

Co-location within the Ministry of Foreign Affairs

Co-location as a tool within the CRE strategy and as part of the CRE portfolio that adds more value to the organization

Colophon

Thesis:

Title: Co-location within the Ministry of Foreign Affairs

Subtitle: Co-location as a tool within the CRE strategy and as part of the CRE portfolio that adds more value to the organization

Version: P5 report

Date: 22-01-2021

Presentation date: 27-01-2021

Personal details:

Name: Zainab el Khamlichi

Student number: 4476611

University:

Institution: Delft University of Technology

Faculty: Architecture and Built Environment

Address: Julianalaan 134, 2628 BL Delft

Master track: Management in the Built Environment

MSc lab: Real Estate Management

Supervisors

First mentor: Monique Arkesteijn

Second mentor: Fred Hobma

External Mentor: Bastiaan Roon

External mentor: Khadija Azoubai

Delegate from board: Joran Kuijper

Abstract

Problem definition:

There is a gap in the literature on co-location: no literature is found on the use of co-location between third parties and governmental organizations (external co-location).

Co-location is already being implemented within the Ministry of Foreign Affairs (MFA). However, co-location has remained as a vague concept within MFA ever since its introduction. There is no strategy backing the concept; only some guidelines have been developed for more clarity from an operational perspective. Besides, the policy takes an opposing stance: a no, unless.. policy. Due to this concept's vagueness, co-location adds limited value to MFA. On the other hand, the number of co-locations indicates there is a clear need for the concept.

Research objective:

The objective of this thesis is to help the primary process of MFA achieve their goals and add more value with a better implementation of co-location by using the step-by-step plan developed in this research. The step-by-step plan with best actions/practices can be used to select the most suitable co-location alternative (with the decision tree and SWOT analysis) and improve the implementation of co-location as a CRE intervention (with the success formula); Consequently, more value is added to the organization. The main research question central in this thesis is: *How can co-location be used as a tool within the CRE strategy and as part of the CRE portfolio that adds more value to the organization, specifically in the Ministry of Foreign Affairs?*

Research method:

With the use of a hybrid research method, in which elements of operational, theoretical, and empirical research are incorporated, the answer to the main research question was obtained. The first part of the research method used was establishing the theoretical background on co-location and adding value. This knowledge establishment formed the basis of the following parts of the thesis. For the second part, an analysis of the current situation within the Ministry of Foreign affairs completed: strategic analysis of the general situation (stakeholder demands, corporate strategy, CRE strategy, Etc.) and an assessment of the current co-location cases (incorporates the empirical elements of the research). This assessment was completed using surveys (to assess the performance and perception) and interviews to develop an anecdotal success formula. The final part of this thesis incorporates the operational elements of the hybrid research method. The obtained information from the previous parts was combined for the development of a step-by-step plan to improve the current situation of co-location within MFA.

Findings and conclusion:

The developed step-by-step plan consists of the following products: a decision tree and SWOT analysis that both can be used to select the best co-location alternatives of a particular co-location embassy/consulate, based on the demands and objectives of MFA and the embassy/consulate. After selecting an alternative, the step-by-step plan's success formula can then be used as a tool to manage the implementation process. The last part of the step-by-step plan is needed to assess and, if needed, readjust the co-location after the implementation: the check and act phase. For assessing the co-location cases, a recommendation list of possible KPI's per demand (including the objectives) and the related adding value parameters are provided.

Preface

This thesis is part of the Management in the Built Environment (MBE) master track at TUDelft and contributes to one of the core disciplines of MBE: Real Estate Management (REM). The subject of the research is mainly on how co-location can be used as a Corporate Real Estate (CRE) Intervention that adds value to the Ministry of Foreign Affairs (MFA). Hence, within the discipline of REM, the master thesis can be positioned within the CRE alignment & adding value theme of CREM.

With this final version of my thesis report, the graduation project has finally come to an end. Due to unforeseen events, like the COVID virus, the research process was lengthier than initially thought; around a year and a half. Throughout this long process, I received a lot of support and help from people. I would, therefore, like to use this opportunity to express my gratitude.

I want to thank my supervisors, Monique and Fred, a lot for the useful feedback throughout this entire process. They have provided me with a lot of useful feedback during my graduation project, not only content-wise but also on my work process and style. Due to their feedback, my work process has changed for the good, and I am sure this will be extremely helpful in the future.

Furthermore, I had like to express my appreciation to the DBV-HF department of MFA, who welcomed me with open arms and were extremely helpful. I would also like to extend my gratitude to my two external mentors from MFA: Bastiaan and Khadija. I believe that they have contributed a lot to my graduation project and process as a whole, with a lot of useful feedback, incredible support, and enthusiasm, which also motivated me and their help. Plus, I would also like to thank the participants of the survey and interviews for their insights, which were critical for the completion of this graduation project.

Finally, I would like to thank my family who supported me and put up with me during this graduation process in which I spent many days only in my room and behind my laptop.

Zainab el Khamlichi
Amsterdam, January 2021

List of abbreviations:

The Ministry of Foreign Affairs (MFA)
Corporate Real Estate Management (CREM)
Real Estate (RE)
Corporate Real Estate (CRE)
Portfolio Management (PM)
Corporate Social Responsibility (CSR)
Value Adding Management (VAM)
Activity Based Working (ABW)
Chef de Post (CdP)
Operational Managers (OM)
Employees (E)
Congo (DRC)
Memorandum of Understanding (MoU)
Key Performance Indicators (KPI's)

Executive summary

Chapter 1: Research establishment

Introduction and problem definition

Co-location has been used in many organizations, such as non-profit organizations, hospitals, schools, and the private sector. (Vinokur-Kaplan, 2001; DeArmond, Nelson & Bruns, 2015; Brown & Barnett, 2004; Walsh, McGregor-Lowndes & Newton, 2006) However, there is barely any literature found on external co-location used in governmental organizations. Despite this literature gap, there are co-location cases within the Ministry of Foreign Affairs (MFA): embassies and consulates. Co-location was introduced in 2012 by the Prime Minister and the Minister of Belgium to benefit from the opportunities of co-location (cost-saving and achievement of policy-related collaborations). Within MFA, co-location is mainly driven by the primary process and is not supported by any strategy (only a short policy document with some guidelines). Consequently, co-location has stayed as a vague Real Estate intervention used in MFA. This may also be why the perception of the policymakers on co-location is negative; the policy document on co-location takes an opposing stance: no, unless. In addition, the vagueness around co-location within MFA has caused a limited added value. On the other hand, the number of co-locations indicate a clear need to implement the concept.

Research objective and questions

The objective of this thesis is to help the primary process of MFA achieve their goals and add more value with a better implementation of co-location by using the step-by-step plan developed in this research. The step-by-step plan with best actions/practices can be used to select the best co-location alternative (decision tree and SWOT analysis), improve the implementation of co-location as a CRE intervention (success formula), and, consequently, add more value to the organization.

The main research question central in this thesis is: *How can **co-location** be used as a tool within the CRE strategy and part of the CRE portfolio that **adds more value** to the organization, specifically in the **Ministry of Foreign Affairs**?*

The three concepts in bold were used to formulate the sub-question needed to answer the main research question. The related sub-questions are:

- *What are the advantages and disadvantages of co-location as a CRE strategy tool?*
- *What is the concept of adding value within CREM, and what are the possibilities of co-location as an adding value tool?*
- *What is the current situation within MFA, and how does co-location fit within the organization?*
- *What is the performance and perception of the current co-location embassies/consulates within MFA, and what can be learned from these current cases?*

Methodology

With the use of a hybrid research method, in which elements of operational, theoretical, and empirical research are incorporated, the answer to the main research question was obtained. The first part of the research method used was establishing the theoretical background on co-location and adding value. This knowledge establishment formed the basis of the following parts of the thesis. For the second part, an analysis of the current situation within the Ministry of Foreign affairs completed: strategic analysis of the general situation (stakeholder demands, corporate strategy, CRE strategy, Etc.) and an assessment of the current co-location cases (incorporates the empirical elements of the research). This assessment was completed using three surveys (to assess the performance and perception) and interviews to develop an anecdotal success formula. The final part of this thesis incorporates the operational elements of the hybrid research method. The obtained information from the previous parts were combined for the development of a step-by-step plan to improve the current situation of co-location within MFA.

Chapter 2: Theoretical background: co-location

In this research, co-location is considered as an overarching concept in which separate independent organizations from different places co-locate together to benefit from each other, based on a lease contract or membership in one shared property with shared services, facilities, and resources. This overarching concept covers different forms (openhouse, co-located, and coworking) and layouts (Executive suites, serviced offices, hybrid offices, and rented desks). (Dearmon, et al. (2015); Vinokur-Kaplan (2001); Vinokur-Kaplan (2018); Brown & Barnett, (2004); Rashid (2013); Vogelaar & Bertens (2018); Nelson & Zappile (2019); Schreurs (2019); Weijts-Perree, et al. (2016); Bates (2011); Cresa (2017)).

Based on the forms and layouts of co-location, 12 different co-location alternatives are considered in this research. These alternatives can be selected based on the demands and objectives of an organization. These alternatives differ from each other in the occurrence of specific possible advantages and disadvantages, the achievement level of these possible advantages and disadvantages, and the level of sharing.

Aside from the possible benefits and downsides of co-location, there were seven factors found in the literature, which could contribute to the success of co-location. These success factors are as follows: the physical environment (implementation of a variety of room types, simplicity and fairness in the use of space, etc.), good working technology and well-equipped spaces, change of organizational culture and behavior with serious gaming, community building with the co-location partner, clear communication, commitment and strong leadership (both internal and external), agglomeration of economies, and freedom and sense of control. These success factors found in the literature were used as the basis of a tool within the step-by-step plan that can be used to improve the implementation and management process of co-location.

Chapter 3: Theoretical background: adding value

Corporate Real Estate Management (CREM) is essential for each organization. It is a discipline that supports an organization to execute its core business without any obstacles due to Corporate Real Estate (CRE). Adding value is considered to be an essential concept within CREM. Implementation of appropriate CRE interventions adds value to the organization by contributing to the organizational performance and achieving the organizational demands and objectives.

There are 12 adding value parameters, developed by Jensen and van der Voordt (2016), which can be used to determine the value that is added with the CRE intervention: satisfaction, image, culture, health and safety, productivity, adaptability, innovation and creativity, risk, cost, the value of assets, sustainability, and corporate social responsibility. The relevant adding value parameters for an organization are dependent on the stakeholders of the particular organization. Co-location could have some impact on the 12 parameters, either direct or indirect. For example, the adding value parameter satisfaction can be directly influenced by co-location since one of the possible advantages of co-location is increasing the job satisfaction of employees.

CRE interventions will always have some impact on an organization. To ensure that this impact is positive (thus, adds value), proper and professional management is needed. Within this value adding management, alignment cannot be discarded. Without the alignment between stakeholder demands, Corporate strategy, and CRE interventions and strategy, adding value cannot be achieved. Thus, in other words, the management of adding value and alignment were both be essential in this thesis.

The primary model used for the management of co-location is the extended VAM model by Jensen and van der Voordt (2016). This model was used as the basis of the steps taken in chapter 4, 5, and 6. However, without alignment between demands, objectives, and strategies, adding value with CRE interventions cannot be achieved. Hence, the four building block alignment model by Heywood and Arkesteijn (2017) was also used in this thesis. There are many similarities found between the VAM model and the alignment model. However, the difference is that the extended VAM model consists of precise steps that need to be taken, whereas, the alignment model is not as explicit in the steps that should be taken. Thus, the VAM model was used as the basis of the

remaining chapters and the development of the step-by-step plan. The four building block alignment model was used to ensure that value is added with co-location by supporting the VAM model. In other words, for the strategic analysis step in the VAM model, the alignment model was used.

Chapter 4: The current situation within MFA

All the, beforementioned, adding value parameters are relevant for MFA except for the parameter: the value of assets. From the stakeholder analysis, it was also found that the financial parameters are not as important as the social parameters. Since MFA is a governmental party responsible for meeting society's interest with good services, financial aspects are not critical objectives or demands.

Within MFA, alignment is achieved on two levels: between strategies and between strategies and the stakeholder demands. The achieved alignment on the two levels means that the first steps to adding value are taken. Despite the achievement of alignment on the two levels, alignment in practice is still a challenge within MFA. Currently, the supply still does not answer all the organization's demands (Note that after the strategic analysis, it was found that the objectives in the strategy documents and the stakeholder's demands are aligned; hence, from this point on, if demands are mentioned, it covers the objectives, mission, visions, Etc. of MFA). For co-location to add value, it has to support the organization in achieving the demands.

Based on the strategic analysis, it can be concluded that co-location could respond to the different demands of MFA. The demands which could be achieved are the health of employees, international demands (meeting and collaboration), sustainability, flexible network organization (meeting and collaboration), flexible RE, modern RE, representative RE (image and culture), and long term resilience in CRE and strategy. Depending on the demands of an embassy/consulate, a co-location alternative is selected; in other words, per case, the chosen alternative could differ.

There are around 33 external co-location embassies/consulates within MFA. As already mentioned above, co-location has no supporting strategy; instead, a policy offers some clarity for the openhouse leasing form, from an operational perspective: the no, unless... policy. This policy showcases that the perception of co-location is not good; the first step of co-location starts with a no. Besides, the aim of the guidelines within the policy is to avoid operational disadvantages. With this thesis's results, there is a wish to change the policy to an open form, focused on adding value to MFA.

Within the current co-location embassies/consulates, the most dominantly found co-location partners are either countries or semi-governmental organizations. From a legal perspective, the co-location with these two parties does not cause any legal complexities, note that semi-governmental organizations do not enjoy diplomatic immunity. In terms of co-location with other private parties, there are some limitations caused by legal issues. Rented desk layouts are not recommended to be used in embassies and not possible in consulates. Within the openhouse alternatives, long-term co-location with commercial parties is undesirable, except for semi-governmental parties; short-term co-location is possible but not perceived well. The co-located form is not recommended to use with private parties. From a legal perspective, coworking is the best form to co-locate with private parties without encountering major legal issues.

Chapter 5: Current co-location embassies and consulates

From the survey results, it can be concluded that there is a low achievement of social and operational advantages of co-location. This low achievement is mainly due to the dominantly used layouts (executive suites and serviced offices, which score the lowest in the achievement of socially related advantages); and the co-location form (openhouse organized in the property of MFA: main advantages are the efficient use of excess space and financial benefits; however, the occurrence of operational problems increases). The negative perception of co-location within MFA, especially from the perspective of Operational and Real Estate Managers, is partly caused by the occurrence of these operational problems in the openhouse leasing form. Aside from the problems mentioned in

the survey, some solutions were also given; a solution found multiple times was a better preparation of co-location and setting clear arrangements and rules.

Based on the interviews, an anecdotal success formula was developed, consisting of 11 success factors. The main message of this success formula is that most factors fall back to the fact that the level of preparation determines the success of co-location. The more extensive and detailed the preparation is, the more successful the co-location will be. In other words, the decision-making process should be thought out well. What demands need to be achieved? Who is the co-location partner? Where will the co-location take place? What are the wishes of the co-location partner? What image does the co-location partner have? Are there mutual benefits for both parties? Etc.

Thus, there is room for improvement in the current co-location cases. Especially in terms of the low performance and the negative perception of co-location, which are mainly caused by the choices made (the layout, form, partner, Etc.) and a lack of a proper preparation process. The lack of a good planning process is also seen in the fact that there is no supporting strategy for co-location within MFA and in the current policy (which takes an opposing stance: that stops co-location before even starting).

Chapter 6: The step-by-step plan

The step-by-step plan developed in this research can be used as a management tool to ensure a sound preparation process for co-location and a positive impact of co-location on the organization (add value to MFA). The actions taken in the step-by-step plan are presented in the figure below, which is based on the extended VAM model of Jensen and van der Voordt (2016).

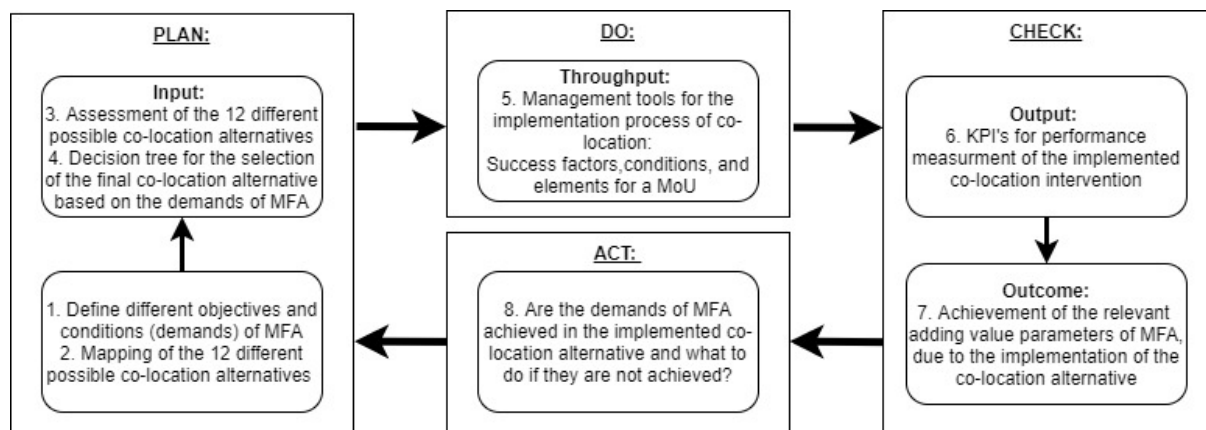


Figure 1. Overview of steps taken for the development of the plan and the related products (simplified version of the extended VAM model by Jensen and van der Voordt (2016)).

The step-by-step plan consists of products that can be used to first select the best alternatives based on the demands MFA wishes to achieve with a specific co-location embassy/consulate: **the decision tree** and **the SWOT analysis**. The decision tree and SWOT analysis are both tools used to select the best solution in each new co-location initiative based on the relevant demands in that particular situation. After selecting an alternative, the step-by-step plan can then be used as a tool to manage the implementation process of the chosen co-location alternative with the use of an **anecdotal success formula** (developed based on the findings from the literature, surveys, and interviews). This success formula mainly pinpoints the importance of good preparation of co-location during the internal and external discussions. The last part of the step-by-step plan is needed to assess and, if needed, readjust the co-location after the implementation: the check and act phase. For assessing the co-location cases, a recommendation list of possible KPI's per demand and the related adding value parameters are provided. Note that the step-by-step plan (including the decision tree, SWOT analysis, anecdotal success formula, Etc.) has not been tested within MFA due to the scope of this

thesis (timewise). Hence, the validation of this step-by-step plan is yet to be executed before the actual use of the plan.

Relevance

The research in this thesis contributes to the field of Corporate Real Estate Management by continuing on the existing knowledge of co-location (usually found as coworking) and adding value with Corporate Real Estate. The main contribution of this research is on how value can be added with the use of co-location within governmental parties (MFA). Currently, there is barely any literature found on the use of co-location as part of the strategy in governmental agencies. This research has shown that in practice, co-location is used in governmental parties, specifically in the Ministry of Foreign Affairs (MFA). Thus, part of the gap is filled.

In addition, the step-by-step plan contributes to a better implementation of co-location as a CRE intervention, which could be used to add value to MFA by achieving the organization's demands. This step-by-step plan and this thesis's structure continues to build on the extended VAM model by Jensen and van der Voordt (2016) by implementing this model for practical use in governmental agencies. The step-by-step plan developed in this thesis contributes to the field of CREM as a practical tool that can be used for governmental agencies. Although, this plan was developed in the context of the Ministry of Foreign Affairs. This tool could also easily be adapted to other public organizations with some slight alterations.

Limitations

There are some improvement points in this thesis related to found errors and limitations that could have influenced the final results. The most critical error and limitations of this research is found in the surveys conducted to assess the performance of the co-location cases within MFA. An error found in the survey for operational managers related to the unclarity in the question formulation, which caused the dividedness in the responses of the operational subjects in the dimensions: possible advantages, disadvantages, and disadvantages. Two limitations are the small response and the spread of responses per embassy in the survey of employees, and the absence of the floorplans of the co-location cases. This error and limitations have lowered the reliability of the survey results and are, therefore, not a strong representation of the performance of the co-location cases. Hence, the extent to which the survey results correspond with literature and reality is harmed. This, in turn, influences the validity of the research method used to assess the performance of the current co-location embassies/consulates in MFA: the survey. Consequently, the conclusions made on the performance of the co-locations may not be valid. However, it can be stated that the conclusions, which were made based on the survey, did not show any abnormality when compared to the findings of other parts of the research, such as: literature, interviews, Etc. To limit the impact of the error and limitations on the rest of the research, the findings of the literature or interviews were leading.

