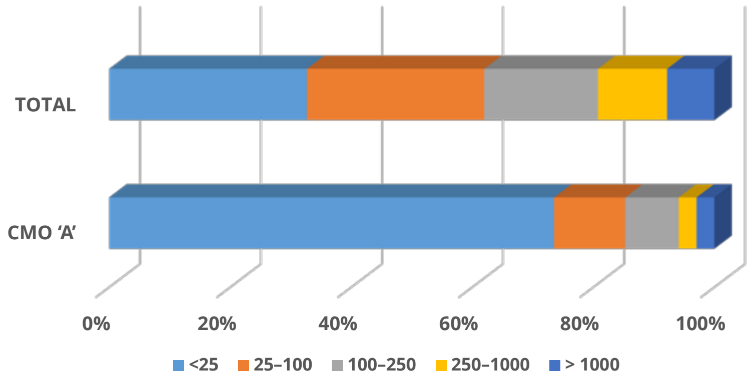


- In general, the firms in CMO 'A' are smaller in size than the overall sample
- The % of participants with production in the Basque Country valued at less than 1 million euros is 71% in CMO 'A', compared to 25% for the overall sample

2

The User Voice – CMO 'A'

Participant size – Direct jobs in the Basque Country

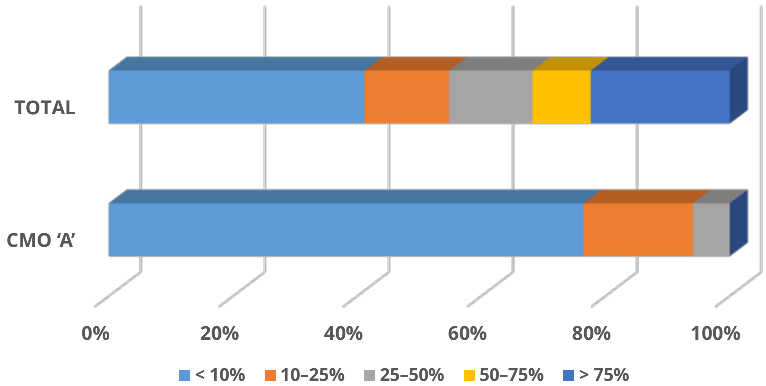


- The % of member firms with fewer than 25 employees in the Basque Country is 74% in CMO 'A', compared to 33% for the overall sample

3

The User Voice – CMO 'A'

% of production in the Basque Country exported

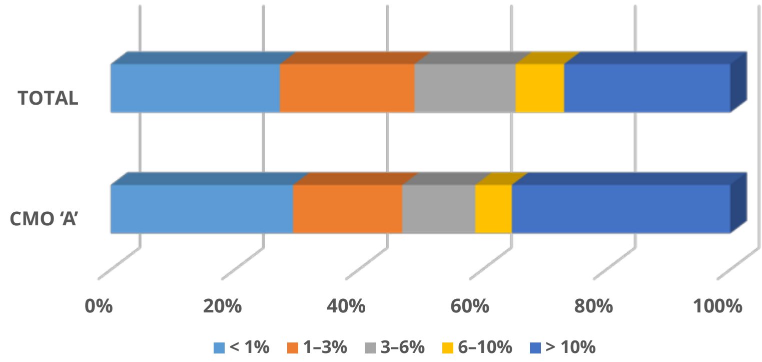


- The level of internationalisation is lower for firms in CMO 'A' (in terms of exports) than in the overall sample

4

The User Voice – CMO 'A'

% of R&D in the Basque Country (over production in the Basque Country)



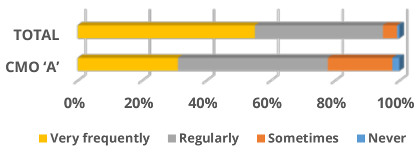
- In terms of percentage of R&D over production, CMO 'A' follows a very similar pattern to the overall sample
- The percentage of firms allocating more than 10% of production to R&D is somewhat higher in the case of CMO 'A'

5

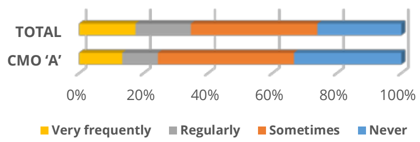
The User Voice – CMO 'A'

