

An analysis on cross-border collaboration

A case study on cross-border collaboration

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Michel van der Plas

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by

Michel van der Plas

Student number: 5139341
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Thesis committee: Dr. ir. E. Minkman, TU Delft, responsible supervisor
Dr. E. J. Houwing, TU Delft, supervisor

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This version has been made anonymous, with the name and some information of the company in the
case study erased.

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Preface

This thesis is written as an assignment for the completion of my Master degree in Construction Management and Engineering at TU Delft. I had the privilege of graduating at Dutch company focusing on the topic of Cross-Border Collaboration (CBC). Together with my supervisors from the company, I selected this topic and was able to shape it into my own unique subject within the company. I have had the opportunity to engage in conversations and discussions with many employees, from team members to even a brief conversation with the CEO, which boosted my enthusiasm to delve deeper into this topic.

I want to thank my supervisors for giving me this chance and for their continuous support throughout the project. I considered this the ideal opportunity to learn about the company as an organization from the inside. I have learned that a topic like CBC brings forth a collection of opinions and perspectives within an organization like company X. While some speak about it with great enthusiasm, others are more reserved. Exploring this further has been an interesting and fun challenge.

Moreover, during my graduation period, I learned how to conduct research and was introduced to a new research method. Ellen Minkman provided me with knowledge about the Q-methodology, showing me that it is a fantastic and enjoyable way to explore various perspectives on topics such as CBC. I am thankful for the support she provided during this period and the time she invested in it. I also want to thank my second supervisor, Erik-Jan Houwing, for his assistance throughout this graduation period. His help in refining the underlying question and keeping my research in alignment with it has been valuable. Questions like 'What is the scope?' and 'What are you asking?' have continually pushed me to reconsider the direction of this thesis.

In short, Cross-Border Collaboration is a fascinating topic to explore within a company like company X. Numerous opinions and insights have been merged into a number of core perspectives. I hope these perspectives provide valuable insights for company X in understanding how CBC is currently perceived within their company and serve as a foundation for future CB collaborations.

*Michel van der Plas
Delft, June 2025*

Summary

In this thesis, Cross-Border Collaboration (CBC) is the central topic. It was defined as the collaboration between international branches of the same company. The main question of this thesis is: *What are the different perspectives on CBC and on how CBC effectively can be implemented and increased within an organization?* The research focused on how such collaborations between different teams or divisions can be set up more frequently by identifying and addressing the barriers that are currently experienced. This was examined through a case study in company X. company X is a company that is located in various Northwest European countries and is finding a way to engage in Cross-Border (CB) collaborations more often. In the literature review, it became clear that a lot is written about collaborations between different companies and within teams or departments of the same company. What was missing in the literature is a comprehensive description of how to establish collaborations between international branches of the same company. There is a lack of literature on how these collaborations can be done more frequently within a company not yet focused on CBC and especially with a decentralized character. To fill this gap in the literature, a case study within company X has been conducted.

Interviews within company X laid the foundation for answering the main question. The sub-question *What are the challenges, problems and enablers in the field of CBC (Cross-Border Collaboration)?* provided insight into the current state of CBC within the organization. The main opportunities of CBC can be summarized in three parts. Firstly, attracting young talent is one of the motivations to engage more frequently in CBC. Attracting young talent is seen as necessary to remain competitive and invest in the future. In addition, CBC is seen as a method to share capacity and sometimes reduce rates in larger projects. Within a single company X country, there is not always enough capacity to take on certain projects. CBC could be a solution for this. The final primary advantage is the sharing of knowledge. In various countries where company X operates, there is often different expertise. By effectively sharing this knowledge, there is an opportunity to grow as a company and as employees of company X. Despite these advantages, CBC is not practiced more frequently.

Apart from these positive effects of CBC, there are still several barriers and considerations regarding these CB collaborations. Common barriers such as language and cultural differences came up, which were also highlighted in the literature review. What was particularly interesting about the findings are the barriers categorized under a single description, namely 'Organizational limitations'. Statements were made that the decentralized organization, smaller teams or lack of collaboration structures within an organization discussed in the case study do not promote these collaborations. In addition, remarks were made the way agreements and norms and standards are implemented. Another interesting finding from the interviews is the statements about the company's culture, which would not be sufficiently focused on CBC yet. The further investigation of the barriers have been focused on organizational limitations. Further literature study has revealed and explained why the barriers might occur and how they could be resolved.

To explain the barriers, a narrative literature study has been conducted in which is mostly referred to Mintzberg (2023), Understanding Organizations. The sub-question *How can these problems and barriers be explained and how can they be minimized?* has been answered this chapter. First, following the interview results, company X as an organization was described as a case in this thesis. In short, company X can be described as a decentralized organization established in multiple Western European countries, working at team level and on a project basis with a focus on the client. Mintzberg (2023) offers explanations for the previously mentioned outcomes, mainly the different forces shaping the organization. Examples of these forces include culture or company acquisitions. In addition, an organization always fluctuates between centralized and decentralized levels.

This is not a stable equilibrium. Issues regarding colleagues not being able to connect can be attributed to silo formation within the organization. The theory suggests potential solutions such as appointing liaisons or CBC-enthusiastic managers in key positions. It is crucial that goals within the organization have concrete measurable performance indicators attached. These various theories were not explicitly based on Cross-Border Collaboration. To test this, it will be further evaluated within the organization.

The Q-method was a suitable way to test the identified theories. Based on 39 statements, 29 participants completed the Q-method. These statements were based on six different categories: decentralized organization, responsibility, company X's business model, organizational structures, incentives and agreements and culture. Participants were asked to rank the statements between -5 and +5. The question *What are the different perspectives on possible solution directions?* was answered. The result identified five different perspectives. The five perspectives are:

Managers and division directors: The initiative is not so much the responsibility of employees who need training or education, but rather the responsibility of managers who should proactively promote CBC and division directors who need to explore the added value of CBC within their divisions. From there, managers are expected to take the initiative and establish CB collaborations.

Financial aspects: Currently, CBC is not considered financially beneficial. CBC should be handled centrally and only pursued when there are similar projects that can benefit from the same collaborations. The rate differences between the different company X countries are also a significant barrier to effective collaboration. Collaborations should therefore be centrally managed to make them financially attractive. In addition, a solution must be found for the differences in rates.

Invest in CBC: This factor emphasizes investment. Employees should receive training sessions about CBC. Temporary lower profits can be accepted to invest in CBC. There needs to be investment within the current organizational structure. In this, the decentralized nature and the autonomy of the teams are important factors.

Decentralized organization: Participants with this perspective disagree that CBC should be handled centrally. Authority and decision-making should remain decentralized within teams. The administrative burden associated with CBC will need to be decreased at least.

Lack of experience: This factor focuses more on the individual. Collaborations should be established through liaisons or connectors that bring different people together. They disagree that specific goals should be set and measured using KPIs. Additionally, there are currently too few people within the organization with real CBC experience to take the step towards more CBC.

when answering the main question *What are the different perspectives on CBC and on how CBC effectively can be implemented and increased within an organization?* it can be stated that CBC is generally viewed positively. Except for perspective two, everyone believes that it is a good idea to promote CBC within the organization. However, this will need to happen within the current organizational structure. There are conflicting opinions on the method of implementation. On one hand, it should be set up in a decentralized manner, but on the other hand, it could be handled more centrally within the divisions. Because someone with a perspective five viewpoint finds that there is currently little CBC knowledge within the organization, investment might be necessary.

In addition to contributing to the literature on cross-border collaboration within the same company, this research also offers several practical takeaways. When changes need to be implemented within an organization, its own structure can raise barriers. In the case of cross-border collaboration, it is important to identify in what areas in the organization, CBC is desired and adds value. Once this has been determined for specific teams, divisions or the organization as a whole, the appropriate approach should be defined for each situation. Some large European projects or projects involving teams with similar skills but different working methods, may require a more centralized approach or initiation. For smaller projects, involving like-minded teams with more experience, a decentralized approach may be more suitable. Clearly defining the goals to be achieved is essential to ensure proper investment in CBC. In any case, higher management must proactively promote CBC in order to shift the organizational CBC culture. CBC can certainly contribute positively, as long as it is not treated as a goal itself, but as a way to achieve goals.

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Nomenclature

Abbreviations

Abbreviation	Definition
CBC	Cross-Border Collaboration
CB	Cross-Border

1

Introduction

1.1. Background

To achieve company goals, it is crucial to have a well-structured implementation plan, according to Eckfeldt (2024). Nowadays, many companies and markets are dealing with internationalization. These businesses aim for economic growth and strive to achieve the strongest possible market position. Internationalization, therefore, plays a major role in this economic growth and therefore within implementing company's goals according to CE Noticias Financieras English (2024). In these international companies, Cross-Border collaboration (CBC) regularly takes place. This CBC is seen as a way to improve innovation and knowledge sharing in an international world. Therefore, CBC is considered a means to maximize economic and societal impact (Europe, n.d.).

Many international companies operate in a project-based way. This means that employees work on different projects until they are completed. According to de Wit (1988), it is essential for companies to complete projects successfully for various reasons. Successful projects help control costs and ensure profitability. When projects are less successful, profits decrease and in some cases, losses may even occur. In addition, successful projects contribute to achieving business goals and provide learning opportunities for future projects. They also enhance customer satisfaction, improve a company's reputation and ultimately create a competitive advantage. According to Brink et al. (2020) project-based companies focus on maximizing project margins. It is emphasized that, in order to achieve higher margins as a company, the maximum value must be extracted from projects. This means clearly defining the scope and working with the right resources are key challenges. According to de Wit (1988), several factors can be used to measure project success. Examples include cost, time/planning and quality. Furthermore, customer and the project team's satisfaction also play an important role. de Wit (1988) states that a project can still be considered successful even if some goals are achieved while others are not.

In companies like company X, which is characterized by its teams and project-based structure, there is a belief that CBC has a positive impact on the organization and its projects. This CBC offers various benefits, such as learning from each other's projects and activities. For example, in the research world, there is the idea that collaboration not only leads to more knowledge about a specific topic but also allows new and surprising ideas to emerge from different perspectives (Leiden University, 2024). According to Deltares (2022), an example is cross-border cooperation in flood prevention. Although this concerns a different type of collaboration, this example is seen as one of the solutions to prevent future flooding in rivers such as the Geul. In addition, this international collaboration is considered a way to assess the effectiveness of different solutions.

For international companies like company X, a lot of time and money can be invested in CBC within project teams and across the organization with the aim of achieving higher profits and better performance within projects and across the organization. But in what way should this be done and how is this subsequently perceived within the organization itself? As mentioned above, CBC can contribute to a company's growth, but does the organization truly support this vision and can this CBC easily be implemented? Is there a possibility that the barriers are too significant for CBC to be successful? The problem is that it remains unclear on how CBC should be implemented and increased within an organization.

company X, a company with multiple branches in Northwestern Europe, sometimes engages in Cross-Border collaborations in national and international projects. This company is divided into various business area and units and is known for working in a decentralized and client-oriented way. This thesis focuses on cross-border collaboration in the context of an organization such as company X. This means that it is about collaboration between colleagues from departments of the same company in different countries. Through theoretical research and a case study examining company X's collaboration with its international partners, this thesis will provide insights into how ongoing collaboration with international partners from other business units can be implemented within an organization. Since company X, as an organization, aims to increase the share of CBC within the company, this thesis will mainly focus on the question of how rather than why CBC should be implemented. The study will look at strategy and goals, where they aim to be among the top in the market and grow as a company in relation to CBC.

1.2. Definition Cross-Border Collaboration

This thesis builds further on the existing literature about collaborations between teams and individuals. It will explore the concept of CBC in more depth. CBC is defined as the collaboration between teams from internationally oriented companies and within the same organization. This refers to companies that operate abroad with multiple branches in projects and deliver their products and services internationally. This is also the definition that company X uses, namely the collaboration with other company X teams and units in the different company X countries (Anonymous, 2025). Collaboration is established to leverage the capabilities, knowledge or other skills that the other team possesses or that one may lack. Furthermore, this collaboration has been established for commercial purposes. Since the focus here is on teams, teamwork is also essential in doing projects. This refers to the collaboration within a team to achieve the best possible results in projects, where the interaction between team members plays a crucial role.

1.3. Relevance

Based on the strategy that company X has outlined and communicated to the organization, there is an ambition to increase the amount of Cross-Border collaborations. In addition, more projects in the different company X countries should be carried out following this CBC approach. The goal is to increase the number of hours worked on CB. This ambition comes from higher management levels, based on the idea that CBC contributes to the company's effective growth. It was confirmed by the CEO of company X in a brief conversation. It is therefore relevant that this research aims to determine how CBC is perceived within the decentralized layers of the organization and how they believe CBC should be shaped within the organization. This is essential since a significant investment in time and money is being made in CBC, while it remains unclear how to approach this effectively and simultaneously contributes to achieving these goals and improving project results.

Furthermore, this research is not only relevant to company X itself, but also to other internationally oriented companies. They too have experiences with Cross-Border collaborations that often need to be carried out within the same company. In addition to the current literature focused on collaborations as a concept and the role of individuals within them, this research goes further by connecting the concept of collaborations with inter organizational aspects and barriers related to CBC.

1.3.1. Relevance to the master Construction Management and Engineering

This research is closely linked to the Master's program in Construction Management and Engineering, especially the Project and People track, in several ways. First of all, large construction projects are often carried out internationally, such as rail connections or energy networks. In these projects, the interaction between international partners and stakeholders plays a key role, making research into this topic highly relevant.

In addition, this research strongly relates to several core concepts of the Master's program, such as project and process management. It focuses on an essential aspect of project management: the collaboration between different parties and their communication. Furthermore, topics such as cultural differences in collaborations have also been covered in the program. In short, this research offers added value and provides insights into how Cross-Border Collaboration should be implemented within an organization.

1.4. Scope

Collaboration and teamwork are broad concepts. In both Chapter 1 and Chapter 2, the concept of collaboration is explored, with a brief reflection on the strategy and goals of a company or organization. The topic will be scoped towards how CBC is perceived within the organization and how employees think aspects of collaborations and other related matters need to change to increase CBC within an organization. This is applied to the case of company X. Their goal is to grow and achieve top market positions in the countries where they are active and where they believe CBC adds value and contributes. This thesis will focus on the collaboration within company X's smaller teams, as company X describes itself as a decentralized organization. The factors that play a role in this process will be analyzed. From there, a broader perspective on company X's vision of Cross-Border collaboration will be examined. Interviews will be conducted with various employees with CBC experience within the organization. These interviews will provide an overview of experiences and opinions regarding this collaboration and the current challenges in introducing CBC. These will then be researched in the literature. Ultimately, a collection of perspectives will emerge, indicating how CBC is perceived.

2

Literature review

This chapter discusses the state-of-the-art literature in the field of Cross-Border collaboration. The current state of CBC within the same company will be investigated here. It will examine the barriers companies face as well as the opportunities that arise from intensive CBC.

2.1. Search query

This review of the literature aims to familiarize readers with key terms relevant to this thesis. The following search terms in Figure 2.1 were used to select articles related to internationally oriented companies or organizations and their connection to CBC. The goal is to identify the success factors and barriers associated with such collaborations. In addition, the research explores how collaboration can contribute to growth and success. It is also essential to define a clear search strategy to ensure that relevant literature is selected, helping to identify the research gap in this field. To create a structured search approach, Scopus will be used, allowing for an easy combination and application of search terms.

For the first step of the literature review, a selection of available articles will be made based on the search terms shown in Figure 2.1 and the condition that all results must be articles written in English. Furthermore, it was decided that all terms must appear in either the abstract, the title or one of the keywords. The only requirement is that either collaboration or teamwork must be included in the title of the article. Terms such as 'multi-national' were excluded as they did not provide additional relevant results in combination with the other search terms. The outcome of this search query is n=34.

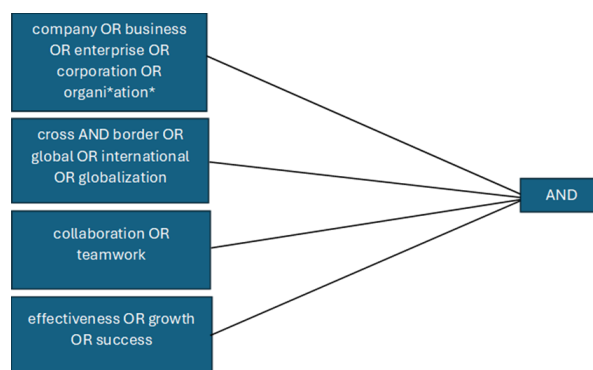


Figure 2.1: Search query

Table 2.1 presents the list of literature retrieved from the search query. The titles are included, highlighting the central role of collaboration. Based on this literature, the research will examine the barriers and success factors of Cross-Border collaboration in relation to the company. Articles that were excluded had very specific applications, such as systems in healthcare. Other articles were not included in the literature review because they were not related to collaboration or did not have collaboration as a central focus. The selected articles, however, had collaboration as their main topic and examined it from various perspectives.

Authors	Title
Heubeck et al. (2024)	Success factors of global virtual teamwork: A social capital perspective
Coffey et al. (2018)	Effective Collaboration for Scaling Up Health Technologies: A Case Study of the Chlorhexidine for Umbilical Cord Care Experience
Sanderson et al. (2022)	The effect of team-member knowledge, skills and abilities (KSAs) and a common learning experience on sourcing teamwork effectiveness
Sudeshika et al. (2023)	Interprofessional Collaboration and Team Effectiveness of Pharmacists in General Practice: A Cross-National Survey
Cassiday (2005)	Expatriate leadership: An organizational resource for collaboration
Hop et al. (2014)	Cross-border Collaboration in the Field of Highly Contagious Livestock Diseases: A General Framework for Policy Support
Arundale (2020)	Syndication and cross-border collaboration by venture capital firms in Europe and the USA: a comparative study
Li et al. (2020)	Multi-Core and Cross-Chain Evaluation Method Based on Multi-Core Mesh Collaboration Relationship
Awan et al. (2018)	Governing interfirm relationships for social sustainability: The relationship between governance mechanisms, sustainable collaboration and cultural intelligence
Compagnucci and Spigarelli (2018)	Fostering cross-sector collaboration to promote innovation in the water sector
Oxley and Pandher (2016)	Equity-based incentives and collaboration in the modern multibusiness firm
Felce (2011)	Cross-university collaboration for work-place learning: A case study
Drew and Coulson-Thomas (1997)	Transformation through teamwork: The path to the new organization?

Table 2.1: Relevant articles search query n=34

Furthermore, this literature study is enriched by an article that is relevant for the topic of collaboration. This was obtained through backward snowballing. This article is shown in Table 2.2.

Authors	Title
Ahuja (2000)	Collaboration networks, structural holes and innovation: A longitudinal study

Table 2.2: Other relevant article

2.2. State of the art

The articles that are relevant focus on concepts of collaboration related to the success of a company and the barriers that are encountered in achieving these successes or successful collaborations. Since company X is the central case in this thesis, company X will be reflected and compared on the articles discussed in Table 2.1 and Table 2.2. The interesting aspects found will be discussed, after which a gap will be identified to shape the subsequent research. The articles that were found contain three themes: Collaboration, Innovation, and Social and Cultural. Each of these will be discussed below.

2.2.1. Collaboration

The following articles focus on collaboration. Since this thesis is focused on CBC, there needs to be a broad understanding of the challenges faced when entering into collaborations and why these collaborations are so important.

Collaboration is essential in a time of increasing globalization and competition. According to Li et al. (2020), traditional collaboration within a single supply chain is no longer sufficient. Nowadays, companies collaborate within larger systems and networks. A new evaluation method is proposed: the multi-core and cross-chain evaluation method. This study focuses on the car industry, where various performance indicators are recorded in a cloud based system to assess collaboration partners. These evaluations are both qualitative and quantitative. Some factors are performance driven, such as profitability and market growth. Others include market risks and company specific characteristics. Regarding how CBC within an organization can increase, a solution might lie here. It involves evaluating certain processes within a company and CBC could be an example of this.

In a case study described by Felce (2011), a collaboration between universities and industry was examined to explore how jobs can be filled and the skills of the workforce can be improved. The collaboration was considered a success, but it still had some risks. One of such risks is the lack of trust, which is cited as one of the causes of collaboration failure. In addition, poor alignment between parties on how to achieve a goal was identified as another contributing factor. Furthermore, unexplained events, such as hidden agendas can challenge effective collaboration. However, according to Felce (2011), there are also positive lessons to be learned. These include clearly defining and formulating goals upfront, allowing time while maintaining deadlines and setting boundaries such as responsibilities. Additionally, the creation of cultural capital is mentioned as something that can be used in other CBC.

Furthermore, According to the case study on the Chlorhexidine for Umbilical Cord Care Experience by Coffey et al. (2018), several factors influence effective collaboration. First, strong and transparent leadership is essential. The case highlighted the role of a neutral player as an example of effective leadership. In addition, collaboration must be clear and transparent, with well-defined goals and mutual benefits for all parties involved. The study also emphasized that, particularly in the healthcare sector, sufficient support from within the industry is crucial. According to Coffey et al. (2018), when collaboration is well structured and organized, processes and interventions can be accelerated.

Just as Collaboration, according to Drew and Coulson-Thomas (1997), striving for effective teamwork is essential in a rapidly globalizing world where technology is becoming dominant. It is suggested that teamwork will become even more important in the future, particularly in the formation of culturally diverse teams in an international context. Drew and Coulson-Thomas (1997) highlights that teamwork plays a key role in improving communication and collaboration, enabling faster decision making, increasing flexibility and fostering a customer oriented culture. However, several challenges may hinder collaboration. A lack of political or managerial support could lead to ineffective teamwork. Additionally, misaligned goals and a lack of necessary skills to engage in collaboration are other factors that can hinder successful teamwork.

To continue on the topic of teamwork, in a case study by Sanderson et al. (2022), individual qualities within sourcing teams are discussed. According to Sanderson et al. (2022), several key factors influence the effectiveness of a team's performance. Some of these individual factors include knowledge, skills, problem solving abilities and capabilities. However, these individual qualities and their impact can mainly be utilized when learning is done collectively. Additionally, teamwork can improve when shared knowledge is developed and a collective mentality is created. It is further stated that joint problem solving does not play the primary role in enhancing effectiveness.

In another case study, research was conducted on the team effectiveness and collaboration of pharmacists. According to Sudeshika et al. (2023), pharmacists who have been working in the field for a longer period tend to be better at professional collaboration. The study also highlighted that trust, clear role distribution and good communication are crucial for effective and successful teamwork and collaboration.