Table of contents

Chapter 1: Research establishment.....	13
1.1 Introduction and problem definition	14
1.2 Research objectives and questions	14
1.3 Relevance	16
1.4 Methodology	16
1.4.1 Research type.....	16
1.4.2 Research approach	17
Chapter 2: Co-location	19
2. Theoretical background: Co-location.....	20
2.1. Definition	20
2.1.1 Conclusion.....	22
2.2 Possible advantages and disadvantages	23
2.2.1 Conclusion	25
2.3 Co-location cases	26
2.3.1 Co-location between charter and district schools (DeArmond, et al., 2015).....	26
2.3.2 Co-location between public and private hospitals (Brown & Barnett, 2004).....	27
2.3.3 Commercial Parties	28
2.3.4 Conclusion.....	28
2.4 Success factors	29
2.4.1 The physical environment/workplace design.....	29
2.4.2 Culture change.....	30
2.4.3 Community building.....	30
2.4.4 Clear communication, commitment, and strong leadership	31
2.4.5 Agglomeration of economies	31
2.4.6 Freedom and Sense of control	32
2.4.7 Conclusion.....	32
2.5 Conclusion.....	34
Chapter 3: Adding value.....	35
3 Theoretical background: Adding value.....	36
3.1 Corporate Real Estate Management	36
3.1.1 Conclusion.....	37
3.2 Adding value	37
3.2.1 The 12 value adding parameters	38

3.2.2 Value adding management.....	43
3.2.3 Conclusion.....	45
3.3 The 4 building block alignment model.....	46
3.3.1 Conclusion	48
3.4 Conclusion	48
Chapter 4: The ministry of Foreign Affairs (MFA).....	50
4.1 Stakeholder management.....	51
4.1.1 The stakeholders and the relevant value adding parameters	51
4.1.2 Conclusion	53
4.2 Corporate strategy	54
4.2.1 External business drivers and forces	55
4.2.2 Internal strategic drivers.....	56
4.2.3 Strategic triggers	56
4.2.4 Conclusion: the corporate strategy	57
4.3 Corporate Real Estate strategy	58
4.3.1 Understanding the RE performance	58
4.3.2 The Corporate Real Estate Strategy	60
4.3.3 Conclusion	63
4.4 Co-location.....	64
4.4.1 Current co-location cases	64
4.4.2 Co-location policy	65
4.4.3 Conclusion	66
4.5 Co-location with different parties from a legal perspective	67
4.5.1 Countries	67
4.5.2 The private sector.....	69
4.5.3 Conclusion	72
4.6 Conclusion	73
Chapter 5: Current co-location embassies and consulates.....	76
5.1 The survey and response	77
5.1.1 The survey and target group.....	77
5.1.2 Response overview	80
5.1.3 Conclusion	82
5.2 Current performance of co-location embassies/consulates	83
5.2.1 Found layouts and partners	84
5.2.2 Possible advantages	84

5.2.3 Possible disadvantages	86
5.2.4 Possible success factors.....	87
5.2.5 Adding value	89
5.2.6 Found issues and their suggested solutions	90
5.2.7 Results per embassy/consulate.....	91
5.2.8 Conclusion	96
5.3 The anecdotal success formula	98
5.3.1 Diplomatic mission 16	99
5.3.2 Diplomatic mission 19	101
5.3.3 Diplomatic mission 25.....	102
5.3.4 Diplomatic mission 30	103
5.3.5 Diplomatic mission 32.....	105
5.3.6 Conclusion	106
5.4 Conclusion	108
Chapter 6: The step-by-step plan to adding value.....	109
6.1 Introduction	109
6.2 Plan phase.....	110
6.2.1 Demand clusters	111
6.2.2 Mapping of the different co-location alternatives	113
6.2.3 Assessment of alternatives	115
6.2.4 The decision tree	118
6.3 Do phase.....	120
6.4 Check and act phase	125
6.5 Conclusion and Discussion.....	129
References	133
Appendix	136

Chapter 1: Research establishment

In this chapter the research proposal will be presented. Starting with an introduction on the subject and the problem. The chapter will then be followed with a presentation of the research objective, questions, conceptual model, and methodology.

1.1 Introduction and problem definition

Corporate Real Estate Management (CREM) is an essential aspect within each organization. Whether the Real Estate (RE) is owned or leased, CREM will still be practiced within most organizations. Corporate Real Estate (CRE) is needed to support an organization's core business. (Corenet, 2015), which is also the case for the Ministry of Foreign Affairs (MFA).

The Ministry of Foreign Affairs (MFA) is part of the Dutch government, and is mainly responsible for maintaining the relationship between the Netherlands and the rest of the world. MFA's primary function is to help Dutch people abroad, represent the Netherlands (establish relationships and work together: 'the antenna and mouthpiece' of the Netherlands), and to fulfill the Dutch interests and values worldwide. Like other organization, CRE is also critical for MFA. The CRE portfolio of MFA is vast and is spread around the world (around 150 countries) because MFA consists of various departments that are either located in The Hague or spread elsewhere in the world (See appendix 1 for the organogram). The CRE in other countries is also known as 'postennet' within MFA; 'postennet' are all the diplomatic representations worldwide: embassies, consulates, permanent representations, other representations, Netherlands business support offices (NBSO), and Regional business support offices (RBSO). (Rijksoverheid, 2019)

Co-location is known as, an organization or business sharing a single building or site to, for example, take advantage of the economies of scales, to stretch the limits of the RE market, Etc. (Vinokur-Kaplan, 2001). Co-location has been used in many organizations, such as non-profit organizations, hospitals, schools, and the private sector. (Vinokur-Kaplan, 2001; DeArmond, Nelson & Bruns, 2015; Brown & Barnett, 2004; Walsh, McGregor-Lowndes & Newton, 2006) After conducting a systematic literature review (see appendix 2), the following gap was found: there is barely any literature found on external co-location used in governmental organizations (only a few articles on 'rijkswerkplek'; that are about internal co-location). Why co-location is not used in these governmental bodies is not found in the literature. Is it not feasible for governmental organizations to use co-location? Has the possibility of the implementation of this tool just not been researched and recorded in literature yet? Or is it just not possible due to, for example, privacy reasons?

Within the portfolio of the Ministry of Foreign Affairs (MFA), co-location is also found. These co-locations are either found in embassies or consulates all around the world. The concept of co-location was officially introduced in MFA in 2012, when the Dutch Prime Minister and the Minister of Belgium decided to use co-location to benefit from the opportunities of co-location: from a saving point of view and to achieve policy-related collaborations. Ever since, the amount of co-locations has increased in terms of location and partners. This concept is since the introduction, still mainly driven from the primary process and is currently not supported/backed by any strategy (only a short policy document with some guidelines). Consequently, co-location has stayed as a vague Real Estate intervention used in MFA because there was a call to do so. This may also be the reason why the perception of the policymakers on co-location is negative. The negative perception is also found in the policy document on co-location: no, unless; which takes an opposing stance. Due to this concept's vagueness within MFA, co-location adds limited value (for example, the use excess space due to co-location). On the other hand, the number of co-locations indicate that there is a clear need for the implementation of concept.

1.2 Research objectives and questions

Based on these problem definitions, the following research objective of this thesis has been formulated:

- Help the primary process of MFA achieve their goals and add more value with a better implementation of co-location.

The final product of this thesis will be a step-by-step plan with best actions/practices, which can be used to select the best co-location alternative (decision tree and SWOT analysis), improve the

implementation of co-location as a RE intervention (success formula); and, consequently, add more value to the organization.

The main research question central in this thesis is: *How can **co-location** be used as a tool within the CRE strategy and as a part of the CRE portfolio that **adds more value** to the organization, specifically in the **Ministry of Foreign Affairs**?*

To answer the research question, the thesis will be divided into four parts, which are derived from the main research question as formulated above (the bold concepts). The sub-questions and sub-sub questions relevant in these four parts are as follows:

- Part 1 (Chapter 2): *What are the advantages and disadvantages of co-location as a CRE strategy tool?*
 - What is co-location?
 - What are the possible advantages and disadvantages of co-location?
 - Which relevant examples of co-location can be found, and what can be learned from these examples?
 - Which possible factors could contribute to the success of co-location (achieve advantages and avoid disadvantages)?
- Part 2 (Chapter 3): *What is the concept of adding value within CREM, and what are the possibilities of co-location as a adding value tool?*
 - What is Corporate Real Estate Management (CREM)?
 - What is adding value in CREM and how can value be added?
 - What is alignment and how can alignment be achieved with the 4 building block alignment model?
- Part 3 (Chapter 4): *What is the current situation within MFA, and how does co-location fit within the organization?*
 - Which adding value parameters are relevant for MFA?
 - What is the Corporate strategy of the Ministry of Foreign Affairs (MFA)?
 - What is the Corporate Real Estate (CRE) strategy of the Ministry of Foreign Affairs (MFA), and is the strategy aligned to the stakeholder demands and the Corporate strategy?
 - What is the current situation with regards to co-location and the related policy?
 - How can the relationships of MFA with third parties due to co-location be explained from a legal perspective?
- Part 4 (Chapter 5): *What is the performance and perception of the current co-location embassies/consulates within MFA, and what can be learned from these current cases?*
 - What is the performance and perception of the co-location embassies/consulates, and which problems are currently encountered?
 - Is there an anecdotal success formula which can be applied to MFA?

In the figure below, the conceptual model is presented. In this conceptual model, the relation between the different concepts of the research question is presented. The model presents the following relations: each organization has its own set of relevant adding value parameters; these parameters are derived from the alignment between the MFA objectives, the stakeholders' demands, and the different strategies. Every CRE decision/intervention has some impact on an organization; if this impact is positive, value could be added to the organization. This positive impact is only achieved if the intervention supports the organization's objectives and demands; in this case, co-location will be implemented to achieve those objectives and demands. Thus, if co-location supports MFA's goals by achieving all or part of those goals, the relevant adding value parameters will be addressed, and, therefore, value can be added.

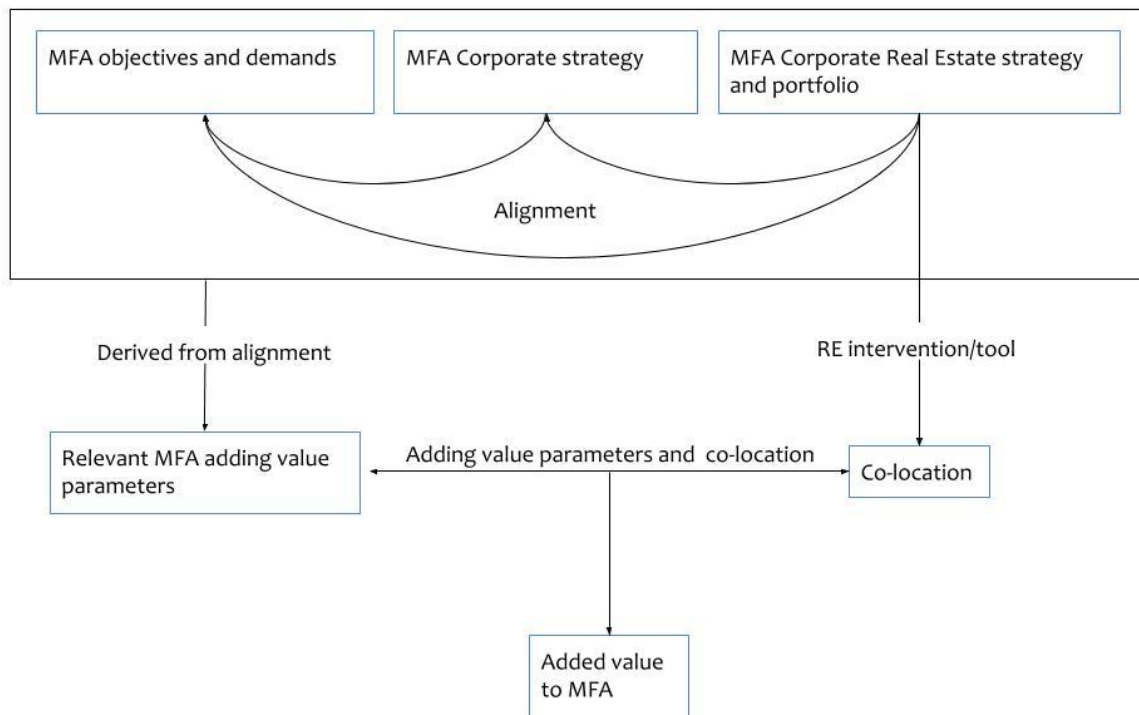


Figure 1. Conceptual model (own figure)

1.3 Relevance

This graduation project is scientifically relevant because it fills the gap found within the literature of Corporate Real Estate Management (CREM): there is no literature on co-location (with external parties) within governmental agencies in the Netherlands.

Besides, with this research, a step-by-step plan is developed in which the implementation and management of co-location are improved; consequently, this adds more value to the Ministry of Foreign affairs. Thus, with this step-by-step plan, an extra CREM tool will become available for governmental organizations. In addition, this improvement provides the society with a better functioning government, due to the increased cooperation between co-location partners and the more efficient and effective housing of governmental functions will decrease the tax expenditures. Although this plan was developed in the context of the Ministry of Foreign Affairs. This tool could also easily be adapted to other public organizations with some slight alterations.

1.4 Methodology

In this section, the research methodology used in this thesis will be discussed. This section will present an explanation of the research type and the research approach.

1.4.1 Research type

Based on the main research question, it can be concluded that the approach needed for this research is a hybrid research method, in which elements of operational, theoretical, and empirical research are included. The need for a hybrid research method can be explained with a reasons; based on the main research question and the research objective, it can be concluded that the primary research method is operational. This is concluded based on the following fact: the research question is a 'how can' type of question, which indicates that the main question is operationally related. In this graduation research it is also attempted to create a step-by-step plan to change the current situation within MFA; thus, it tries to improve the current situation, which shows that it has an operational relevance. However, to answer the main research question, theoretical research is

included in this thesis. This is found in the sub-questions: 'what is' type of questions, which are mostly theoretically based. An element of empirical research found in this thesis is the use of surveys to obtain data on a specific subject. In this research, a survey was conducted to obtain information on the current co-location cases and their performance. With this information, it will be attempted to find a link between knowledge and survey results; in other words, explaining the survey results with previously found knowledge. (Barendse, Binnekamp, de Graaf, van Gunsteren & van Loon, 2012)

1.4.2 Research approach

The findings from the theoretical research are mainly found in the chapter 2 and 3, these chapters will form the theoretical background in this thesis. For the selection a systematic literature review was conducted; for more details on the systematic literature review refer to appendix 2.

The third and fourth part (Chapter 4 and 5) of this thesis will mainly present the analysis of the current situation within the Ministry of Foreign Affairs. This analysis consists of two parts: a strategic analysis based on the theory obtained in chapter 3 and an analysis of the current situation related to co-location (with surveys and interviews).

The final chapter of this thesis will then combine the information from the four parts to develop a step-by-step plan, consisting of the following products: a decision tree and SWOT analysis for the selection of the best alternative, a success formula to improve the implementation of co-location, and a suggestion on the assessment of co-location after the implementation.

The surveys and interviews.

The surveys presented in chapter 5 will be used to answer the following questions: What is the performance and perception of the co-location embassies/consulates, and which problems are currently encountered? These surveys are also essential for the development of an anecdotal success formula. The survey sample will be the occupants of the co-location embassies/consulates (operational managers and employees) and the CRE managers. For these three different respondent groups, a total of three different surveys were conducted. A detailed explanation of the survey approach will be given in chapter 5 in which information on the respondent groups, the formulation of the questions, distribution of the survey, the response, and the results are given.

The questions formulated for the surveys have to be answered from two different perspectives. For the Real Estate Managers, this will be a broad perspective on all co-location cases in general. In contrast, the occupants (employees and Operational Managers) have to answer these questions based on the co-location embassy/consulate in which they reside. To ensure that the occupants answer the questions from the perspective of their own co-location office shared with third parties; and not from a general co-location perspective or based on the workplace which is not shared, the following measures were taken:

- In the survey introduction, the following statement was included: *'Before starting with the survey, the following has to be clarified about the questions: When answering the questions, it is important to only consider the co-location part of the office you work in; in other words, this survey is not about your own workplace.'*
- Moreover, in some of the questions, the focus was explicitly on their co-location office to ensure that the statement in the introduction is not overlooked or forgotten.

The steps taken in the quantitative research process, as presented by Bryman (2012), were also used to prepare for the surveys. Note that it is difficult to call this survey a quantitative research because of the small size of the survey, but the process's steps was helpful for the design of the survey. The research design used in this thesis is a cross-sectional research design: *'survey research or structured observation on a sample at a single point in time.'* (Bryman, 2012, p.76). Another step in the process, presented by Bryman, is about the operationalization of concepts (how are concepts measured).

The predominant concept of these surveys is to determine the performance of the co-location cases. The indicators/subject for this concept were based on the dimensions found in the theoretical framework on co-location (chapter 2), more on this in chapter 5. The survey was sent to all the external co-location embassies/consulates within MFA (about 38).

The survey results are not only significant for obtaining a better understanding on the current perception and performance of the co-location cases within MFA, but also for the selection of the interview cases. The question central in these interviews is as follows: Is there an anecdotal success formula that can be applied to MFA? When preparing for an interview, it is essential to determine and understand the amount of control used in the interview. The determination of control will help categorize the interviews into one of the four types of interview methods presented in the table below. (Research Methods and Statistics, 2016)

Table 1. Amount of control in each possible interview method. (Research Methods and Statistics, 2016)

Interviews	Conversation	Unstructured	Semi-structured	Structured (no flexibility)
Topic	Free	Fixed	Fixed	Fixed
Question formulation	Free	Free*	Free*/fixed	Fixed
Question sequence	Free	Free*	Free*/fixed	Fixed
Interviewer behavior	Free	Free*	Free*/fixed	Fixed

*Note, Free does not mean unprepared!

Based on this table, the method selected for the interviews in this research is a semi-structured interview. In the interviews executed in this thesis, most aspects are fixed; however, the flexibility to, for instance, change the question formulation, sequence, and the interviewers' behavior depending on the flow of the interview is available. Meaning that, for instance, the question formulation is pre-formulated, but if new questions arise during the interview, they can also be asked. The reason for using this free structured interview design is due to the uniqueness of the interviews conducted in the research. Instead of comparing the different results from the different cases, these interview results were used to determine the uniqueness of each co-location case.

Chapter 2: Co-location

In this chapter, the theoretical background of co-location will be presented. This chapter, together with chapter three, will function as the basis of the step-by-step plan presented in chapter six. This chapter starts with the formulation of the co-location definition, which will be used throughout this thesis. Following this definition, the possible advantages and disadvantages of co-location will be presented. Partly based on a few co-location cases in which organizations adapt co-location, this chapter will end with a few success factors and conditions.

2. Theoretical background: Co-location

2.1. Definition

Table 2. Relation between research questions and purpose of section 2.1.

Sub question	Sub-Sub question	Purpose	Structure
What are the advantages and disadvantages of co-location as a CRE strategy tool?	What is co-location?	Determine a definition of co-location, which can be used throughout the thesis.	Analysis of different definitions of co-location and its synonyms. This will be followed with an analysis of the different possible forms and layouts of co-location.

The relevance of this section in relation to the main question of this chapter is presented in the table above. Defining the concept of co-location is of great importance since it is the main subject of this thesis. In this section, different definitions of co-location will be analyzed to formulate a concluding definition, which will be used throughout the entire thesis. First, the co-location definitions will be analyzed; and an analysis of possible co-location synonyms will follow.

DeArmond, et al., (2015) analyzed co-location between district schools and charter schools. In this research, co-location is described as follows: when two different schools decide to share the same building to realize collaboration in order to increase the performance of both schools (*'take the best from both sides and work together to produce great results for our students'* (p. 3)).

In the research of Vinokur-Kaplan (2001), co-location between non-profit organizations in the US is analyzed. Co-location can be described as follows: when different organizations locate together in the same property to benefit from, for example, the economies of scale. According to Vinokur-Kaplan (2001), the concept of co-location is inspired by the business incubator model. In this model, startups locate together in a nourishing environment, consisting of shared facilities, services, and networks, to eventually graduate from this environment. However, The business incubator model is different from co-location because, in co-location, there is no such thing as graduating. In 2014, Vinokur-Kaplan and McBeath researched the concept of co-location further; in this research the following definition was used: *'building or geographic site in which non-profit organizations are co-located in close proximity to one another with some measure of shared space or services.'* (p.78). In later research of Vinokur-Kaplan (2018), this definition of co-location was used again: separate independent organizations sharing the same property in order to achieve some benefits (later in this chapter the potential benefits will be presented).

In Australia, co-location is used as a win-win model for public and private hospitals (Brown & Barnett, 2004). Brown & Barnett have identified four types of co-locations used in hospitals: '1) the traditional model of locating a for-profit hospital in close proximity to a public hospital, e.g. across the road; (2) a shared campus where a private and public hospital occupy the same site; (3) a shared building with the two hospitals occupying different space within the building; and (4) where the public hospital, under contract to a state government, has been built and is operated and owned by the corporate hospital chain in return for patient payments from the state concerned.' (p. 429).