Involvement (I)

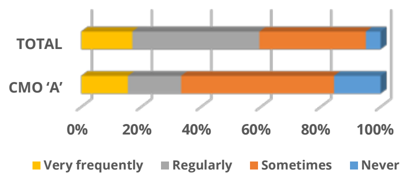
Receive regular information



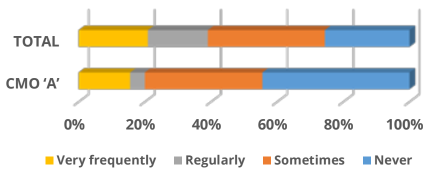
Development of R&D projects



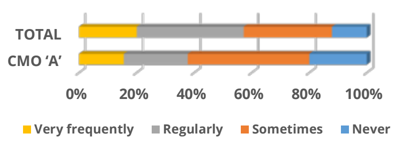
Participate in seminars, etc.



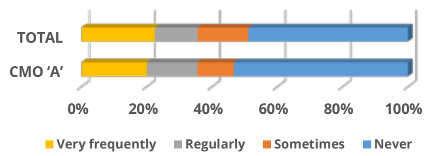
Participate in international activities



Participate in committees and working groups



Part of the board of directors



6

The User Voice – CMO 'A'

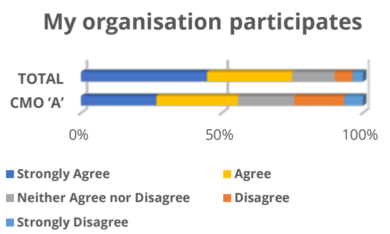
Involvement (II)

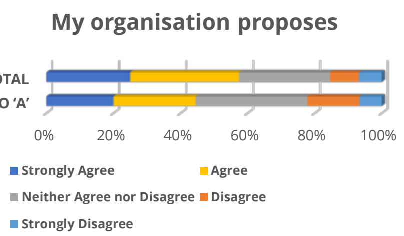
- In general, the members of CMO 'A' report somewhat less involvement in the group's various activities than the overall sample
- The highest level of involvement reported is in the **'receive regular information'** activity, both in general and for CMO 'A'
- However, it is also this activity where we see the biggest differences between the members of CMO 'A' and the overall sample

7

The User Voice – CMO 'A'

Involvement (III)





- For both the overall sample and the members of CMO 'A', organisations believe their level of **participation** in cluster initiatives is higher than the degree to which the organisation **proposes** initiatives
- In line with the analysis on the preceding pages, the level of participation by members of CMO 'A' is lower than the overall sample

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The User Voice – CMO 'A'