Lastly, based on a case study focusing on preventing the spread of animal diseases through increased cross-border collaboration, several benefits and challenges were mentioned. According to Hop et al. (2014), both economic benefits should be preserved, while at the same time preventing the spread of diseases. Some challenges that emerged included improving communication between different parties in various countries, specifically the ministries in this case. It is also important to align tasks and responsibilities. In addition, according to Hop et al. (2014), both parties must be sufficiently willing to enter into collaboration, particularly in terms of compensation for damage cases. Furthermore, reducing legal and administrative burdens would foster collaboration. The benefits of this CBC, according to Hop et al. (2014), include lowering costs and increasing the efficiency of disease control. This is a specific example where Cross-Border collaboration is necessary to both prevent the spread of disease and maintain the company's economic value.

Collaboration also plays a major role within company X's teams. The exact structure of company X will be discussed later, but collaboration goes beyond working with direct colleagues or team members. These articles provide an initial impression of the barriers and opportunities that come with collaboration.

2.2.2. Innovation

As a company, you want to innovate in order to remain competitive in the market. In the state-of-the-art literature review, several articles link innovation to collaboration. These articles further explore the importance of collaboration in driving innovation.

The first article from Ahuja (2000) provides interesting insights. Innovation is important for a company to remain competitive. It compares collaboration between companies and the potential of innovation. It emphasizes the importance of having both direct and indirect ties within networks, both between companies and within the company itself. Direct ties are the collaborations that provide opportunities for learning and access to new resources, while indirect ties act more as intermediaries. Both types of connections have a positive impact on innovation. The article also mentions structural holes in a network. These holes have two sides. On one hand, they can be negative because they might lead to issues concerning misunderstanding. On the other hand, they can be beneficial for the organization as they allow for a diversity of information to flow in. The article concludes that there is no single network structure that applies to all companies. It highlights the need to consider the company's strategy and goals. Prioritizing and clearly defining the company's needs and the intended gains are central to this approach.

Furthermore, according to Compagnucci and Spigarelli (2018), there is too little collaboration in the field of water resource management. The research discussed highlights the lack of collaboration between industry, government and universities as the cause of this issue. Active collaboration is needed to stimulate innovation. according to Compagnucci and Spigarelli (2018) Research shows that, due to the emphasis on self interest, the focus on the collective and the innovations that come with it falls short. A shared innovation agenda could be a good step in the right direction. To achieve this, improvements in communication between the different actors will also be necessary. The collaboration will also need to be based on a flexible approach between the various parties.

The question is not only how collaboration can contribute to a company's goals but also what this collaboration should look like. Another article discusses therefore the implementation of financial incentives within an organization. According to Oxley and Pandher (2016), equity based incentives have a positive impact on cross-business unit collaboration. Not only do they align managers more effectively, but they also sharpen their focus on the company's growth and potential. Oxley and Pandher (2016) suggests that such incentives enable managers to create value more quickly through their efforts. These incentives appear to be most effective in expanding stock markets. Furthermore, they serve not only to align the organization's growth objectives but also to facilitate risk sharing and division profits.

2.2.3. Social and Cultural

The final part addresses cultural and social aspects. Several articles discussed this topic as part of international collaborations. This makes it applicable and relevant to the case examined in this thesis.

The next article reflects on cultural differences and their impact on collaboration. Awan et al. (2018) argues that cultural intelligence is essential for successful partnerships with companies from other countries. The study suggests that collaboration improves when individuals are aware of their own cultural traits. In addition, a person with high cultural intelligence should also understand the cultural background of their international partners. There must also be a willingness to engage with these other cultures and when necessary, adapt to the other culture to foster effective collaboration. Ultimately, the article concludes that collaboration is essential for social sustainability. Furthermore, according to Awan et al. (2018), higher cultural intelligence leads to stronger and more effective agreements between international companies.

Another perspective on collaboration is described by Heubeck et al. (2024). Globalization and digitization are now a reality, leading to increased cross-border collaboration. However, simply implementing various digital tools is not enough to ensure effective teamwork. According to Heubeck et al. (2024), efficiency does not necessarily improve through digitization alone. To achieve real improvements, the focus must also be on social capital. This refers to the importance of social connections between team members or collaborating parties. Heubeck et al. (2024) argues that it is essential not only to invest in digital tools but also in social interaction. Team-building activities or face-to-face meetings, for example, can strengthen these relationships, ultimately improving the functionality and efficiency of digital teamwork.

Furthermore, the experiences of effective organizational leaders with international experience is described. According to Cassiday (2005), interviews with such managers revealed that leaders who were satisfied with the outcomes were able to understand different cultures. These leaders were also better at handling group interactions. It is further suggested that leaders who effectively build relationships and communicate well are often better at solving problems and positively influencing their teams. In addition, these leaders, according to Cassiday (2005), are able to leverage cultural differences. They are also capable of creating an environment where respect, trust and good communication are central.

The next article delves into cross-border collaboration and syndication for venture capital investors. According to Arundale (2020), the differences between the American and European investors hinder collaboration. First, there are differences in willingness between American and European investors. European companies are generally more reluctant to share information. In addition, American investors perceive European investors as more cautious when making large investments and taking risks. Europeans also tend to prefer doing business with familiar investors rather than engaging with unknown partners. Furthermore, Arundale (2020) states that collaboration does not always run smoothly. American investors prefer to invest close to home, making European deals less attractive. At the same time, European investors are less willing to partner with American investors due to concerns about losing control over the project. As a potential solution, it is suggested that American investors should develop a better understanding of the scale of European investments, while European investors should be more open to sharing knowledge and occasionally taking greater risks. The lesson to be learned from this is that collaboration should not be one-sided but must come from both parties. If one party fails to clearly understand the differences or the barriers that need to be overcome, the collaboration may ultimately result in failure.

In the case of a company willing to increase its CB collaborations, there are several recognizable aspects. First of all, cultural differences will be encountered, as the company is established in various countries. Cultural and social awareness is therefore important, as it can either improve or hinder collaboration when such awareness is lacking. Additionally, differences in perspective, as mentioned in the articles above, can always arise. Tables 2.3 and 2.4 provide an overview of the factors identified in this chapter that influence collaboration.

Factors with negative influence
Self interest
Lack of political and managerial support
Lack of necessary knowledge
Misaligned goals
Ineffective teamwork
Lack of trust
Hidden agenda's
Legal and administrative burdens
No willingness

Table 2.3: Negative influence on collaboration

Factors with positive influence
Collective interest
Financial incentives
Good communication
Strong and effective leadership
Effective teamwork
Be time flexible, but strict on deadlines
Having clear goals
Setting boundaries such as responsibilities
Creation of cultural capital
Strong and transparent communication
Mutual benefits

Table 2.4: Positive influence on collaboration

2.3. Literature Gap

There is extensive literature on how people collaborate effectively and the importance of teamwork is frequently emphasized. In addition, a company's strategy reflects its character and culture and goals can be shaped based on this strategy. Working in a team that operates with trust and shared interests can pursue the objectives of a company or organization. To collaborate successfully, clear communication between different parties is essential. There is also a lot written about collaboration between different companies. Understanding cultural differences is crucial in making such collaborations successful.

Little attention is paid to the factors that influence Cross-Border collaboration negatively and how these factors can be resolved. Moreover, the existing literature lacks a comprehensive view of how Cross-Border collaboration functions within a single company operating in multiple countries. It also remains unclear how such collaborations can be successfully established and increased within an organization.

Looking at companies willing to increase CBC within their organization, it becomes clear that it is important to understand how CBC should be shaped within the organization. This is about achieving the goals the company has set, such as increasing profits and growing as a company and where they believe that CBC makes a positive contribution. To effectively expand and implement CBC within the organization, investments will be necessary. It must be clear how these collaborations should be structured to ensure that investments are not wasted.

In addition, CBC is a topic of discussion within company X. It is mentioned in their internal communications and is believed to contribute positively. This research will therefore investigate how CBC within a single organization can be effectively and appropriately increased by examining the barriers experienced in the field of CBC. This literature will complement existing research by providing insights into CBC within a single organization, going beyond general descriptions of collaborations and looking closely at the internal design of the organization itself. For many companies that work internationally or intend to do so, this research provides valuable insights into important considerations.

3

Research question

In this chapter, following the literature review, a research question will be formulated. To answer this question, sub-questions will be developed. These sub-questions will serve as a foundation for building the theoretical framework needed to answer the main question. The questions will be addressed using various research methods.

3.1. Main research question

From the literature review discussed in Chapter 2, it has become clear that little has been written about the factors that influence Cross-Border Collaboration within a single organization and how these barriers can be mitigated or resolved in order to expand CBC effectively within the organization. In addition, it is unclear what the perspectives are on how CBC can be implemented and increased effectively within an organization.

This thesis will investigate this through the main research question: *What are the different perspectives on CBC and on how CBC can be implemented and increased within an organization?*

3.2. Sub-questions

To answer this main question, several sub-questions will need to be addressed. These questions have been formulated using the Double Diamond method, which will be explained in chapter 4.

Sub-question 1: *What are the challenges, problems and enablers in the field of CBC (Cross-Border Collaboration)?*

This first question provides insight into how experienced professionals perceive Cross-Border Collaboration and the challenges they face when entering into such collaborations and in doing projects. Furthermore, this question explores the opportunities which comes along in CBC. It also aims to create insight into what these opportunities are and if barriers are still present. These findings can then be interpreted in the literature to understand why the barriers arise and how they can be resolved.

Sub-question 2: *How can the problems and barriers be explained and how can they be minimized?*

This sub-question builds on the results of the first sub-question. The outcomes, namely the problems and barriers experienced when entering into cross-border collaborations are examined in more detail. As mentioned, these findings are interpreted and analyzed in the literature. It seeks to understand the reasons for the barriers to exist and also examines solutions to minimize them.

Sub question 3: *What are the different perspectives on possible solution directions?*

The solutions and theories identified to answer the previous two sub-questions form the basis for this question. Not all theories will be applicable to all organizations. Therefore, this question provides perspective on how different solution approaches are viewed within the organization. From this, advice and insights can be developed on how to move forward with CBC.

4

Methodology

To answer the main research question *What are the different perspectives on CBC and on how CBC can be implemented and increased within an organization?*, qualitative research will be conducted on CBC within a case study supported by a literature study. The goal is to use this case study to make statements about the experiences and thoughts of the research participants about CBC and its limitations. The literature review, supplemented by interviews, will provide a substantive basis for these statements. By ranking these statements, several perspectives can be formed. These perspectives will give an impression of how employees within company X think about CBC and how this should be organized within the company in the future. To structure this process, this thesis will along its questions be based on the double diamond method.

4.1. Double diamond method

The Double Diamond method has been chosen to first create an overview of the problem space related to the topic. In the first diamond, the focus is on identifying the range of problems and barriers associated with CBC. Next, CBC enablers are explored to determine whether barriers prevent their full potential from being realized. This phase also aims to separate the main problems from the small problems, ensuring that solutions address the opportunities with the greatest impact rather than the smaller issues. In the second diamond, the focus shifts to finding suitable solutions. Based on the previously identified problems, these solutions will be investigated further to reach a well-founded final assessment. This evaluation will be conducted through the Q-method, which will be explained in more detail later in this chapter. In Figure 4.1 an overview of the methodology can be seen.

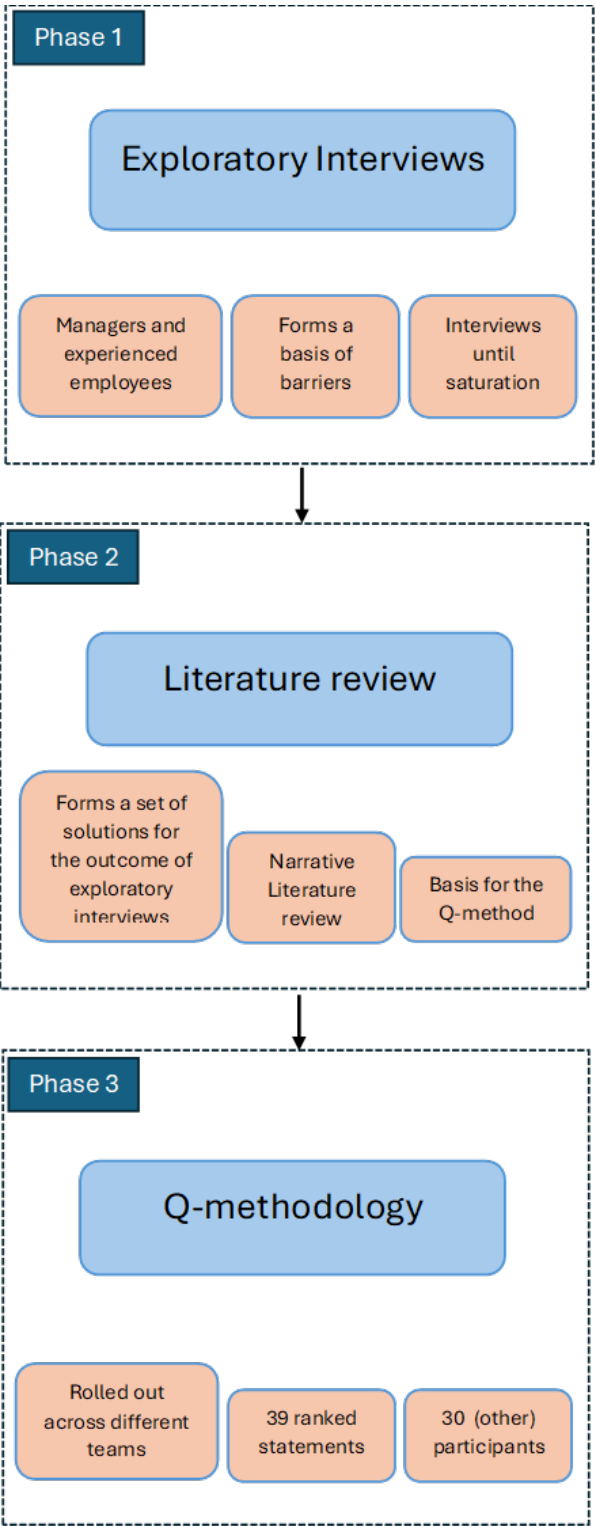


Figure 4.1: Methodology

4.2. Part 1: Exploratory interviews

The first phase, the discovery phase, aims to sketch the current scene of CBC within company X through exploratory interviews. To gain a broad perspective, various people experienced in CBC will be interviewed about their views on challenges, problems and enablers in CBC. These interviews will be conducted in a semi-structured way, linking the identified barriers in CBC to the advantages of CBC, both now and in the future. The inductive nature of these interviews will help formulate a theory on why CBC enablers are not fully exploited. The question that will be answered is: *What are the challenges, problems and enablers in the field of CBC (Cross-Border Collaboration)?*

The outcomes of this research will create a range of problems, challenges and enablers. For enablers, the focus will be on identifying the conditions necessary for their effectiveness and assessing whether they become evident. These findings will be categorized and selected based on the responses collected. When frequent answers to problems are identified, they will be further discussed in the define phase of the first diamond to ensure a clear focus on the most critical barriers.

4.2.1. Interview process

Figure 4.2 provides an outline of the different steps within the interview process. First, an overview of the input for the interviews will be provided. This will be referred to as the problem definition. This is the outcome of the state-of-the-art literature review discussed in Chapter 2. Based on this, the next section will present expected outcome of the interviews, which is derived from this state-of-the-art literature review. The following section will give an overview of the study participants. After this, the results of the exploratory interviews will be presented. These results will then be clustered to form a strong basis for the rest of the research.

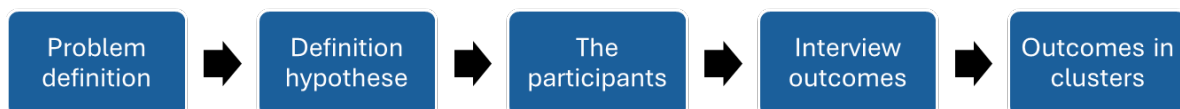


Figure 4.2: Overview of interview process

4.2.2. The interview guide

In Appendix C the interview questions are provided. The interview is divided into three sections, which will be discussed.

The first section sets the scene. Questions related to the role of the participant will be asked to ensure that the person fits the description of the target group, namely CBC experienced employees. In addition, in this section, participants will be asked to share their experiences with CBC and if they are frequently involved with CBC. This part consists of introductory questions aimed at bringing back memories of previous collaborations.

The second section of the interview focuses on identifying the negative aspects of CB collaborations. This means that the challenges and problems in these collaborations will be explored. Terms from the state-of-the-art literature study and potential company goals will be used to guide the discussion on potential problem areas. For example, the literature review highlighted issues such as poor communication, cultural and language barriers. In addition, administrative or legal challenges will be examined. The interview will also explore whether there are other challenges that were not identified in the literature. These will be addressed through open ended questions. Furthermore, participants will be asked about their own perspectives on what they would do differently in future collaborations. This question aims to explore possible areas in which solutions might contribute.

The third section will focus on the enablers within international collaborations. The goal of these questions is to assess whether opportunities and possibilities are being fully utilized or if barriers prevent these enablers from being maximized. Participants will also be asked for their views on how these enablers can be better leveraged in the future. As a final question, participants will be asked whether any aspects of collaboration that could be improved were missed in the interview.

This order serves only as a guide during the conversation. The interviewee will mainly do the talking. Follow-up questions will only be asked if the conversation drifts off-topic or if certain aspects of the questions are not addressed.

4.2.3. Participants description

These interviews will be conducted with employees who have experience in Cross-Border Collaborations within company X. This specific group was chosen because they have worked in CB projects and as a result, they have the most insight into the activities, as well as the direct enablers and challenges. The goal is to find people who both know about the strategy and business objectives as well as doing this kind of collaborations within the decentralized character company X has. This will probably be managers of some kind.

Participants will be recruited internally within company X through the available network via this thesis' supervisors. Additionally, the contacts of the company X supervisors of this thesis will be asked to come up with colleagues which have been in CB collaborations. The participants are approached directly with an introduction to the research. This introduction clearly outlines the purpose of the study and what is expected from the participants. The questions will be formulated based on exploratory discussions and a state-of-the-art literature review. The results of the interviews will be given equal weight in the research.

For this exploratory interview, a sufficiently large number of participants must be selected. In this case, a single case will be used, namely company X. Considering the limited time available and the exploratory basis of the interviews, the aim is to include 5-10 participants in the study. Interviews will be conducted until saturation is reached and a clear pattern of problems can be identified.

4.2.4. Interview expected outcome

The expectation is that these exploratory interviews will reveal several factors that hinder collaboration, making the project less efficient and hinder smooth collaborations. It is also expected that such projects, where CBC occurs, are only initiated when absolutely necessary. In order to significantly increase the amount of CBC projects, it is expected that there are still several barriers that outweigh the enablers these projects can bring. From the state-of-the-art literature review, several aspects emerged that are expected to appear again in the outcomes of the interviews. Some examples of these are administrative burdens, language and cultural barriers and misaligned goals.

Furthermore, from an organizational point of view, there should be complete clarity on how such collaborations should be established in order to work efficiently. From exploratory conversations, it has already emerged that there are different opinions about CBC within company X. These are from different team managers with some being positive towards CBC while other values the team interest and does not really see CBC as added value. Due this statements about the decentralized approach that company X aims to pursue within its teams, reactions on CBC will probably be mixed. In addition, administrative barriers between different company X countries make it possibly less practical to implement CBC in projects when compared to projects within the same country.

4.2.5. Interview outcomes

After the interviews have been conducted, they will need to be processed. Given the exploratory nature of these interviews and the limited number of participants, a thematic analysis will be performed. First, the transcripts will be carefully processed and sent back to the participants for approval. Next, the transcripts will be examined to identify challenges, problems and enablers related to CBC and project success. By coding the transcripts, a structured approach is used to identify the various barriers and challenges. These elements will be highlighted within the transcripts and then grouped into different themes. In addition, the most frequently mentioned terms will be analyzed to determine which are the most significant.

4.3. Part 2: Analysis on barriers

In the next phase, the identified barriers will be analyzed through a narrative literature review. The aim of this narrative literature study is to interpret and analyze the identified barriers within the literature and based on this, shape the concourse for the Q-methodology. In the second phase of the Double Diamond method, the Develop phase, as many solutions as possible will be gathered for the identified problems. These solutions will be collected and used to create different statements, which will then be presented to different teams within company X. Most statements will link solutions which have been found to specific problems. However, some statements will introduce a different perspective on CBC. These statements will be more negative on CBC to assess whether people truly see the proposed solutions as effective within the organization. These negative statements will be based on the interview outcomes.

The solutions will be selected on the basis of a narrative review of the literature. This research method is chosen because clusters of problems will emerge from the interviews. The topics that arise the most and are related to a decentralized company will be investigated based on relevant literature. The interviews will highlight issues associated with CBC as well as enablers. In this narrative literature review, the identified solutions will not necessarily be directly linked to CBC. This connection will be made in the Q-methodology through specific statements.

4.4. Part 3: Q-methodology

For this process, the Q-methodology will be used. This approach will help in the Deliver phase to reach a clear and well-supported answer to the main research question: *What are the different perspectives on CBC and on how CBC can be implemented and increased within an organization?* From this study a collection of possible solutions will result. This will provide insight into how employees view CBC in relation to what they think is necessary in order to increase and implement CBC within the organization.

According to Minkman and Molenveld (2020), the Q-methodology is an effective way to assess the extent to which opinions diverge. This method is seen as a tool that allows the organization and its stakeholders to respond to policies or in some cases, make necessary adjustments. The Q-methodology identifies different opinions and ranks them. The Q methodology provides information on the different perspectives within the organization, which, according to Minkman and Molenveld (2020), policy makers can use to refine their policies. Additionally, Minkman and Molenveld (2020) states that this method has the advantage of quickly revealing how opinions on a specific topic in this case CBC, vary within the organization. Moreover, a relatively small number of participants is required for this research. Around 30 responses are expected.

With this Q-methodology, a similar approach is used as in the exploratory interviews. The difference now lies in the people who are being approached through the supervisors' network. While the interviews were conducted with people relevant to CBC, the Q-method will go beyond that. The goal is to have 30 different participants for the Q-methodology to ensure that the two studies remain separate.

While the exploratory interviews will be conducted across different areas of expertise and departments within company X, the Q-method will be applied to more specific fields. Since company X can be described as a decentralized organization, it was decided to gather responses to this Q-method as decentralized as possible. Therefore, two business units will be chosen: X. The teams within these business units are participating in this research. This decision was made in order to provide a decentralized solution approach to a central policy choice. These two departments were specifically chosen because, in the area of water, there is currently very little Cross-Border collaboration. It is therefore interesting to gain insight into how employees who have little experience with such collaborations think about it. In the case of spatial planning, there is already somewhat more CBC. This became clear from conversations within the departments. It is therefore interesting to see how they think the level of CBC can be increased within the organization and what they consider to be unrealistic.

4.4.1. The Q-method process

Firstly, the statements will need to be defined. In this study, this will be done through both inductive research, namely interviews and deductive research, namely literature review. These two researches will form the concourse of the Q-set. This is the collection of things people say about the subject, in this case Cross-Border Collaboration (Webler et al., 2009a). Approximately 30 statements remain after iteration and eventually used. All viewpoints and theories expressed in previous research will be preserved.