Just like Brown & Barnett, Rashid (2013) defines different levels of co-location. In Rashid's study, the effects of co-location on the perception of office workers on workplace design and interaction freedom in organizations are researched. When organizations share the same space, it can be considered co-location. As already mentioned before, Rashid describes in his research that co-location can be achieved on different levels; it can involve bringing all or a few employees from different departments within one organization together. Co-location can also be achieved externally by bringing people together to one place from different organizations and different locations. Another level is gathering people from different floors of the same building to one floor, or from

different spaces on one floor to the same space; both internally or externally. The last level of co-location is connecting people using a virtual space despite staying in different physical places.

From these definitions it can be stated that co-location in all cases has to do with sharing space with different organizations and bringing people or organizations together in order to benefit from each other, the shared amenities, and real estate. Note that only co-location within the same property (site excluded) and only co-location between separate independent organizations will be considered in this thesis.

Now that the definition of co-location has been analyzed, it is essential to consider all possible synonyms of co-location. According to Vinokur-Kaplan (2018), coworking is a type of co-location space. However, in other articles, it was found that coworking is considered to be one of the many flexible workplace types. Flexible workplaces are, as considered by JLL, an overarching concept that covers all different forms of flexible work environments: from the traditional fully facilitated spaces with flexible leasing conditions to the coworking concepts in which community is central (Vogelaar & Bertens, 2018). In the research report of Colliers international, it is mentioned that flexible workplaces are used to locate different organizations into the same building or space, either through memberships or lease contracts (Nelson & Zappile, 2019). Just like co-location, flexible workspaces are about bringing people together in a shared setting. Thus, in this thesis, co-location and flexible workspaces are viewed as the same; in other words, just like flexible workplaces, co-location is considered as an overarching concept consisting of different typologies.

Co-location can, thus, be categorized into different forms, which can be distinguished based on the lease options and ownership options. In Schreurs' (2019) research on offices as a service, a distinction of different forms and lease options were made. This distinction will also be used in this thesis:

1. **Openhouse:** When an organization decides to lease excess space in their property to other organizations (Schreurs, 2019). In Bates' (2011) research, this concept is also known as co-tenant, whereas, Nagy and Lindsay (2018) also define this form as openhouse.
2. **Co-located:** When an organization decides to co-locate together by becoming both the main tenant or owner of the building. This involves mutual agreement and distribution of risks. (Schreurs, 2019)
3. **Coworking:** This type is probably the most famous type of flexible workplaces. This form can be described as follows: when organizations decide to locate themselves based on a membership in an office renting facility (offices provided by coworking space providers; for example, spaces, WeWork, Regus, etc.) (Schreurs, 2019; Gandini, 2015).

Both openhouse and co-located forms of co-location do not put any specific emphasis on achieving collaboration and creating a community. However, coworking spaces all have in common that they provide organizations with working spaces, while they can also, if necessary, benefit from the collaborative environment provided by these coworking spaces (Lukjanska, 2016; Zhai, 2017).

Besides these different leasing forms of co-location, there are also different types of layouts which can be implemented within these different forms mentioned above:

1. **Executive suites:** The closest form of a flexible workspace layout that is similar to a traditional office. In this type, the building, some basic facilities (toilet, parking, Etc.) and services (basic administrative reception, internet, security, Etc.) are shared with different organizations, but each organization has its own separate office. (Bates, 2011)
2. **Serviced offices:** Private offices are rented to different organizations housed in the same building. The organization can benefit from shared facilities (for instance, the kitchen, canteen, lounge areas, gym, toilets, parking lots, Etc.), and business services (reception, internet, security, printers, cleaning, Etc.). (Weijs-Perree, Appel-Meulenbroek, de Vries & Romme, 2016)

3. **Hybrid spaces:** in this layout, all different layouts are combined into one type: private offices are combined with an open plan workspace in which desks, meeting rooms, lounge areas, call rooms, canteens, coffee corners, Etc., are shared; also includes the sharing of services. (Bates, 2011)
4. **Rented desks:** This layout only consists of an open plan workspace in which everything is shared. However, there is a distinction between dedicated and hot desks. A dedicated desk is a form in which each organization has its own desks, and the same entity uses the desks for as long as it is rented for. In the hot desk concept, an organization can rent desks, but the desks do not belong to a particular organization; thus, working at the same desk is not guaranteed. (Cresa, 2017)

2.1.1 Conclusion

The answer to the question central in this section, *What is co-location?*, is formulated as follows:

Co-location is an overarching concept in which separate independent organizations from different places co-locate together to benefit from each other, based on a lease contract or membership in one shared property with shared services, facilities, and resources. This overarching concept covers different forms (openhouse, co-located, and coworking) and layouts (Executive suites, serviced offices, hybrid offices, and rented desks).

(Dearmon, et al. (2015); Vinokur-Kaplan (2001); Vinokur-Kaplan (2018); Brown & Barnett, (2004); Rashid (2013); Vogelaar & Bertens (2018); Nelson & Zappile (2019); Schreurs (2019); Weijs-Perree, et al. (2016); Bates (2011); Cresa (2017)).

Based on these different forms and layouts, 12 different co-location alternatives are found. The table below, gives an overview of the 12 alternatives, a detailed description of the alternatives will be presented in chapter 6.

Table 3. An overview of the different alternatives.

	Executive suites	Serviced offices	Hybrid space	Rented desks
Openhouse	Openhouse with executive suites	Openhouse with serviced offices	Openhouse with hybrid spaces	Openhouse with rented desks
Co-located	Co-located with executive suites	Co-located with serviced offices	Co-located with hybrid spaces	Co-located with rented desks
Coworking	Coworking with executive suites	Coworking with serviced offices	Coworking with hybrid space	Coworking with rented desks

Every alternative has different possible advantages and disadvantages, or at least the achievement level differs. The selection of the best alternative by an organizations is dependent on the demands and objectives (what do you wish to achieve? And which layout and form could be implemented to achieve these needs and wishes?). In the section below, the different possible advantages and disadvantages are presented.

2.2 Possible advantages and disadvantages

Table 4. Relation between research questions and purpose of section 2.2.

Sub question	Sub-Sub question	Purpose	Structure
What are the advantages and disadvantages of co-location as a CRE strategy tool?	What are the possible advantages and disadvantages of co-location?	Determine the possible advantages and disadvantages of co-location, needed to determine the potential of co-location as a tool (is it worth it to use co-location).	All the different possible advantages and disadvantages found in literature are stated in tables, with a description to provide more information on the different subjects.

In this section, the overview of the possible advantages and disadvantages, found in the analyzed literature, are presented. This overview is vital because each alternative, as explained in 2.1.1, has different consequences in terms of advantages and disadvantages; by mapping all these possibilities, each alternative's strengths and weaknesses can be determined (see chapter 6).

Organizations often use co-location to benefit from the shared environment unique to co-location spaces. In the table below, the possible advantages derived from literature are presented.

Table 5. Overview of all possible advantages of co-location based on the findings from literature.

Advantages	Description
Unique selling point (Cushman & Wakefield, 2018a)	Co-location gives a positive image when it comes to openness and accessibility. (Spinuzzi, 2012; Gandidi, 2015; Ivaldi, 2017).
Improved performance and Productivity (Rashid, 2013; DeArmond, et al., 2015; Regus, 2018; van der Voordt, 2003)	According to Rashid (2013), the physical environment of workplaces can influence the performance of individuals, groups, and organizations. There are around 51 aspects of the physical environment that could affect the performance and productivity of an organization. The social environment is also critical for the productivity and performance of an organization. Thus, the workplace design can be used as a tool to manipulate the productivity of occupants, by manipulating the physical distance between people. The improvement of performance is also stimulated due to the increase in collaboration and interaction. Co-location gives opportunities to get feedback from each other, encourage each other, and provides learning moments; these could also be factors that increase the performance of an organization (Spinuzzi, 2012)
Increased interaction (Spinuzzi, 2012; Rashid, 2013)	People are brought together from scattered locations into a single workplace, depending on the layout co-location could be used to push out interaction into the shared territories. The increased visibility, accessibility, and openness in co-located spaces, stimulates encounters; consequently significant interactions can take place. (Rashid, 2013)
Expansion of network (Spinuzzi, 2012)	Due to the stimulation of formal and informal interaction.
Improve knowledge sharing (Gandidi, 2015; Artto, Ahola, Kyrö & Peltokorpi, 2016; Schreurs, 2019)	The increase in knowledge sharing is due to the increase in interaction and collaboration (Artto, et al., 2016).
Increased collaboration (Spinuzzi, 2012 ; DeArmond, et al., 2015; Schreurs, 2019 ; Artto, et al., 2016)	According to Boudreau, Ganguli, Guale, Guinan & Lakhani (2012), co-location increases the chance to collaborate by 70%. This is probably promoted due to the sudden encounters, these encounters increase the interaction and allow trust building between people (Artto, et al., 2016).

Advantages	Description
Stimulate innovation and creativity (Cushman & Wakefield, 2018b; Nelson & Zappile, 2019; Kojo & Nenonen, 2014)	Collaboration is one of the foundations of the production and reproduction of knowledge (combining knowledge, expertise and capabilities through collaboration), which is especially needed for innovation. (Nelson & Zappile, 2019)
Stretches the limits of real estate resources (Vinokur-Kaplan, 2001; Vogelaar & Bertens, 2018)	Especially in markets with escalating prices and with a structural deficit of office space. (Vinokur-Kaplan, 2001)
Better equipped space (Spinuzzi, 2012; Vinokur-Kaplan, 2001; van der Voordt, 2003)	Due to the shared service arrangements, in other words, there is an opportunity to invest in quality instead of quantity.
Low commitment (Spinuzzi, 2012)	Especially the case in forms where administrative support is given, also related to the efficiency created by co-location. (Spinuzzi, 2012)
Flexible leasing conditions (Arora, Nilawar, Bhargave, 2017; Nelson & Zappile, 2019; Schreurs, 2019)	Organizations are not locked with a traditional lease contract for a number of years, instead there are shorter, medium and long lease terms. (Arora, Nilawar, Bhargave, 2017; Nelson & Zappile, 2019; Schreurs, 2019)
Cost effectiveness (Van de Voordt, 2003; Arora, et al. 2017)	The sharing of facilities does not only provide organizations with efficiency is scale, but also saves costs (Bates, 2011). On the first hand the cost of co-location seem to be higher than a traditional office, this is only true to some extent: the leasing prices are indeed higher. However, if you take a closer look, the total cost decline with the use of co-location. The costs per employee decreases, due to the decrease in RE and facility management costs: administration costs, maintenance costs, annual operational costs, etc. (Vogelaar & Bertens, 2018; van der Voordt, 2003)
Flexibility to downscale or upscale (Arora, et al. 2017)	With co-location you are not bounded with fixed cost, due to the flexible leasing conditions; thus, up-and downscaling is easier to achieve (Arora, et al., 2017). In addition due to the increase in flexibility, greater agility is achieved, which lowers the risks (Instant, 2018).
Increase in efficiency (Vinokur-Kaplan, 2001; Nelson & Zappile, 2019)	Immediate time and cost savings. There is also efficiency achieved in the use of space: better use of space and reduction of footprint due to the shared spaces (van der Voordt, 2003; van der Voordt & d'Ancona, 2013). In terms of time, efficiency is achieved due to the decrease of the administrative tasks; thus, the focus in realizing the core function of the organization is increased (Vinokur-Kaplan, 2001)
Decrease in capital expenditures (Nelson & Zappile, 2019; Dixon, 2018)	There is no huge amount of costs paid up front. Note that this is dependent on the leasing form used.
Optimization of portfolio performance (Nelson & Zappile, 2019)	If organizations choose to use co-location within their property unused and inefficient space will become functional and revenues are generated. Also a reduction of m2 due to shared workplaces.
Attract best talent (Nelson & Zappile, 2019; Vogelaar & Bertens, 2018)	<i>With companies in intense competition to attract the brightest minds, they must be creative about their working space to draw them in, with amenities that appeal to younger workers.</i> (Nelson & Zappile, 2019, p.12) Some appealing points of co-location are: network expansion, collaboration, openness, accessibility, etc.

Advantages	Description
High level of job satisfaction (van der Voordt, 2003; Regus, 2018)	Improved mental and physical health due to flexibility, social interaction, better equipment, etc. (van der Voordt, 2003)
Environmental benefits: sustainability (Spinuzzi, 2012; Gandidi, 2015; Regus, 2018)	Due to the sharing nature of co-location.

In addition to benefits co-location also has some disadvantages. These disadvantages found in literature are presented in the table below.

Table 6. Overview of the possible disadvantages of co-location based on the findings from literature.

Disadvantages	Description
Higher costs (Nelson & Zappile, 2019)	The lease costs are slightly higher than regular office space because of the services and facilities that are offered in return for the higher rent.
Not all employees may be satisfied with a shared environment (Nelson & Zappile, 2019; van der Voordt, 2003)	Job satisfaction is extremely ambivalent. While a lot of people could be satisfied with co-location, there is always a chance that the job satisfaction decreases due to the lack of privacy, the overstimulation, difficulty to personalize space, etc. (van der Voordt, 2003). The decrease in job satisfaction could also have negative influence on the productivity. There could be introvert employees who will find an extrovert environment uncomfortable, which may cause them to withdraw to electronics instead of creating an increase in interaction (Nelson & Zappile, 2019).
Overstimulation (Nelson & Zappile, 2019; van der Voordt, 2003)	Too much distraction and information, may cause a decrease in productive interaction which could harm the productivity.
Privacy of employees can be harmed (Rashid, 2013; van der Voordt, 2003)	Due to the openness in co-location workplaces.
Security issues (Cushman & Wakefield, 2018b; Hurry, 2012)	Computer and internet security, data security, etc.

2.2.1 Conclusion

Tables 5 and 6 present the answer to the question: *What are the possible advantages and disadvantages of co-location?*

After analyzing the possible advantages and disadvantages of co-location, the following tendency was found: many of these listed advantages and disadvantages are interrelated. Thus, some advantages caused by co-location automatically cause other advantages (this also applies for the disadvantages and between benefits and disadvantages). For example, an increase in interaction means that the opportunity to improve knowledge sharing and collaboration increases; consequently, this means that innovation could also be stimulated.

Depending on the chosen alternative, the achievement of these possible advantages and the possible disadvantages one can encounter can differ. For instance, in an alternative in which the rented desk layout is used, the chance of achieving interaction between different organizations locating in that layout is exceptionally high when compared to an alternative with an executive suite layout. Thus, if an organization wishes to increase the interaction with the co-location partners all alternatives with a rented desk layout would be recommended, rather than the alternatives with an

executive suite layout. A detailed overview of the relation between alternatives and possible advantages will be presented in chapter 6, in the SWOT analysis.

2.3 Co-location cases

Now that the possible advantages and disadvantages of co-location have been determined. It is essential to look at some examples of co-location being used in practice. Some questions answered in this section are: What are examples of co-location used in organizations? Which goals/advantages do these organizations wish to achieve? Which problems/disadvantages were encountered due to the implementation of co-location? What contributed to the achievement of these goals/advantages? Or How were the problems/disadvantages avoided?

Table 7. Relation between research questions and purpose of section 2.3.

Sub question	Sub-Sub question	Purpose	Structure
What are the advantages and disadvantages of co-location as a CRE strategy tool?	Which relevant examples of co-location can be found, and what can be learned from these examples?	Use examples of co-location used in practice to learn more about the successful achievement of the advantages (achievement of initiation goals), and to learn more about how problems/disadvantages encountered can be avoided.	Three different examples are presented in this section, Co-location used between private and public parties, between different public parties, and in commercial parties.

This section will function as the basis of section 2.4, in which the lessons learned from the cases are translated into success factors and conditions. The selection of the first case, co-location between schools, was selected based on the fact that both the Ministry of Foreign Affairs (MFA) and the schools are non-profit organizations; neither organizations have making profit as its primary goal. Due to this similarity, there could be relevant lessons that could maybe also be applied to MFA. The second example of co-location used in practice is co-location between public and private parties (hospitals). This case was selected because of the public-private relationships that occur in the co-location of public and private hospitals. In MFA's case, such relationships could also occur; thus, relevant information could be obtained from this example. The last example is not a specific case; instead, coworking space providers are observed in general. It could also be helpful to take a look at these type of commercial parties. This might not seem relevant at first hand, but if MFA decides to adapt the co-location alternatives with an openhouse or co-located leasing form, the role of MFA becomes similar to a coworking space provider; Thus, there could be points which could be interesting for MFA.

2.3.1 Co-location between charter and district schools (DeArmond, et al., 2015)

In this research, cases of co-location between two different types of schools in the US are analyzed: district schools (traditional public schools) and charter schools (independent public schools). The main goal of this research by DeArmond et al. (2015) was to find the answer to the following questions: *'Is co-location more trouble than it's worth? Are win-win co-location possible?'* (p. 1). The conclusion made from this research is that there is potential in the co-location of district and charter schools. However, some factors need considerable attention to make the co-location successful and reach the goal to realize an improvement focused co-location (improvement of school performance encouraged by co-location due to cross-collaboration).

The points of attention found in this research are as follows: 1) **Communication** is critical in the implementation of co-location. As DeArmond et al. (p.9, 2015) formulate nicely: *'There is no such*

thing as too much communication about the goals and purpose of co-location.' This statement is made because the employees (teachers) did not comprehend the initiation goals/objectives of co-location and how to achieve them; consequently, despite co-locating together, interaction and collaboration between the teachers to improve the performance did not occur. For the successful implementation of co-location, not only the **commitment** of leaders to co-location is essential, but also the employees' commitment to co-location is critical; this commitment could be increased if the employees are aware of the goals of co-location and the method to achieve these goals.

2) Another point of attention that became evident in the co-location of charter and district schools is the importance of **strong leadership from both sides**. According to the researchers, leadership is of great importance for the successful achievement of improvement focused co-location and the peaceful co-existence of the different organizations. Strong leadership is also related to the point made above on communication; the task to make sure that the initiation goals of co-location are clear to employees rests with the leaders. In the paper, a distinction is made of three levels of leadership: 1) **leadership at the top**: Active involvement of the leaders from both sides (for example, the directors) is essential in order to sustain the partnership between the co-location partners, to launch and sustain the co-location initiative, to prepare the leaders at the middle and top and the employees, to stimulate the socializing between the different organizations with the use of events (meetings, shared electives, lunch, afterschool sports, etc.), and to become more flexible for change as an organization (collaboration asks for some flexibility, for example, schedules have to be changed in order to match the schedule of the other organization). 2) **Leadership at the middle**: This is about a leader who takes on a fixer role (internal or external, full-time or part-time). This fixer role is important to support the implementation of a successful co-location. This type of leader makes sure that the on-site implementation of co-location is supported: *'Support day to day work and helping the principals manage the extra work that came with running co-located schools'* (p.4). 3) **Leadership at the school**: This is about the leaders at the co-location case (for example, the schools' principals). It is required of these leaders that they are both prepared to take on extra work caused by co-location, committed to co-location, and open to co-location. In other words, they must stand behind the co-location concept.

2.3.2 Co-location between public and private hospitals (Brown & Barnett, 2004)

In the research of Brown & Barnett (2004), different co-location cases between private and public hospitals in Australia were analyzed. The co-location between these hospitals are offered by the State Government and is seen as a beneficial win-win model for both the private and the public sector; for example: relieve pressure on the government in terms of health services, improvement image for private hospitals, cost-sharing with regards to resources, minimize risks, Etc. Brown & Barnett, distinguished four types of co-location: 1) Traditional model (located near to each other), 2) shared hospital campus, 3) Shared building, and 4) merged hybrid space (public hospital built, operated, and owned by a private hospital under the contract of state government in return for patient payments). Some interesting points found in the paper are:

1. The relationship between the private and public sector are negotiated and formalized in commercial contracts. The private hospitals are also responsible for the management and operation of public hospitals.
2. The private party must be approved by the State Government and must also meet various regulations and guidelines.

2.3.3 Commercial Parties

In the report of Cushman & Wakefield (2018a), the unique selling points of coworking providers WeWork and Knotel (WeWork offers space to companies of all sizes, while Knotel offers space to more established organizations (20 or more employees)) are presented, some interesting points in the report were:

1. The use of events, for example, lunch and learn, networking events, investors events, etc., to promote the creation of community within the building and the broader WeWork network;
2. The use of a member App to help support collaboration and community building. The app can be used to book meeting rooms, access social feed, network, etc.;
3. Business services are provided on behalf of the members; for example, to help young companies save money and help them focus mainly on their core business;
4. Offering branding that is unique to each member, to create a successful and cohesive culture;
5. Offer a wide variety of meeting rooms in order to avoid a lack of rooms;
6. Access is only provided to a company's employees who have a membership.

In the comparative study on coworking by Lukjanska (2016), a few other coworking providers are mentioned, including the reason why they are considered to be great. Some interesting points are:

1. Some providers offer courses and educational programs on different subjects; marketing courses, fund courses, incubator programs, etc.;
2. Community building events, for example, breakfasts, monthly get-togethers, film/documentary events, apps, etc.;
3. Sessions on overarching concepts: brainstorming sessions to promote collaboration;
4. Inspiring interior and extra benefits: roof garden, gym, etc.;
5. *'It implements into reality creative ideas and gathers together different stakeholders such as the municipality and private investors or organizations'* (p.50)
6. Focus on local products and local stakeholders.