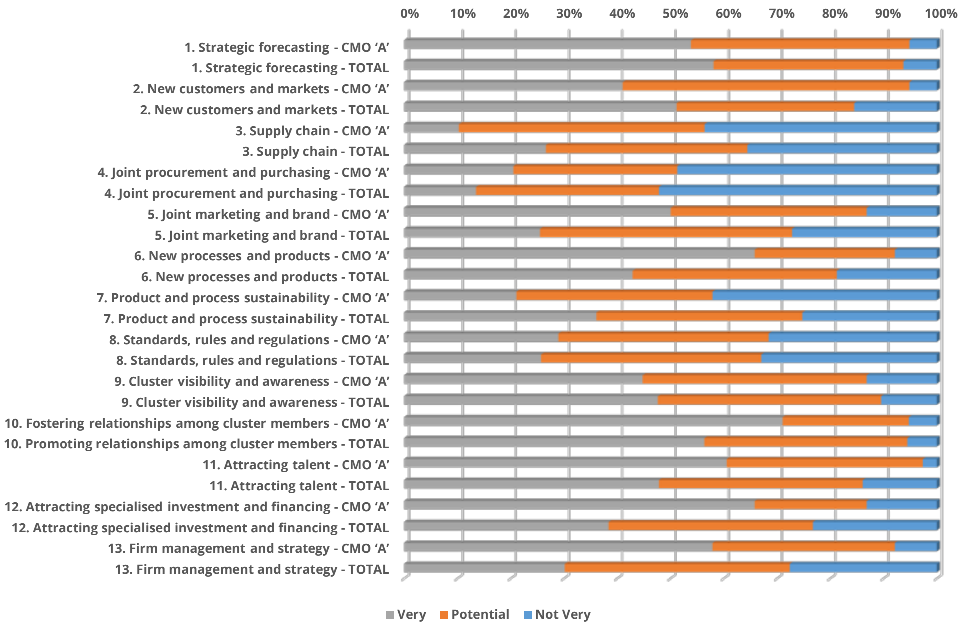
Areas of Cooperation: 13 areas

1. Strategic forecasting and knowledge of markets, products, services, technologies, procedures, etc.
2. New customers and markets
3. Supply chain
4. Joint procurement and purchasing
5. Joint marketing and brand
6. New processes and products
7. Product and process sustainability
8. Standards, rules and regulations
9. Cluster visibility and awareness
10. Fostering relationships among cluster members
11. Attracting talent
12. Attracting specialised investment and financing
13. Firm management and strategy

9

The User Voice – CMO 'A'

Areas of Cooperation. Importance



10

The User Voice – CMO 'A'

Areas of Cooperation. Importance

- Areas of cooperation to which participants attribute **greater importance**:
  - 10. Fostering relationships among cluster members
  - 12. Attracting specialised investment and financing
  - 6. New processes and products
  - 11. Attracting talent
  - 13. Firm management and strategy
  - 1. Strategic forecasting
  - 5. Joint marketing and brand

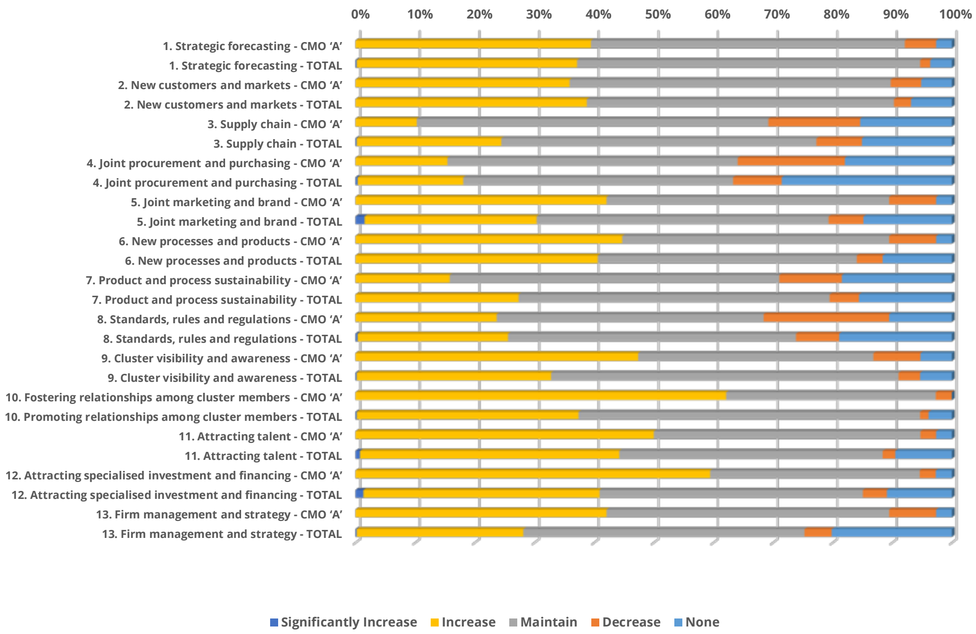
    - ➢ More than 50% of survey participants from CMO 'A' consider this aspect to be **very** important
    - ➢ In comparison with the overall sample, the greater importance assigned to items 5, 6, 12 and 13 is especially noteworthy

- In CMO 'A' there are three areas which are significant, given the number of firms that considered them **not very important:**
  - 3. Supply chain
  - 4. Joint procurement and purchasing
  - 7. Product and process sustainability. In this last area, the responses for CMO 'A' differed considerably from the overall sample

11

The User Voice – CMO 'A'

Areas of Cooperation. Involvement and resources



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The User Voice – CMO 'A'

Areas of Cooperation. Involvement and resources

- In general, survey participants believe that the current role of the group should be MAINTAINED in the different areas of cooperation considered

- Areas of cooperation in which a significant number of responses indicate that the group's **'Involvement and resources'** should be INCREASED:

  10. Fostering relationships among cluster members
  12. Attracting specialised investment and financing
  11. Attracting talent

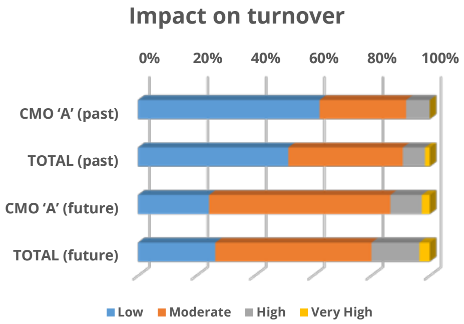
- Of special note is the higher percentage of firms in CMO 'A' that feel that **'Involvement and resources'** in areas 10 and 12 should be INCREASED, compared to the overall sample

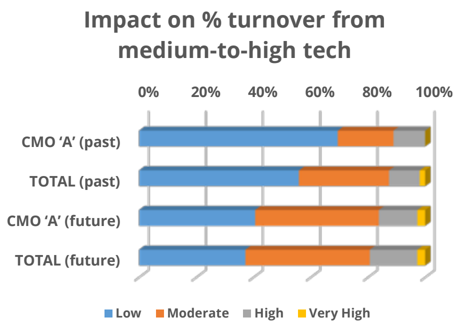
- In no area of cooperation do a significant number of responses indicate that the group SHOULD NOT have **'Involvement and resources'.** Notable in this regard is the lower percentage of firms in CMO 'A' under item 4. Joint procurement and purchasing, compared to the overall sample

13

The User Voice – CMO 'A'

Impact of cluster cooperation on the firm





- The majority of the firms in CMO 'A' believe the impact of cluster cooperation on **turnover** has been low
- In general, it is expected that cluster cooperation will have a greater impact on firm **turnover** in the next five years
- We see a somewhat worse rating for the impact of cooperation on **turnover** in CMO 'A' than the overall sample, but expectations for the next five years are very similar between the two groups

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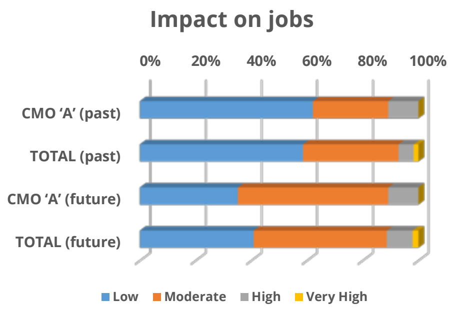
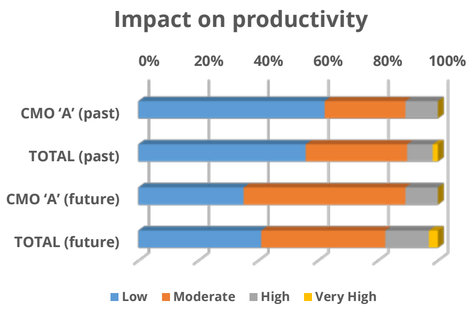
The User Voice – CMO 'A'

Impact of cluster cooperation on the firm (II)



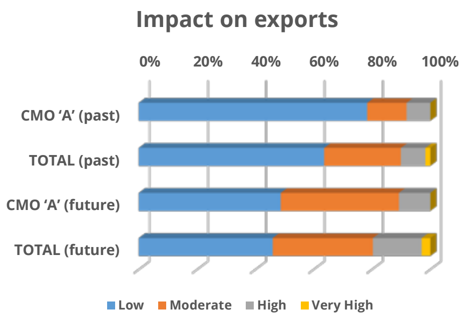


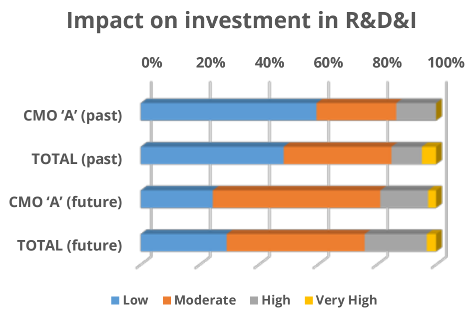
- The majority of the firms in CMO 'A' believe the impact of cluster cooperation on **jobs** and **productivity** has been low
- The majority expect this impact to be moderate in the future.
- We do not see major differences between CMO 'A' and the overall sample in the responses to these items