The sorting of responses will be done via an online form. This choice is made to efficiently manage time and to be able to question as many participants as possible. In addition, the form will include the option for participants to briefly explain why they chose the extremes as they did. This provides more insight into the 'why' question that otherwise would not be addressed in this Q-method.

The different statements are based on the outcomes of the interviews combined with the literature in which they are analyzed. From these results, various categories will be defined, with an equal number of statements created for each category. After several iterations, the statements that remain contribute to answering sub-question *What are the different perspectives on possible solution directions?* The Q-method is then sent via a software program according to Banasick (2023) to the two defined business areas. It is important that during these iterations, statements that answer a different question are filtered out. In addition, all statements must be supported by theory and interview results.

4.5. Assumptions

This study will address the question: *What are the different perspectives on CBC and on how CBC can be implemented and increased within an organization?* Based on the literature reviewed in Chapter 2, it became clear that collaborations offers advantages such as capacity and expertise sharing. However, limitations and barriers are also mentioned that can sometimes hinder collaboration. Therefore, this thesis is expected to reveal a wide range of insights and perspectives on how CBC should be improved in the future to positively contribute to a decentralized organization such as company X.

These insights will be gathered from various CBC experienced people within the organization. The goal is to capture opinions from different teams. Through the exploratory interviews, it is expected that perspectives will differ. The expectation is that the barriers experienced depend on the project, the project's environment and the project's size. This is also evident from the state-of-the-art, where the type of person and personality often form the basis for experiencing barriers as discussed by Awan et al. (2018). Furthermore, it is likely that team management views CBC differently than the people working on the projects directly. Higher level managers are expected to have a more holistic view to CBC as a concept.

The overall expectation is that CBC contributes positively to knowledge and expertise sharing. However, a significant increase in CBC may not easily be done because of existing barriers. Also, these kind of barriers have probably to do with employees being unfamiliar with CBC. This analysis will lead to a range of perspectives how CBC is perceived and how these kind of collaborations can be done more frequent. The expectation is that the outcomes will be generalizable, as today many companies collaborate in various forms, both locally and internationally.

4.6. Validity and reliability

To ensure the validity of the research, the interviews will mostly be conducted with people who are closely involved with project teams rather than those with a broad strategic view of CBC. Team managers have practical experience through their team members while also understanding the overall strategic benefits from higher-level management. The interview questions as well as the Q-method process will be reviewed by experts who have experience in conducting research and designing interview questions. An example of such experts includes the supervisors of this thesis project. A sufficiently large research group is also important for reliability. The number of interviews is somewhat flexible but is estimated to be around 5. Saturation will be reached when a clear pattern of problems or challenges emerges that can be used for further analysis.

The validity of this research is evident in the fact that all three sub-questions serve as a foundation for the next sub-question until the the main question and in the fact that different participants with different backgrounds have been asked to participate in this research. The first sub-question investigates opportunities and barriers. This is done through interviews until saturation occurs. The second sub-question is formulated to explain these barriers from the literature. The final sub-question explains the various perspectives on the information found within the case study and in the literature. This is a different group of participants who work in various teams across different business units. This provides a mix of people and a variety of areas of expertise. The participants remain anonymous and unbiased throughout the process.

To further improve reliability, some questions in the interview will ask for the same information but from different perspectives. If the answers are consistent, the research results will be more reliable. In addition, all interviews will follow a similar approach to avoid external influences that could affect the results. Furthermore, all statements are based on the interviews themselves and the theory related to the barriers found in the interviews.

4.7. Limitations

According to Minkman and Molenveld (2020), the Q-methodology has the limit that it does not provide explanations for the given responses. To counter this, the statements will be based on literature and the exploratory interviews. The 'why' question remains difficult to answer.

However, potential limitations remain, such as the risk of not reaching saturation due to too few responses or the time intensive nature of the Q-methodology, which may limit the number of participants.

5

Part 1: Exploratory interviews

This chapter discusses the exploratory interviews. A total of five interviews were conducted, after which a clear picture emerged about the existing barriers and opportunities related to CBC. The sub-question addressed in this chapter is: *What are the challenges, problems and enablers in the field of CBC (Cross-Border Collaboration)* This chapter serves as input for the narrative literature review, which aims to interpret the identified barriers and opportunities.

5.1. Introduction interviews

First of all, This thesis starts the exploratory phase of the research by conducting semi-structured interviews, as described in Chapter 4. Interviews were chosen in order to gain insight into the specific problems and challenges faced when working internationally. According to Jain (2021), exploratory interviews are useful as they allow the unknown drivers and perceptions to be mapped out. Other advantages of conducting interviews include the clear interaction between the interviewer and the interviewee. This way, according to Jain (2021), any remaining ambiguities can be discussed and misunderstandings about definitions can be avoided. Furthermore, there are sometimes answers or comments that were not anticipated beforehand but are still interesting for the research.

Moreover, Naz et al. (2022) talks about conducting semi-structured interviews. The advantages of these interviews are the ability to ask follow-up questions on interesting remarks during the interviews. In addition, according to Naz et al. (2022), they allow for in-depth discussions on certain topics, leading to new and valuable insights. The order of the questions can also be adjusted if the conversation requires it.

5.2. Intended outcome

The purpose of these interviews is to gather a wide range of issues that, according to experienced individuals, arise during CBC or reasons why CBC does not occur in the first place. Based on the results, different clusters with specific issues will be identified, after which the next phase of the project will begin.

This interview has a clear objective and intended outcome. These interviews aim to explore how CBC is experienced within the organization. Given that CBC is already part of ongoing discussions at company X and there is a clear ambition to enhance CBC, the focus lies on understanding why CBC has not yet been more broadly adopted within company X. The focus is on identifying factors, specifically challenges, problems, or barriers that may prevent ongoing CB Collaborations. This first phase of the research, the exploratory interviews will be considered successful if a collection of barriers has been collected when collaborating CB.

5.3. Problem definition

To properly define the problem, the state-of-the-art literature study is used to identify what will be explored in these interviews. As mentioned above, there is a lot of research available on collaborations in general and also on international collaborations. Tables 2.3 and 2.4 present several factors from the literature review that influence the quality of collaboration. However, the literature shows that there is limited knowledge about how CBC functions within a single company operating in different countries. This is important for companies that see CBC as a positive thing and as something that needs to happen more often in the future. The focus will be not only on identifying the factors that hinder collaboration, but also those factors that hinder the realization of its potential benefits.

In addition, company X has expressed the ambition to significantly increase the number of working hours spent on CBC projects. It is therefore important to understand how this can be done effectively and what challenges employees currently face. To create a solid basis for this during the exploratory interviews, the following sub-question has been formulated: *What are the challenges, problems and enablers in the field of CBC (Cross-Border Collaboration)?*

5.4. The participants

Five interviews were conducted with various individuals with CBC experience. Each of these interviewees discussed the reasons why CBC should take place and why there is currently not more CBC happening. A clear pattern emerged after the fifth interview. Each of the five interviewees had different expertise. Not only was their opinion asked, but sometimes they were also asked if they recognized the problems that emerged from the state-of-the-art literature review.

5.4.1. Interviewee 1:

In Figure 5.1, an overview of the outcome of interviewee 1 is presented. Interviewee 1 believes that more benefits can be obtained from each other's strengths through CBC than is currently being done. It involves expertise and capacity sharing and creating new opportunities, such as increased profitability and sharing of knowledge and experience. They introduce the CBC framework with an older version that includes company X countries, a rough description of each country's expertise and their average hourly rates. It is a template with topics that need to be arranged.

Generally, there are three reasons to collaborate: to reduce rates, improve competitive position and to bring in expertise from abroad. The Netherlands is a quite expensive country on this scale discussed in the template, making it interesting to collaborate with company X countries with lower rates to reduce the average rate. Another option is to do bulk work in countries with lower rates. Expertise from abroad is also valuable. The form used by this person shows where the expertise is, although it is outdated. The form also includes lessons learned, emphasizing the importance of making a plan, starting small and developing collaboration. This is crucial for project management. It is important for project leaders to fly over to understand the project, as without direct oversight, they may not ask questions and could waste hours. Sometimes, the result might not be satisfactory. Confusion can arise if the training hours of international colleagues are assumed to be paid by the contractor or client, leading to disagreements. It should not be assumed that everything is understood. Each country has different guidelines and legal requirements.

Transparency in costs and progress is crucial according to interviewee 1. With a lump-sum contract, there is a risk that another country spends too many hours, which can be costly for the other company X party. Each country has its own way of forming contracts, which affects their willingness to take risks. The type of contract in which the client is involved strongly influences whether CBC can be engaged without subsequent issues. Contracts should balance agreements and avoid an 'everyone for themselves' approach.

CBC seems promising, but is still not applied uniformly. Each country tries to fill projects with its own people to keep them employed, showing a lack of awareness of CBC's benefits, such as making winning bids by reducing rates. Shared projects can allow higher-quality work in the Netherlands. Lower average rates can lead to higher profits. Interviewee 1 claims there is always room for more work, as billing ratio targets are always higher than realized. CBC should not be an objection.

CBC is more useful for larger projects than small ones. Each company X country must decide if the financial benefits are sufficient for CBC and then make agreements on responsibility. Both parties should benefit. Long-term investment is necessary to understand the laws, rules and conditions of a country. It involves long-term thinking. Initial investment will lead to efficiency and profitability over time. Knowledge transfer must happen quickly to avoid wasting hours and risking the financial business case and planning. The three core concepts are time, money and quality.

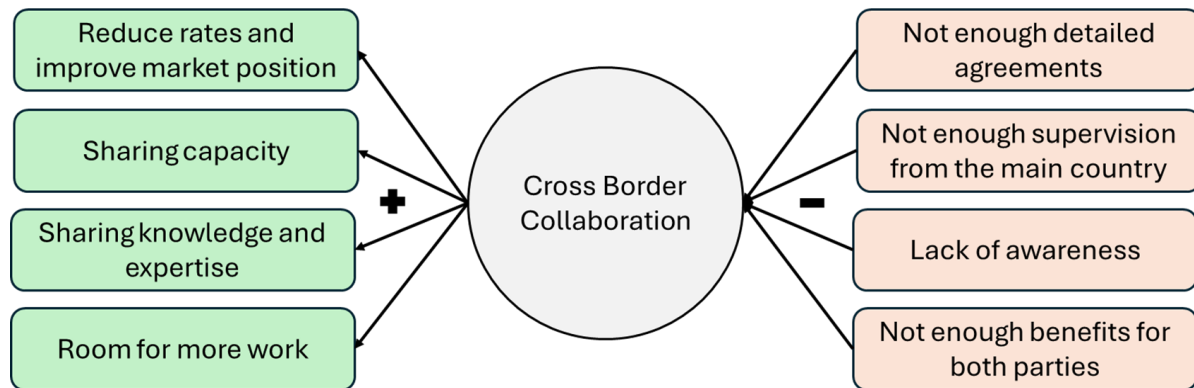


Figure 5.1: Factors interviewee 1

5.4.2. Interviewee 2:

Figure 5.2 provides an overview of the outcome of the second interview. Interviewee 2 describes the difference between Export management and CBC as somewhat of a gray area. This person refers to collaboration with other company X countries in regions where company X is not established and firmly believes in the importance of CBC, citing positive effects such as sharing expertise and attracting young talents. The assumption is made that a large international company involved in significant international projects attracts new talent. Large clients can find the company better and as an international company, you want to demonstrate your capability in handling major international projects. In large projects, young talents can gain valuable experience and bring that knowledge back to the Netherlands, enhancing the company's positive image. Foreign projects are considered interesting and enjoyable. While Teams meetings make collaboration efficient, they lack the charm and social contact, which is critical for creating enthusiasm and binding among team members. The effectiveness of CBC often requires physical interaction, especially for larger projects.

Recently, company X employees have become less accustomed to cross-border collaboration. It is not embedded in the organization and is not sufficiently promoted. There is a general lack of awareness about CBC and communication regarding CBC needs improvement. The opportunities and potential benefits of CBC are often underestimated.

When it comes to CBC, people often focus on negative experiences rather than positive ones. Discussions are mostly about losses or disagreements with colleagues from other countries or clients. The perspective on CBC can vary greatly depending on the manager and is strongly influenced by individual personalities. You need a certain drive, which can be dependent on the specific work area. The focus on CBC is generally lacking, although this can vary by department based on necessity. Everyone is currently very busy due to the hectic Dutch market, leading to the belief that local priorities should come first. To successfully implement CBC, it should be prioritized over other projects.

Additionally, cultural and language differences are encountered during CBC, as well as varying rules, laws and procedures in different countries, which complicate working abroad. High tariffs in the Netherlands also make it difficult to work internationally, putting pressure on profit margins. Consequently, Dutch professionals are often less likely to be engaged due to these high tariffs.

company X teams are relatively small, so when a project is pursued but the offer is just missed, it heavily impacts the team. Larger projects require significant effort and missing out can affect team results. Results are evaluated on a team basis. Interviewee 2 suggests that to prevent this, scaling up to the department and division level is necessary. Organizational changes are needed to handle CBC more effectively. Decisions should be made on which countries and themes to collaborate on from higher organizational levels. Expressing the desire for collaboration should align with the organization. Departments should identify potential collaborations and determine what fits and what does not. From there, create a strategy, identify where CBC is of added value and focus efforts accordingly. Communication of this strategy within the organization is crucial.

Initially, there will be investments needed to effectively integrate CBC within the organization. This will incur costs. The teams must present their results, but CBC is more of a long-term commitment. A strategy and steps must be outlined and investment will be required.

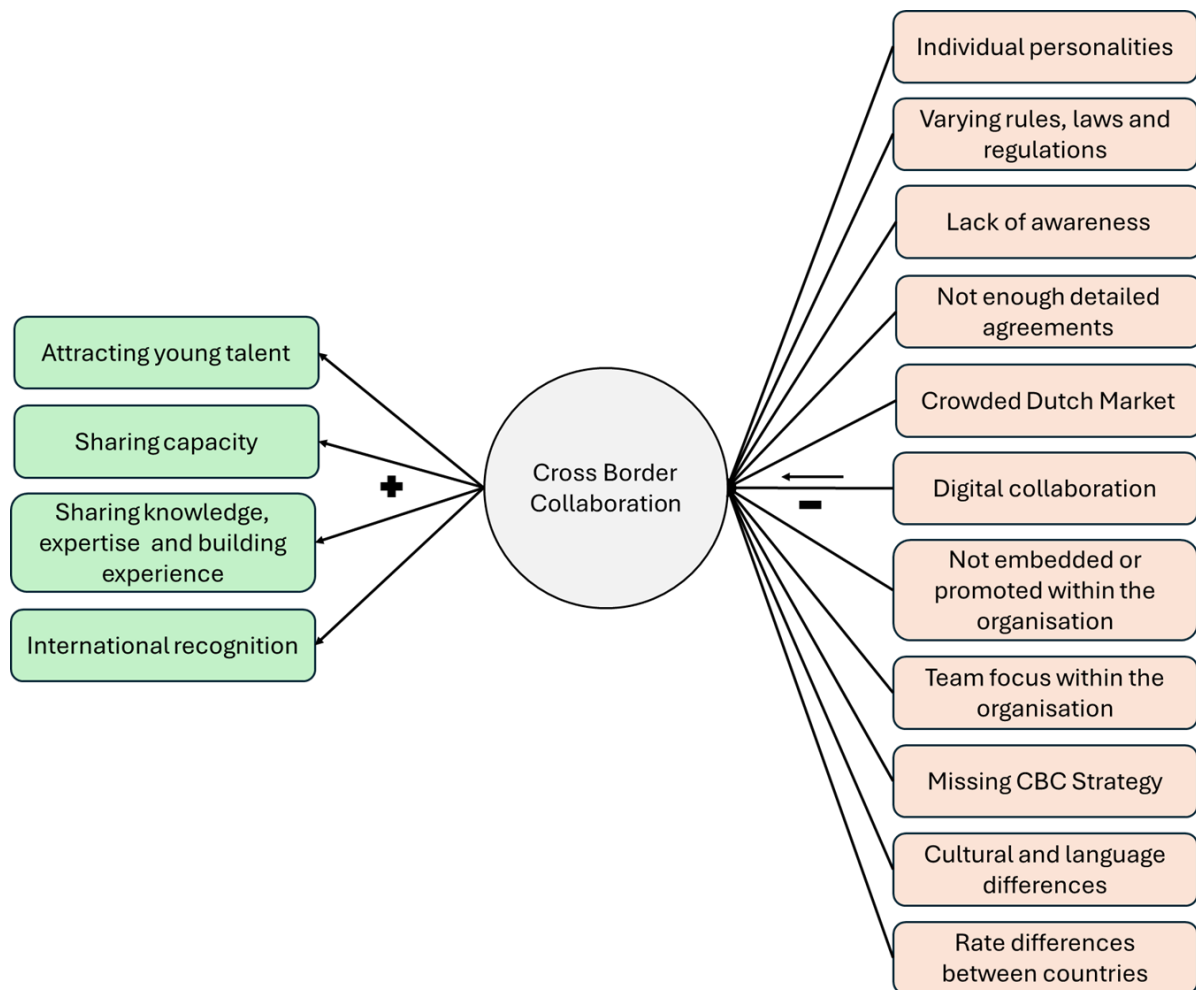


Figure 5.2: Factors interviewee 2

5.4.3. Interviewee 3

In Figure X, the factors mentioned by the third interviewee are shown. Interviewee 3 states that at the moment CB collaboration is not done systematically. It only happens on very large projects now. In the past, this person has seen many international projects fail. They ultimately became less profitable because things did not go as planned.

When choosing between two projects in the Netherlands or abroad, the Dutch project is often favored because it is familiar and it has been done many times. The benefits of foreign projects are simply unclear. In addition, there is a lot of work to be done in the Netherlands, especially on main themes such as flood protection. On these themes, it may not be wise to increase cross-border collaboration much. However, there are gains to be made on other themes. Engineering firms do not bid on certain themes due to a lack of capacity in the Netherlands.

These routine projects require discovering which market areas can achieve greater margins. This person is still positive about CBC because it has positive effects on the external appearance and the international character. The international character distinguishes you from local engineering firms. Additionally, it is interesting for graduates to do international projects and it is very appealing for high potentials and graduates.

Interviewee 3 is positive about CBC within company X countries but less positive about CBC outside company X countries. Working in an unfamiliar country for both parties can be challenging. However, it is necessary to utilize capacity from abroad to address critical shortages in the Dutch market. Certain specialization areas cannot take on projects due to a lack of capacity. There should be an evaluation per discipline to identify where collaboration can be achieved and where opportunities lie. Creating a heatmap for these sectors would be beneficial.

CBC should only be pursued when necessary. Otherwise, achieving success from these projects can be difficult. There are three aspects to CBC: capacity, price and knowledge. Three examples are provided; In the Netherlands, there may be a lack of capacity that exists abroad, people in the Netherlands who are not currently engaged can share their expertise and work abroad or the people aspect, where it is attractive for young talent to work on large international projects. In the past, mistakes have been made when CBC was not pursued for one of these reasons. An example of this is when people find a project fun or interesting to do.

Interviewee 3 mentions that CBC sometimes failed in the past due to agreements not being precise enough. This often led to discussions during collaborations. The current CBC framework used is still a 'fairly open standard'. The combination of contract forms, recorded hours on projects and a poorly defined scope description often create a challenging tension. Very concrete agreements must be made for these collaborations to be successful. People are also hesitant because there are more negative examples than positive ones.

Furthermore, there are cultural differences in such collaborations. Practices that Dutch people have may differ abroad. Language is sometimes perceived as a barrier, especially among seniors who primarily speak their native language.

CBC is further complicated by the use of different standards. Various regulations and norms act as barriers in CBC, which are typically specific to a country and sometimes unknown to other company X countries. People need proper training to overcome these barriers. The language barrier also plays a role, especially when translating technical terms, making it difficult to convey information accurately. Investment is needed to address these challenges effectively.

Additionally, company X's decentralized structure complicates CBC. Currently, business decisions are made at the team level. For various assignments, decisions are made at a lower level on which projects to proceed with. Although there is some cross-team consideration, it often stops there. Teams also consist of a small number of people, so in large projects, a large portion of the team is involved. If something goes wrong, it negatively affects the team's results. This decentralized model hinders CB collaboration. There is little organizational encouragement to train personnel abroad, as short-term costs are seen as project overruns. Management approval is needed to accept these short-term overruns since they can yield returns in the long term. The problem is often approached from a cost perspective. Structurally, each country is organized differently and while names have been somewhat aligned, it remains challenging to connect with each other.

Investments are necessary, but currently, project wins and team results are prioritized. Investments for a few months down the line are not considered useful. According to this interviewee, the biggest issue with CBC is sub-optimization at the team level. Teams need to understand why they should engage in CBC and what long-term benefits it brings. Business unit managers and division directors need to lead by example, considering whether they want to invest in CBC and if they see a future in it. It involves accepting weaker results in the short term to achieve long-term success. If this decision remains at lower organizational levels, it will not be addressed effectively.

5.4.4. Interviewee 4:

In Figure X, an overview of the factors mentioned by interviewee 4 is provided. Interviewee 4 mentions that cross-border collaboration is useful due to capacity distribution and commercially interesting because lower rates are applied. This refers to the deployment of company X personnel from countries where the rates are lower than in the Netherlands. In addition to the advantage of these lower rates, high-quality expertise and knowledge are also brought in from abroad, which strengthens the market position here in the Netherlands.

For larger projects where this person has experience, there is the possibility to invest time and money in CBC. For medium-sized projects, there needs to be a prospect that several similar projects will follow, from which more returns can be achieved. For highly specialized assignments, it is also possible to outsource this abroad. Investments can be made, which will pay off later. About the number of collaborations currently undertaken, it is still not very many. At the moment, many hurdles are experienced before collaborating. For example, you need to get to know the other parties well, such as who they are and what they can do. Financial agreements must also be made. For smaller projects, this is perceived as too much a burden according to this person. Furthermore, company X's directive is to become dominant in its own company X country first. Therefore, there is less focus on looking abroad. company X places the responsibility low in the teams, giving these teams a lot of self-management capability. When collaborating cross-border, investments will need to be made, which is not embedded in the current business model. It is not yet seen as a potential growth opportunity within this model. For projects that span departments and divisions, this team focus is challenging.

When collaborating on cross-border projects, it can be challenging when tasks are delegated or when a product is created that does not align with expectations and intentions. This is not necessarily the case, according to interviewee 4. Sometimes this involves different working methods that ultimately have financial implications. To rectify this, time, energy and money must be invested. Both parties must commit to achieving success as one company X. With insufficient experience, this is not a given. There is a strong personal and human aspect to these collaborations. On one hand, it is essential to recognize that it can be challenging for the party abroad to work on a project in the Netherlands. On the other hand, they must genuinely want to work internationally.