2.3.4 Conclusion

In this section, three examples of the use of co-location in practice were presented. From the first case, the most important conclusion that can be made is that there are three factors which contribute to the achievement of improved performance, increased interaction, and collaboration:

- **Clear communication** of the initiation goals and objectives of co-location to the employees (tasks for the leaders);
- **Commitment** to the co-location initiative from both the leaders and the employees;
- **Strong leadership, on three different levels**, from all the involved parties.

Besides the contribution of these factors in the achievement of the named co-location advantages, these factors also contribute to the co-location's overall success and the peaceful coexistence between the parties.

The main conclusion taken from the second case is that when public and private parties decide to co-locate together in a merged hybrid space (in this thesis, this is similar to the co-located form), the relationship then takes form as a public-private partnership (PPP). If the Ministry of Foreign Affairs also decides to co-locate together with a private party in a co-located form, PPP's could also be interesting. This will, therefore, be explored in more detail in chapter 4, section 4.5.

As for the third example, commercial coworking spaces were considered. From this example, it can be concluded that community creation is the most significant success factor for coworking space providers.

These success factors found from this analysis will be used as the starting point of a more detailed research on other success factors of co-location; these newly found success factors will be combined with the success factors from the cases in practice in section 2.5. Note that there is a difference between success factors and advantages because to increase the chance of achieving certain advantages, success factors could be implemented.

2.4 Success factors

Table 8. Purpose of section 2.4

Sub question	Sub-Sub question	Purpose	Structure
<i>What are the advantages and disadvantages of co-location as a CRE strategy tool?</i>	<i>Which possible factors could contribute to the success of co-location (achieve advantages and avoid disadvantages)?</i>	These success factors are needed to increase the chance of achieving the possible advantages of co-location and to prevent the occurrence of the possible disadvantages. Consequently, the implementation of co-location can be improved.	Each subsection's title represents a success factor; which will include the relevant advantages or disadvantages.

In this section, the success factors found in the cases mentioned above and other literature on co-location will be presented. Each subsection title represents a success factor; within these subsections, the achieved advantages or the avoided disadvantages of co-location due to the implementation of these possible success factors are presented, including these success factors' conditions.

2.4.1 The physical environment/workplace design

Simplicity and fairness in the use of space

A physical factor that plays a role in the achievement of collaboration is the space usage of the workplaces; it is advised to avoid hierarchal space usage, instead allocating the space with simplicity and fairness could **stimulate collaboration** instead of damaging it. (Theander, 2018)

Variety of room types

This success factor has to do with different advantages and disadvantages. As already mentioned before, Job satisfaction is ambivalent because while many people could be satisfied with co-location, there is always a chance that the job satisfaction decreases due to the lack of privacy, overstimulation, difficulty to personalize space, personality (extrovert and introvert), etc. (van der Voordt, 2003; Nelson & Zapille, 2019). The occurrence of disadvantages like the **lack of privacy, overstimulation**, and decrease of **job satisfaction**; could all mainly be avoided, by implementing a variety of room types related to the activities needed in the office: concentration/seclusion rooms, meeting rooms, lounge areas, Etc. (Hartog, et al., 2018; van der Voordt & d'Ancona, 2013; Lauwereys, et al., n.d.))

A variety of room types is also essential for the encouragement of **interaction and collaboration**. To achieve collaboration between different organizations, it is important to provide space to collaborate and space in which unplanned encounters with people from different organizations can occur. Moreover, it is also important to have space to withdraw and work on these new innovative and creative ideas without being distracted. (Theander, 2018) According to Holienka & Racek (2015), collaboration takes form in three levels: informal collaboration (unexpected random conversations), formal (agreed collaboration), and systematical collaboration (due to workshops, lectures, training). Hence, it is essential to provide space for all three levels of collaboration. The

physical environment is of essential for the achievement of the benefits of co-location, and, thus, the success of co-location.

Good working technology, well equipped spaces, and workplace design

Good working technology and well-equipped spaces are also related to the **job satisfaction** and **productivity** of employees (van der Voordt, 2003; Dixon, 2018). Sharing should become a positive thing among co-locaters. Thus, effectiveness in sharing could be promoted if users get something back from it, for example, good technology, better furniture, good contribution to image, variety of room types, Etc. (Lauwereys et al., n.d.)

According to Spinuzzi (2012), having an 'outward-facing design' could create amazement with clients of co-locaters, and could, therefore, **improve the image** of the organization. This outward-facing design could be modern, representative, comfortable, clean, Etc. Spinuzzi (2012) also mentions that besides outward-facing design, improving the 'inward-facing design' could **improve productivity and performance**. The inward-facing design could be interpreted as a design that focuses on providing comfort and fostering relationships for the co-location space users.

The workplace design could **improve the interaction** between people, mainly due to connected spaces, visibility, openness, accessibility, and shared rooms: kitchen, recreational facilities, Etc. This improvement is because these particular characteristics increase the chance of having sudden encounters, increasing the possibility of interaction between people. (Rashid, 2013)

2.4.2 Culture change

Co-location could sometimes (especially with advantages like **achieve collaboration and interaction between different organizations, expand the network, knowledge sharing**, Etc.) require a cultural or behavioral change in organizations. For example, interaction and collaboration with different organizations are closely related to cultural norms: is entanglement with different organizations permissible or stimulated (Rashid, 2013). The change from a traditional office concept to co-location is different from the traditional situation, and, therefore, sometimes requires behavioral change. This change in culture or behavior could be stimulated with the use of serious gaming. Serious gaming could be divided into three categories:

- Learning (training or new knowledge is given on a specific skill or a particular object);
- Development (with the focus on the psychological effects of the specific process on human development);
- Change (is about influencing an individual or the organization as a whole).

Depending on the wishes, a serious game could be developed; in the case of co-location, the serious game would probably be developed under the categories learning and change. Learning using games is effective because it could promote intrinsic motivation, increase emotional involvement (also related to the commitment success factor), active engagement, visualization of certain concepts (for example, co-location), and provides policymakers/implementers with continuous feedback. (van Liempt, 2012)

2.4.3 Community building

Community building is a factor that holds great value within coworking spaces; it is one of the most critical success factors of coworking spaces. Community building is essential for **networking, social interaction, collaboration, and productivity and performance**. The creation of a community could be stimulated with the following tools:

1. Having adequate space to hold events (Spinuzzi, 2012);

2. Organizing events, shared experiences, and other entertaining networking activities: host conferences, lunch lectures, free or low-cost learning opportunities, guest speakers, Etc. (Spinuzzi, 2012; Gandini, 2015; DeArmond et al., 2015; Bates, 2011)
3. Community managers are a critical factor in the success of community building, even more so than the design of the physical environment. These community managers have a coordinating role, and are, thus, connected to all member of the co-location space (network assembler); they are, among other things, responsible for the encouragement of openness, curiosity, trust, family spirit, Etc. (Nagy & Lindsay, 2018; Artto et al., 2016)
4. Using a member App to help support collaboration and community building. (Cushman & Wakefield, 2018a; Theander, 2018)

Community building could be fostered even more if co-locaters have the same visions, shared values, or objectives on specific subjects (Bates, 2011). Hence, to maintain communities in co-location offices, the owners of these spaces need to encourage and stimulate the creation of social contacts between members, either with the use of space, resources, languages, shared values, and interests (Holienka & Racek, 2015). According to Holienka and Racek (2015) 's research, the community is the factor that plays the most significant role in the success of coworking spaces. They mention that it is essential to start building a community with support and interest as fast as possible, instead of waiting for the natural creation of the community. Some coworking spaces fail because they did not manage to create a sense of belonging and community for the occupiers (Miller, Olsen, Rich & Takao, 2016).

2.4.4 Clear communication, commitment, and strong leadership

Strong leadership from both sides is important for improving **the overall performance of co-location** and the **peaceful coexistence between parties**. As already mentioned in section 2.3, a distinction is made between three leadership levels: leadership at the top, leadership at the middle, and leadership at the co-location office (see section 2.3 for more) (DeArmond et al., 2015). This strong leadership also involves the commitment of leaders, which includes having a careful implementation process and a management team showing enthusiasm when deciding to implement co-location. (van der Voordt, 2003) A factor that plays a significant role in the failure of co-working spaces is that it should never be seen as a side project besides another business. For this type of flexible office solutions full-time attention of a manager is needed to be successful. (Holienka & Racek, 2015)

Besides having committed leaders, the commitment of the employees is also critical because, after all, they are the end-users of the co-location sites. Therefore, it is necessary for the employees to fully understand the implementation goals of co-location and the method to achieving these goals. The first and most crucial step is, therefore, clear communication from the leaders to the employees on the co-location goals, benefits, and purposes. Communication contributes to the understanding of employees, which in turn improves the performance. (DeArmond et al., 2015) Therefore, it is required of the management team to constantly promote co-location, share the visions of co-location on the goals the organization wishes to achieve, Etc. (Lukjanska, 2016). This commitment of leaders and employees is vital for the improvement of the overall co-location performance.

2.4.5 Agglomeration of economies

One of the various benefits of co-location is the stimulation of innovation. A factor that contributes to the stimulation of innovation is the clustering of similar or same businesses; in other words, the occurrence of the agglomeration economy not only has economic advantages and provides more potent industrial benefits, it also stimulates innovation. However, note that it is also important to

still have some diversity in the work environment. This means that it is not about being exactly the same, instead some differences make co-location more interesting; because the more people present from different backgrounds, the more different types of knowledge are spread, which increases the **stimulation of innovation and creativity**. (Theander, 2018)

2.4.6 Freedom and Sense of control

Providing employees with a sense of control could have a positive influence on the **job satisfaction** of the employees. Giving a sense of control could be on a low level like giving people the freedom to personalize space, for example, with decorations like photos, with small chores like dishwashing, and giving the possibility to have personal control on the indoor climate. This sense of control increases the feeling of belonging to a place, feeling at home; consequently, **job satisfaction** is increased. (Lukjanska, 2016) A higher level of control can be achieved by involving users of co-location buildings in the decision-making process, for instance: letting the employees decide with whom they would like to co-locate. According to Hartog et al. (2018), to achieve the satisfaction of employees, it is crucial for the management team to identify their needs and to involve them in the decision-making process; in other words, work closely together to create an environment which meets the goals of the organization as a whole but also the needs of the employees.

To **stimulate innovation and creativity**, employees need to collaborate with third parties; it is, therefore, essential to give employees the freedom to work with whom they wish and the freedom to choose the space they want to collaborate in. This freedom also **increases the job satisfaction** of employees. (Theander, 2018)

2.4.7 Conclusion

The answer to the question, *Which possible factors could contribute to the success of co-location (achieve advantages and avoid disadvantages)?*, is given in this conclusion with the use of the table below. This table presents all the possible success factors with a description of what they entail and the related possible advantages or disadvantages.

Table 9. Overview of the possible success factors found from section 2.3 and 2.4

Success factors	Description	Possible advantage and disadvantages of co-location
The physical environment	It is advised to avoid hierarchal space usage, instead allocate the space with simplicity and fairness. (Theander, 2018)	Stimulate collaboration
	Implement a variety of room types related to the activities needed in the office: concentration/seclusion rooms, meeting rooms, lounge areas, collaboration rooms, coffee corners, etc. (Hartog, et al., 2018; van der Voordt & d'Ancona, 2013; Lauwereys, et al., n.d.; Theander, 2018; Holienka & Racek, 2015)	Decrease lack of privacy; Avoid overstimulation; Avoid harmed job satisfaction; Increase interaction and collaboration
	'Outward-facing design' which could create amazement with clients of co-locaters: modern, representative, etc. (Spinuzzi, 2012)	Improve image
	Inward-facing design could be interpreted as a design that focuses on providing comfort and fostering relationships for the co-location space users. (Spinuzzi, 2012) A form of inward-facing design could be a workplace design with connected spaces, visibility, openness, accessibility, and shared rooms: kitchen, recreational facilities, Etc. (Rashid, 2013)	Improve productivity and performance Increase interaction
Good working technology and well-equipped spaces	Sharing should become a positive thing among co-locaters. Thus, effectiveness in sharing could be promoted if users get something back from it, for example, good technology, better furniture, good contribution to image, variety of room types, etc. (van der Voordt, 2003; Dixon, 2018; Lauwereys, et al., n.d.)	Increase of job satisfaction; Improve productivity

Success factors	Description	Possible advantage and disadvantages of co-location
Change of culture with serious gaming	Serious gaming could change the culture and behavior (for example, become more open for collaboration and interaction with third parties), and it could provide occupiers with more information on co-location and its possible advantages and disadvantages. Due to serious gaming, learning through a game, the following points are promoted: emotional involvement, active engagement, give policy makers constant feedback, Etc. (van Liempt, 2012)	Achieve social advantages like: increase of interaction and collaboration, expand network, stimulate knowledge sharing, etc.; Increase commitment of employees; Achieve support for the co-location
Community building	Creation of community between partners with the following tools: events, community managers, lunch lectures, guest speakers, conferences, Etc. (Spinuzzi, 2012; Gandini, 2015; DeArmond et al., 2015; Bates, 2011; Nagy & Lindsay, 2018; Artto et al., 2016)	Increase interaction and collaboration; Improve social networking; Increase productivity and performance
	Community building could be fostered even more if co-locaters have the same visions, shared values, or objectives on specific subjects. Hence, to maintain communities in co-location offices, the owners of these spaces need to encourage and stimulate the creation of social contacts between members, with the use of: space, resources, languages, shared values, and interests. (Holienka & Racek, 2015)	
	Start building a community with support and interest as fast as possible instead of waiting for the natural creation of the community. (Holienka & Racek, 2015)	
Clear communication, commitment, and strong leadership	Strong leadership from both sides on three different levels: leadership at the top, leadership at the middle, and leadership at the co-location office. Strong leadership also involves the commitment of leaders, for example: showing enthusiasm, careful implementation process. (DeArmond et al., 2015; van der Voordt, 2003)	Improve overall performance of co-location; Peaceful coexistence between parties
	The commitment of the employees is also critical because they are the end-users of the co-location sites. (DeArmond et al., 2015)	
	For the commitment of employees it is necessary for the employees to fully understand the goals of co-location. The first and most crucial step is, therefore, clear communication from the leaders to the employees on the co-location goals, benefits, purposes, and methods. (DeArmond et al., 2015; Lukjanska, 2016)	
Agglomeration of economies	The occurrence of the agglomeration economy is not only has economic advantages and provides more potent industrial benefits, it also stimulates innovation. However, note that it is also important to still have some diversity in the work environment. This means that it is not about being exactly the same, instead some differences make co-location more interesting; because the more people present from different backgrounds, the more different types of knowledge are spread. (Theander, 2018)	Stimulation of innovation and creativity
Freedom and sense of control	Giving a sense of control could be on a low level like giving people the freedom to personalize space, for example, with decorations like photos. A higher level of control can be achieved by involving users of co-location buildings in the decision-making process, for instance: letting the employees decide with whom they would like to co-locate. The occupants are the ones actually dealing with the co-location; it is, therefore, essential to give employees the freedom to work with whom they wish and the freedom to choose the space they want to work in. It is crucial for the management team to identify their needs and to involve them in the decision-making process; in other words, work closely together to create an environment which meets the goals of the organization as a whole but also the needs of the employees. (Lukjanska, 2016; Hartog, et al., 2018; Theander, 2018)	Increase of job satisfaction; Stimulate innovation and creativity

2.5 Conclusion

This chapter has presented information on different aspects of co-location. First of all, it is considered a co-location, in this thesis, when two different independent organizations decide to locate together in the same building to benefit from each other with shared facilities, and services.

Based on the found forms (openhouse, co-located, and coworking) and layouts (executive suites, serviced offices, hybrid offices, and rented desk) of co-location, 12 different alternatives were found. These alternatives can be selected based on the demands and objectives of an organization. A detailed description of these 12 alternatives, together with the relevant possible advantages and disadvantages, will be presented in chapter 6. These two overviews are two steps within the step-by-step plan, which can be used to select the best alternative for MFA.

In table 9, the found success factors were presented together with the possible outcomes (the possible advantages and disadvantages). This table functions as the basis of a tool within the step-by-step plan that can be used to improve the implementation and management process of co-location. These found success factors will in chapter 6 be combined with the success factors found from the surveys and interviews which will be presented in chapter 5.

Thus, in this chapter, the findings for the first concept in the main research question, co-location, has been presented. Chapter 3 will present the research findings of the second concept of this research, which is on adding value.

Chapter 3: Adding value

The research question central in this chapter is: *What is the concept of adding value within CREM, and what are the possibilities of co-location as a tool to add value?* By answering this question, the theoretical background used in this thesis will be completed (the second main concept found in the main research question). The structure used to obtain the answer to this sub-question is as follows:

- A description of what Corporate Real Estate Management (CREM) is;
- Explain the concept of adding value, including the adding value parameters and a description on Value Adding Management;
- And the concept of alignment will also be discussed.

3 Theoretical background: Adding value

3.1 Corporate Real Estate Management

The table below gives an overview on the relation between the section and the rest of this chapter.

Table 10. Overview relevant research questions.

Sub question	Sub-Sub question	Purpose	Structure
What is the concept of adding value within CREM and what are the possibilities of co-location as a tool to add value?	What is Corporate Real Estate Management (CREM)?	Provide basic background knowledge on the context of adding value: Corporate Real Estate Management (CREM).	An introduction of CREM and different important aspects of CREM.

Corporate real estate (CRE) is a concept that is about the Real Estate (RE), either owned or leased, that is crucial for the functioning of an organization (thus, RE, which supports the core business). As Corenet (2015) states (p.5): *"Corporate real estate is considered the glue that helps bond the business units."* CRE should not be confused with commercial real estate, in which RE is the core business of the organization. (Corenet, 2015) For CRE to efficiently support the core business, Corporate Real Estate Management (CREM) is needed. CREM focuses on tasks like obtaining, maintaining, and discarding real estate for a particular organization. However, this is not the only task of a CREM department in an organization; CREM also focuses on the alignment between the CRE strategy, the organizational strategy, and the stakeholders' demands to support the primary functions of a corporation. Alignment is essential in CREM because it could optimize cost-saving. (Corenet, 2015) Besides, alignment is also an overall aspect of adding value and adding value management; in other words, alignment is crucial for the adding value to an organization with the use of Corporate Real Estate interventions (more on this in section 3.2) (Jensen & van der Voordt, 2016).

Besides Real Estate, location selection is also essential within CREM. The decision to locate somewhere is influenced internally and externally. An internal influence is caused by the stakeholder demands, the Corporate strategy, and the CRE strategy. External influences in location decisions are caused by trends that occur in an organization's external environment, for instance: technology, innovation, demographics, globalization, Etc. The external environment is extremely dynamic and requires flexibility in order to deal with the changes and the related risks; flexibility in the CRE strategy and portfolio. (Corenet, 2015)

Portfolio Management (PM) is also an important aspect within CREM. PM is needed to manage the different CRE locations, the different types of spaces, Etc. With Portfolio Management, risks can be mitigated, unnecessary costs are avoided, productivity within an organization is enhanced, flexibility in terms of space is maximized, and the organization's value is maximized. Corenet defines PM as follows (2015, p.24): *"the management of a company's real estate portfolio at a macro level instead of looking at each lease or purchase separately based on local demands."* According to Corenet (2015), there are five principles of PM: 1) having enough of the right space but no more than necessary (to avoid unnecessary costs), 2) duration matching (own or lease: for how long will you need the building?), 3) analysis of clusters (analyzing similar requirements or types of space, in order to not view each asset separately and to avoid missing potential opportunities and cost wasting), 4) managing duration by clusters or segments, and 5) financial underwriting (to align with the finance team of an organization). (Corenet, 2015) Portfolio Management is a process that consists of 7 steps:

1. The first step is about understanding an organization's business drivers; what affects the real estate of a corporation?;
2. The second step is about the alignment of the Corporate Real Estate strategy with the business strategy. In this step, it is essential to understand how CRE positions itself within the planning process of an organization, define the impact of the drivers (from step 1) within the organization, and evaluate how PM strategies can be used to support the organization.;

3. Another step in the PM process is understanding the supply and demand for space; this step is important for the alignment of the supply and demand.;
4. The fourth step requires RE professionals to analyze and identify similar requirements or needs across different business units.;
5. The fifth step is about the identification of (potential or existing) gaps within the portfolio. This step is accomplished with the implementation of scenario thinking and making a strategy that responds to the scenarios and fits within the organization.;
6. Step six summarizes all the information resulting from the previous steps; this summary can be seen as a list of recommended actions.;
7. The last step is about the implementation and governance of the chosen strategy.