15

The User Voice – CMO 'A'

Impact of cluster cooperation on the firm (III)





- The majority of the firms in CMO 'A' believe the impact of cluster cooperation on **exports** and **R&D&I** has been low
- They expect a somewhat greater impact, on both exports and R&D&I investment, in the next five years
- Although we do not see major differences between CMO 'A' and the overall sample, in CMO 'A', the assessment of the impact of cluster cooperation on exports and R&D&I is somewhat worse

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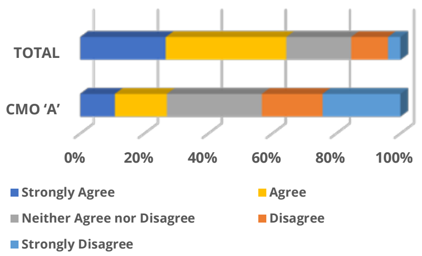
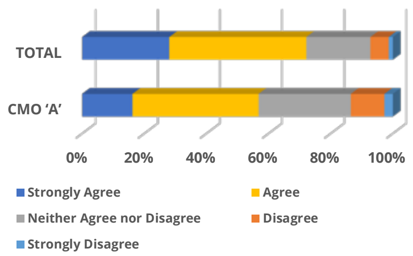
The User Voice – CMO 'A'

Perception of cooperation within the cluster

Shared vision within the cluster



Open to collaboration



- A significant percentage of firms in CMO 'A' do not believe that **there is a shared vision within the cluster of its challenges and strategic aims**
- This response is clearly different from the overall sample, in which the majority believe that there is a shared vision within the cluster of its challenges and strategic aims
- In general, **it is felt that other members of the cluster are open to collaboration in search of solutions to challenges.** Although the perception is more positive in the overall sample than in CMO 'A', in this case, the difference between the two groups is not so great

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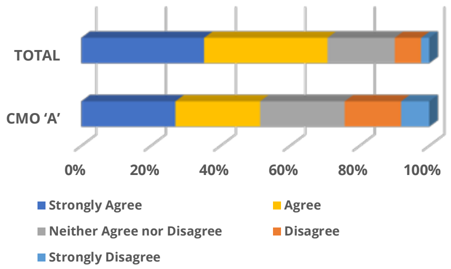
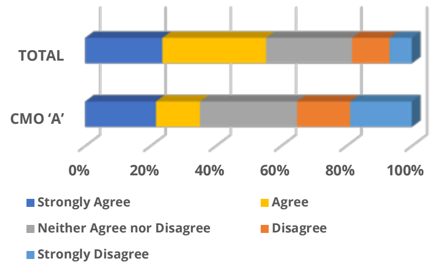
The User Voice – CMO 'A'

Perception of cooperation within the cluster (II)

Part of a collaborative effort



Solving challenges



- A smaller percentage of firms in CMO 'A' than in the overall sample believe that **their firm feels part of a collaborative effort and identifies as part of the cluster**
- What is more, the percentage of firms that **contact the cluster when they have a challenge that they cannot solve on our own within the firm** is quite a bit lower in CMO 'A' than in the overall sample

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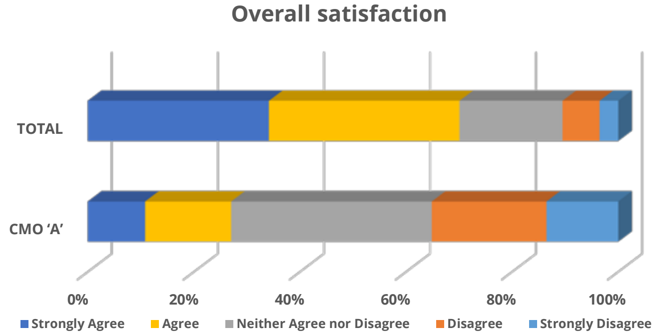
The User Voice – CMO 'A'

Perception of cooperation within the cluster (III)



- Additionally, the **general degree of satisfaction with the group's activities** is lower among CMO 'A' firms than in the overall sample

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Orkestra

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