In addition, a team wants guaranteed returns and minimal risks when collaborating. This makes it difficult to reach an economic offer and partnership. There must be a trigger on both sides to engage in the collaboration. Joint success must be created. In CBC, 4/5 members of a team will not be deployed at once. This will be less. The person involved in the collaboration will gain knowledge and experience. It is a risk that this knowledge may disappear if that person leaves the organization.

Moreover, cultural differences remain. An example is given where something is said in a brainstorming setting in the Netherlands and it is immediately seen as an assignment abroad. In addition, in other countries, the role of a manager is sometimes perceived differently. When a manager says something, it is seen as an order and the manager ultimately decides. In the Netherlands, it is much more team-oriented. Generally, within company X, people work in their own country. Therefore, this person believes that cultural awareness is sometimes insufficient among the people. General awareness of cultural differences should be improved with an increase in the number of CB collaborations. Communication usually goes well, though there are differences in the open and direct way of communication in the Netherlands compared to others abroad.

Lastly, discussions about rates often arise when Dutch expertise is deployed abroad. Solutions are found with great effort, but these discussions recur periodically. Therefore, financial success is not always tied to CBC. Often, it involves building resumes and personal growth. Occasionally, it even

affects job satisfaction when collaborations are messy, such as deploying and withdrawing people when agreements are not reached. Other challenges experienced during CBC include the administrative burden that comes with it. This is often substantial, with agreements that need to be signed.

The advice given is to make collaborations easier, as there is a lot of administrative burden involved. A clear picture should be created about the added value and the future outlook, including potential future returns. CBC should not be pursued just as a goal itself.

5.4.5. Interviewee 5:

In Figure 5.3, the factors mentioned by interviewee 5 are shown. According to this interviewee, CBC has several advantages. Cross-Border collaboration is seen as a good way to share expertise among the different company X countries. In addition, these collaborations are often regarded as enjoyable and educational experiences.

However, this person recognizes various obstacles. These can be summarized into two categories: obstacles before the collaboration begins and obstacles experienced during the collaboration. The interviewee was brief about the second category, namely during the collaboration. As acknowledged in earlier interviews, cultural differences are experienced in all collaborations. This includes different customs or even work methods. In addition, language barriers are encountered in these collaborations. Lastly, it was emphasized that during collaborations in different countries, the standards used may differ.

Furthermore, the CBC Agreements help in making arrangements. Despite good agreements, parties still face different rates within the organization. The shared Maconomy, enterprise resource planning software, already helps a lot in this regard. Generally, CBC works well. However, the discussion about rates compared to the Dutch rate remains. Such collaborations are only profitable if specific knowledge from the Netherlands is applied in the project. Currently, it appears that the incentive from company X is not very high due to issues like these tariff problems.

Regarding the issues prior to the collaboration, this interviewee was much more outspoken. This person claims that it is difficult to find each other, which means that each other's expertise is not yet optimally utilized. Also, because of the decentralized organization, people tend to look within a limited scope. Because the organization is not always clearly structured, it is also difficult to find each other abroad. company X is not organized based on expertise or market, but based on geography. Additionally, due to the decentralized organization, teams are very self-reliant when it comes to achieving results and performing. Currently, a lot of local work is being done in small projects by the project teams. The advantage of working abroad is therefore not always very significant. At this moment, it quickly takes a large portion of the team's time to collaborate Cross-Border. This person claims that when CBC is required, the organizational structure somewhat hinders, as company X's model is not designed for it. It is therefore a big step to collaborate Cross-Border. It is perceived as challenging and occasionally causes problems. Some of the issues mentioned are communication, cost allocation and making offers. Due to these barriers, it is more difficult for a team to collaborate outside of its team. As long as the decentralized nature is deemed very important, this will remain difficult.

Regarding presentation, company X presents itself as decentralized and close to the clients. However, company X presents itself less as one company X Europe. This person leaves the choices to be made in this regard somewhat open. It is stated that when new or young people want to work internationally, this cannot be adequately offered at the moment. This is due to the tightly organized decentralized structure. Opting for this decentralized character has many advantages for the local market. However, the disadvantage is that when aiming for cross-border collaborations, it poses many obstacles. According to this person, it will depend on personal initiatives only and not be something structural. Currently, communication almost has to go through the country director to make certain agreements, which takes a long time. This person links this to the fact that during collaborations, it is sometimes unclear which party ultimately makes the major decisions. Due to the lack of good structures for such collaborations, it is difficult to determine who is in charge. Ultimately, this also has to do with personal relationships.

Additionally, it is claimed that a fairly hierarchical structure currently exists towards the country directors, with cross-links between teams and areas of expertise in Europe missing. Therefore, it is challenging to find each other in the other countries. Steps are being taken to name similar departments the same,

but for now, it remains difficult. However, this person suggests that organizing cross-meetings might not be the best option because it takes a lot of time to organize them.

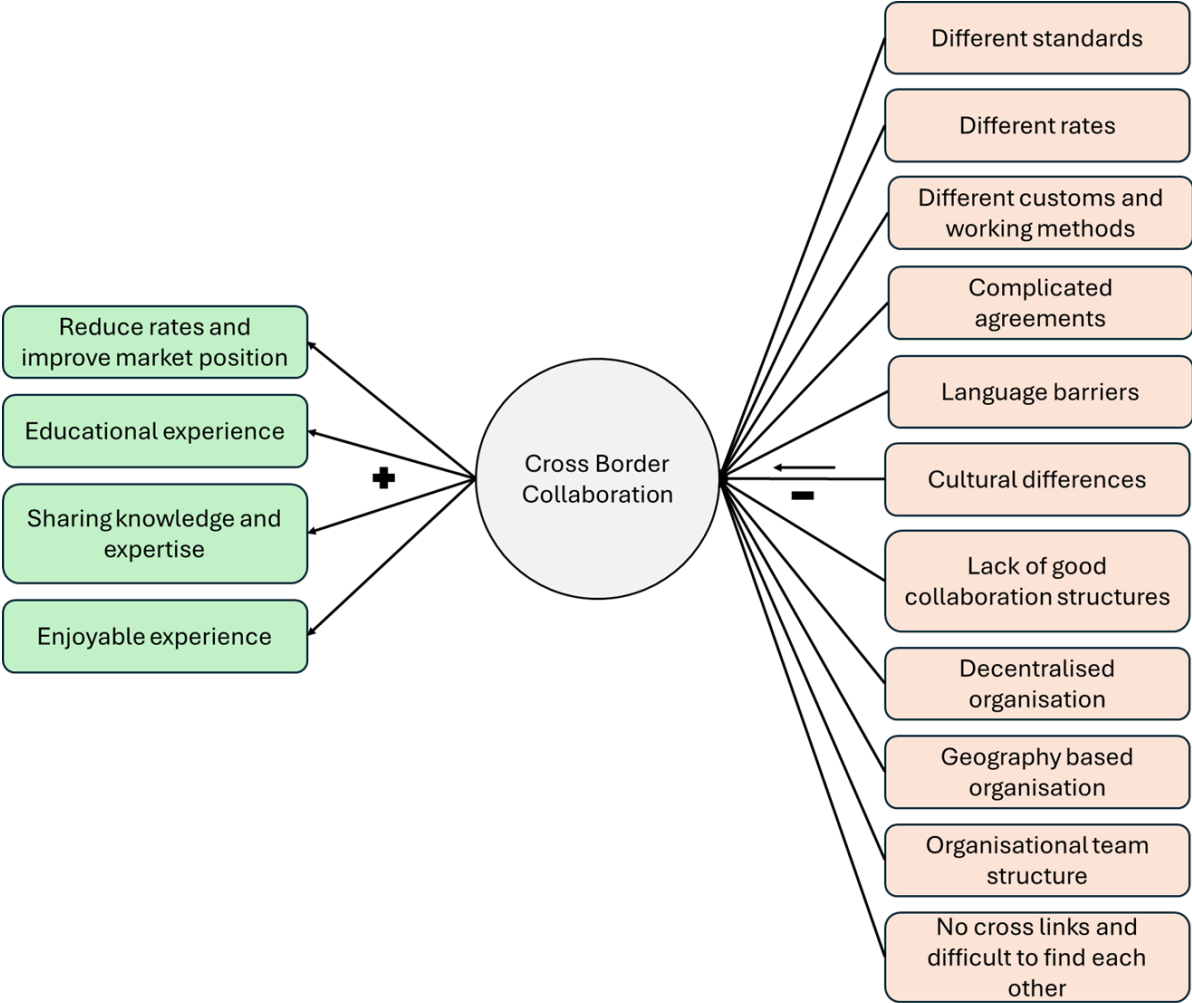


Figure 5.3: Factors interviewee 5

5.5. Outcome in clusters

In summary, all interviewees are positive about CBC. However, investment will be required to make these collaborations sustainable and beneficial to company X’s business case. It can be stated that the benefits CBC offers, such as sharing knowledge and expertise and attracting new talent are currently not being optimally utilized due to various reasons. The additional success that CBC could potentially achieve cannot be fully exploited because of these reasons. Although the exact success factors or indicators have not been clarified within the various divisions and business units of company X, interviews suggest that CBC is something an organization must aspire to in order to benefit from the positive side effects mentioned earlier.

Currently, there is still too much uncertainty within the organization regarding CBC and there are mainly organizational barriers encountered when engaging in CBC. These organizational barriers came up in almost every interview. In Figure 5.4, an overview is provided of the various factors that are encountered in clusters. The answer to the question *What are the challenges, problems and enablers in the field of CBC (Cross-Border Collaboration)?* can be divided into five different clusters. These organizational challenges are factors that came up in every interview and are almost always experienced. In general, the different organizational barriers were spread across the interviews, but there were also common ones. One example is the structure that makes it difficult to find colleagues across borders. In addition, the focus on teams is an example of a frequently mentioned topic within the interviews. The decentralized organization that hinders CBC and the different norms, values and agreements were also common subjects.

Because many organizational aspects were mentioned collectively in the interviews, further research on these barriers will be conducted in this thesis. Not only because of the frequent occurrence of these barriers, but also because there is little research on CBC within this same organization, making this subject interesting. Other barriers such as language and cultural differences will not be discussed as they have been frequently researched. Lastly, the focus of the topic in this thesis is also due to the emphasis that interviewees placed on the organizational will and support for CBC. For this reason, the following chapters will delve further into the organization of company X and into the organizational structure where CBC needs to find its place.

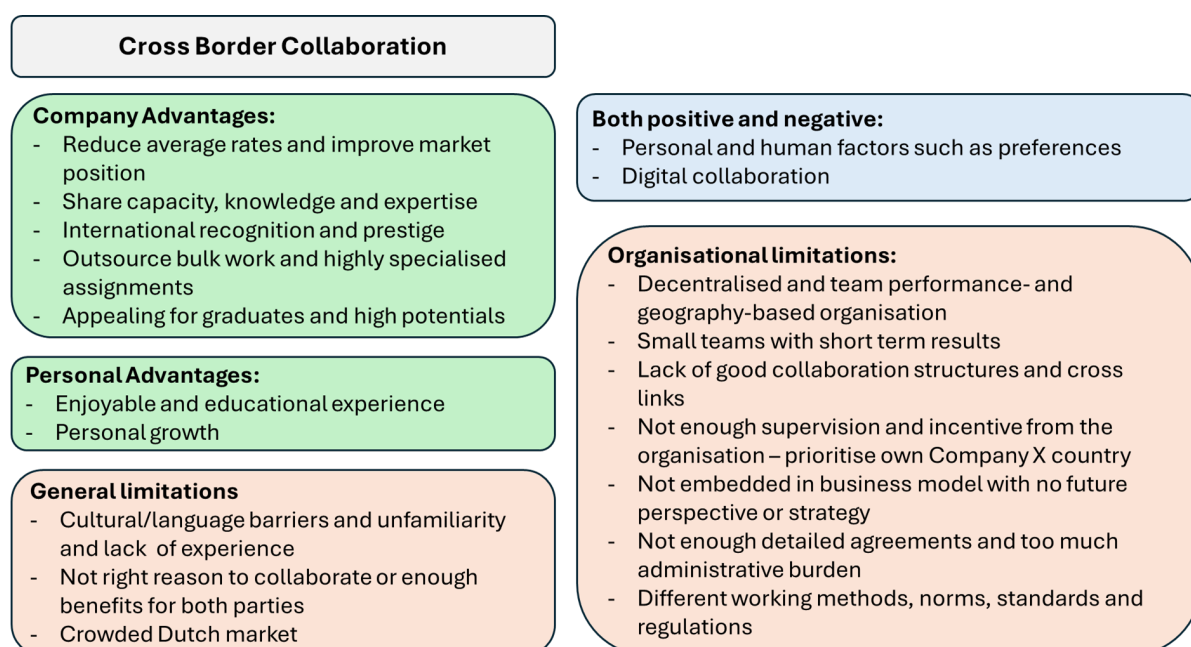


Figure 5.4: Factors in clusters

6

Part 2: Analysis on barriers

In this Chapter, the following sub-question will be answered: *How can the problems and barriers be explained and how can they be minimized?* To answer this question, the results from the exploratory interviews will be examined. Issues or barriers on namely the organizational ones that emerged will be explored, because this subject was one of the biggest cluster outcomes in the interviews. The remaining barriers, such as language and cultural barriers, will not be discussed any further in this chapter. This analysis of the barriers which have been found will present various potential solutions approaches. However, not all solutions will be directly applicable to the CBC context within company X. Some may even fail to offer practical solutions. In this chapter, not only the interview results will be interpreted, but the theory about other types of organizational barriers will also be explored, based on Mintzberg (2023) and other relevant sources. This literature study will form the basis for developing the statements used in the Q-method in Chapter 7.

6.1. Starting point review

From the exploratory interviews, several barriers could be identified when it comes to CBC. From the clustered overview in Figure 5.4, it can be seen that one of the largest clusters of problems is related to organizational matters. Some terms that arise from this are 'decentralized organization with respect to CBC' and 'CBC not embedded in the company X model'. Claims are made here that organizationally company X is not focused on an increase in CBC. From this cluster of problems, six different categories can be identified. These are: the decentralized organization, responsibility, company X's business model, organizational structures, incentives and agreements and culture. These categories will be explained based on Mintzberg (2023), supplemented by other relevant literature. This literature study will not only include examining the current organizational structure of company X and an explanation why the barriers are currently being experienced, but also the structure of the organization if CBC were to become a major part of company X's organization will be examined. Similarities and differences in structure will be analyzed.

6.2. company X's organization

Before analyzing the theory discussed in the literature, the organization of company X will be described in order to refer to it. According to Mintzberg (2023), the meaning of an organization: 'An organization can be defined as collective action structured for the pursuit of a common mission' and 'the structure of an organization can be defined as the pattern of relationships designed to enable its people to take that action together.' In other words, this means that when a company sets certain goals, the structure of the company is important in achieving these goals. The structure of an organization is specifically mentioned. 'The pattern of relationships' should promote that the goals are collectively achieved by the people in the organization (Mintzberg, 2023). Within this philosophy, one could argue that in the case of company X, the organizational structure should be examined to determine if it is designed to pursue the established goals, such as increasing and promoting CBC.

From the interviews, it emerged that company X is a decentralized organization. This is supported by company X's insight platform information. It is stated that company X focuses on projects of medium to small size. The projects are being executed in teams. These teams are authorized and expected to take responsibility themselves. company X claims to be organized in straightforward structures that help operate close to clients Anonymous (2025). It is also stated that CBC is encouraged and desired when requested. This applies to larger projects or projects that promote market growth.

company X is an organization where clients are prioritized, according to their principles. One of their pillars is client focus. According to Anonymous (2025), this decentralized organization is achieved by structuring the organization as a line organization, where teams are considered the most important parts of the organization. The teams ideally consist of approximately 10-15 people and work according to a similar vision, strategy and policy. This line organization is characterized by teams that each have a leader. The number of leaders decreases towards the top with ultimately the director or executive at the top Van Commenee (2024). Figure X shows how the different management levels in the organization are structured according to this line organization. This specific example shows company X Netherlands. The Netherlands is one of the business areas within company X.

The company X group is divided into different business areas. These are structured geographically. Each business area (BA) is led by a BA president and a Finance Director Anonymous (2025). Figure X shows how the business area in the Netherlands is organized. It includes different divisions, which are further subdivided into business units. The business units are further divided into different teams that were discussed earlier in this section.

As seen in the previous examples, each company X country follows the same structural setup. The differences lie in the names of the divisions, the number of divisions and the basis in which these divisions are structured. The business units that are part of the divisions differ in terms of quantity, name and areas of expertise.

Earlier this chapter an explanation was given of what company X's business model entails and how they operate. An explanation of the category responsibility will follow. Mintzberg (2023) discusses several key players in an organization who have important roles and shape the organization. In addition to the operators who do the work, the supporting staff who assist these operators and the analysts who monitor the activities within the organization, there are the managers who oversee everything. The managers who take responsibility for specific sections within the organization. In addition to these four players, there are two more components of an organization that have influence according to Mintzberg (2023). Firstly, the culture within an organization is significant. Mintzberg (2023) defines this as the system of beliefs within the organization. It is considered as the way things are done within the organization. In addition to this internal culture, there are also external influences that can shape the organization.

According to Mintzberg (2023), in an organization, people with different expertise and backgrounds need to collaborate. This is called coordination and usually happens through mutual adjustment. There can be various alternatives such as direct supervision, where a manager maintains control or standardized work where people almost automatically coordinate through standardized knowledge or skills. Standardized norms also function within the organization according to Mintzberg (2023). This makes it easier for people to coordinate with each other. In addition, organizations often function better when norms and values are standardized. From the interviews, it emerged that the different standards and norms in various countries make CBC challenging. This serves as input for the category Culture and Agreements.

6.3. Structure of an organization

Next, the category of Organizational structures. According to Mintzberg (2023), there are various elements that determine the structure of an organization. The first element discussed is the design of the positions. This involves the scope, degree of formalization and the training and indoctrination required. The degree of formalization refers to how standardized and documented tasks and responsibilities are. Training and indoctrination are related to the amount of training and education a person needs to work effectively within the organization. A specific example is mentioned where organizations have a distinct culture. According to Mintzberg (2023), it is essential that employees fully embrace and internalize this culture.

Secondly, there is the design of the superstructure. According to Mintzberg (2023), this involves how positions are grouped into units, the size of these units and how much decision power is decentralized to these units. The division of units promotes collaboration and communication, makes supervision possible and allows the creation of a common result within the same field of expertise. Figure 6.1 and Figure 6.2 show examples of groupings. Mintzberg (2023) states that vertical groups create horizontal barriers and horizontal groups create vertical barriers. Grouping can be done based on region, different functions, customers, time period or specific reasons. Furthermore, an organization can choose to be centralized or decentralized. According to Mintzberg (2023), there are two extremes: one in which everyone has equal power and the other in which the power is concentrated in one person. There are many variants of decentralized organizations between these extremes, which can be distributed vertically or horizontally throughout the organization. This theory forms the basis for the category Decentralized Organization.

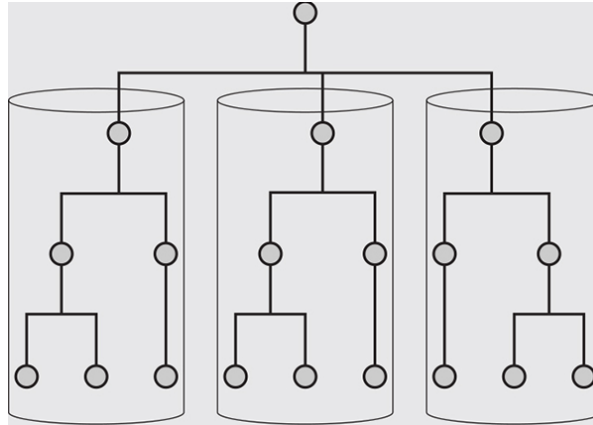


Figure 6.1: Vertical grouping

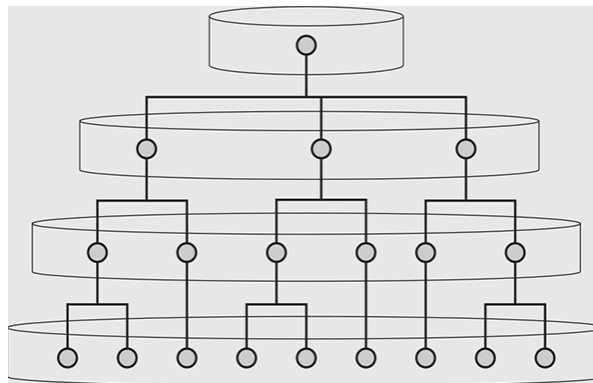


Figure 6.2: Horizontal grouping

Thirdly, Mintzberg (2023) mentions additional factors that are important. This includes systems that plan and control performance. Lateral links are also discussed, which promote communication and collaboration between different units. Several examples are mentioned here. For example, the liaison position is someone who sits between two units according to Mintzberg (2023). These individuals have the task and responsibility to find ways for the two units to collaborate with each other. Furthermore, integrating managers is mentioned. These managers can be given authority over certain resources of the unit. In addition, Mintzberg (2023) suggests that meetings, committees, teams or task forces can be established to create alignment between units.

Lastly, a matrix structure is mentioned. According to Mintzberg (2023), in this structure, individuals report to multiple leaders. This reduces ambiguity about collaboration. These structures can be set up permanently, but can also be established for specific projects.

According to Borgatti et al. (2009), the structure of a network matters because teams with similar skills can perform completely differently based on their position in the network or the way they are connected to others in the network. This influences the opportunities available. Centrality can also be important in bringing together and controlling different actors or parties. Borgatti et al. (2009) suggests that success, such as innovation, can be achieved by bringing together separate units or groups. This can be traced back to how the different Business areas of company X are structured. There are divisions that sometimes differ in name or are split into multiple divisions. A degree of centralization could bring these divisions together across national borders.

6.4. Forms of organization

According to Mintzberg (2023), there are four fundamental forms of organizations. These are shown in Figure 6.3. These four forms are the personal enterprise, the programmed machine, the project pioneer and the professional assembly.

In the personal enterprise, one leader is the basis. This leader has a lot of control over the organization. The strategy of the organization is often based on the perspectives of this leader, according to Mintzberg (2023). Mintzberg (2023) says that this structure is very flexible, dynamic and engaging but carries the risk that the broader vision may be lost and the organization may become too dependent on this person.

On the other hand, the programmed machine is more hierarchical. According to Mintzberg (2023), work is often standardized, making it easier to execute. Work is typically carried out in chains. This organizational form is common in stable and simple situations where the organization has existed for a long time. External influences have little impact on this form of organization, according to Mintzberg (2023).