As straightforward as these steps may seem, PM also undergoes many challenges. Dealing with the external uncertainty is an example of a challenge within PM because of the anticipation difficulty; a possible mismatch in the scenarios and reality, and a mismatch in the supply and demand could occur. To tackle the uncertainty of the scenarios, great flexibility in the PM and CRE strategy is needed. (Corenet, 2015)

3.1.1 Conclusion

To conclude, Corporate Real Estate Management (CREM) is essential for each organization. It is a discipline that focuses on the organization's support; more specifically, it supports an organization to execute its core business without any obstacles due to Corporate Real Estate (CRE). Some important concepts of CREM are Corporate Real Estate strategy, alignment, location decisions, Portfolio Management, and adding value. These concepts are all found to be interrelated, for example, within the definition, principles, and process steps of PM the other concepts were also found; for instance, adding value. The following section will focus on the relation between CREM and adding value.

3.2 Adding value

Table 11. Relation between adding value and the thesis.

Sub question	Sub-Sub question	Purpose	Structure
<i>What is the concept of adding value within CREM and what are the possibilities of co-location as a tool to add value?</i>	<i>What is adding value in CREM and how can value be added?</i>	Explain the concept of adding value to achieve a better understanding on how this concept works, in order to determine what process is needed to add value to an organization.	General description of adding value, determine the adding value parameters used in this thesis and its relation to co-location. Explore how adding value can be achieved: with the use of management.

CREM has seen a shift in focus in recent years. The focus of CREM is now on how value could be added to an organization with the use of CRE, rather than CREM only being considered from a financial point of view (reducing costs of CRE). It is now believed within CREM, that the implementation of appropriate CRE interventions could add value to the organization by contributing to the organizational performance and the achievement of organizational objectives. (van der Voordt, 2016). In other words, alignment between CRE interventions, CRE strategy, and corporate strategy to support the organization is considered a way of adding value to the organization (Heywood and Arkesteijn, 2017). This statement can also be traced back to the existing alignment models: these alignment models are now used to structure how CRE can add more value to the organization (Arkesteijn, Binnekamp & de Jonge, 2017).

Due to this shift, there has been many research on adding value through Corporate Real Estate. Consequently, there are different terms used to define the possible adding value parameters: seven parameters defined by de Jonge in 1996, Den Heijer (2011) increased the list to 14 parameters, Etc. Based on the different research perspectives, there was no agreement on which parameters are the most important and which terms should be used. In 2016, Jensen and Van der Voordt analyzed all the different existing lists of parameters. Based on this research, they developed a list of 12 parameters, representing all the research done up until 2016. (van der Voordt, 2016) This list of parameters, by Jensen and van der Voordt (2016), will be in this thesis. The justification for this choice is as follows: the research executed by Jensen and van der Voordt was an extensive research of different lists and is, therefore, considered as a good representation of all the other adding value parameter lists. Hence, due to the extensive research and, therefore, the excellent representation of this list, the 12 parameters are used: satisfaction, image, culture, health and safety, productivity, adaptability, innovation and creativity, risk, cost, the value of assets, sustainability, and Corporate Social Responsibility (CSR). In the following sub-section, the 12 value adding parameters will be discussed.

3.2.1 The 12 value adding parameters

The 12 adding value parameters, as listed in the research of Jensen and van der Voordt (2016), will be used throughout this thesis. In the following section, the parameters will be defined in more detail. Each parameter will first be discussed generally and will be followed by a description from a Real Estate perspective and a co-location perspective. Note that the information on the general and Real Estate perspectives are based on the findings in the book of Jensen and van der Voordt (2016), unless stated otherwise.

1) Satisfaction

General: Workplaces are often used to support the core business of organizations and improve employee satisfaction. Enhancing employees' satisfaction is essential to avoid the occurrence of problems and increase the productivity.

Real Estate: The physical environment of employees could have some influence on the level of satisfaction; however, many other factors could influence the employees' satisfaction. Thus, the cause-effect relationships between physical environments and satisfaction is difficult to measure. Despite this, much research has been conducted in which the satisfaction of employees with their offices were measured (pre-or post-occupancy evaluations). From these researches, it is clear that the physical environment and its layout matters in employees' satisfaction or dissatisfaction. In many cases, employee satisfaction can be increased with the improvement of the physical environment.

Co-location: When looking specifically at co-location, it can be seen that one of the benefits of co-location is the increase in the job satisfaction of employees. However, it was also mentioned before, that co-location could also lead to dissatisfaction due to, for example, overstimulation or privacy issues. Despite these possible disadvantages, there was a success factor found in section 2.4: these disadvantages could be tackled by implementing various room types within the office. Thus, by blocking the occurrence of these possible disadvantages of co-location with the success factors, there is a higher chance that the satisfaction will increase with the implementation of co-location.

2) Image

General: Jensen & van der Voordt (2016) define an organization's image as follows: '*mental representation of how customers, end-users and public perceive the organization and what it stands for*' (p.87). The image of an organization could determine its position within the competitive society.

Having a positive image could not only help organizations with the attraction of clients but also with the attraction of new talented employees.

Real estate: Creating a positive image could be achieved in several ways: good services, low prices, innovation, Etc. The physical environment, RE and facilities, could also be used to establish a positive image; in other words, using CRE and facilities to support the image of the organization. For example, expressing hospitality with an open, accessible, and pleasant entrance. Besides, the effect of RE on an organization's image is hard to imitate or replace with the use of other tools. With the use of RE as a tool to improve the image, it is important to keep in mind what the perception of the clients is on the buildings and what they consider to be necessary.

Co-location: Improvement of the image might not be a direct possible advantage of co-location, but it could still have some impact on the image of an organization. The open, accessible, sustainable, and collaborative image of co-location (this could differ per co-location alternative) could be reflected on the organization. As mentioned in section 2.4.1, implementing an 'outward-facing design' could improve the image.

3) Culture

General: In the book of Jensen and van der Voordt (2016), it is stated that *'Buildings acts as cultural artefacts' and 'symbols' that reflect the culture of their inhabitants, expressing particular norms and values about human relations, power, and the nature of work'* (p.40). Strong corporate culture is a factor that could contribute to the success of an organization due to its effect on the behavior and work styles of people: way of working of employees, the commitment, treatment of clients, Etc.

Real estate: RE also plays an important role in the culture of an organization; for example, the culture is reflected in the way an organization invests in RE and how the physical environment is used. Aside from RE reflecting the culture of an organization, the physical environment could also affect an organization's culture; for instance, individuality is stimulated with private cells while a collaborative culture is stimulated with an open environment. According to Jensen & van der Voordt (2016, p.107): *'workplace design cannot change or shape culture by itself, but it can be an effective means of communication as part of a wider change program.'*

Co-location: Co-location could be used as a tool to stimulate a culture of collaboration, openness, innovation, and interaction. However, this is hugely dependent on the form and layout of co-location, for example, a co-working form with a hybrid layout. In this alternative, culture of collaboration, interaction and openness could be stimulated. In other words, depending on the level of collaborative and open culture an organization wishes to achieve, a specific alternative could be chosen.

4) Health and Safety

General: This parameter is strongly related to other parameters such as productivity, satisfaction, CSR, sustainability, profitability, and risk. In this parameter, health is about the health of people: burnouts, work fatigue, health problems (headaches, migraine, getting cold, irritation of eyes, nose or throat, Etc.), occupational stress, Etc. The term safety is about the safety of the people: preventions of accidents which could hurt or kill such as burglary, theft, fraud, Etc.

Real Estate: Some features of RE that could have some influence on the mental and physical health and safety of employees are: the indoor climate (thermal conditions, light conditions, sound conditions, Etc.) and the workplace layout (open workplace layout, the distance between workstations, security level, Etc.).

Co-location: As already mentioned before, health and safety are closely related to aspects such as satisfaction and productivity. Some benefits of co-location are about the increase of productivity and job satisfaction of the employees. The implementation of co-location could, therefore, have some positive influence on the health of the employees. However, some possible downsides of co-location could negatively affect the health: overstimulation, harmed privacy, and dissatisfaction with the shared environment. To avoid these negative influences, it is important to find counter measures and manage these co-locations as good as possible; as already mentioned before, implementing various room types could decrease these issues.

5) Productivity (Support user activities)

General: Productivity is about the relationship between input and output or between sacrifices and results. Efficiency (the results and goals are achieved with as minimal resources as possible) and effectiveness (all actions contribute to the achievement of goals and the intended results) are concepts that are closely related to productivity. Effectiveness is mainly linked to the output, while efficiency is related to the input.

Real Estate: According to Jensen and van der Voordt (2016), if the improvement of RE could stimulate productivity, it would be very cost-effective because: *'the cost of buildings and facilities are typically considerably lower (10%) than the costs of staff (80%)'* (p.140). In order to have an optimally productive employee, an appropriate physical environment should be offered in which different job activities are facilitated: from communication to concentration, informal to formal, Etc. A high level of satisfaction with the physical environment could also influence productivity positively. Some factors of the physical environment which could influence productivity are indoor climate, light, greenery, sound, personal control, space (office concept), the physical design of the workplace, and aesthetics.

Co-location: One of the possible advantages of co-location is the improvement of the productivity of employees; this is either influenced by the layout, the social interaction/community, or the well-equipped spaces. Efficiency and effectiveness are related to productivity (input and output); two possible advantages of co-location are efficiency in time, space use, and work and cost-effectiveness.

6) Adaptability

General: There are three types of adaptability: organizational flexibility (strategic, structural, operational, financial, and contractual flexibility), process flexibility (flexibility in initial, design, and construction phase; planned and responsive flexibility in the process), and product flexibility (flexibility of the building itself).

Real Estate: From a RE perspective the parameter adaptability can be defined as flexibility of RE. Flexibility is of great importance because RE impacts the environment we live in: long life cycle, significant spatial impact, and high economic value. The long life cycle of RE requires a lot of flexibility due to the constantly changing world dynamics: needs, preferences, and demands are always changing. Some characteristics of adaptability are: *'keep functionality during its technical life cycle in a sustainable and economic profitable way, withstanding changing requirements and circumstances'* (Jensen and van der Voordt, p. 95).

Co-location: Co-location is mostly known for the flexible opportunities it offers: flexibility in leasing conditions, flexibility to up-and downscale, flexibility to relocate, and a flexible layout. However,

even though the level of flexibility offered by co-location is relatively high, this level could differ depending on the layout and form.

7) Innovation and creativity

General: Innovation plays an important role in adding value to an organization. Innovation is needed for the growth and survival of organizations. Innovation can be defined as follows: *Creativity and innovation at work are the process, outcomes, and products of attempts to develop and introduce new and improved ways of doing things. The creativity stage of this process refers to an idea generation, and innovation refers to the subsequent stage of implementing ideas toward better procedures, practices, or products....*' (Jensen & van der Voordt, 2016, p. 189). Knowledge sharing and creativity are all concepts that are closely related to the stimulation of innovation. The stimulation of collaboration can increase the amount of creativity and knowledge sharing and, therefore, an increase in innovation is achieved.

Real Estate: RE can have a significant impact on collaboration, knowledge sharing, and creativity, and, therefore, innovation, for instance, due to visibility, exposure, accessibility, density, layout, design, flexibility, different types of rooms, Etc.

Co-location: Co-location can improve innovation and creativity due to the following reasons: expansion of network (new partners to work with on common issues), increased interaction and collaboration, knowledge sharing between third parties, Etc.

8) Risk

General: Risk Management (RM) can be defined as follows: *'RM is a managerial task concerned with continuously monitoring, evaluating and maintaining the risks levels that the company is or may be subject to, and to implementing suitable arrangements to prevent or limit the consequences of unacceptable risks'* (Jensen & van der Voordt, 2016, p.143). Some examples of risk prevention are security installations, guards, prepared for possible future scenarios, alignment between organizational strategy and RE strategy, Etc. While Risk control is crucial for an organization's livability, RM could also be beneficial: it could help organizations identify opportunities. Four types of RM strategies are avoidance, reduction, transfer, and acceptance.

Real Estate: Risks in CREM can be divided into three types: ongoing business risks (for example, continuity of business), project related risk (such as project delays), and transaction and contract-related risks. Some other risks related to RE are security risks, health and safety risk, Etc.

Co-location: How can co-location contribute to this risk management? The most straightforward answer lies in the flexibility that co-location can offers: flexibility in up-and downscaling, opening and closing, and leasing options. Having a flexible CRE portfolio allows an organization to react faster to changes. Besides the risk management opportunities of co-location, co-location could also create some added risks to an organization; this is due to the possible security issues of co-location.

9) Cost

General/Real Estate: In the book of Jensen and van der Voordt (2016), this parameter is only discussed from a Facility Management perspective. However, this limited view is not suitable for this research and has to be broadened to a CREM point of view. In the research of Den Heijer (2011), the parameter cost does not only refer to the costs of RE, but it could also address the overall or personnel costs. The example given by Den Heijer (2011) is formulated as follows: *'When a new*

concept adds to higher production or a lower percentage of absence; decreasing costs can be achieved by a variety of RE interventions of which the most obvious strategy is reducing floor area' (p. 97).

Co-location: Although co-location usually has higher leasing costs than traditional offices, the overall costs of co-location are expected to be lower due to: cost-effectiveness (decrease of capital expenditures) and shared facility management costs: reduction of administration costs, maintenance costs, annual operational costs, Etc.

10) Value of assets

General/Real estate: The value of assets found on the balance sheet could be affected by the following: ownership or leasing, the lifecycle of ownership, renovations, alternative use, industry trends, Etc. It is important for an organization to constantly value its CRE, especially since the total value of the CRE often takes a prominent part of the total organizational value. There are different ways to value CRE: sales comparison approach, cost approach, or income capitalization approach.

Co-location: The value of the co-location offices are incredibly dependent on the co-location forms: openhouse, co-located, and coworking. In the case of openhouse, it depends on the situation: an organization opening its property for other parties (value will either be the same as traditional offices or slightly higher: other factors excluded) or an organization locating in another organization's property. The value is still significant with the co-located form, despite different organizations being co-tenant or co-owner of the property (the asset value owned by one organization will be lower than a solely owned property because it is shared). In the case of a coworking type, the organization is probably leasing based on a membership. Thus, the actual value of the building will not be relevant to the organization.

11) Sustainability

General: Sustainability can be divided into three types: social, economic, and environmental sustainability. This distinction is also known as the P-triple: People-Planet-Profit or People-Planet-Prosperity.

Real estate: Real estate could be categorized into environmental sustainability. The role RE plays in sustainability is essential; RE gives organizations an opportunity to tackle the sustainability issues encountered and provide them with benefits: the negative effect on the environment could be reduced, positive influence on the social wellbeing, sustainable buildings provides organizations with economic benefits (for example, reduced maintenance costs and operational costs), increased productivity (healthier buildings), enhanced competitive edge, and improved company image. Realizing sustainable buildings as an organization has a positive impact on the organization and society (which is also related to corporate social responsibility).

Co-location: Co-location is a sustainable RE strategy tool; not specifically in terms of sustainable measures like solar panels, but more in terms of the sharing nature of co-location.

12) Corporate social responsibility (CSR)

General: CSR stands for corporate social responsibility. CSR has become an important concept for organizations; they have become more aware of the influence of their activities on social, ecological, and economic issues. Consequently, organizations are trying to include this concept into their governance and try to become more transparent. CSR is also related to other parameters like: sustainability (it encourages sustainable development), health and safety, productivity, Etc.

Real estate: Depending on the direction the organization wishes to go, RE could in some ways contribute to the CSR parameter. For example, if an organization decides to take on an introverted sustainability strategy, it would mean that the RE interventions will probably be more focused on cost savings, supporting the primary process in an efficient way, Etc.; rather than it focusing on, for example, the image of the organization, which could mean that an more extroverted sustainability strategy will be used (to show the external environment and at the same time benefit the society with the measures).

Co-location: Advantages related to CSR are mainly the environmental benefits that co-location has to offer, the cost-effectiveness due to the implementation of co-location, and the increased satisfaction and productivity.

3.2.2 Value adding management

As Jensen and van der Voordt (2016) stated in their book, the impact of CREM interventions on an organization cannot be ignored. This impact could either be positive (adds value) or negative. To ensure that these CRE interventions add value to the organization, proper and professional management is needed. There are a variety of models that have been developed to help managers with the management of adding value, of which some are:

- The FM value map developed by Jensen. This model is based on the basic process model: input (Facility Management (FM) resources, for example, RE, facilities, technology, Etc.), throughput (Facility Management processes), and output. This process then results in an outcome that is about the achievement of the adding value parameters related to the stakeholders of an organization. (Jensen & van der Voordt, 2016);
- Another model is the framework by Anna-Liisa Sarasoja. Unlike the FM value map, this framework is not based on the basic process model. The basis of this framework is a cause-effect model, in which the real estate decisions lead to different possible adding value parameters. (Jensen & van der Voordt, 2016);
- Like Jensen's model, Jackie de Vries also developed a framework in which the basic process model is incorporated. Note that this framework does not view CREM management separately, but rather five general business resources are considered, of which RE is one. Besides the basic process model, the cause-effect model is also found in this framework (Jensen & van der Voordt, 2016);
- The conceptual model by den Heijer, is for some part, based on the model of de Vries. However, the model of den Heijer could be considered a redesign, in which the value adding parameters were extended to 12. Just like the other models, the input, throughput, and output model is also found in this framework. (Jensen & van der Voordt, 2016)

These mentioned frameworks have two things in common. The first common point found is that in all models, stakeholders are of great importance. Incorporating stakeholders into the models and adding value management in general is critical, mainly because different stakeholders have different objectives and, therefore, a different perspective on the value adding parameters. In other words, the relevance and prioritization of the adding value parameters could differ depending on the stakeholders' demands, objectives, and perspectives. Adding value can, therefore, not be achieved without the incorporation of stakeholders and their demands. *'The different stakeholders have their own roles in the co-creation of value, and they might also perceive values differently'* (Jensen & van der Voordt, 2016, p.10).

Another common point between the models, mentioned by Jensen & van der Voordt (2016), is the process models found in the frameworks: the input-throughout-output-outcome/added value and the cause-effect model.

The model that will be used to ensure the added value by co-location and as the basis of the step-by-step plan developed in this thesis will be the extended Value Adding Management (VAM) model developed by Jensen & van der Voordt (2016). There are two reasons why this model is used:

- The VAM model combines the essential aspects of the models mentioned above:
 - A combination of the mentioned process models (the basic process model and the cause/effect model), resulted in the following process model: intervention (Cause/input) → Management (implementation) → added value (effect/outcome).;
 - Stakeholders.
- Simplicity
 - The model is divided into phases and consists of various steps, which makes the use of the model easier. The simplicity in the VAM model will be used as the basis of the step-by-step plan developed in this thesis; consequently, this simplicity will also be reflected in the final tools of this thesis. Hence, the model could be used by a wide variety of people and makes the implementation of co-location even easier.
 - Jensen and van der Voordt (2016, p.320) stated: “Whereas many different tools are available, so far these tools are usually not integrated in a step-by-step approach.”

Before the extended VAM model is presented, it is essential to understand the process model, intervention, management, and added value (already explained in the previous section on adding value), because it functions as the basis of the extended VAM model. There are various sorts of interventions that could be implemented to improve an organization's performance, add value, or achieve organizational goals. Jensen and van der Voordt (2016) recommend using a SWOT analysis to assess the different alternative interventions.

Jensen and van der Voordt (2016) define Value Adding Management (VAM) as follows: 'the management and implementation of FM/CREM interventions with the aim of creating added value to the core business' (p.30). As already mentioned before, alignment and adding value are closely related concepts; CRE only adds value to an organization if it supports the organizational objectives. In other words, **without alignment** between strategies (corporate and CRE strategies) and stakeholder demands, value **adding cannot be achieved**.

The extended VAM model by Jensen and van der Voordt (2016) will be used as the basis of the following chapters and the step-by-step plan. The extended VAM model is presented below:

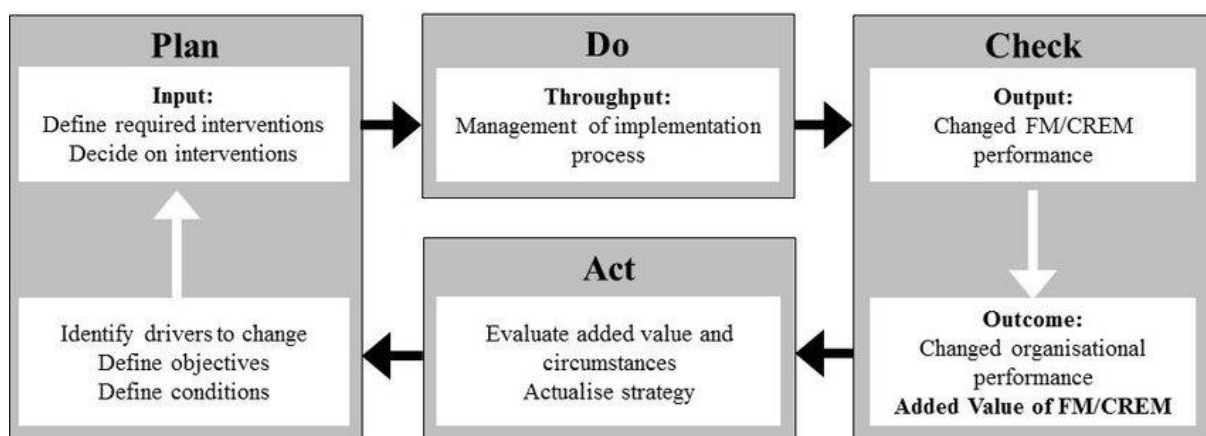


Figure 2. The extended VAM model (Jensen & van der Voordt 2016, p. 301)

This models consist of four phases, which consist of various steps: (Jensen & van der Voordt, 2016)

1. **Plan:**
 - Define objectives, condition, and drivers to change: a strategic analysis of the stakeholder demands, the corporate strategy, and the CRE strategy, determine gap

between desired performance and current performance, ensure alignment between these aspects. These steps will also result in the selection of the relevant adding value parameters;

- Determine intervention needed to achieve objectives, desired performance, and adding value;
 - Define objectives and conditions of intervention;
 - This phase ends with a decision on which intervention will be used. The selection of an intervention will be based on a SWOT analysis.
2. **Do:**
 - The actual implementation and management of the interventions: define who will be involved, what is needed to have a successful implementation of the RE intervention, Etc.
 3. **Check:**
 - Measurement of the performance after the implementation of the interventions;
 - Assess whether the changed performance fits with the organizational objectives, vision, strategy, and if its adds value.
 4. **Act:**
 - If the performance is not what was initially wished for, the cycle could be restarted either by making changes in the objectives or choosing a new intervention.