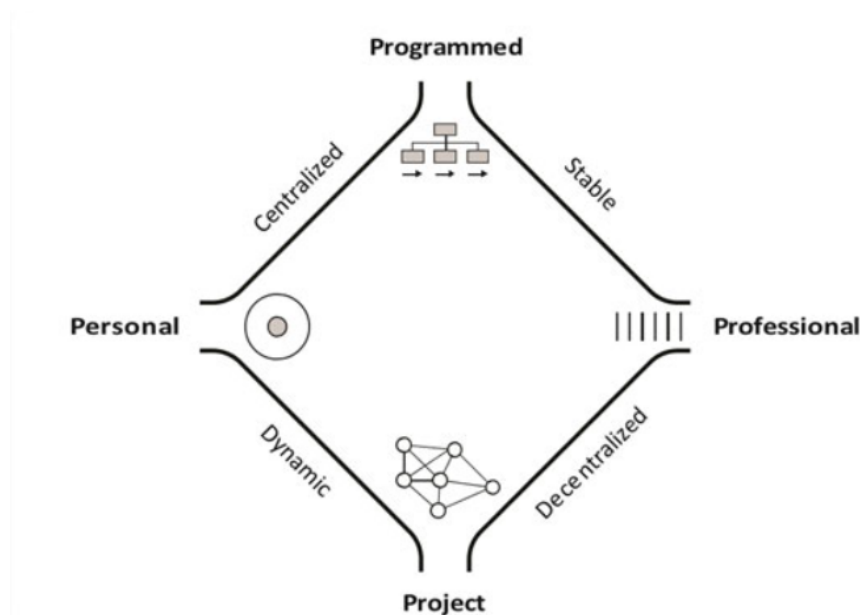


Figure 6.3: Four fundamental forms of organization

Mintzberg (2023) then discusses the professional assembly. In this type of organization, highly educated or specialized individuals are hired and trained to perform their work efficiently. According to Mintzberg (2023), these skills and knowledge are subsequently standardized within the organization. These skilled individuals can then work autonomously in a decentralized manner. Compared to other organizational forms, this form is the most decentralized according to Mintzberg (2023). It involves not only autonomous, but also administrative decisions and the hiring of new personnel. This form is known for seeking customized solutions for customer requests, which is less common in the programmed machine and personal enterprise forms. In short, the professional assembly is described by Mintzberg (2023) as a group of autonomously working individuals in specialized units who are focused outwardly towards the clients they serve.

This form has several advantages, such as the motivation and dedication associated with this type of organization. However, there are also some disadvantages. Categorizing skills can lead to situations where customers whose needs fall just outside these units or specialized categories may not receive direct help or solutions. In addition, according to Mintzberg (2023), changes are difficult to implement in this form of organization. Professionals are asked to collaborate, even though they are trained to have significant autonomy and primarily work in stable environments. Changing existing categories in which professionals work is therefore seen as challenging. According to Mintzberg (2023), the role of managers is more a supportive role, rather than a supervisory one.

According to Mintzberg (2023), the previous forms of organizations are not necessarily suitable to foster innovation. In contrast, project pioneers have the capacity for innovation because this type of organization is filled with experts who collaborate to create innovative results. Projects are seen as unique, with new developments occurring continuously. Spontaneous interactions and collaborations are a key feature. This form emphasizes collaboration and adaptability within teams of experts. Mintzberg (2023) describes this form as having a decentralized nature in which managers have more of a connecting role, rather than a controlling one in changing projects and project teams. Project teams can be established for a single project, continue onto the next project or serve external clients in various projects. The disadvantages of the project pioneer form include ambiguities due to the distribution of power within a project team. This can lead to discussions that sometimes cause the focus to be lost, resulting in projects being both effective and inefficient at times. According to Mintzberg (2023), the role of managers in this type of form is different because they are part of the project team itself. The role of managers and the distribution of power will form the basis for several categories, such as the Decentralized Organization, Incentives and Responsibility.

Mintzberg (2023) also mentions other forms of organizations. An example is the division form, where companies expand by implementing related products and services into new departments. Acquiring other companies is an example of this. Merging companies is easier than merging different cultures, which according to Mintzberg (2023) can take a longer time. These departments operate autonomously, though the headquarters has set goals regarding the results and associated performance checks. According to Mintzberg (2023), portfolios are also managed at the headquarters. This form is considered a streamlined version of decentralization Mintzberg (2023). Additionally, these different divisions move towards the machine form of an organization as certain matters are centrally managed within this form. Ultimately, Mintzberg (2023) suggests that none of the previously mentioned organizational forms exist, as each organization has unique characteristics.

When looking at the organization of company X, you can observe various characteristics. Within company X, teams sometimes work in different compositions and individuals within these teams sometimes work autonomously. The manager's role varies between being connective and sometimes collaborative. Teams consist of individuals with knowledge and expertise. Company X, therefore shares similarities with both the characteristics of professional assembly and project pioneering. Additionally, company X occasionally acquires smaller companies. As previously stated, it can sometimes be easier to integrate the new company than to blend different corporate cultures. Further drawbacks mentioned include that due to the autonomous and decentralized nature, independence is sometimes more ingrained than collaboration across units. Moreover, an equal distribution of power might hinder a cultural change such as an increase in CBC.

6.5. Forces of organizations

Mintzberg (2023) states that an organization consists of several forces. Each form, previously discussed, is associated with a specific force, as shown in Figure 6.4. The personal enterprise has the force of consolidation. In times of crisis, this can strengthen the qualities and changes of individuals and processes, as well as bring people together. For a programmed machine, the force is efficiency due to the order that prevails in the organization and the minimization of resources. According to Mintzberg (2023), the force for professional assembly is proficiency. This is about utilizing the skills and knowledge of professionals and is not focused on efficiency or creative collaborations. The project pioneer uses collaboration to innovate. While they could use consolidation, collaboration is their main force. According to Mintzberg (2023), similar results can be achieved in the networks created by these collaborations.

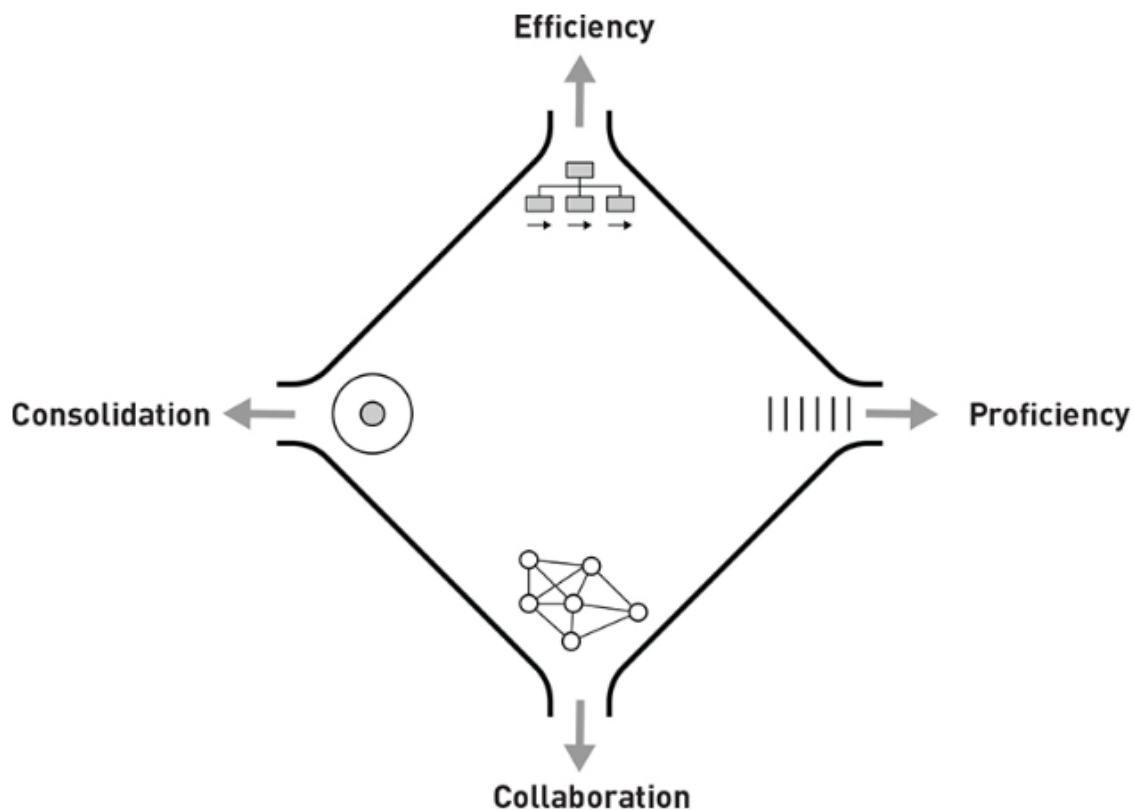


Figure 6.4: Forces for each form

Then there are three forces that play a role in all forms of an organization. First, according to Mintzberg (2023), there is overlay of separation. This is about increasing autonomy within the structure. The decision-making authority is shifted more towards the units as long as they align with the intended results set by central management. Next, according to Mintzberg (2023), there is the infusion of culture. Culture is defined as the way things are done within an organization. According to Mintzberg (2023), organizations with a clear culture are recognizable by their unique way of working. It is stated that organizations with a clear and appealing culture, where people are motivated and where values and goals are clear, often work more effectively.

It is not easy to create such a culture within the organization. Mintzberg (2023) mentions that changing the culture in an existing organization is quite challenging. A charismatic leader is seen as an important factor in any potential changes within this existing culture. Positive stories and experiences must be built within the organization to create traditions. This will be included within the categories of Incentives and Culture and Agreements. Current employees will need to conform to the new culture. New employees, according to Mintzberg (2023), will then integrate into a group where there is a shared culture, rather

than a group where people have different ideas. According to Mintzberg (2023), a distinctive culture can occur in all the previously mentioned forms. However, it is noted that in the professional assembly, there is often a more individualistic and professional approach rather than an organizational one. In the project pioneer, such a culture is more expected due to the decentralized nature and collaborative nature of the teams.

Next, there is the intrusion of conflict. According to Mintzberg (2023), this involves driving people apart due to conflicts and disagreements. When these disagreements or conflicts arise, political games can emerge. Culture and conflicts, according to Mintzberg (2023), are two concepts that can counteract each other but can also balance each other. Mintzberg (2023) claims that two or more forces must come together for the organization to function effectively. Conflicts can arise where different forces meet. These differences or contradictions in these forces must be effectively managed according to Mintzberg (2023) for the organization to be effective.

In short, tensions can arise when different forces come together. Within company X, there is a strong decentralized nature with autonomous teams and collaboration within these teams or business units. A cultural shift towards more CBC or international projects could potentially clash with other dynamics within the organization. For instance, the shift of power towards the teams might not be beneficial to changes that need to be implemented centrally.

6.6. Centralization vs decentralization

According to Cummings (1995), there is no fixed balance between centralization and decentralization of an organization. It appears to be a dynamic aspect that moves between two extremes. Cummings (1995) also claims that an organization should always seek a balance between decentralization and centralization that works well for them. This balance is constantly disrupted by external and internal forces. Examples of external forces include market dynamics and technological advancements and examples of internal forces are the company's culture and the personal needs of the employees. Therefore, it is important not to focus on a fixed balance, but rather on the ability to adapt. This is where a hybrid model is mentioned, where not everything is decentralized, but certain matters can be managed centrally. Involving employees in discussions about the extent and specifics of decentralization is crucial according to Cummings (1995). In addition, it is important to clearly communicate why certain matters need to be decentralized or centralized.

6.7. Innovation

Mintzberg (2023) also mentions several steps that can be taken when more innovation is desired. For example, the organization can choose to set up a new unit that focuses entirely on innovative projects. Different people from various teams can join this new unit when contradictions arise. These units can be formed based on specific project needs with the goal of breaking through fixed structures. When large-scale innovation is required, the organization can choose to implement a culture of innovation throughout the entire structure. The idea is that everyone can contribute ideas on how to improve their work processes.

Granovetter (1973) provides additional insight into strength of ties with others, distinguishing between strong ties and weak ties. Strong ties are bonds that people engage in frequently, while weak ties are connections with less familiar contacts. According to Granovetter (1973), having weak ties provides the opportunity to have more interactions within a network. Strong ties can sometimes have the drawback of keeping information sharing within limited circles, which can lead to fragmentation within a network. Weak ties offer the possibility of innovation through the sharing of information and collaboration with these less familiar connections within the network. Weak ties can bring various groups or circles together. Granovetter (1973) also suggests that it is beneficial to appoint individuals who seek connections between different groups or departments. It is wise for these individuals to have many weak ties, as they already possess a broad knowledge base. These weak ties can be built during meetings and conventions. Without these intermediaries and relying solely on strong links, the possibility for innovation and broad knowledge sharing is smaller. This innovative solution will be addressed in the next chapter, where such forms of collaboration or the bringing together of different groups will be tested through a series of statements.

6.8. Outward focus

Lastly, Mintzberg (2023) discusses the way organizations can focus outward. He suggests that companies used to expand through diversification, with established boundaries, hierarchy and structures remaining intact. Tasks are outsourced on the basis of contracts. It is important for organizations to always keep their core tasks sharp and internal. According to Mintzberg (2023), outsourcing transforms an organization more toward a project structure. Joint ventures are mentioned as an example in which different organizations collaborate to create market-specific products or services. Providing a platform for others is seen as an easy way to promote coordination between various parties. In addition, Mintzberg (2023) discusses aligning efforts for a common purpose, where different parties are engaged to achieve a common goal, such as securing better prices together. This is seen as something important when collaborating. Organizations do not integrate according to Mintzberg (2023), but a few individuals can be appointed to keep the collaboration coordinated.

6.9. Theory applied to company X

In the various company X countries, a line organization structure is used. You can state that vertical silos of management levels and information and reporting streams are created. According to Mintzberg (2023), vertical silos can cause horizontal barriers. This was confirmed through interviews, with remarks that indicated that it is difficult to find colleagues.

In Figures X, only the divisions and business areas of the Netherlands, and X are shown. The teams that fall under these divisions are not visible. The names of the divisions and business units are different in various company X countries. In X, these are sometimes based on geography rather than a particular field of expertise. During the interviews, it was mentioned that it is difficult to find colleagues in other company X countries. This generally has to be done via existing contacts and cannot be easily identified through an overview of the structures of other countries according to the interviews discussed in 5. For example, it is not easy to find the structures of other countries in the Netherlands.

In addition, the organization of company X is characterized by its decentralized nature. There is a lot of autonomy and decision-making authority within the teams operating in the business units. As highlighted in the interviews, this decentralized nature makes CBC difficult. Smaller teams risk achieving poor results if a CB project does not proceed as planned or if the bid is not won as discussed in 5. In terms of literature, you can describe the structure of company X as a combination of the project pioneer and the professional assembly. Within the teams, a lot of project work is done with a customer-oriented focus. However, the teams consist of specialists who perform their work with their knowledge and expertise. According to Mintzberg (2023), these characteristic structures also have some disadvantages, such as working in silos through these small islands of knowledge. Furthermore, it can be more challenging to direct things from the top-down to the lower teams and other way around. According to Cummings (1995), it is about finding a balance where decentralization is the most important and where things need to be regulated more centrally. However, this balance is never static and will fluctuate due to various external and internal factors.

Another point that emerged from the interviews is the organization's desire for CBC. There is not always enough incentive to engage in collaboration. The organization should not only express the need for more CB collaborations, but also translate this into actionable measures as discussed in Mintzberg (2023). This lack of incentive from the organization was also mentioned as insufficient stimulation for collaboration. As stated earlier, company X has characteristic properties of both the project pioneer and the professional assembly. These expert teams have the disadvantage that work is often done individually or within the project teams themselves Mintzberg (2023). Good leadership is a solution to this. When the organization sets concrete goals in the area of CBC, these can also be assessed. To successfully monitor this, good leadership is needed. According to Su and Baird (2017), leadership styles that involve clear structures, goals and performance criteria or leadership styles that prioritize personal well-being or a good work atmosphere, can contribute through control systems to improve performance. These control systems can help translate these management styles into measurable results. Su and Baird (2017) also mentions diagnostic control mechanisms. These mechanisms measure the outcomes and monitor progress using performance indicators. Goals will need to be set in advance that can be measured.

Next, Popova and Sharpanskykh (2011) discusses a framework in which organizational goals are evaluated based on performance indicators (PI). By linking goals to measurable indicators, organizational performance can be better assessed. Popova and Sharpanskykh (2011) claims that goals should be formulated through such performance indicators. It is also necessary to link these goals and PI's to employee roles or processes. In short, company X's vision of wanting to collaborate more cross-border could possibly be translated into concrete goals and PI's to allow for evaluation. Popova and Sharpanskykh (2011) also mentions that when different goals conflict, these conflicts can be identified through evaluations.

The line organization in which autonomous teams work fits well here. The interviews revealed that due to the small teams, poor results in CBC negatively impact the team's overall performance. Since there is currently not much cross-border collaboration within company X and it is not ingrained in the organization, the culture will also need to change. In a brief conversation with the CEO of company X, she indicated that CBC adds value to the organization, but it is indeed not yet part of company X's culture. In earlier conversations, it was even mentioned that collaboration between divisions is currently not optimal. Finding and connecting with each other is sometimes a challenge. CBC is already being implemented in several major projects, such as those related to hydrogen and infrastructure. However, she also noted that CBC is not yet embedded in the organization's culture and that something needs to change in that regard. As Mintzberg (2023) stated, this is challenging within an organization where a culture has already developed. This culture change can bring about effectiveness in projects or the organization. The interviews also mentioned that setting goals and accepting long-term goals in the area of CBC, along with the investments that come with it, should be necessary. According to the literature, it is essential for the organization to set concrete goals and include specific performance indicators to facilitate change.

In short, simply expressing ambitions is not enough for an organization. When it comes to CBC, changes are necessary if you truly want to increase CBC within the organization and embed it in the organizational culture. However, not all changes are desirable and not all options are seen as realistic. Therefore, the Q-method will help determine whether the findings from this literature review, combined with the description of company X as an organization, align with the opinions from the organization and how these results should be interpreted.

To conclude this chapter, as an addition to Figure 5.4, an overview of several concepts and topics that have been discussed throughout this chapter, will be given with the belonging category. This overview complements the identified organizational barriers and serves both as a summary and as input for the statements in the next chapter.

- Managers and leaders being responsible (Responsibility)
- Standardized norms and values (Culture and Agreements)
- Cultural differences when taking over companies (Culture and Agreements)
- Cultural change needed and embracing changes (Culture and Agreements)
- Enough incentive leaders of a company (Incentives)
- KPIs to measure progress (company X's Business Model)
- Strong and weak ties (Organizational Structures)
- Sharing experience (Responsibility)
- Combination centralization and decentralization (Decentralized Organization)
- Horizontal and vertical barriers (Organizational Structures)
- Training employees (Incentives)
- Introducing liaisons (Responsibility)

Part 3: Q-methodology

This third phase builds on the findings of the literature review in phase two of this thesis and the findings of the exploratory interviews. The barriers encountered within company X, which the interviewees consistently mentioned and which appeared most frequently, were further examined in the literature review. What the literature revealed about these barriers will form the basis for the last part of this research. The Q method has been chosen to gain insight into how company X employees perceive different statements on how to improve CBC within the organization. Once again, a representative group of participants will be invited to participate. These will be the two business units Water and Urban Projects with each business unit having different teams. They will be presented with various statements that offer solutions to several CBC-related problems. They will rank these statements alongside other statements with a relatively more negative view considered CBC. The results of this research part will help answer the sub-question, *What are the different perspectives on possible solution directions?* Next, it will be up to the higher management to decide how to use this interpretation of CBC within the organization. In any case, it will provide clear insight into how CBC is perceived within the organization and by experts in the field.

7.1. The participants

As announced in Chapter 4, two business units have been approached to participate in the Q-method. This group is known as the P-set according to Exel and Graaf (2005). Webler et al. (2009b) claims it is also important that the various points of view are represented by the participants, the P-set. It is expected that because two business units are chosen with one working more CB than the other, there will be a difference of opinion about how easy it is to start such collaborations. People may have different views on how to solve this. The teams include different age categories and have a diverse mix of men and women. There are practical barriers where agreements or connections between different divisions or countries are lacking. Additionally, the responsibility for pursuing such collaborations arises from practice is unclear in some respects. However, for employees who are less familiar with CBC, cultural and organizational aspects such as the decentralized organization or the focus of the team within company X will dominate. A total of 29 responses were received from the Water and Spatial Planning departments.

7.2. The statements

The Q-set, The statements that the participants evaluated are based on the outcomes of the interviews and the subsequent literature review. These have formed the concourse of this study. The different perspectives that emerged are reflected in the various statements. Some examples include the decentralized nature in relation to cultural change within an organization and long-term vision in contrast to short-term benefits.

Additionally, the thesis explores to what extent the organization can promote the shift towards more CBC and whether clarity can be provided regarding network connections. The organizational limitations in Figure 5.4 together with the literature corresponding to the limitations create six different categories. For each category, an equal amount of statements have been created to address each organizational limitation. In addition, several other statements have been included based on the state of the art and narrative literature review.

Based on identified limitations, as well as previously mentioned literature and interviews, six categories were established. These are: the decentralized organization, responsibility, company X's business model, organizational structures, incentives, and agreements and culture. All statements were written in Dutch. They are presented in the Appendix A and were also distributed in Dutch within the organization to avoid interpretation differences due to translation. Table 7.1 provides an overview of the statements translated into English. After several adjustments and iterations, a total of 39 statements remained. In the latest iteration, the number of statements was reduced from around 50 to 39. Some statements were removed because they answered a different question in this study, namely whether participants see CBC as a good option. Although this is an important question, the decision was made to focus on exploring different perspectives on how to improve and increase CB collaborations. In addition, similar statements were combined into one. For example, statements about changing the culture within the organization were directly linked to a responsible party. This forces participants to think more deeply about who is actually responsible. The 39 statements are based on the six categories. Sometimes, an attempt was made to combine statements relating to different categories with earlier findings from the state-of-the-art literature review. For example, setting goals centrally is essential to increase motivation for cross-border collaborations, mainly relates to the move towards central actions, but it is also about setting clear goals so that concrete steps can be taken and possibly linked to consequences. These categories also reflect the different perspectives expected from employees. For example, one person may feel more connected to cultural changes within the organization, while another may focus more on the financial aspects of the business model or the decentralized nature as one of the four pillars of company X. In short, the six categories show different perspectives obtained from the interviews.

7.2.1. Decentralized organization

In Figure 5.4, the top two organizational limitations points are taken as a reference for the first category, the decentralized organization. Therefore, the statements are related to both the decentralized nature of company X and the teams working at the decentralized level. The literature refers to the always fluctuating (de)central level within an organization. The statements are therefore also based on making decisions centrally, instead of placing all authority at the decentralized level.

7.2.2. Responsibility

Responsibility is the only category that does not directly refer to a component of Figure 5.4. It is related to the other categories because it addresses the question of who should be responsible for increasing Cross-Border collaboration. This category was added because the literature indicated that problems such as silo formation can be resolved by appointing special liaisons. In addition, managers in responsible positions need to be supportive of CBC and actively pursue CBC-related goals.

7.2.3. company X's business model

Point five of Figure 5.4 indicates that company X's current business model is not designed for CBC. Interviews revealed that short-term profits sometimes take precedence over long-term goals. This team focus can sometimes have adverse effects on the larger CBC-picture, as stated by the interviewees.

7.2.4. Organizational structures

Point three of Organizational Limitations in Figure 5.4 forms the basis for this category. The interviewees mentioned having difficulty finding each other. This, together with the literature that discusses the formation of silos within organizations, supplemented by the concepts of strong and weak ties, forms the basis for the statements in this category.

7.2.5. Incentives

The category Incentives relates to the fourth point from Organizational Limitations in Figure 5.4. Currently, there are no concrete goals regarding CBC. In addition, pursuing these goals is not significantly emphasized. The importance of setting goals is also highlighted in the literature as a means to effect change.

7.2.6. Culture and agreements

The cultural aspect was frequently mentioned. Its importance came up not only in the conversation with the CEO of company X, where she indicated that CBC is not yet truly part of company X's culture, but also in the literature, suggesting that culture can drive organizational changes, as discussed in Mintzberg (2023). Additionally, interviews revealed that there is currently little Cross-Border collaboration. As a final point, company X often takes over other companies. The literature discusses the challenge of implementing the culture of these acquired companies, as well as the difficulty of changing the existing culture.

#	Statement
Category 1: Decentralized Organization	
1	Although decentralized teams are the foundation of company X, the decision about when CBC is of added value should be made at the central level by the division directors.
2	Centrally formulated goals will motivate employees to collaborate cross-border more frequent.
3	The higher management levels should take the initiative to enable team members to work cross-border.
4	Due to company X's decentralized nature, the decision to collaborate cross-border should lie at the team level.
Category 2: Responsibility	
5	Division directors should determine for their division in which areas CBC can lead to more successful results.
6	We should only collaborate cross-border on major European projects.
7	We need to appoint connectors or liaisons to establish connections between international colleagues.
8	To make CBC a success, division directors should monitor this as a KPI and address the BUMs monthly.
9	Managers in liaison positions between countries and/or divisions should proactively encourage CBC.
Category 3: company X's Business Model	
10	company X prioritizes being dominant in its home country. Nevertheless, some areas within the organization should focus on the international market rather than the Dutch market.
11	To make CBC a success, we need to invest, even if it temporarily leads to lower profits.
12	The focus on team profit is hindering Cross-Border Collaboration.
13	The focus on the national market is hindering Cross-Border Collaboration.
14	The rate differences between company X countries are too great a barrier for effective Cross-Border Collaboration.
15	Financially, it is currently not attractive to engage in Cross-border collaborations at team level.
16	Cross-Border Collaboration should be included in company X's business model.

Category 4: Organizational Structures	
17	I find it difficult to find suitable colleagues abroad, hindering successful Cross-Border Collaboration.
18	Team names should reflect the content of the field to be easier found internationally.
19	AI should help to find international colleagues more easily.
20	Names of divisions and business units should be the same in different countries to better find international colleagues.
21	To give CBC a greater chance of success, collaboration should only occur within company X countries.
22	company X should engage in conversations with its employees about the organizational structure, how it hinders CBC, and how it can be resolved.
23	Currently, there are too few people within company X with real Cross-Border experience to make the step towards a organizational culture with more Cross-Border collaborations.
24	Organizing (in)formal gatherings with international colleagues is necessary to set up more Cross-Border collaborations.
Category 5: Incentives	
25	Cross-Border Collaboration does not fit into company X's current organizational structure.
26	Business unit managers should set goals within their unit for cross-border collaborations.
27	Per division, the benefits for the various business units of CBC should be clearly defined to create more awareness of CBC.
28	CBC in medium-sized and small projects only makes sense if it can be scaled up, meaning if there are multiple similar projects to follow.
29	To increase CBC successes, employees within company X should receive training on cross-border collaborations.
30	Including CBC in the innovation agenda is necessary to increase the share and importance of CBC.
31	It is not clear whether CBC is actually seen by the board as added value for company X when considering current policies.
Category 6: Culture and Agreements	
32	Within the company X model, Cross-Border Collaboration should become the fifth pillar.
33	To make CBC a permanent value within company X, a cultural shift is needed.
34	For CBC to flow more smoothly, administrative processes should be simplified to enter collaborations.
35	To facilitate CBC, norms and standards should be more aligned across company X countries.
36	To increase enthusiasm about CBC within the organization and achieve a culture change, the positive aspects must be shared more.
37	The company X board sufficiently expresses about CBC to change the CBC culture within the organization.
38	When company acquisitions occur, better training and information should be provided on how CBC works within company X due to differences in organizational culture.
39	CBC agreements need to be more precise and extensive to prevent later discussions and disagreements.

Table 7.1: Statements Q-sort

7.3. The Q-method software

After the statements were created and the P-set was defined, the Q-method was established. Using Ken-Q’s EQ-web sort software, according to Banasick (2024), the environment of the Q method was created based on the input. Several choices were made in this process.

7.3.1. Pre-sort

After participants were asked permission to participate in the study, they were asked to pre-sort all 39 statements. The intention is to divide these statements into three piles: agree, disagree, and neutral. In this way, the participants become familiar with all the statements according to Webler et al. (2009b). Additionally, the pre-sort allows the participants to place the statements more easily in the Q-grid.

7.3.2. Q-sort

After completion of the presort, participants were asked to place the statements in the Q grid as defined in the software designed according to Banasick (2024). The three piles in the presort are displayed beneath the grid. Participants can move the statements wherever they wish. A previously made choice of agree or disagree can be changed. The Q-grid requires the statements to be arranged within a predefined shape. Typically, this shape is a normal distribution. This means that, in this case, the statements could be rated from -5 to +5. Most statements could be placed at 0, while one statement could be placed at -5 and +5. The number of statements gradually increased and decreased between these extremes and 0. This ‘forced form’ was chosen to compel participants to make decisions regarding their opinions on the statements. An example of this grid can be seen in Figure 7.1.

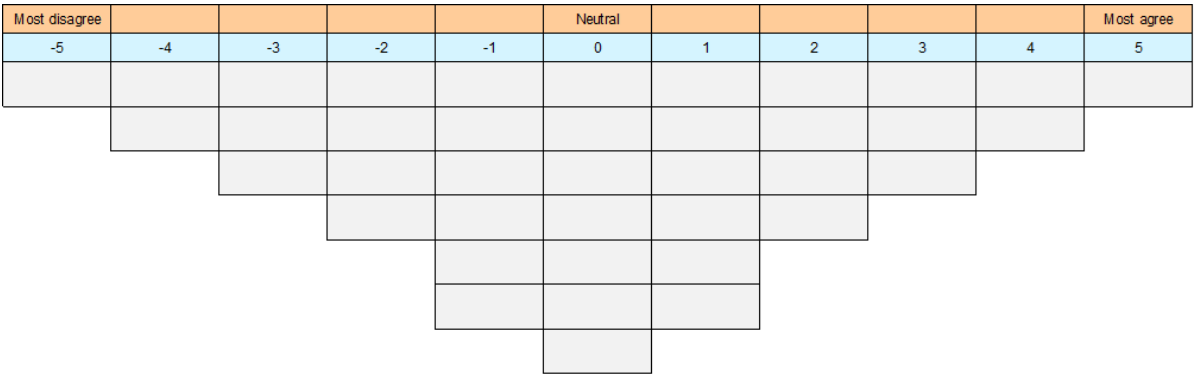


Figure 7.1: Q-grid

7.3.3. Post Q-sort

Through the EQ-Web Sort software, where the grid is filled with statements, there is also the possibility to ask questions after Q sort. First, all participants are asked to explain their extremes. These are the statements placed at -5 and +5. Additionally, a few short questions are included, such as whether they have a positive attitude towards CBC and any further comments.

7.3.4. Data analysis

The data analysis was carried out using KADE software created by Banasick (2023). According to QMethod Software (2019), in the Q-method, the data is analyzed using correlations and factor analysis. All Q-sorts are used as input in this process. In the case of this Q-method that is done in this study, there are 29 responses. These 29 Q-sorts are all compared with each other to identify factors. According to QMethod Software (2019), these factors are clusters of shared perspectives within the Q-sorts. Each factor can be linked to a Q-sort that is the most representative of that factor. For example, if everyone within the organization thought the same way, eventually only one factor would remain. According to QMethod Software (2019), the post Q-sort questions that were asked provide a rich complement to the various factors that emerged from the study.

As described previously, there are 29 responses to the survey. To determine the number of factors, also known as common points of view of the organization, attention must be paid to several aspects. Firstly, the correlation matrix has emerged from the results. This matrix is shown in Appendix B.1. According to Watts and Stenner (2012), this is described as a matrix in which the correlation between each Q-sort is displayed. Hence, according to Watts and Stenner (2012), factors are a technique to reduce the results into different patterns and groups of like-minded people.

To determine the number of factors, several guidelines apply according to Watts and Stenner (2012).

- Eigenvalues higher than 1.00.

This is also referred to as the Kaiser-Guttman criterion according to Watts and Stenner (2012). When a factor has a high eigenvalue, this means that this factor explains a significant portion of the total variation in the dataset. Factor 1 will therefore be the factor with the highest variance, which means that it represents the most dominant part of the participants. In this study, all factors have an eigenvalue higher than 1.00. The eigenvalues are as follows: 5.3527, 2.1246, 1.842, 1.3328, and 1.3757.

- Two or more significant loading Q sorts

This means that in the entire Q-set, there should be at least two Q-sorts that are representative of the factor. The formula that calculates when the factor loading is significant is the following with $N = 39$.

$$\frac{2.58}{\sqrt{N}}$$

This corresponds to a value of 0.41 for this study.

- Scree test

The next method to determine the number of factors is the scree test according to Watts and Stenner (2012). This is a graph with the eigenvalues plotted on the y-axis. The higher this value, the more significant the factor. The x-axis displays the factors. The graph in Figure 7.2 is the result of the study carried out within company X. This method cannot be used as a standalone criterion, but must be combined with the guidelines mentioned above according to Watts and Stenner (2012). When there is a shift in the trend in the scree test graph, you can distinguish between factors with considerable variance and those that do not contribute much.

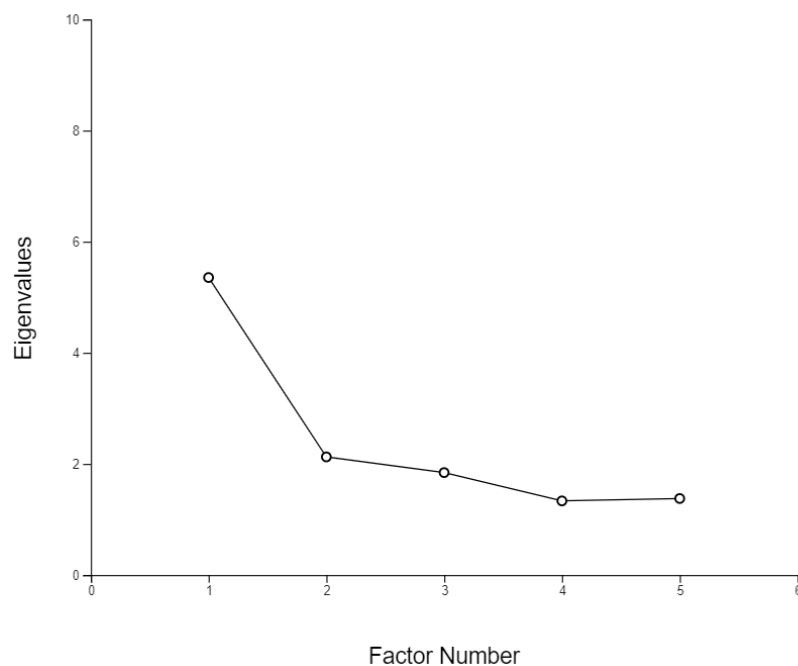


Figure 7.2: Scree test

Taking the above into account, 5 factors have been chosen. According to Watts and Stenner (2012), factor rotation is part of this analysis. This process involves rotating all factors with their different viewpoints to sharpen the correlations between the Q-sorts within the factors. The Varimax rotation is selected because this method automatically performs the rotation, resulting in a factor with a clear cluster of Q-sorts, where each Q-sort primarily aligns with one factor. Watts and Stenner (2012) states that the Varimax method of factor rotation also considers the largest groups with shared viewpoints, making it a suitable method for this study.

Each factor will eventually have a factor estimate according to Watts and Stenner (2012). This is a weighted average of all Q-sorts that significantly load onto that factor. Factors can sometimes be formed by both positively and negatively loaded Q-sorts, known as bipolar factors. An example of this can be seen in factors 2 and 4, where most Q-sorts load positively on the factor, but each factor also includes one negatively loaded Q-sort. This Q-sort represents an opposite view compared to the others within that factor. Factors can also consist solely of positively or negatively loaded Q-sorts. To make comparisons between the different factors, z-scores are created. These indicate how far a valued item in the Q-sorts deviates from the mean. The statements most characteristic of the factor can be identified in this way. The z-scores are ultimately used to create factor arrays. These represent a single Q-sort and therefore the viewpoint of the specific factor. The statements that apply to the factors can also be compared. Earlier, participants were asked to rank the statements from -5 to +5. Therefore, each statement can receive an average score for each factor. When a statement gets a score of +5, this means the statement is very representative of the factor. A score of -5 means the opposite.

7.4. The Q-method results

This section addresses the sub-question: *What are the different perspectives on possible solution directions?* As previously mentioned, a decision has been made to continue with five factors. Figure B.2 displays all Q-sorts and indicates which factor they correspond to. All factors have eigenvalues higher than 1, which gradually decrease toward the fifth factor. This does not apply to the last one, but this change is not significant. Additionally, all factors consist of at least four Q-sorts. In this way, the different factors meet the previously mentioned criteria of minimal eigenvalue and the minimum number of Q-sorts per factor. Below, all factors will be discussed first, focusing on what stands out for each factor and how it relates to the other factors and categories discussed in A. For each factor, the corresponding statement number from Table 7.1 is indicated, along with the value with which it was ranked.

7.4.1. Conformity within Factors

Most of the factors correlate between 0.24 and 0.4. This means that there is overlap between the factors, but they are, in fact, significantly different. Any value below 0.5 is considered sufficiently distinct within this thesis. There are a few themes that the different participants in the factors have rated similarly.

Firstly, the statement *The company X board sufficiently expresses about CBC to change the CBC culture within the organization. (#37)* In all factors, this statement is rated on average -2. So, there is a general perception that despite the expressed intention to focus more on CBC, this is not yet sufficiently promoted or communicated by the company X board. This correlates with leadership theory and the setting of concrete goals according to Su and Baird (2017), which views leadership as an important tool to achieve goals. When deciding to make CBC a fixed value within the organization, the outcome of this statement should be taken into account.

Secondly, the statement *Managers in liaison positions between countries and/or divisions must proactively stimulate CBC. (#9)* Across the entire collection of factors, this statement is rated on average as +3. Apparently, everyone agrees that if people in important positions do not promote CBC, CBC will not take off and play a bigger factor within the organization. From this, one can conclude that it is important for this group of employees to have a clear vision of the benefits, and if this is lacking, discussions should be held with these employees about this topic. This result is supported by the theory discussed by Mintzberg (2023). When changes need to be made or are desired within an organization, leaders and managers must take the lead. This is not only about being proactive, but also about sharing experiences and stories with enthusiasm. In this way, traditions and the culture within the organization can change.

Thirdly, the statement *We should only Cross-Border collaborate on major European projects* (#6) had negative responses. The perspective is that CBC should also occur in small and medium-sized projects. This is aligned with the statement *CBC in medium and small projects only makes sense if it can be scaled up, meaning if there are multiple similar projects to follow.* (#28) This statement is received positively only in factor 2. Generally, therefore, the belief is that small and medium-sized projects should also be suitable for CB collaborations.

Fourthly, with the exception of Factor 1, the statement *Cross-Border Collaboration does not fit into company X's current organizational structure* (#25) has very negative responses. This result provides perspective and indicates that company X employees are generally convinced that CBC should be able to work within the current structure. This is supported by the decentralized way of working within the organization. More about this will be explained later.

7.4.2. Factor 1: Managers and division directors

Within factor 1, there are five Q-sorts significantly loading on it. What is interesting about this factor is that there is no specific statement that is rated much more positive relative to the other factors. There are some statements which were rated significantly lower. However, there are statements that are rated strongly positive by someone with the perspective of factor 1, such as *company X prioritizes being dominant in its home country. Nevertheless, some areas within the organization should focus on the international market rather than the Dutch market.* (#10), and *Division directors will need to identify areas within their divisions where CBC can lead to more successful results.* Compared to the other factors, the statements *Cross-Border Collaboration should be included in company X's business model.* (#16), and *The focus on the national market hinders Cross-Border Collaboration.* (#13), are the only statements rated significantly positively, with +3 and +2 respectively. The other factors have rated these statements between -3 and 0. It appears that factor 1 emphasizes moving beyond only stating that CBC is a good idea within company X. Concrete actions, such as incorporating CBC into the business model and defining the relevant topics where CBC should be applied, contribute to this. Therefore, this factor can primarily be categorized under company X's business model and responsibility, as defined in A. Additionally, *Managers in liaison positions between countries and/or divisions should proactively promote CBC.* (#9) suggests that the initiative for changes in CBC should be more in the hands of managers and division directors than in teams. In addition, the statement *To make CBC a permanent value within company X, a cultural shift is needed.* (#33 is rated relatively high compared to the other factors. Hence, there definitely needs to be some change within company X. This factor also indicates that the focus on the national market sometimes hinders CBC. Therefore, for certain topics, the international perspective should be considered instead of the national perspective. It seems that factor 1 contains aspects from various categories.

Compared to the other factors, the statement *To increase CBC successes, employees within company X should receive training on Cross-Border collaborations.* (#29) is rated very negatively with -5. The other factors were mixed neutral or positive about this statement. This seems to confirm that the leaders or higher management should take the initiative in the transition towards more CBC. In addition, the statement *To facilitate CBC, norms and standards should be more aligned across company X countries.* (#35) is the only one rated significantly negatively with -2. This appears to strengthen the earlier conclusion of factor 1, that current collaborations are not the problem. In short, you could state that, in factor 1, the general perspective is that higher management should determine in which areas CBC is beneficial. In addition, it is not the employees themselves who need to be trained to improve these cross-border collaborations. Shifting from the national to the international market seems to imply, as previously stated in the theory, a shift from decentralized toward centralized decision-making.

7.4.3. Factor 2: Financial aspects

Considering factor 2, there are four Q-sorts that significantly load on it. Factor 2 also belongs to a specific category when ranking the statements, namely the financial aspect. This can be found in company X's business model in A. The highest-rated statement is *The rate differences between company X countries are too great a barrier for effective Cross-Border Collaboration. (#14)*. The interviews revealed that the different company X countries have varying rates, which complicates collaboration. This finding is confirmed by the outcome of this statement. Compared to factor 2, the other factors see these tariff differences less as a problem when entering a CBC. The financial aspects are also seen in *Financially, it is currently not attractive to engage in Cross-border collaborations at team level (#15)* and *CBC in medium-sized and small projects only makes sense if it can be scaled up, meaning if there are multiple similar projects to follow. (#28)* These statements both are rated at +3 and indicate that there is currently little incentive to CB collaborate. To do so, only when the situation is appropriate for the right project type and if this type of project occurs frequently, there should be CBC. Factor 2 is the only factor in which these statements are positively evaluated. The other factors do not see the financial aspect as the greatest challenge in engaging in CB collaborations. Another notable statement is *Centrally formulated goals will motivate employees more to collaborate Cross-Border*. This statement indicates that when goals are set, it is more likely that these goals can be pursued and worked towards. However, this statement is rated highly (+4) only in Factor 2. Another interesting statement is *To make CBC a success, division directors should monitor this as a KPI and address the BUMs monthly (#8)*. This statement is based on the theory that to pursue goals, there must be consequences for actively following up on these goals. However, factor 2 is the factor in which this statement is rated highest. It was only rated at 0, indicating that on average, nobody among the factors is really enthusiastic about this statement.

Factor 2 is generally less positive about CBC on an individualistic level within the organization. The most negatively rated statement with -5 is *Organizing (in)formal gatherings with international colleagues is necessary to set up more Cross-Border collaborations (#24)*. Factor 2 is the only factor in which this statement is rated very negatively. Furthermore, the statement rated -3, namely *company X should engage in conversations with its employees about the organizational structure, how it hinders CBC, and how it can be resolved (#22)*, aligns with this idea. Sessions discussing CBC and the problems experienced are not very popular within this factor. Compared to factor 2, the other factors are not as negative about engaging in conversations about CBC. This shows a preference for centralization together with statements such as *Centrally formulated goals will motivate employees to collaborate cross-border more frequent (#2)*. Factor two can be described as a factor in which the financial perspective on CBC is currently negative. The differences in tariffs are an obstacle and the financial benefits are currently too small. Therefore, it is unclear whether factor two currently has a positive view on increasing the share of Cross-Border collaboration within the organization. However, it is clear that this should be done in a centralized manner by formulating clear goals. There is no positive response to attaching KPIs to these goals. However, according to Popova and Sharpanskykh (2011), this is essential to measure whether certain goals are indeed being pursued and achieved.

7.4.4. Factor 3: Invest in CBC

Within factor 3, there are five Q-sorts that significantly load on it. Within this factor, it can be stated that the participants who fall within this factor see the need to invest in CBC and the people within company X who must work on CBC. This is evident from the statement with the highest Q-sort value of +5, namely *To make CBC a success, we need to invest, even if it temporarily leads to lower profits (#11)*. Within the other factors, there is less enthusiasm for this statement. In addition, the statements *Organizing (in)formal gatherings with international colleagues is necessary to set up more Cross-Border collaborations. (#24)* and *To increase CBC successes, employees within company X should receive training on cross-border collaborations. (#29)* are rated highly at +4. The interesting thing about these two statements is that, compared to factor 3, the other factors have ranked these statements much lower. Factor 3 is the only factor that is significantly positive about these two statements. As a neutral statement, *Division directors should determine for their division in which areas CBC can lead to more successful results. (#5)* is worth mentioning. Factor 3 is the only factor that rates this statement as neutral.

The other factors assess this statement either very positively or moderately positively. This factor falls into the categories of company X's business model and organizational structures mentioned in Chapter 7.

The statement *Although decentralized teams are the foundation of company X, the decision about when CBC is of added value should be made at the central level by the division directors* (#1) had the least positive reaction. This suggests that within company X, there should be invested in CBC, but in its current form where decentralized teams themselves initiate these collaborations. The other factors are less negative about these statements, adopting a more neutral view. The preference for decentralization is reflected in the statements indicating that division directors should not have the final say on when to engage in Cross-Border collaborations and when not to. The appointment of liaisons to connect people is ranked with positive reactions. It could be stated that investing in CBC within the current organizational structure is a priority within this factor. It mainly involves educating employees on the effective functioning of CBC. Organizing meetings to discuss CBC is considered a good idea. The main point is, as mentioned earlier, that this should happen within the current structure. This implies that the decentralized way of working is important in increasing the share of CBC.