What can be concluded from these steps found in the extended VAM model is that the steps are similar to the seven steps mentioned in the process of Portfolio Management (section 3.1). However, there is an essential difference: PM is more focused on the management on a macro level (thus, the entire portfolio), whereas the extended VAM model is focused on specific CRE interventions (micro level).

3.2.3 Conclusion

What is adding value in CREM, and how can value be added?, the answer to this question is as follows: adding value is an essential aspect of CREM. Implementation of appropriate CRE interventions adds value to the organization by contributing to the organizational performance and by achieving the organizational objectives. Thus, alignment between stakeholder demands, CRE interventions, CRE strategy, and corporate strategy to support the organization is in CREM considered a way of adding value to the organization.

There are 12 adding value parameters considered in this thesis. In the figure below, the relation between those parameters and co-location is presented.

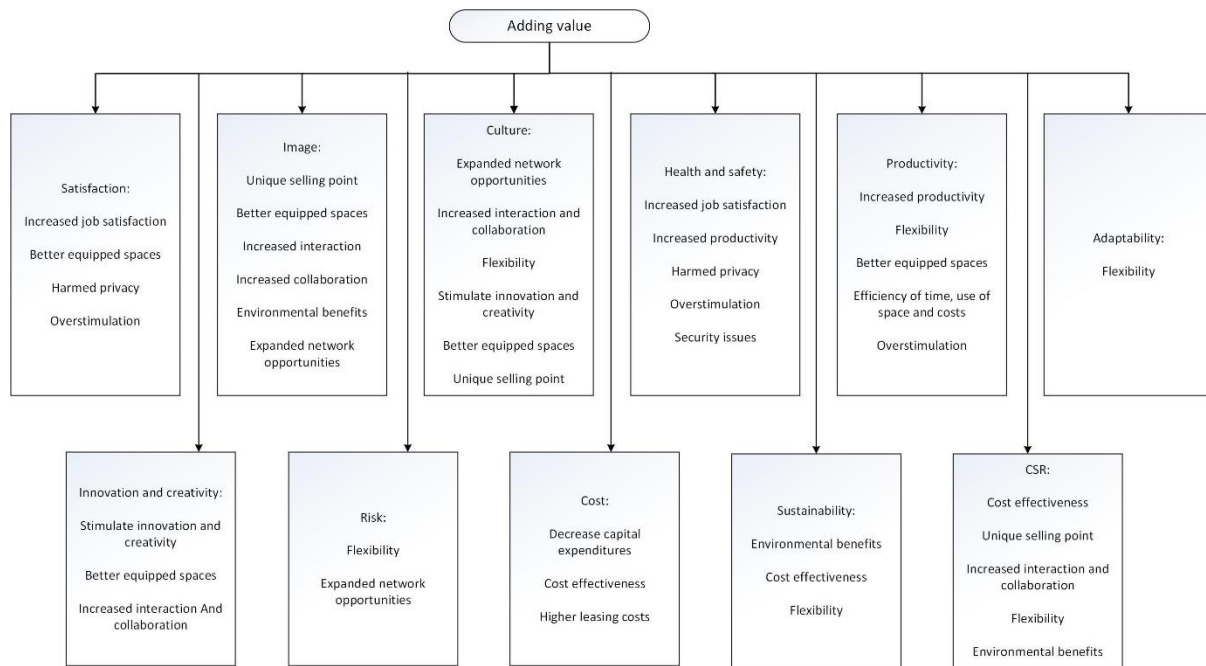


Figure 3. adding value parameters in relation to the possible advantages and disadvantages of co-location (own figure)

To ensure that value is added with a particular CRE intervention, Value Adding Management is needed. The model used to achieve proper and professional management is the extended VAM model by Jensen & van der Voordt (2016). This model will be used as the basis of the steps taken in chapter 4, 5, and 6. However, without alignment between demands, objectives, and strategies; adding value with CRE interventions cannot be achieved. It is, therefore, essential to understand how alignment can be achieved. This subject will be discussed in the next section.

3.3 The 4 building block alignment model

Table 12. Relation between CRE, adding value, and alignment.

Sub question	Sub-Sub question	Purpose	Structure
What is the concept of adding value within CREM and what are the possibilities of co-location as a tool to add value?	What is alignment and how can alignment be achieved with the 4 building block alignment model?	A better on understanding on how alignment can be achieved. Consequently, the achievement of adding value with CRE interventions.	A description of what alignment is, some examples of alignment models, and an explanation on the selected model used in this thesis.

Alignment is a critical part of the management of adding values. There are a variety of alignment models, which can be used to achieve alignment, such as the alignment model of Henderson and Venkatraman (1989), the triangular model of Nourse and Roulac (1993), Weatherhead linear flowchart model (1997), Etc. (Heywood & Arkesteijn, 2017). In the discipline of CRE, a lot of research has been conducted concerning alignment. For example, the research of Heywood and Arkesteijn (2017), in which 14 graphical representations of CRE alignment models were analyzed. In their research, a collective review was conducted of 14 previously developed alignment models. The justification for this review was as follows: the various alignment models were developed in isolation of previously developed models. Thus, research on how these models compare with each other was lacking. In addition, partly due to the isolation, some models were incomplete and imperfect. Hence, a cumulative review of the existing models was needed for a complete representation on how the

alignment of CRE can be achieved. The final result of the research, by Heywood & Arkesteijn (2017), was a representative alignment model: the four building block alignment model, which was based on the already existing 14 models of alignment. This alignment model consists of four building blocks, 12 components, and feedback between the components and building blocks. Comparing the four building block alignment model with one of the reviewed models, for example, the triangular model of Nourse and Roulac, the incompleteness of the triangular model is seen:

- The triangular model only consist of 7 out of the 12 components of the four building blocks needed for complete alignment. There were three components which were not found in the model but mentioned in the text: *strategic triggers of the corporate strategy*, *RE market information*, and *actioning required CREM practices*. The two missing components in the model and text are: *audit of existing real estate and assessment of the effect of CREM actions on the RE performance*. (Heywood and Arkesteijn, 2017)

Due to the representativeness of the model by Heywood and Arkesteijn (2017); this model will be used in this thesis for the strategic analysis of the strategies of the Ministry of Foreign Affairs (MFA) and as the basis for an assessment on alignment (is alignment achieved within MFA?); this is needed to ensure that co-location adds value. In figure 4 s the four building block alignment model by Heywood and Arkesteijn (2017) is presented.

The **first building** block of the alignment model is about understanding the corporate strategy. Aspects covered by this block are as follows: understanding the external environment of an organization (determine external business drivers and forces), the internal environment of an organization (define internal strategic drivers), identify drivers of change (strategic triggers), and the final formulation of the Corporate strategy (in case of this thesis this will be an analysis of the actual Corporate strategy and its creation process). The components found in this building block are in line with the first step of the extended VAM model by Jensen and van der Voordt (2016): define drivers of change (strategic analysis of the stakeholder demands, the corporate strategy, and the CRE strategy; including the alignment between these aspects). This again justifies the use of the four building block alignment model together with the extended VAM model.

The second building block is about the assessment of the CRE performance, in other words, the state of the CRE portfolio. This step takes place before the actual alignment between the strategies. The block contains the assessment of the current performance of CRE; this is needed to determine the gap between supply (CRE) and demand (corporate objective, demands, and strategy). This step is again in line with the VAM model: Determine the gap between desired performance and current performance. Another important component in the second building block is assessing the effects of the CREM actions, which is similar to the step in the plan phase of the VAM model in which the specific CRE intervention is assessed.

The actual CRE strategy formation takes place in the **third building block**. However, in this thesis, this will be an analysis of the existing strategy of MFA. A critical aspect found in this block is alignment; the actual alignment between strategies occurs after the formation of the CRE strategy. In this thesis, this will be an assessment on whether or not alignment is achieved; if not, it is important to define how this can be achieved to add value with co-location.

The last building block is about the actual implementation of the CRE strategy and the CRE interventions, which was developed and aligned in block 3. This building block is in line with the second phase of the VAM model: Do phase, which is also about the actual implementation of the chosen CRE intervention.

Like the VAM model, the check and act phase, the alignment model also consists of indicative feedback components. This indicative feedback and the check and act phase are both about the assessment of the implemented intervention to determine whether demands and objectives are met; if not, the cycle could at some point of the VAM model or alignment model be restarted.

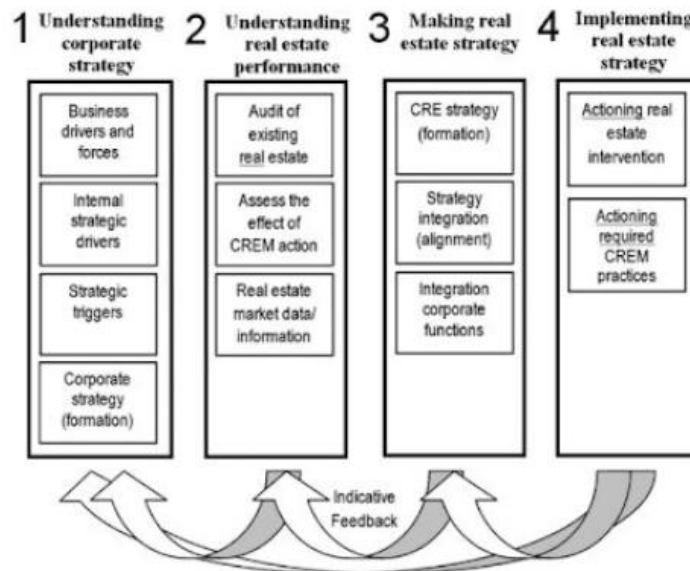


Figure 4. The 4 building block alignment model of Heywood and Arkesteijn (2017, p.17)

3.3.1 Conclusion

To conclude, alignment is a significant part of the management of adding value: adding value cannot be achieved without alignment. It is, therefore, critical to include alignment between demands and objectives and the strategies. The four building block alignment model, by Heywood & Arkesteijn, will be used for the strategic analysis of the Ministry of Foreign Affairs. This choice is partly justified by the similarities found between the alignment model and the adding value model; this again ensures that these two concepts are intermingled, and alignment must be included to add value.

3.4 Conclusion

Corporate Real Estate Management (CREM) is essential for each organization. It is a discipline that focuses on the support of the organization; more specifically, it supports an organization to execute its core business without any obstacles due to Corporate Real Estate (CRE).

Adding value is considered to be an essential concept within CREM. Implementation of appropriate CRE interventions adds value to the organization by contributing to the organizational performance and achieving the organizational objectives. In other words, if the CRE intervention supports the core business of an organization, value could be added (alignment).

There are 12 adding value parameters, developed by Jensen and van der Voordt (2016), which can be used to determine the value that is added with the CRE intervention: satisfaction, image, culture, health and safety, productivity, adaptability, innovation and creativity, risk, cost, value of assets, sustainability, and corporate social responsibility. The relevant adding value parameters for an organization are dependent on the stakeholders; it is, therefore, critical to determine which parameters are relevant for the particular organization (see section 4.1). It was found that co-location could have some impact on the 12 parameters; for an overview of the parameters with the possible advantages and disadvantages of co-location, refer to figure 3.

CRE interventions will always have some impact on an organization. To ensure that this impact is positive (thus, adds value), proper and professional management is needed. Within this value adding management, alignment cannot be discarded. Without the alignment between organizational demands and objectives, Corporate strategy, and CRE interventions and strategy, adding value cannot be achieved. Thus, in other words, the management of adding value and alignment will both be essential in this thesis.

The main models used for the appropriate management of co-location is the extended VAM model by Jensen and van der Voordt (2016). This model will be used as the basis of the steps taken

in chapter 4, 5, and 6. However, as already mentioned, without alignment between demands, objectives, and strategies; adding value with CRE interventions cannot be achieved. This statement is also supported by the similarities found between the VAM model and the alignment model. However, the difference is that the extended VAM model consists of clear steps that need to be taken, whereas the alignment model is not as explicit in the steps that should be taken. Thus, the VAM model will be used as the basis of the following chapters and the development of the step-by-step plan. The four building block alignment model will be used to ensure that value is added with co-location by supporting the VAM model. In other words, for the strategic analysis step in the VAM model, the alignment model of Heywood and Arkesteijn (2017) will be used.

This concludes the answer to the sub-questions central in this chapter: *What is the concept of adding value within CREM, and what are the possibilities of co-location as a tool to add value?* The following chapters will present the results of the implementation of the extended VAM model and the supporting alignment model within the Ministry of Foreign Affairs.

Chapter 4: The ministry of Foreign Affairs (MFA)

The question that will be answered in this chapter is as follows:

What is the current situation within MFA, and how does co-location fit within the organization?

The answer to this question will be found in a few steps; these steps will be discussed in different sections (Note that the steps taken are based on the steps within the first phase (plan) of the extended VAM model of Jensen & van der Voordt (2016)). The chapter consists of the following sections:

- An analysis of the demands of all stakeholders involved in MFA to determine the adding value parameters relevant to the organization (see chapter 3 for the justification for this taken step);
- A strategic analyses of the Corporate Strategy and the Real Estate Strategy with the use of the four building block alignment model (see chapter 3 for the justification for the use of this model);
- Mapping of the current situation in MFA with regards to co-location:
 - Co-location initiative and current policies;
- Different possible relationships in co-locations from a legal perspective.

4.1 Stakeholder management

As mentioned in chapter 3, to achieve adding value, a good understanding of the involved stakeholders is needed. The stakeholders' demands determine the different adding value parameters relevant for the Ministry of Foreign Affairs. In other words, which parameters are essential for the stakeholders and, therefore, for the organization (part of the first step of the extended VAM model: determine objectives, conditions, and drivers to change). Hence, in this section, the different stakeholders of the Ministry of Foreign Affairs (MFA) and their needs will be presented. The determination of the demands also increases the understanding of the drivers behind the corporate strategy and the CRE strategy. The relationship between this section and the main question of this chapter is presented in the table below.

Table 13. Relation between chapter and section 4.1.

Sub question	Sub-Sub question	Purpose	Structure
What is the current situation in MFA, and how does co-location fit within the organization?	Which adding value parameters are relevant for MFA?	Identify which value adding parameters are relevant based on the stakeholders' demands. Part of the first step of the extended VAM model by Jensen and van der Voordt (2016).	All the demands of the stakeholders of MFA will be mapped into two different categories: Business demands and Corporate Real Estate (CRE) demands. The relevant parameters will be determined based on these demands.

4.1.1 The stakeholders and the relevant value adding parameters

MFA has a wide variety of different stakeholders. These stakeholders consist of different departments within the organization, other governmental institutions, the current government, and Dutch citizens in the Netherlands and abroad. There was no document found within MFA, which stated these different stakeholders and their demands clearly. The analyzes presented below was, therefore, determined based on a comprehensive analysis of different sources and was put together on own initiative: rijksverheid (2019), rijksportaal (2019), and the organogram (2019).

MFA consists of around 25 departments (see appendix 1 for the organogram of MFA). Due to this widespread of departments, the mapping of the demands could be unclear; therefore, the departments will be put into the directorate to which they belong. Thus, the following stakeholder clusters are made: Secretary-general (SG) and deputy secretary-general (PSG), Directorate general political affairs, Directorate general European Collaboration, Directorate general foreign economic affairs, Directorate general international collaboration, diplomatic representations abroad, Dutch people abroad, other governmental agencies, and the current government. In the table below, an overview is giving of all the found business demand and the related CRE demands; for a more detailed overview, see appendix 3. These subjects used are either found concepts (for example, flexible network organization and modernization) or an overarching concept was appointed to the demands addressing the same subject (such as legality and international demands).

Table 14. An overview of all the demands of the stakeholders (own table based on stakeholders and demands found in rijksverheid (2019), rijksportaal (2019), and the organogram (2019). Note that the last column is not based on information found anywhere.)

Business demands	CRE demands	Related adding value parameters
Legality: Law; Treaties; Policies.	Legality: - Incorporate the flag, emblem, shield, Etc. into the CRE (related to treaties); - Ensure inviolability; - Incorporate legal aspects into CRE decisions; - Realize reciprocity in CRE	Risk Image Culture Corporate Social Responsibility (CSR)
Safety and health: - Of employees worldwide: more attention to employees worldwide (unburden employees); - Of the Netherlands; - Proper crisis management; - Encourage international safety.	Safety and health: - Ensuring safety and health of employees into CRE: incorporating safety and security measures; - Ensuring health of employees: increase satisfaction and productivity of employees with the use of CRE; - Realize an optimal separation between work and private life	Health and safety Satisfaction Productivity CSR
Provide proper consular assistance: - In order to help Dutch people abroad - As a representation of good support from the Dutch government	Consular assistance: - CRE should be supporting consular assistance: service desks, waiting rooms, exam rooms, etc.	CSR Image Satisfaction
International demands: - Promote the international trade economy; - Promote an open world economy; - Strengthen the international function of MFA; - Achieve a coherent Dutch policy and EU policy; - Promote international peace, stability, legal order, prosperity, wellbeing and human rights; - MFA as a to go to department for international issues within the government.	International demands: - Facilitate a variety of meeting and collaboration spaces in embassies and consulates; - Decrease distance between the Hague and diplomatic representations abroad;	CSR Image Culture
Sustainability: - Economic sustainability: stimulate sustainable economic developments, sustainable globalization, Etc.; - Environmental sustainability: sustainable resources available for everyone, Etc.; - Social sustainability: Employability of employees (national and international), fairness, focus on Dutch social issues, Etc.;	Sustainability: - Incorporate sustainable measures in CRE (sustainable CRE in 2030 (climate neutral portfolio in 2030)).	Sustainability CSR Image Health and safety
Flexible network organization: - Stimulate meeting and collaboration (for example: facilities, strengthen and broaden network (both in NL and worldwide), Etc.); - Adequate and good communication facilities (for both internal and external use); - Efficient deployment of people, resources and services; - Diversity in network and collaborations.	Flexible CRE: - Flexible Layout (multi-purpose rooms, Activity based working, Etc.); - Flexibility in opening and closing embassies and consulates; - Flexibility in up- and downscaling; - Efficiency in the placement of employees (landing place for new colleagues); - Facilitate meeting and collaboration spaces; - Hospitable, open, equal and transparent - Good location, accessibility for network	Image Culture Productivity Innovation and creativity Adaptability Risk CSR

Business demands	CRE demands	Related adding value parameters
Modernization: - Digitalization; - Providing modern and digital consular assistance.	Modern CRE: - Modern and adequate AV facilities and tools; - Implementation of Time, place, and device independent working (TPAW); - Implementation of Activity based working (ABW); - Decrease distance the Hague and representative housing abroad.	Innovation and creativity Satisfaction Productivity Image Culture
Representation: - Strengthen Dutch culture sector worldwide; - Represent the Netherlands abroad; - Promote a competitive position of the Netherlands; - Create a good international reputation.	Representative CRE: - Realize fitting and attractive CRE; - Representation of Dutch culture within CRE; - Hospitable, open, equal and transparent.	Image Culture CSR
Long-term resilience of policies: - Good financial management; - Efficiency in policy: integrate policy making and business operations (supply and demand, policy and execution); - Coherence foreign policy; - Integration of knowledge.	Long-term CRE strategy and housing: - Realize feasibility in CRE; - Develop proactive CRE strategies; - Working within a clear strategy framework, supported by all relevant stakeholders	Risk Adaptability Productivity Cost Sustainability CSR

In this table, the demands are categorized into various subjects (bold and cursive in the first two columns): modernization, flexibility, flexible network organization, Etc. Under each subject, the demands of the stakeholders derived from the analysis are presented. Besides the overall business and CRE demands, there is one more column presenting the adding value parameters related to these demands. What can be seen is that a few parameters are repeated despite the different demands. This supports the statement found in the book of Jensen and van der Voordt (2016): stakeholder management is essential for adding value management because each stakeholder could have a different perspective on the same adding value parameter.

4.1.2 Conclusion

To conclude, based on this analysis the answer to the sub-sub question: *Which adding value parameters are relevant for MFA?*, is found. The set of value parameters important for MFA are:

- Satisfaction
 - of users and employees (strategic), also partly related to the CSR parameter;
- Image
 - Mostly strategically relevant, indirectly it is also interesting for users (better image of Netherlands, could bring benefits to Dutch people in general);
- Culture
 - Relevant on a strategic level (which culture does MFA wish to represent and stimulate?);
- Health and Safety
 - Of users and employees, also partly related to the CSR parameter;
- Productivity
 - Strategically relevant, but also for users (better performance in the provision of services and more efficiency in the services provided and increase of satisfaction of the users);
- Adaptability
 - Interesting from a strategic and technical level;
- Innovation and Creativity

- Strategic level (improvement of services for users, thus, indirectly also interesting for the users);
- Risk
 - Strategic perspective;
- Cost
 - Relevant from a strategic perspective, also related to the CSR parameter;
- Sustainability
 - Interesting on a strategic and technical level, also partly related the CSR parameter;
- Corporate Social Responsibility
 - Important for users and is also strategically important.
 - Related to other parameters like: sustainability, satisfaction, health and safety, etc.

From the 12 adding value parameters listed in section 3.2, all parameters, except the value of assets, are mentioned in the analysis above. The parameter cost is only mentioned one time; in other words, in terms of prioritization, this parameter places last, explaining why the parameter value of assets is not found. The prioritization of the other parameters is in the following sequence: Image and CSR (score the same), culture, productivity, risk and satisfaction (score the same), health and safety and the remaining parameters score the same. From this analysis, it can be concluded that the financial parameters are not as important as the social parameters, which is not a surprising occurrence since MFA is a governmental party, which is responsible for meeting the interest of society with good services.

This stakeholder analysis is relevant for determining the value-adding parameters. However, it also presents the possible drivers behind the corporate and CRE strategy: which business and RE demands were central in the strategy development? These drivers will later be used to assess the alignment of the strategies with the stakeholder demands.

4.2 Corporate strategy

Table 15. Relevance of section 4.2 in relation to the main question of this chapter.

Sub question	Sub-Sub question	Purpose	Structure
What is the current situation in MFA, and how does co-location fit within the organization?	What is the Corporate strategy of the Ministry of Foreign Affairs (MFA)?	A strategic analysis of the current corporate strategy, needed for a better understanding of the organization. A better understanding of the organization and how it works, can, consequently, be used to develop a better way of implementing co-location. This strategic analysis is also the second step, for an assessment of the alignment between the business demands and the strategies; which is critical for the achievement of adding value	The section will be structured based on the components of the first building block of the alignment model of Heywood & Arkesteijn (2017).

As presented in the table above, the strategic analysis of the corporate strategy will be presented, which is an important step in the extended VAM model (define objectives, conditions, and drivers to change). This analysis was based on the strategy found in the document: BZ in 2030 (found within (MFA)). The tool used for this strategy's strategic analysis is the four building block alignment model developed by Heywood and Arkesteijn (2017) (for justification for this tool, see chapter 3). The components of the first building block, understanding the corporate strategy, will be used for the

analysis: external business drivers and forces, internal strategic drivers and forces, strategic triggers, and the corporate strategy (in this case, it is not about the formation of a strategy but rather an overview is given of the strategy).

4.2.1 External business drivers and forces

The 1st component of the first building block is about the identification of the external business drivers and forces. The external business drivers and forces can be seen as the external impacts which influence the working field of MFA. In the case of MFA, these drivers and forces could, for example, be the geopolitical situation of the world. These drivers require strategic responses because they influence the organization. If changes occur in these external business drivers and forces, they could become strategic triggers; strategic triggers cause changes in the organization.

Some other external drivers and forces of MFA are technology, societal and political changes, multilateralism, Etc. These business drivers and forces could constantly change due to the dynamic nature of the world. Therefore, it is crucial for MFA to react to these changes as fast as possible or anticipate these changes; thus, being proactive as an organization is essential. The wish to become proactive is also stated in the strategy document:

‘... how can the ministry prepare itself as good as possible for the future....’ (p.3)

‘BZ has to prepare itself for the future.’ (p.4)

In the corporate strategy document, some trends of the relevant external business drivers and forces are presented. However, these trends are not stated in a clear list categorized in clusters. In the following table, these trends will be presented; the trends relevant for MFA are based on the trends happening worldwide and in the Netherlands.

Table 16. Trends and clusters (based on corporate strategy document, just an analysis no own input)

	Clusters	Relevant trends
1	Instable multilateralism	<ul style="list-style-type: none"> • A blur in the dividing line between national and international issues (more issues are crossing borders); • More structural relationships with domestic partners; • Existing coalitions are becoming less obvious, an example could be: the relationship with the USA; • More Public-private partnerships; • The Netherlands has to put more effort to have some Dutch input in the multilateral policy.
2	Geopolitical shifts	<ul style="list-style-type: none"> • The west is losing its dominant defining role, and is adapting a more influencing role; • Shift of economic and political power to Asia; • The EU must manifest as a unity in several areas in order to remain resilient in an environment of increasing strategic rivalry; • The Netherlands can no longer act effectively to promote its own interests, but instead the Netherlands will start adapting to the rules of others; • Knowledge is power, in the future, access to new technologies will determine the power ratio.
3	Political changes	<ul style="list-style-type: none"> • Trust in the government will decrease, authority of the government is disputed due to the increasing criticism of society (unfiltered news sources); • More need for direct democracy, this among other things is due to the new technological developments. Thus, the government has to become more transparent.
4	Digitalization	<ul style="list-style-type: none"> • More technological developments which will have tremendous influence on the work processes: AI, VR, Smart buildings, Etc.; • More automation of work processes in organizations, consequently, the human personnel will be influenced; • More data- and information driven work; • More access to information due to digitalization, thus; an emergence of new trading perspectives; • More risk of manipulation, for example, increasing need for cyber security; consequently, the human factor will become more important.
5	Nationalism	<ul style="list-style-type: none"> • Effects of globalization, such as migration flows and relocation of production, are perceived as increasingly threatening; • More focus on domestic issues in foreign policy;

Clusters		Relevant trends
6		<ul style="list-style-type: none"> Strongly growing nationalism: own people and country. Society, however, is becoming increasingly multiform (a growing group of well-educated young people with greater international awareness).
	Job market	<ul style="list-style-type: none"> Shortage on the labor market; More competition in recruitment of employees due to increasing internationalization of education and the labor market.

What can be concluded from this subsection is that the trends mentioned in the corporate strategy document of MFA and presented in the table above can be considered as the external business drivers and forces of the organization.

4.2.2 Internal strategic drivers

The second component of the first building block of the model by Heywood and Arkesteijn (2017) is about identifying the internal strategic drivers: the internal working field, for example, the organizational structure, leadership style, Etc.; which is the parallel of the external drivers.

Two internal strategic drivers were introduced in 2013 within MFA: **Modernization** (becoming more digital in the workplace and also in the consular assistance given to clients, and also become more modern in terms of culture: less hierarchy) and **Flexible network organization** (not a clearly defined concept, but in general it is about realizing a wide presence worldwide with the use of MFA's network, expanding and diversifying the network, being agile, and having flexible CRE in terms of time). These two drivers were also found in section 4.1, as two subjects within the different demands of the stakeholders.

These two concepts were introduced to change the internal working field of the ministry. This was needed because MFA was required to change its way of working at the request of the government to become more digital and international as the national service (Rijksdienst) as a whole. The government believes that only by becoming more digital and international the achievement of the core function of MFA can be improved. (Ministerie van Buitenlandse zaken, 2014) The core function/mission of MFA mentioned in the corporate strategy is:

'The ministry of Foreign Affairs makes our kingdom safer, more prosperous, and is committed to the achievement of a fair and sustainable world. And Helps Dutch people abroad with the consular assistance provided and to represent the Netherlands with those diplomatic representations abroad (Embassies, consulates, residencies, etc.).' (p.5)

Thus, the two internal strategic drivers found from the analysis of the strategy document are: modernization and flexible network organization.

4.2.3 Strategic triggers

This subsection is about the third component: strategic triggers. These triggers are about things in the organization's working field, both internal and external, which caused an organizational change. In the research of Heywood and Arkesteijn (2017), it is also mentioned that if disturbances occur in the external drivers and forces, and the internal strategic drivers, they become strategic triggers. In the internal strategic drivers, there are no apparent changes identifiable; these changes happened in 2013 and are still relevant, however, no new changes are seen.

Two triggers are found in the external strategic drivers: **Different world players (geopolitical shifts)** and **unstable multilateralism**. This statement is based on the impact these two trends have on the organization: first, there was a document found, de wereldorde 2030, which developed scenarios for 2030. In this document, the scenarios are based on the two trends mentioned above. Developing scenario's with two trends means that these two trends had the highest impact, lowest steerability, and the highest predictability and are, therefore, in need for response (statement based on Dewulf, Den Heijer, De Puy, and Van der schaaaf (1999)). In the corporate strategy, it is also found that MFA wishes to become proactive in its strategy; the willingness to become more proactive

means that the strategy reacts to the current situation and future scenarios. It is found that the strategy goals react to the demand of the stakeholders, the external and internal drivers, and these two triggers.

4.2.4 Conclusion: the corporate strategy

The answer to the question: *what is the corporate strategy of MFA?* will be presented in this subsection using a visual overview of the corporate strategy. This overview functions as a summary of the findings of the corporate strategy document of MFA; thus, no own input in terms of content is found (purely an analysis of the strategy, as explained in sections: 4.2.1, 4.2.2, and 4.2.3). This overview includes other essential points made in the corporate strategy 2030 of MFA: the mission, vision, and strategy goals. Some quotes from the strategy document on the strategy:

‘... within Europe , there is closer cooperation with a number of trusted partners, but also that elsewhere in the world outside existing coalitions on sub-topics, new partners are approached.’ (p.12)

‘... better connection of the work of MFA with the social issues.’ (p.13)

‘... MFA should work with flexibility....’ (p.14)

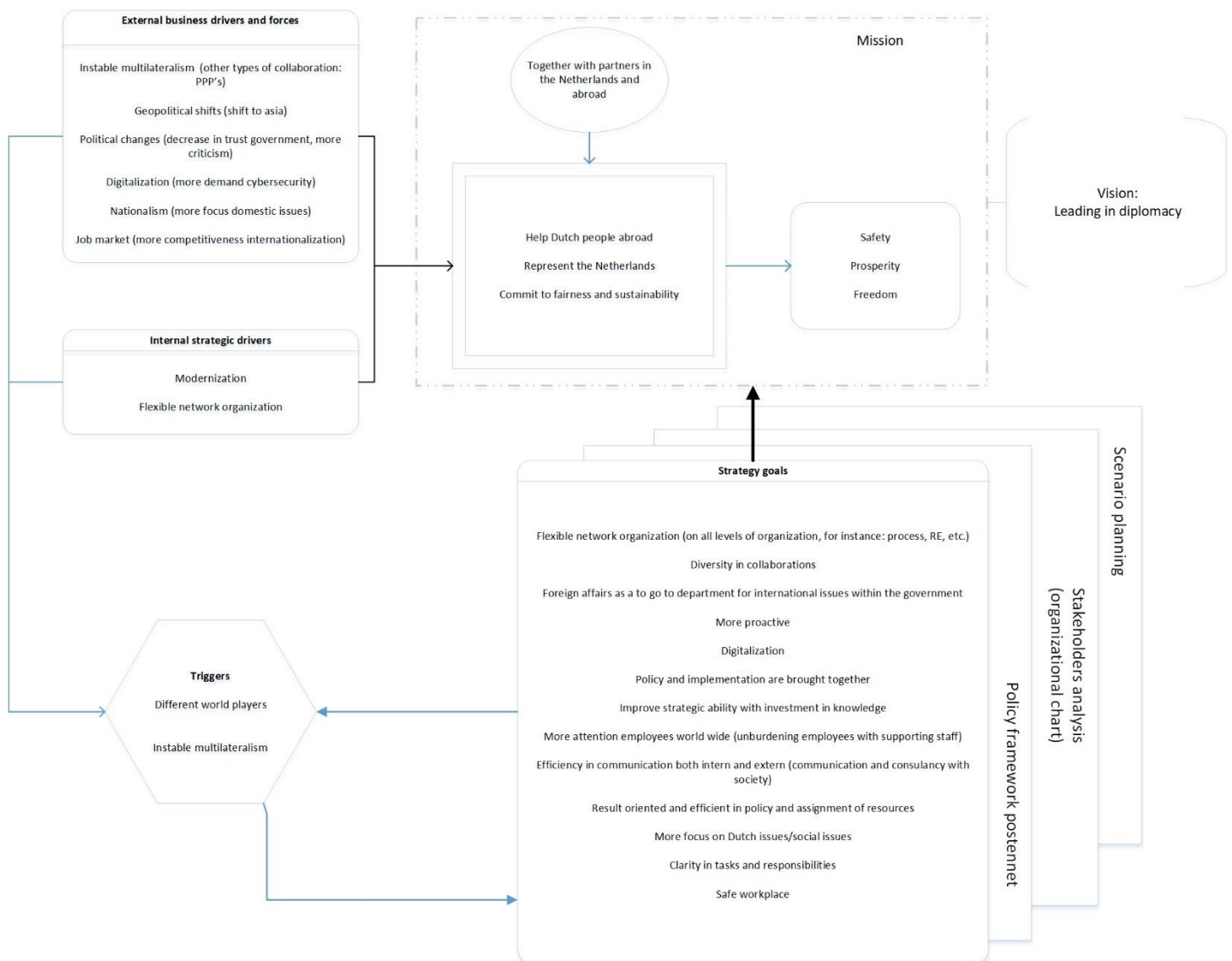


Figure 5. an visual summary of the corporate strategy (own illustration based on the corporate strategy document: BZ in 2013)

4.3 Corporate Real Estate strategy

Like the Corporate strategy, the Corporate Real Estate (CRE) strategy of MFA will also be analyzed with the four building block alignment model of Heywood and Arkesteijn (2017). The second and third building blocks will be used for this analysis: understanding RE performance and making RE strategy (in this case, it will be about presenting the current CRE strategy and assessing the alignment between the strategies and demands). This section reflects the first step of the plan phase of the extended VAM model: strategic analysis, determine gap and determine intervention needed to close this gap (already set: co-location).

Table 17. Sub-sub question answered in this section.

Sub question	Sub-Sub question	Purpose	Structure
What is the current situation in MFA, and how does co-location fit within the organization?	What is the Corporate Real Estate (CRE) strategy of the Ministry of Foreign Affairs (MFA), and is the strategy aligned to the stakeholder demands and the Corporate strategy?	A strategic analysis of the current CRE strategy, needed for a better understanding of the organization and the current CRE portfolio and its performance. This strategic analysis is part of the plan phase of the VAM model.	The section will be structured on the basis of the components of the second and third building blocks of the 4 building block alignment model of Heywood & Arkesteijn (2017).

4.3.1 Understanding the RE performance

This section will cover the second building block of the alignment model by Heywood & Arkesteijn (2017), which is about understanding the CRE performance of MFA. The first component of the block, an audit of existing RE, is about the assessment of the current CRE portfolio. The second component, assess the effect of CREM actions; this will be discussed later in Chapter 6 (SWOT analysis of co-location alternatives). For the CRE portfolio's assessment, the current Corporate Real Estate (CRE) has to be tested against the stakeholder demands and the corporate strategy discussed above. This step is essential for determining the gap between demand and supply. By determining this gap, it becomes clear how co-location could be used as a possible means to close this gap. However, there is no direct quantitative information available on the performance of the current CRE portfolio. To still get an image of the performance, questions were asked to the acting head of strategy and programming of the new housing directorate. For the questions and the answers, please refer to appendix 4. Based on the answers, the following can be concluded on the performance of the CRE and Portfolio:

- In terms of the legality, safety and health demands and objectives, the current CRE portfolio meets the desired results with the use of a standard program of requirements and working procedures;

“Safety, health and security are our top priority in everything we do, even if it means to shut down business or invest more in real estate.”
- Providing consular assistance is one of the main elements of the CRE strategy.
 - However, due to **“modernization** we see that **consular assistance** is optimized and/or outsourced, leading to **lesser use of the consular real estate facilities**. In these cases there is an excess of space that is **not flexible to use by other working processes at the Embassy or Consulate”**.

- In terms of facilitating the international and flexible network organization demands (facilitate the establishment of international relations and networks), there is an approach to ensure that these demands are met in every relocation: best possible location (central and close to important network partners), good and fit facilities (Activity Based Working), mix of meeting spaces, representation rooms, Multi-purpose rooms, and different reception zones for different guests.
 - However, *“there is still more than half of the portfolio to relocate or to modernize to this concept”*.
- There is a strategy being developed to achieve the sustainability goals of the Dutch government. This plan will incorporate a new mission in the CRE strategy. Currently, the focus of sustainability is mostly on social responsibility and procurement .
- Flexibility in layout is achieved with the use of Activity Based Working (ABW): overdimensioning of the number of facilities (workstations), make upscaling of the local team possible in the floorplan, and incorporate multi-purpose rooms.
 - However, in **locations where ABW is not used, there is an excess of space** (currently, less space is needed due to governmental cutbacks, centralization, and modernization (outsourcing and digitalization)). Having excess space is not efficient, but it does give flexibility to do more things (for example: implement colocation in the form of openhouse).
- There is *“Room for improvement to speed up projects, sometimes projects take a long time due to internal procedures (like procurement regulations) or scarce resources at the real estate department.”*
- Modernization in CRE does meet the demands in locations where ABW is used.
 - *“... ABW concept Part of this concept is a modern take on real estate, facilitating meeting places, flexible workstations, etc.”*
 - *“AV-facilities responsibility just between the RE-department and IT-department, leaving **room for improvement** in the design/ project phase, as well as in operations.”*
- The CRE strategy is, in terms of representation, focused on modernizing the way of working (for example: ABW), becoming a leading player in the world, and showcasing Dutch characteristics (Open, Hospitable, and Transparency).
 - Dutch art is in both new and old CRE essential (to bridge the gap between countries and cultures)
 - “Facilitating representation at a high standard” is the selling point of the CREM department.
- *“the CRE strategy is not worked out in a long-term plan (difficult in a flexible network organization), but rather based on guiding principles and internal rules or habits making resources fit our goals on the way”*.

What can be concluded from the list stated above is that, in general, the CRE portfolio responds to most of the demands and objectives of MFA. However, there is still room for improvement in some parts; these especially have to do with old concepts that have not been subject to relocation and transformation yet. Room for improvement is found in terms of flexibility in the realization of projects (faster opening and closing), implementation of AV-facilities within CRE, excess space which is not flexible for other uses (especially in consular spaces), excess space which may be flexible in some points but is not efficient, and facilitating the establishment of international relationships and networks.

Note that some concepts are already achieved in the current CRE portfolio but are still essential to maintain in every CRE decision: legality, safety, health, security, consular assistance,

facilitate the establishment of international relations and networks, representation of Dutch characteristics, and modernization.

4.3.2 The Corporate Real Estate Strategy

In this section the already existing CRE strategy is analyzed (the strategy was found in the discussion paper CREM 2030). Figure 6, gives a summary of the mission, challenges and strategy goals found in the CRE strategy of MFA; this overview does not provide any own input in terms of content. Some quotes of the strategy found in the document are:

‘Our Real Estate abroad support the goals of MFA by providing the organization with housing in sometimes representative buildings, with flexible and modern layouts, and by facilitating a variety of meeting places.’ (p.1)

‘Our goal for 2030 is providing safe, sustainable, and representative real estate for our flexible network organization; which at the same time fits within the local context of our colleagues and local objectives of our missions. (p.1)

‘It is still important to be flexible and to open or close, to up-and downscale our missions faster. Our layout is already flexible with the Activity Based Working concept and the digital facilities.

To become more flexible we want to experiment with coworking spaces.’ (p.2)

Note that discussions about the real estate strategy are currently ongoing, hence, this overview only presents the current state of affairs.