7.4.5. Factor 4: Decentralized organization

In factor 4, there are nine Q-sorts with a significant loading. The first typical outcome is the statement that is rated with a Q-sort value of +5, namely *Due to company X's decentralized nature, the decision to collaborate cross-border should lie at the team level.* (#4) The participants who fall into factor 4 find the decentralized nature of company X very important. Also relatively highly rated is the statement *To make CBC a success, we need to invest, even if it temporarily leads to lower profits* (#11). This correlates with the theory that CBC can heavily impact team results. Therefore, the conclusion seems to be that teams are very important within company X.

On the other hand, the statements *To make CBC a success, division directors should monitor this as a KPI and address the BUMs monthly.* (#8) (-5) and *Cross-Border Collaboration does not fit into company X's current organizational structure.* (#25) (-3) are negatively rated in this factor. It appears that this factor is characterized by the current way company X is structured. The decentralized organization is considered sacred without imposing obligations or goals from the top down onto the teams. According to these participants, CBC fits within the current organizational structure. However, what needs to change is the administration associated with CBC. For example, the statement *For CBC to flow more smoothly, administrative processes should be simplified to enter collaborations.* (#34) is highly rated with +4. This is a statement that all factors, except factor 1, rate positively. This factor fits into the category of decentralized organization discussed in A. This factor is distinguished by explicitly prioritizing the decentralized nature of company X. It is stated here that increasing the number of cross-border collaborations within the organization may temporarily allow less high team results. Within the current structure, the possibilities for CBC will be investigated by simplifying the administrative process. In addition, factor 4 ranked the focus on the international market positively compared to the national market when certain issues arise. This statement is rated positive with +4.

7.4.6. Factor 5: Lack of experience

In factor 5, there are five Q-sorts that are significantly loading on it. The statement that is rated the highest in factor 5 with +5 is: *Currently, there are too few people within company X with real Cross-Border experience to make the step towards a organizational culture with more Cross-Border collaborations.* (#23) This is an interesting statement as it indicates a significant barrier within the organization. There are too few people who can share experiences and tell how to approach these collaborations. Although this experience is lacking, there is another statement that poses a challenge. The statement *We need to appoint connectors or liaisons to establish connections between international colleagues.* (#7) is rated +4 in factor 5. Although there are few people within the organization with real experience in CB collaborations, positions must be created for people who will facilitate these collaborations. These statements are rated more neutrally within the other factors. This factor fits into the categories of Responsibility and Organizational structures discussed in Chapter 6.

In Factor 5, there are also two statements that are disagreed with. Firstly *To make CBC a success, division directors should monitor this as a KPI and address the BUMs monthly. (#8)* This statement receives a neutral score in the other factors. Only in factors 4 and 5 this is not the case. Along with the statement *Within the company X model, Cross-Border Collaboration should become the fifth pillar (#32)*, it seems that in factor 5, CBC is seen as something positive, but should not need specific measures or be considered a core value. Together with the positively viewed statement about appointing connectors, it seems that CBC should indeed be a part of company X, but without consequences or rewards attached. In short, efforts must be made to address the lack of experience within the organization. Along with the appointment of liaisons, this presents a two-sided perspective. On one hand, there are employees without experience who need to engage in CBC, while on the other hand, employees should not receive training to become familiar with cross-border collaboration. This was confirmed by a negatively rated statement about training with a -3.

7.4.7. Overview Factors

The categories discussed in Chapter 7 have all been reflected and recognized in the different perspectives that have emerged from the Q-methodology. Table 7.2 shows an overall overview of the different factors. From the factor analysis, it can be concluded that there are five different perspectives within the participant group. As previously stated, the first factor has the greatest variance. Many participants have filled out their Q-sort, which closely aligns with the first Factor. For each of these factors, a representative Q-sort can be created. These are shown in Figures ?? to ?. In these figures, you can see which statements, as described above, score significantly higher or lower compared to other statements. The small black arrow indicates whether it scores higher or lower than in the other factors.

Factor	Factor characteristics
Factor 1	Managers and division directors: This factor looks at the bigger picture. The initiative must lie with the managers and division directors to achieve a cultural shift. They will need to determine when CBC is desired. Sometimes this means choosing the international market over the national one. It is also not desirable to provide employees with training on CBC. This strongly suggests that CBC is still somewhat of an unclear concept and that managers and division directors should take the lead in changing the CBC culture within the organization, without employees in the teams having to take the initiative.
Factor 2	Financial aspects: This factor is characterized by financial considerations. The differences in tariffs are seen as a problem in engaging in CBC. A solution must be found to make CBC attractive. They also specifically state that, even at this moment, financially, CBC is not interesting. Moreover, CBC is only an option if similar projects follow when costs are reduced. This factor is also characterized by not organizing gatherings or organization-wide discussions about CBC and its barriers. However, it does emerge from this factor that CBC should be addressed more centrally and not so much within the teams.
Factor 3	Invest in CBC: Within this factor, investing is the main topic. From a more positive perspective, it is found that investments need to be made. This involves accepting temporarily lower team performances to provide room for investments. Additionally, this factor positively views organizing gatherings and training sessions for employees to learn more about CBC. However, this must be done at the team level and therefore be integrated into the decentralized manner in which company X currently operates.
Factor 4	Decentralized organization: This factor focuses on the importance of company X's decentralized character. It is important that the choice to collaborate on CBC always lies at the team level. They also disagree that CBC does not currently fit within the organizational structure and especially disagree with the idea that division directors should monitor CBC performances. To facilitate collaborations, investments need to be made and the administrative processes should be simplified.
Factor 5	Lack of experience: This factor focuses on the individual. It is characterized by the statement that there are currently too few people with CBC experience to take the step towards more CBC. They believe that individuals should be appointed as connectors/liaisons to establish CBC collaborations. Despite this, there is negative feedback within this factor on linking KPIs to CBC goals and adding CBC as a pillar to the company X model.

Table 7.2: Summary of five perspectives (factors) from the Q-analysis

Differences between Factors

In the above factor descriptions, the different topics in the statements have been defined that distinguish the factors from each other. As can be seen, five different perspectives are currently being considered. In addition, it can be observed that factor 2 views CBC from a more negative perspective, such as CBC not being financially attractive. It is also evident that some factors are contrasting. Although decentralization is considered the most important, another believes that division directors, managers or liaisons should take the lead. This can be related to the theory discussed in Mintzberg (2023), which speaks about an ever-moving balance between decentralized and centralized levels. Furthermore, Factor 3 believes that employees should be involved in setting up CBC structures, whereas others like Factor 2 do not agree with this.

These differences can be seen in Table 7.3. This correlation can range from -1 to +1, with -1 being completely opposite and +1 being exactly the same. This can be seen in the diagonal of the matrix where the correlation with its own factor is +1. In addition, this table shows that factor 2 fundamentally differs from the other factors. This indicates that there are disagreements among the participants in the Q-methodology about how to increase CBC within the organization. Factor 2, compared to the others, clearly has a different perspective. Therefore, one can argue that the financial aspects considered important in factor 2 are perceived differently in the other factors. This can be seen as a unique factor in the collection of factors.

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Factor 1	1	-0.007	0.2412	0.3037	0.2728
Factor 2	-0.007	1	-0.1705	-0.0159	0.0693
Factor 3	0.2412	-0.1705	1	0.3998	0.3999
Factor 4	0.3037	-0.0159	0.3998	1	0.3835
Factor 5	0.2728	0.0693	0.3999	0.3835	1

Table 7.3: Correlation matrix of the factors

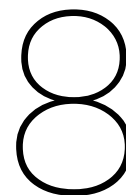
Then there are several examples of statements per factor that differ significantly from each other. First, the most extreme, *Due to company X's decentralized nature, the decision to collaborate cross-border should lie at the team level.* (#4) This statement is scaled at +5 in factor 4 but at -4 in factor 2. The other factors scale it on average -1. This indicates that there is great division in whether CBC should be approached in a decentralized manner. In addition, the statement *Although decentralized teams are the foundation of company X, the decision about when CBC is of added value should be made at the central level by the division directors.* (#1) is valued oppositely in factor 2 and 3, namely at +3 and -3. The others are less outspoken, with -1. The big question that remains is at what level, between decentralized and centralized, decisions should be made regarding CBC. This difference in opinion can also be seen as a cause of the fluctuating level between decentralized and centralized approaches, as discussed by Cummings (1995). This means that decisions regarding CB collaborations are relatively new within company X. Since company X is known as a decentralized organization, such changes in business operations require decisions about where the initiative should lie. If these decisions are made at the team level, the organization becomes more decentralized. The opposite is true if the decisions are made by the division directors.

Secondly, the different opinions about the statement *To make CBC a success, we need to invest, even if it temporarily leads to lower profits.* (#11) reflects the earlier insights given about CBC. During the interviews, it was mentioned that CBC, especially when it involves new collaborations, requires investments. This could impact team results. There are mixed reactions to this statement. It is positively rated at +5 and +3 in factor 3 and 4, but negatively rated at -3 in factor 2 and 5. This could mean two things. On one hand, participants might believe that team results should not suffer from increasing the amount of CB collaborations. On the other hand, participants might think that it is not necessary for team results to be negatively impacted when investing in CBC.

7.4.8. Concluding remarks

In summary, there are five different perspectives, each providing a different direction for the implementation of cross-border collaboration. However, before further choices are made in CBC strategies, it is necessary to investigate how to proceed with CBC, taking the different perspectives into account. The various factors agree on several points, but mainly provide differing views on the subject. For instance, there is a difference between the factors regarding the degree to which decisions should be made at a decentralized or centralized level. There are also disagreements about the extent to which all employees should be involved in further developing CBC within the organization. In addition, the perspectives on the lack of experience and the need for investing indicate that CBC is still in its early stages. The perspective with financial considerations offers an opposite view to the other perspectives. It may not be the opinion of the largest group, but it does represent the concerns of a part of the organization.

Several points that emerged from this chapter need to be specifically addressed. When CBC is truly seen as an added value, it should be promoted more actively by the managers and board. This involves proactively sharing experiences and stories to change the culture and mindset about CBC within the organization, as discussed in Mintzberg (2023). The main contradiction is the expansion and decision-making of CBC at team level versus decisions at the division level. In addition, the outcome of the lack of personnel with CBC experience is interesting. How can their expertise be utilized to increase and improve CB collaborations? The financial skepticism is also a notable outcome. The investments mentioned by someone with a perspective from factor 3 can be weighed against financial concerns and possibilities. After all, the investments must be weighed against financial advantages.



Discussion

In this chapter, the results will be discussed. This includes reflections on the thesis as a whole, as well as a more detailed discussion of the specific findings of the research. Lastly, an advice will be given on how to increase CBC within an organization. This thesis investigated the following research question: *What are the different perspectives on CBC and on how CBC can be implemented and increased within an organization?*

8.1. General description

The literature used, such as Mintzberg (2023), consists of legitimate sources that provided the necessary information. The outcome of this study aligns with what was intended by the sub-questions and the main research question, namely, an overview of perspectives on possible solutions to increase CBC within the organization, based on internal insights and literature on barriers. This outcome is in some way generalizable as not every organization is exactly the same as the one discussed in the case study. This means organizations that operate on a project-based basis in teams can have similar results. This can be a decentralized organization, but also one with a more centralized setup, since the literature according to Cummings (1995) views this as a balance that fluctuates between the two extremes. What is mainly generalizable are the differences in perspective between investing on the one hand, and evaluating whether changes are financially worth implementing on the other. Every company deals with these considerations in which investments need to be weighed against the goals that are intended to be achieved with those investments. The results showing that change needs to be encouraged by management are also generalizable. Any necessary significant change will not succeed without enough motivation or incentives from management. This study can be seen as a contribution to the literature on collaboration. It confirms the barriers found in earlier research, such as the cultural barriers defined by Awan et al. (2018) and Cassiday (2005). However, this research goes further by including theories about the organization's own structure, which can sometimes make changes like CBC more difficult or in other cases support them.

In this thesis, the choice was made to investigate organizational barriers experienced before and during Cross-Border Collaborations. However, the interviews revealed that while this was the largest cluster of barriers, it was not the only one. The reader of this thesis should be aware that CB collaborations also involve cultural and language differences between countries, which can lead to poorer collaboration outcomes. In addition, it was emphasized that if the collaboration lacks proper motivation, this often results in less successful outcomes. Furthermore, it was decided not to continue investing in building strong relationships, such as establishing trust between the parties. This also includes making agreements on the definition of goals and how to achieve them as described by Felce (2011). The decision was made to keep this study as anonymous as possible. The Q-method was deliberately implemented within two different business units. The choice for these two business units was made because one was said to already have some experience with cross-border collaboration, while the other did not have much of this experience. This was assumed to create a good mix of opinions on the topic, combining both lack of knowledge and actual experience.

If this research were to be extended more broadly within the organization, an even wider range of perspectives could be gathered. However, due to the mix of employees with and without CBC experience, a similar result is expected. It is now unclear who the participants are as the research was anonymous. Therefore, it is unknown whether the five perspectives derived from this study originate from young company X employees or more experienced employees because age data went missing during the process. In future research, this should be better mapped within the organization to gain a clearer understanding of which category within the organization holds specific opinions on certain subjects and why they perceive CBC as they do.

8.2. Evaluation of perspectives

The Q-method revealed five perspectives: decentralized versus centralized, a financial perspective, a perspective focused on investments, and one highlighting a lack of employee experience necessary for successfully increasing Cross-Border Collaborations. The expectation was that the problems were mainly of a practical nature, such as language and cultural barriers. This emerged from the theoretical framework. However, it turns out that the barriers go beyond language and cultural barriers toward barriers in the organizational structures of the company. The insights gained from the results show that the organizational form is closely linked to changes such as an increase in CBC within the organization. This is also described in Mintzberg (2023). The factors indicate not only that this involves a decentralized organization engaging in CBC, but also the more centralized vision on CBC and the incentives from higher management that arise from it. The five perspectives each provide different insights into how CBC is perceived within the organization and how participants think CBC can be set up more frequently. However, it is clear that several contradictions and points of discussion arise.

Currently, CBC within company X is happening on a very small scale. However, the Q-method reveals that all perspectives agree that CBC should be possible within the current structure. Any issues related to not being able to find international colleagues cannot be solved within this same structure without any changes. The interesting aspect of the statement *We should only engage in Cross-Border collaboration on large European projects* is that it was negatively evaluated within every factor. This means that almost all participants agreed that CBC should also be possible within smaller projects. The statement *CBC in medium-sized and small projects only makes sense if it can be scaled up, meaning if there are multiple similar projects to follow.* was negatively responded to, except for the perspective of someone in factor 2. However, the interviews showed the opposite. This reveals a contradiction. These different perspectives probably would not have emerged using other research methods or additional interviews. Fundamental choices therefore need to be made regarding which projects and areas CBC is meaningful and adds value. Within the current structure, starting these collaborations, combined with the difficulty of finding international colleagues will make CBC on smaller projects very challenging. As highlighted in the interviews, investments must be made in new CB collaborations. If no similar projects follow in which the same collaboration structure can be used, the question arises as to whether this remains profitable or beneficial.

The outcomes of the different perspectives can be evaluated based on the theory discussed earlier. Perspectives 1 and 2 indicate that if CB collaborations need to occur more frequently within the organization, it needs to be set up more centrally. According to Cummings (1995), this shift towards a more centralized way of working is not an unusual outcome and is possible within the organization. It is a continuously shifting balance between the extremes of centralization and decentralization. Cummings (1995) also emphasizes the importance of focusing on the ability to adapt rather than striving for decentralization. However, other theories such as those described by Mintzberg (2023), provide a different point of view. These theories suggest that companies with a similar structure to company X operate in small teams of professionals who prefer to work independently and autonomously. Mintzberg (2023) highlights the importance of being able to make autonomous decisions, which conflicts with policies aimed at a more centralized approach. Employees should support the decisions made regarding CBC and probably be involved in the decision-making process. In this respect, a step towards a centralized way of working is a good idea especially if CBC requires it, but the autonomous teams that currently prefer to work in a decentralized manner must be taken into account. According to Cummings (1995), the most important thing is that employees are involved in the decision-making process if matters will be centrally arranged and that the decisions made are clearly explained.

In perspective three, it is stated that investments need to be made within the existing structures of an organization and that decision-making authority should remain close to the autonomous teams. Additionally, perspective four is expressed on the fact that CBC should be implemented and expanded within the decentralized nature of an organization like company X. This contrasts with the view of Borgatti et al. (2009), which states that teams with the same skills can perform entirely differently depending on their position in the network. It is argued that centrality in making decisions contributes to bringing together different teams or groups with the same skills but who operate differently. Therefore, continuing CBC in a decentralized manner within the current setup might not contribute to better and more effective CB collaborations. In this way, the teams could remain somewhat separated, resulting in the collaboration ultimately being less successful than initially intended.

Next follows perspective five, which states that there is currently insufficient experience to make the step towards more CBC. It is argued that if this increase in CBC is to happen, it should be initiated by higher management. This is supported by the theory according to Coffey et al. (2018), which suggests that strong and transparent leadership with clearly defined goals contributes to implementing changes. However, within this perspective, there is negative feedback about offering employees training to improve CBC culture within the organization. This is contradicted in the literature. For example, Sanderson et al. (2022) states that individual capacities and knowledge are primarily improved when approached collectively. This leads to the argument that only providing training to management layers on how CBC collaborates or allowing them to take the initiative will not be sufficient to better utilize or develop CBC-related capacities and qualities. Employees will need to gain more collective knowledge about CBC to maximize the results in CB collaborations.

It has also been highlighted multiple times that CBC is not yet a big part of the current culture. The various perspectives have shown that providing training to staff or new employees, such as during company acquisitions about CBC and the CBC culture of the company is essential. However, Mintzberg (2023) emphasizes the importance for employees, especially in the context of company acquisitions to conform to the existing culture and the culture being aimed for. Without this mutual agreement, it becomes difficult to collectively change the culture to one in which CBC plays a more prominent role. Training could be a solution to facilitate this transformation.

8.3. Advice

Taking the above into account, the following can be stated. All perspectives represent different views of groups within the organization who think like-wise about CBC. These individuals each have their own motivations for believing how these collaborations should be approached, whether centralized or decentralized. Ultimately, the best approach may lie somewhere in the middle. One could argue that it is wise to assess per division when CBC makes sense and adds value and from there determine how these collaborations can be best structured. Generally stating that this should be more centralized or decentralized may not be wise or even be necessary.

First, it must be determined within the divisions whether CBC is of added value. If this is the case and in another country within a similar division it is also found valuable, connections can be established through for example a liaison or the division directors. This collaboration can be continued in a decentralized manner. When necessary, as Cummings (1995) and Borgatti et al. (2009) suggest, a more centralized approach can be chosen. Furthermore, if CBC is found to be valuable but the projects involved need to be executed on a larger European or international scale, a more central setup or initiation might be required. If this is not necessary and can be managed in a more decentralized manner within divisions, this should be considered.

Furthermore, the findings according to Popova and Sharpanskykh (2011) must be taken into account. Although none of the perspectives showed enthusiasm for monitoring CBC from within the divisions, it is necessary to consider how these goals about CBC can be checked. When employees are specifically tasked with engaging in these collaborations, it can be monitored and pursued. Without these performance indicators, there is a risk that nothing will change and the CBC culture will not change. Given the fact that CBC will not always be of added value, it would not be necessary to implement these performance indicators company wide.

Although the five factors identified in this research differ in perspective, they all contain a common message. CBC is a topic that requires careful consideration before it can become an integral part of a company's operations. This raises several new questions, such as the following for companies that want to invest in and collaborate on CB more frequently: How should investments in CBC be made? Should decisions about CBC participation be made decentralized or centralized? What will the financial picture look like when more CBC takes place? How can the lack of experience be addressed to increase CBC? There is work to be done and possibly more research is required. A plan will need to be developed on how to proceed with CBC.

Regarding the literature gap, one could argue that this research has taken a first step toward better understanding a Cross-Border Structure within a decentralized organization. Future studies should examine the specific combination of value creation within teams and their performance relative to larger collaborative structures carried out organization-wide. In addition, there is a need to investigate how central decisions and structures regarding CBC can coexist within a decentralized organization. However, the shift towards a CBC culture must be considered. As discussed in Mintzberg (2023), this can conflict with other core values of a company, such as its autonomous decision-making or its focus on clients. Although this is not necessarily the case, it should certainly be taken into account. This research has contributed to mapping these different perspectives. If these differences within the organization are not managed, disagreements and slow decision-making and policy processes may arise. CBC has potential, both in general and specifically within company X, but it requires thorough investigation before it can be effectively implemented in the organization.

9

Conclusion

This thesis was written to contribute to the existing literature on collaborations. Specifically, it addresses the gap in the literature about Cross-Border collaborations within the same company. The aim of this research is to provide insight into how cross-border collaborations are perceived within an organization and how such collaborations can be initiated more frequently in the future. To explore this, exploratory interviews were conducted to identify barriers. These barriers were then analyzed using a narrative literature study. Then, various solutions were tested within an organization. All of this was done as part of a case study within company X

9.1. Outcomes

In conclusion, based on the main question *What are the different perspectives on CBC and on how CBC can be implemented and increased within an organization?*, it can be stated that there are various perspectives on cross-border collaboration. A qualitative research has shown that there are different views on how to perceive CBC and how it can be increased within a decentralized organization.

The sub-question *What are the challenges, problems and enablers in the field of CBC (Cross-Border Collaboration)?* has provided insight into current thoughts within the case of company X about CBC. While there are mainly positive reactions towards engaging in CBC due to sharing capacities, knowledge and attracting young talent, there is still some restraint. This is mainly because barriers are currently being experienced. CBC in this case, is a relatively unknown concept within the organization and employees within the decentralized teams usually do not know how to engage in these collaborations. Furthermore, the interviews revealed that there are several organizational barriers that hinder CBC. Examples include the lack of collaborative structures or incentives from higher management. Additionally, the decentralized way of working in relatively smaller teams is seen as a challenge for Cross-Border Collaborations.

In addition, the narrative literature study in part 2 answered the sub-question *How can these problems and barriers be explained, and how can they be minimized?* and could be used as input for the statements. The barriers have been identified in the literature, from which several key concepts can be derived. Some of these concepts include the integration of different corporate cultures during acquisitions, the importance of leadership and proactive managers when implementing changes and the role of performance indicators in monitoring goals and adjusting policies accordingly. Based on the identified theories and analysis, several statements could be created for the follow-up research using the Q-methodology. The outcome of the Q-method has provided insight into current thoughts within an organization about solutions to the barriers being experienced. The statements ranked in the Q-method are based on interviews that had their basis in the state-of-the-art literature review. Ultimately, the results of the Q-method from 29 respondents revealed that there are currently five different perspectives on CBC.. The first perspective indicates that the initiative should come primarily from proactive managers focused on CBC and divisional directors who should explore where CBC can add value within their divisions.

Training employees and organizing sessions seem to be less enthusiastically received within this perspective. Perspectives 2 and 3 are both financial perspectives. In Perspective 2, CBC is currently not seen as adding financial value, while perspective 3 argues that for making investments, accepting temporary losses to allow room for CBC investments and investing in training sessions for employees is necessary. Perspective 4 looks at the current decentralized nature, which is perceived most important and should not change for the sake of CBC. They believe that CBC should occur more frequently within the existing organizational structure, but with proactive managers on CBC. The final outcome of the Q-method presented perspective 5, which suggests that there are currently too few employees with CBC experience to transform the organization's culture into one where CBC becomes part of an organizational culture.

The initiative lies with the management. Firstly, when the concept of CBC is relatively new within an organization. In order to truly change the culture and make CBC an integral part of the business operations, division managers will not only need to identify where and when CBC is of added value but also proactively stimulate and talk about CBC according to the different perspectives. These five factors present, to some extent, contrasting views on CBC. While one believes that decisions should be made more centrally to increase CBC within an organization, another believes that this should happen in a decentralized way within teams. This thesis does not take a position on whether the decision should be made centralized or decentralized. However, a decision must be made. It should be explored to what extent the choice to collaborate CB should be made at a central level. One possible option is for division directors to initiate the collaborations, which can then be further developed in a decentralized way. A structure that combines centralized and decentralized influences should be examined. The focus is on determining the optimal level of decision-making authority for CBC to achieve the most efficient collaborations, while also ensuring employee satisfaction with maintaining a decentralized and autonomous character. In addition, appointing liaisons could help support this process. On the other hand, there is a more negative view regarding financial aspects, in contrast to the factor that recognizes the need to invest in CBC. In this case, lower short-term profits might be acceptable in order to make these investments. This is linked to the idea that there is a lack of knowledge and experience needed to effectively implement CBC. This can result in a complex situation where, on the one hand, there is a need to train current staff, but on the other hand, there is hesitation to do so.

In addition, liaisons are seen as possible solutions for bridging horizontal barriers between divisions or countries. The insight from this study is that CBC is not only hindered by personal mismatches such as language and cultural barriers, just as unawareness of this topic is also not the only barrier that needs to be overcome. Furthermore, there must be genuine motivation from an organization to implement changes, such as increasing CBC. It starts with making decisions about what needs to be done and what changes are required in the current situation. It is necessary that higher management clearly communicates why and how this will be implemented within an organization and within which divisions CBC would be of added value. Furthermore, it was stated in all perspectives that no KPIs should be linked to CBC-related subjects. However, Popova and Sharpanskykh (2011) argues that when changes need to be implemented in order to achieve goals, they must be monitored in some way. If you do not do this, an organization cannot provide feedback and adjust policies where necessary. The theoretical framework has shown that various barriers are encountered in every type of collaboration. There is also literature on international collaborations and what to consider in such contexts. Some examples are Awan et al. (2018) and Heubeck et al. (2024) who discuss globalization and cultural influences within international collaborations. This research serves as a valuable addition to the existing literature. Specifically, it provides information on how CBC can be improved and applied more widely within a single organization operating in different countries. The emphasis is on the combination of collaborating CB while being a decentralized organization, where much decision-making authority lies within the teams.

9.2. Recommendations

Earlier in this thesis, an assumption was made about what the outcomes of this study would be. It was assumed that barriers would primarily be experienced in language and cultural differences. In fact, lack of knowledge about the topic of CBC within has been found within the case study. In addition, these language and cultural differences are sometimes experienced to some extent. However, these issues are not currently the main problem concerning CBC. The barriers faced are primarily organizational. This is reflected in the various perspectives, indicating that the solutions lie within these areas. It is not only about proactive managers and leadership within an organization concerning CBC, but also about implementing CBC effectively within the divisions and teams. The differing views on decentralized and centralized decision making are particularly interesting.

This study has shown through interviews that CBC is a valuable addition to an organization because, beyond sharing expertise and capabilities, young talent is attracted. According to the interviewees, attracting young talent is necessary to stay competitive in the future. Therefore, it can be stated that this new young talent ensures that new knowledge is brought in, which positively contributes to the ability to innovate and ultimately improves a company's market position. This is also confirmed by Compagnucci and Spigarelli (2018) in the field of water resource management.

For organizations that want to increase CBC, it is recommended that they assess within their current organizational structure and operations when CBC is desired and whether it actually contributes to the goals they aim to achieve. The case study also revealed that collaborations should only be pursued if there is a genuine intention to collaborate and both parties benefit from the collaboration. Therefore, the first recommendation is to investigate how the specific situation of a company looks before implementing changes like large CBC structures within an organization. This means that if for instance, there are organizational silos that hinder information sharing or create other barriers, these should be overcome first, as discussed in the case presented in this thesis. In addition, the degree to which specific teams or parts of an organization work autonomously is important. Although Cummings (1995) mentions varying levels of decentralized or centralized decision making, the case discussed shows mixed views on whether CBC should be approached in a centralized or a decentralized manner.

A second recommendation for an organization that wants to invest in CBC is to determine in which areas this adds value. According to the case study in this thesis, it became clear that there is overall uncertainty about where and when exactly CBC should occur. Alongside the argument that CBC should be undertaken with the right intentions, it should serve as a means rather than an end. An example of this is the expertise in different countries where an organization operates. One country may possess specific knowledge that is needed in another country, as illustrated by Compagnucci and Spigarelli (2018). It is necessary to investigate the financial implications of CBC. Where collaboration is increasingly happening in a CB manner, this will impact the financial situation of a team, business unit, or organization. This needs to be examined for each specific situation, especially if investments are required, for instance in network connections between international colleagues.

As a third recommendation, the combination of performance indicators and the implementation of more CBC should be investigated. While Popova and Sharpanskykh (2011) speaks positively about performance indicators, suggesting that goals are measured or linked to performance to monitor whether these goals are achieved, the results from the Q-method indicate that such measures are viewed negatively in a decentralized organization. As previously stated, it will need to be assessed whether implementing or using CBC more frequently is an end in itself or serves as a means, for example to attract young talent. Therefore, it is recommended that organizations investigate this and consider to what extent these performance indicators can be introduced in a similar decentralized organization in an acceptable manner.

As a final recommendation, due to the varying perspectives, it is important not to implement CBC as a whole. Where it adds value, decisions can be made about specific goals or performance indicators. Setting this up organization-wide would be less beneficial as some employees may not be enthusiastic or the team or division may not benefit from a CBC structure. Each specific situation should be evaluated to determine how CBC is implemented: in a centralized or decentralized way and supplemented by the appropriate investments.

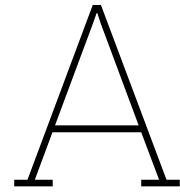
When considering the above, it can be stated that the various perspectives are reflected in the different recommendations. Each organization may have a slightly different situation, which is why the outcomes and best solutions can vary. One organization might find a centralized approach more suitable, while another might prefer a decentralized approach. In addition, investments combined with the financial drawbacks experienced can then be weighed and improved or resolved where necessary. In short, it is essential for each organization to carefully evaluate its current structure. For company X, an assessment was made for the different perspectives based on the literature. This is also important for other organizations to make such an assessment. It should be investigated when and how CBC can contribute in each specific case. In this, it is important to involve employees in the decision-making process and above all, to clearly explain why certain decisions have been made. The five perspectives have indicated that there can be different thoughts on a subject such as CBC where people have strong feelings about certain decisions.

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Statements Q-method

This Appendix A contains all the statements that were formulated and ranked in the Q-method software. Within company X and the research they are distributed in Dutch. Therefore, they are shown below in the same way and order as used in the Q-method software.

1. Hoewel decentrale teams het fundament van company X zijn, moet de afweging wanneer CBC van toegevoegde waarde is op centraal niveau gemaakt worden door de divisiedirecteuren.
2. Centraal geformuleerde doelen zullen medewerkers meer motiveren om Cross-Border samen te werken.
3. De hogere managementlagen zullen het initiatief moeten nemen om teamleden Cross-Border samen te laten werken.
4. Vanwege het decentrale karakter van company X, moet de keuze om Cross-Border samen te werken op team-niveau liggen.
5. Divisiedirecteuren zullen voor hun divisie moeten vaststellen op welke gebieden CBC kan leiden tot succesvollere resultaten.
6. We moeten enkel Cross-Border samenwerken op grote Europese projecten.
7. We moeten verbinders/liaisons aanstellen om verbindingen tussen internationale collega's tot stand te brengen.
8. Divisiedirecteuren moeten om CBC tot een succes te maken, dit als KPI gaan monitoren en maandelijks de BUM's hierop aanspreken.
9. Managers op verbindingsposities tussen landen en/of divisies moeten CBC pro-actief stimuleren.
10. company X geeft prioriteit aan het dominant zijn in eigen land. Toch zal er op sommige gebieden binnen de organisatie de focus moeten worden gelegd op de internationale markt in plaats van de Nederlandse Markt.
11. Om CBC tot een succes te maken zullen we moeten investeren, ondanks dit tijdelijk kan leiden tot lagere winst.
12. De focus op de winst van het eigen team zit Cross-Border Collaboration in de weg.
13. De focus op de nationale markt zit Cross-Border Collaboration in de weg.
14. De tariefverschillen tussen de company X landen vormen een te grote barrière om effectief Cross-Border te kunnen samenwerken.
15. Financieel gezien is het op dit moment niet aantrekkelijk om op teamniveau Cross-border samenwerkingen aan te gaan.

16. Cross-Border Collaboration zal meegenomen moeten worden in het business model van company X.
17. Binnen het company X model moet Cross-Border Collaboration de vijfde pijler worden.
18. Ik kan geschikte collega's in het buitenland moeilijk vinden. Dit houdt succesvol Cross-Border samenwerken tegen.
19. Teamnamen moeten de inhoud van het vakgebied dekken om internationaal beter gevonden te kunnen worden.
20. Met behulp van AI zouden internationale collega's elkaar makkelijker moeten kunnen vinden.
21. Namen van divisies en businessunits moeten in verschillende landen dezelfde namen hebben om internationale collega's beter te vinden.
22. Om CBC een grotere kans van slagen te geven zal er enkel nog binnen company X landen Cross-Border samengewerkt moeten worden.
23. company X zal in gesprek moeten gaan met haar werknemers over de bedrijfsstructuur, hoe dit CBC belemmert en hoe dit opgelost kan worden.
24. Binnen company X zijn er momenteel te weinig mensen met echte Cross-Border ervaring om de stap richting een organisatiecultuur met meer Cross-Border samenwerkingen te maken.
25. Het organiseren van (in)formele samenkomsten met internationale collega's is noodzakelijk om meer Cross-Border samenwerkingen op te kunnen zetten.
26. Cross-Border Collaboration past niet in de huidige vorm van company X's organisatiestructuur.
27. Business unitmanagers zullen binnen hun unit doelen moeten gaan stellen op het gebied van Cross-Border samenwerkingen.
28. Per divisie moeten duidelijk de voordelen voor de verschillende business units van CBC worden gedefinieerd om meer bewustzijn van CBC te creëren.
29. CBC in middelgrote en kleine projecten heeft alleen zin als er opgeschaald kan worden, oftewel als er meerdere soortgelijke projecten volgen.
30. Om CBC successen te vergroten zullen de werknemers binnen company X trainingen moeten volgen over Cross-Border samenwerkingen.
31. Het opnemen van CBC in de innovatieagenda is nodig om het aandeel en belang van CBC te vergroten.
32. Het is niet duidelijk of CBC daadwerkelijk door de board als toegevoegde waarde wordt gezien voor company X als je kijkt naar het huidige beleid.
33. Om CBC een vaste waarde te geven binnen company X is er een cultuuromslag nodig.
34. Om CBC soepeler te laten verlopen, zal het administratief eenvoudiger moeten worden om de samenwerkingen aan te gaan.
35. Om CBC gemakkelijker te maken moeten normen en standaarden meer op één lijn gebracht worden binnen de company X landen.
36. Om enthousiasme over CBC binnen de organisatie te vergroten en hierin een cultuuromslag te krijgen, moeten de positieve aspecten meer met elkaar gedeeld worden.
37. De board van company X laat zich genoeg uit over CBC om de CBC-cultuur binnen de organisatie te veranderen.
38. Wanneer bedrijfsovernames plaatsvinden zullen er vanwege de organisatiecultuurverschillen betere trainingen en informatievoorzieningen moeten zijn hoe CBC werkt binnen company X.
39. De CBC-agreements moeten nauwkeuriger en uitgebreider worden om zo latere discussies en meningsverschillen te voorkomen.

B

Q-method results

Appendix B will contain different figures with data used in Chapter 7. Below an overview is given of the figures included in this Appendix.

1. **Figure B.1:** Shows the correlation matrix of the Q-method
2. **Figure B.2:** Shows the factor loading for each Q-sort

Figure B.1 gives an overview of the correlation between all the different Q-sorts. The different color scales show how strongly the Q-sorts are correlated. This provides a mixed overview, which indicates that the statements were indeed ranked differently. This correlation between Q-sorts is the basis of the factor formation.

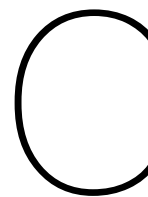
Participant	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1	100	4	20	39	8	20	21	15	-6	5	12	5	5	40	-13	25	35	3	1	26	11	16	18	-6	30	13	9	1
2	4	100	17	21	8	13	9	-3	-5	11	18	42	-3	45	17	13	29	37	21	-7	36	38	3	38	24	4	30	10
3	20	17	100	33	36	25	50	24	41	20	34	29	8	21	-22	44	9	55	23	6	35	-12	43	25	11	2	42	32
4	39	21	33	100	24	31	41	31	36	17	34	25	3	43	-8	47	37	18	10	1	22	-17	9	17	15	4	2	25
5	8	8	36	24	100	16	26	-8	26	48	25	-5	12	-8	-8	24	27	29	8	24	27	-17	5	-3	24	0	44	12
6	20	13	25	31	16	100	56	2	20	9	18	20	17	34	9	38	29	26	28	25	-13	-8	36	47	41	8	21	1
7	21	9	50	41	26	56	100	17	51	10	42	32	18	17	0	47	19	44	43	40	21	-31	30	44	25	-18	18	29
8	15	-3	24	31	-8	2	17	100	15	28	33	21	3	48	-22	17	-3	17	12	2	-8	3	23	39	24	3	0	38
9	-6	-5	41	36	26	20	51	15	100	4	40	2	14	-10	-13	27	-8	42	49	18	12	-45	7	37	3	-21	-7	8
10	5	11	20	17	48	9	10	28	4	100	2	3	35	6	8	18	4	40	-5	17	10	-3	-11	-5	11	15	51	26
11	12	18	34	34	25	18	42	33	40	2	100	27	14	35	-31	41	-21	40	24	33	9	-30	25	42	30	2	12	20
12	5	42	29	25	-5	20	32	21	2	3	27	100	20	52	-8	27	8	39	9	-25	34	-3	23	16	41	-24	12	37
13	5	-3	8	3	12	17	18	3	14	35	14	20	100	-5	-9	22	-16	11	1	36	-8	-31	-9	6	3	-31	30	-2
14	40	45	21	43	-8	34	17	48	-10	6	35	52	-5	100	-7	15	22	23	12	-9	9	26	27	27	50	14	2	24
15	-13	17	-22	-8	-8	9	0	-22	-13	8	-31	-8	-9	-7	100	-8	13	2	-2	8	-8	33	-10	-2	10	18	0	-14
16	25	13	44	47	24	38	47	17	27	18	41	27	22	15	-8	100	-1	28	-1	17	31	-12	50	26	33	-11	33	42
17	35	29	9	37	27	29	19	-3	-8	4	-21	8	-16	22	13	-1	100	-1	-4	7	22	30	2	8	20	-8	3	17
18	3	37	55	18	29	26	44	17	42	40	40	39	11	23	2	28	-1	100	26	9	33	1	17	41	38	-15	23	34
19	1	21	23	10	8	28	43	12	49	-5	24	9	1	12	-2	-1	-4	26	100	11	-15	-17	5	46	16	-18	-16	-22
20	26	-7	6	1	24	25	40	2	18	17	33	-25	36	-9	8	17	7	9	11	100	-10	-10	13	12	9	4	23	-24
21	11	36	35	22	27	-13	21	-8	12	10	9	34	-8	9	-8	31	22	33	-15	-10	100	8	15	0	10	9	33	35
22	16	38	-12	-17	-17	-8	-31	3	-45	-3	-30	-3	-31	26	33	-12	30	1	-17	-10	8	100	1	-4	4	35	0	-12
23	18	3	43	9	5	36	30	23	7	-11	25	23	-9	27	-10	50	2	17	5	13	15	1	100	14	34	-11	11	16
24	-6	38	25	17	-3	47	44	39	37	-5	42	16	6	27	-2	26	8	41	46	12	0	-4	14	100	33	2	11	25
25	30	24	11	15	24	41	25	24	3	11	30	41	3	50	10	33	20	38	16	9	10	4	34	33	100	0	12	19
26	13	4	2	4	0	8	-18	3	-21	15	2	-24	-31	14	18	-11	-8	15	-18	4	9	35	-11	2	0	100	25	-10
27	9	30	42	2	44	21	18	0	-7	51	12	12	30	2	0	33	3	23	-16	23	33	0	11	11	12	25	100	18
28	1	10	32	25	12	1	29	38	8	26	20	37	-2	24	-14	42	17	34	-22	-24	35	-12	16	25	19	-10	18	100

Figure B.1: Correlation matrix

Figure B.2 shows the factor loading for each Q-sort. For each Q-sort, it is indicated in which factor it is flagged. The distribution of the Q-sorts within each factor that was discussed earlier in Chapter 7 can also be seen in this figure. The minimum loading in this Q-method is 0.41. However, in factor 2, a lower loading was still included because the loadings in the other factors were significantly lower. The same applies to several examples in factors 4 and 5, where the highest loading was slightly below 0.41. These were still included because they were the highest.

Q-sort	Factor 1		Factor 2		Factor 3		Factor 4		Factor 5	
5	0,6326	Flagged	-0,0935		0,1614		-0,0322		0,1498	
27	0,6202	Flagged	0,0877		0,0313		0,0443		0,1239	
10	0,5933	Flagged	-0,0048		-0,0882		0,0678		0,114	
3	0,4546	Flagged	-0,0009		0,3993		0,4397		0,0262	
21	0,4513	Flagged	0,2704		-0,0201		0,3546		-0,1163	
22	-0,0866		0,764	Flagged	-0,1564		-0,0532		0,126	
2	0,1291		0,4914	Flagged	0,2969		0,2328		0,0688	
13	0,2698		-0,3904	Flagged	0,0904		-0,0097		0,1334	
26	0,1178		0,3855	Flagged	-0,0555		-0,1141		0,0186	
19	-0,1573		-0,0368		0,6958	Flagged	-0,0469		0,0536	
24	-0,0642		0,0814		0,64	Flagged	0,2302		0,1673	
7	0,2766		-0,2116		0,6361	Flagged	0,2124		0,3692	
9	0,1669		-0,3458		0,6128	Flagged	0,09		-0,0464	
18	0,3609		0,1854		0,5516	Flagged	0,3166		0,0072	
12	0,0687		0,0307		0,1493		0,6324	Flagged	0,0445	
14	-0,2971		0,3608		0,0767		0,6003	Flagged	0,5172	
28	0,2968		0,0245		-0,0344		0,5673	Flagged	-0,0394	
8	-0,0906		-0,0677		0,1311		0,4692	Flagged	0,1334	
16	0,3245		-0,1825		0,1645		0,4549	Flagged	0,3144	
11	0,0878		-0,2452		0,4177		0,4278	Flagged	0,1781	
4	0,2194		-0,0191		0,1784		0,3638	Flagged	0,3619	
15	0,0424		0,2953		0,0195		-0,3521	Flagged	0,1237	
23	0,0647		-0,0329		0,1274		0,3312	Flagged	0,2217	
6	0,1193		0,0171		0,2959		0,0354		0,647	Flagged
1	0,0745		0,0855		-0,0906		0,1399		0,5338	Flagged
25	0,0384		0,1653		0,1863		0,3632		0,4373	Flagged
20	0,2075		-0,2616		0,1478		-0,2567		0,4127	Flagged
17	0,1414		0,3355		-0,0089		0,0131		0,3578	Flagged

Figure B.2: Factor loading Q-sorts



Interview questions

Appendix C the question guide for the exploratory interviews is shown. In the semi-structured interview, an open conversation was held with the interviewees. In general, the interviewees did most of the talking. However, to stay focused on the topic and explore the opportunities and barriers related to CBC, the following questions were prepared. These questions served as a guide and not as a strict framework for the interview. The questions were asked in Dutch and therefore shown in the same way below.

Project experience:

1. Heeft u ervaring met internationale samenwerkingen binnen de company X groep? Wat was hierin uw functie?
2. Kunt u voorbeelden geven van dergelijke projecten waarin u heeft gewerkt? Ben je frequent betrokken met dit soort projecten?
3. Had u bepaalde doelen en verwachtingen voordat u deze samenwerking aanging? Welke waren deze?

Questions about experienced problems and barriers:

1. Wat zijn de grootste obstakels en uitdagingen die u bent tegengekomen bij het aangaan van dergelijke samenwerkingen? Komen deze frequent voor?
2. In hoeverre waren er problemen op het gebied van administratieve of juridische zaken?
3. Zijn er voorbeelden te noemen waarin taal en cultuur problemen gaven? Zo ja, wat waren deze problemen?
4. Hoe verliep in het algemeen de communicatie met deze internationale partners? Waren er uitdagingen die niet te maken hadden met taal en cultuur?
5. Wat is in het algemeen uw mening over het aangaan van cross-border samenwerkingen met andere company X kantoren?
6. Als u weer een CB samenwerking aan zou gaan, wat zou u dan in het vervolg anders doen?

Questions about enablers:

1. Wat zijn de grootste kansen/enablers die uit CB samenwerkingen gehaald kunnen worden?
2. Zijn er situaties geweest waarin u het gevoel heeft gehad dat er meer gehaald had kunnen worden uit de samenwerking?
3. Welke mogelijkheden en kansen worden er dan niet benut?
4. Wat zijn de redenen dat deze kansen niet worden benut? Komt dit vanwege interne en/of externe factoren?
5. Wat zou er in het vervolg moeten veranderen om meer te halen uit deze internationale samenwerkingen binnen de company X groep.
6. Wat is het effect van internationale samenwerking op het behalen van de doelen van company X, zoals groei doormaken en bereiken van internationale top markt posities?

Other question:

1. Heeft u nog andere ervaringen of inzichten die u wilt delen wat betreft het aangaan van CBC?