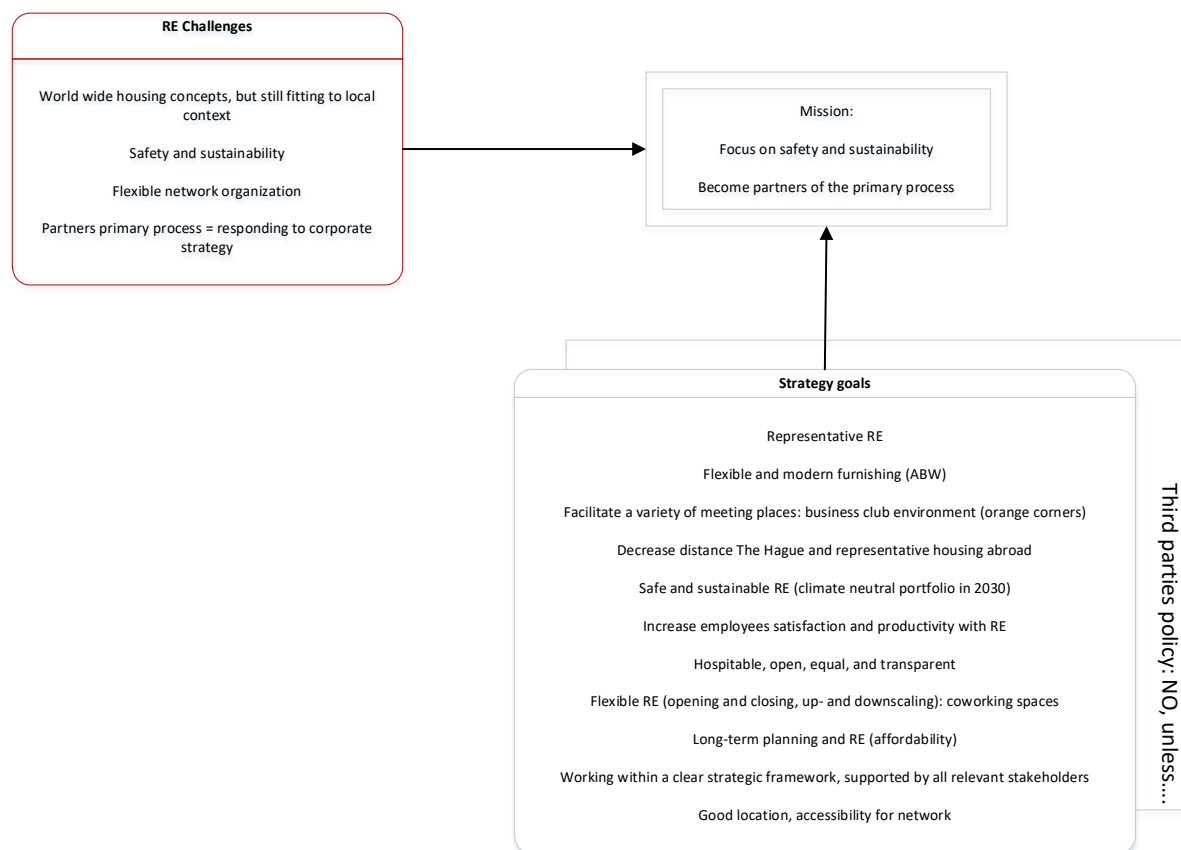


Figure 6. A summary visualization of the already existing CRE strategy of MFA(own illustration based on the CRE strategy found in the discussion paper CREM 2030)

The first conclusion made based on the analysis of the strategies is that the CRE strategy and the corporate strategy are closely aligned; take, for example, the mission of the CRE strategy in which is stated that the CREM department wishes to become partners of the primary process by supporting

the goals of the organization. However, to be more certain, the stakeholder demands, corporate strategy goals, and CRE strategy goals are put against each other to determine if this statement is true. See the table below:

Table 18. Overview of response of the strategies to the stakeholder demands with the relevant adding value parameters (own illustration, based on information from previous sections in this chapter).

Business demands	RE demands	Corporate strategy mission, vision, goals	CRE strategy mission, goals	Related adding value
Legality Policies Law Treaties	Legality: - Incorporate the flag, emble, shield, etc. into RE (related to treaties) - Ensure inviolability - Incorporate legal aspects into RE decisions - Realize reciprocity in RE		Representative RE : flag, emblem, etc.	Risk Image Culture Corporate Social Responsibility (CSR)
Safety and health: - Of employees world wide - Of the Netherlands - Proper crisis management - Encourage international safety	Safety and health: - Ensuring safety and health of employees into RE (safety measures) - Increase satisfaction of employees with the use of RE - Increase productivity of employees with the use of the physical space - Realize an optimal separation between work and private life	Safety, Prosperity, and Freedom More attention employees world wide (unburdening employees with the use of supporting staff) Safe workplace	Focus on safety : safe RE Increase employees satisfaction and productivity with RE	Health and safety Satisfaction Productivity CSR
Provide proper consular assistance: - In order to help Dutch people abroad - As a representation of good support from the Dutch government	Consular assistance: - RE supporting consular assistance: service desks, waiting rooms, exam rooms, etc.	Help Dutch people abroad	Become partners of primary process: support Good location and accessibility for network	CSR Image Satisfaction
International demands: - Promote the international trade economy - Promote an open world economy - Strengthen the international function of MFA - Achieve a coherent dutch policy and EU policy - Promote international peace, stability, legal order, prosperity, wellbeing and human rights	International demands: - Facilitate meeting and collaboration spaces in embassies and consulates	Safety, Prosperity, and Freedom Flexible network organization MFA as a to go to department for international issues within the government	Facilitate a variety of meeting places Decrease distance the Hague and representative housing abroad Hospitable, open, equal and transparent	CSR Image Culture
Sustainability: - Stimulate sustainable economic developments - Sustainable globalization - Sustainable resources available for everyone - Social sustainability: employability of employees	Sustainability: - Incorporate sustainable measures in RE	Commit to fairness and sustainability Social sustainability: more focus on Dutch issues/social issues	Focus on sustainability: sustainable RE in 2030 (climate neutral portfolio in 2030)	Sustainability CSR Image Health and safety
Flexible network organization: - Stimulate meeting and collaboration (for example: facilities, strengthen and broaden network (both in NL and worldwide), etc.) - Adequate and good communication facilities (for both internal and external use) - Efficient deployment of people, resources and services	Flexible RE: - Flexible Layout (multi-purpose rooms, Activity based working, etc.) - Flexibility in opening and closing embassies and consulates - Flexibility in up- and downscaling - Efficiency in the placement of employees (landing place for new colleagues) - Facilitate meeting and collaboration spaces	Together with partners in NL and abroad Leading in diplomacy Flexible network organization on all different levels Diversity in collaborations Efficiency in communication both intern and extern	Flexible and modern furnishing (ABW) Facilitate a variety of meeting places Flexible RE: co-location Decrease distance the Hague and representative housing abroad Hospitable, open, equal and transparent Good location, accessibility for network	Image Culture Productivity Innovation and creativity Adaptability Risk
Modernization: - Digitalization - Providing modern and digital consular assistance	Modern RE: - Modern and adequate AV facilities and tools - Implementation of Time, place, and device independent working (TPAW) - Implementation of Activity based working (ABW)	Digitalization	Flexible and modern furnishing (ABW) Decrease distance the Hague and representative housing abroad	Innovation and creativity Satisfaction Productivity Image Culture
Represent: - Strengthen Dutch culture sector world wide - Represent the Netherlands abroad - Promote a competitive position of the Netherlands - Create a good international reputation	Representative RE: - Realize fitting and attractive RE - Representation of Dutch culture within RE	Represent the Netherlands	Representative RE Dutch culture Hospitable, open, equal and transparent Good location	Image Culture CSR
Long-term resistance of policies: - Good financial management - Efficiency in policy: integrate policy making and business operations (supply and demand, policy and execution) - Coherence foreign policy - Integration of knowledge	Long-term RE strategy and housing: - Realize feasibility in RE - Develop proactive RE strategies	More proactive Policy and implementation are brought together Improve strategic ability with investment in knowledge	Partners of the primary process Long-term planning and RE (affordability) Working within a clear strategy framework, supported by all relevant stakeholders	Risk Adaptability Productivity Cost Sustainability CSR

From the table, it can be concluded that both strategies respond to each demand listed in the first two columns (except for the legality demands, nothing is explicitly stated in the corporate strategy). Thus, the CRE strategy and corporate strategy are aligned with each other and the stakeholder demands (in terms of stated vision, mission, and objectives found in the discussion paper CREM 2030). Because of the alignment between the objectives in the strategy documents and the stakeholder's demands; from this point on, if demands are mentioned, it covers the objectives, mission, visions, Etc. of MFA.

The alignment may be achieved on "paper"; but in practice, the achievement of alignment incorporates many challenges and is, therefore, difficult to achieve. This is also seen in section 4.3.1, where the current gaps in the CRE portfolio were presented; showcasing that the alignment between demand and supply is difficult to achieve compared to alignment on paper between strategies.

4.3.3 Conclusion

The answer to the sub-sub question: *What is the Corporate Real Estate (CRE) strategy of the Ministry of Foreign Affairs (MFA), and is the strategy aligned to the stakeholder demands and the Corporate strategy?*; is as follows: one of the missions of the CRE strategy is to become partners of the primary process by supporting the goals of the organization. This mission and other points within the CRE strategy show that the strategy is aligned with the corporate strategy. Based on further analysis, it was also found that alignment is achieved on two levels: between strategies and between strategies and the stakeholder demands. The achieved alignment on the two levels means that the first steps to adding value are taken.

Despite the achievement of alignment on the two levels. Alignment in practice is challenging to achieve: currently, the supply still does not answer all the organization's demands and objectives. As already mentioned before, MFA is working on a better alignment between supply and demand; however, there is still work to be done. The gaps between demand and supply are mostly found in the following aspects:

- There is still room for improvement on some parts of the CRE portfolio; these especially have to do with old concepts that have not been subject to relocation and transformation. For example, in a location where ABW has not been implemented yet, flexibility in the layout is still not achieved.
- Room for improvement is found in terms of flexibility in the realization of projects (faster opening and closing), implementation of AV-facilities within CRE, excess space which is not flexible for other uses (especially in consular spaces), excess space which may be flexible in some points but is not efficient, and facilitating the establishment of international relationships and networks.
- Some essential concepts to maintain in every CRE decision: Legality, Safety, Health, Security, Consular assistance, facilitate the establishment of international relations and networks, Representation of Dutch characteristics, and modernization.

For co-location to add value, it has to support the organization in achieving the demands (incl. objectives, visions, etc. as found in the strategy documents). Based on the strategic analysis in sections 4.1, 4.2, and 4.3 and the information from chapter 2 and 3, it can be concluded that co-location could be used to respond to the different demands of MFA. The first potential of co-location lies within the flexibility it could offer. With this flexibility, demands like efficiency in time (flexibility in opening and closing), flexibility in the network (diversity in relationships), and flexibility in up-and downscaling can be achieved. The second potential of co-location, which could benefit MFA, is due to the possible social advantages of co-location: the establishment of broader and more robust networks and relationships could also be stimulated. The excess space found in many embassies and consulates could be efficiently used to implement co-location (which is currently already happening within MFA, see section 4.4). The representation of MFA as an open, hospitable, and

transparent flexible network organization could also be improved with co-location. In terms of modernization, coworking alternatives of co-location could provide better-equipped spaces (AV facilities' quality could be improved) and co-location in general could be used to increase modernization of the work environments and work processes.

4.4 Co-location

Now that the general situation within MFA has been analyzed and the potential of co-location has been briefly discussed. It is essential to take a look at the current situation in MFA (focused on co-location). This will form the basis of chapter 5, in which the current co-location cases are analyzed in more detail.

Table 19. Overview of relevant research questions of section 4.4.

Sub question	Sub-Sub question	Purpose	Structure
What is the current situation in MFA and how does co-location fit within the organization?	What is the current situation with regards to co-location and the related policy?	Mapping of the current situation in MFA with regards to co-location: the co-location initiative and current policies; This chapter will function as the start of the detailed analysis of the co-location cases, which will be presented in chapter 5.	First an overview is given on the found cases: location, partner, and leasing form. The second part will be on the co-location policy of MFA.

4.4.1 Current co-location cases

The concept of co-location was officially introduced in MFA in 2012, when the Dutch Prime Minister and the Minister of Belgium decided to use co-location to benefit from the opportunities of co-location: cost saving and to achieve policy-related collaborations. Ever since, the number of co-location embassies/consulates has increased in terms of locations and partners; see section 5.1 for more details.

The figure below, gives an overview of all the realized and currently ongoing co-locations in embassies and consulates. Out of the three co-location leasing forms, only two are used within MFA: openhouse and co-located; of which open house is dominantly used. This can be explained by the fact that MFA has a vast portfolio, and in a lot of these embassies/consulates, excess space is present; to deal with this excess, space is offered to other parties. The massive portfolio of MFA is also seen in the fact that the openhouse form mostly exists in the form of a country moving in the property of MFA. Coworking is currently not part of the CRE portfolio of MFA. However, MFA is busy with a pilot in Vilnius, in which MFA has decided to move its entire embassy to an office in SPACES in order to try out new possibilities needed to open an office in less time (as mentioned in section 4.3, this was one of the gaps found between supply and demands). The type of parties MFA currently co-locates with are as follows:

1. Countries (like-minded countries)
2. Semi-governmental organization
3. NL and EU representations
4. Internal co-location

In the past, there were some co-location cases in which MFA co-located with commercial parties. However, this was not viewed positively; more on this in section 4.5. Most of the co-location cases are either with other countries or with semi-governmental organizations.

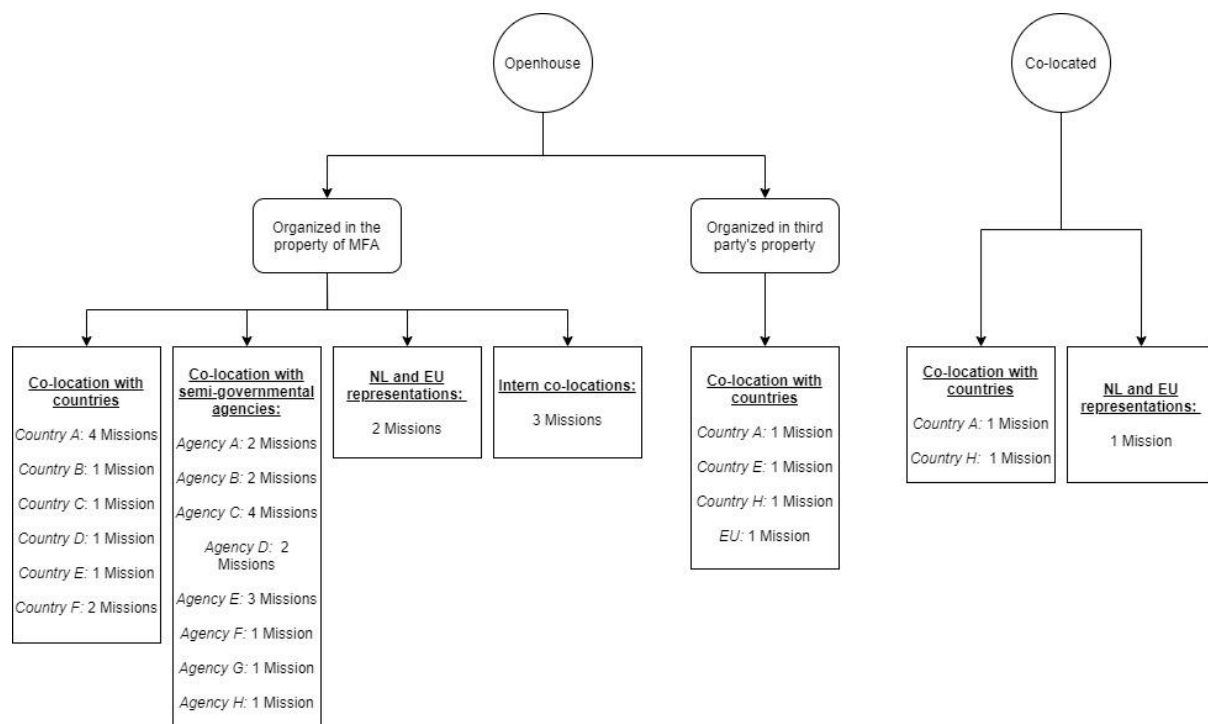


Figure 7. Overview of ongoing co-location embassies/consulates (diplomatic missions) (own overview)

4.4.2 Co-location policy

Co-location is a concept driven from the primary process of MFA (due to the initiative of the two ministers). After the initiation by the two ministers, co-location stayed as a concept that was driven by the primary process; rather than it being carried by a strategy. For this reason, co-location has stayed as a vague CRE intervention within MFA, which lacks clarity in strategy alignment and value-adding from a real estate perspective. Thus, there is no solid strategy supporting co-location. However, in the CRE strategy 2030, it was mentioned in one sentence that MFA wishes to experiment with coworking (like in the pilot in Vilnius).

To still provide managers with some guidelines for the concept, MFA had developed a policy. This policy is also known as the policy concerning co-location with third parties: *No, unless... policy*. In this policy, it is stated that MFA defines a few types of third parties: co-location countries (diplomatic representation of other countries), tenants (organization renting space for a long period in the office space of chancelleries: KvK, NESCO, KITLV, Etc.), passer-by (organizations renting space for a short period (for instance: orange corners), and external organizations (organization renting representative spaces in chancelleries or residences for a short time (mode show, a seminar, Etc.)).

A few starting points formulated in this third party policy are; note that these guidelines in the policy are all aimed at avoiding operational disadvantages, there is no focus on adding value to the business. (MFA, 2019, p.1):

- “Housing of MFA and parts of the national government always come first. The placement of third parties is **not a primary task of BZ**
- In the concerned representation there is **excess of space which MFA cannot sell or need in short term**, only then could the space be offered to third parties
- With the realization of new office spaces for the housing of a post, **third parties are not a definitive goal**
- With regards to offering space to colocation countries, tenants, passerby’s in chancelleries
 - Applies the starting point: No, unless....

- Cohousing with colocation countries at least has to achieve minimal economies of scale
- With tenants and passerby's there has to be a clear and demonstrable added value
- It has to comply with the conditions
- Intentions to co-location always have to be presented to the department"

As mentioned above, there are a few conditions to which the co-location has to comply. These conditions cover the following areas: legal, financially economic, fiscally, safety technical, and diplomatic. The most interesting conditions are stated below (MFA, 2019, p. 2):

- "Legal
 - Offering space to third parties is **aligned with the international law and regulations** and is not at odds with the local governmental rules
 - An agreement with regards to the offering of space is **only valid if there is actually an excess of space**
- Financially economic
 - BZ **requests a cost-covering payment for BZ** (consisting of rent, as well as an amount for supplies and services). BZ strives for separate measure of consumption of water and energy, as well as separate registration of consumables.
- Fiscally
 - The asked payment covers all tax liabilities
 - **Third parties do not benefit from tax benefits of the post**
- Safety technical
 - Information security is guaranteed. **data networks have to be separated**
- Diplomacy
 - It is in line with the **treaty of Vienna**
 - It is not a **negative influence on the relation with the host country** or the imaging."

4.4.3 Conclusion

The question central in this section was: *What is the current situation regarding co-location and the related policy?* It can be concluded that there are around 38 co-location cases within MFA, mostly in the form of openhouse organized in the property of MFA. There are four types of partners in the current cases: countries, semi-governmental organizations, NL and EU representation, and internal co-location.

There is no strategy supporting the co-location; instead, there is a policy that offers some clarity from an operational perspective: the no, unless... policy. From this policy, it can be concluded that the perception of co-location is not good; the first step of the implementation of co-location starts with a no, and the aim of the guidelines within the policy is on the avoidance of operational disadvantages. Note that this policy is only applicable to the leasing form openhouse organized in the property of MFA (there is no policy or strategy on the other forms). With the results of this thesis, there is a wish to change the policy to an open form, focused on adding value to MFA, instead of starting with a no that is based on operational disadvantages.

In the current policy, there are different partners identified within MFA. However, the current situation shows that MFA does not co-locate with all parties stated in the policy: the main co-location partners are countries and semi-governmental agencies. Why is this the case? In the following section, this will be explained.

4.5 Co-location with different parties from a legal perspective

In this chapter the following sub-sub question will be discussed:

Table 20. Purpose of the section 4.5

Sub question	Sub-Sub question	Purpose	Structure
What is the current situation in MFA, and how does co-location fit within the organization?	How can the relationships of MFA with third parties due to co-location be explained from a legal perspective?	With the answer to this question the relationships are not only explained from a legal perspective, but with the obtained information the current most dominant co-location relationships found within MFA are explained and new possibilities of co-location partners are explored further.	This section will be divided into two groups, relationships with countries (public sector) and the private sector (businesses, non-profits, startups, etc.).

As seen in the current co-location policy of MFA (section 4.4.2), there are four types of third parties distinguished when it comes to co-location: Countries, Tenants (long term leasing to businesses, associations, or foundations; mostly semi-governmental organizations), passers-by (short term leasing to businesses, associations, foundations, or private individuals), and external organizers (businesses, associations, foundations, or private individuals who make use of representative space for a short time (shows, seminars, Etc.)). These four types will be divided into the public sector, which only concerns countries and the private sector. The relationships with these two categories will all be explained from a legal perspective.

4.5.1 Countries

As concluded in section 4.4, there are many co-location cases in which the co-location partner is another country. The diplomatic relationships with countries could, in general, be explained with the treaty of Vienna (which was also stated in the policy).

The treaty of Vienna (since 1961) was established because it was believed that an international treaty on diplomatic relations (including privileges and immunities) could stimulate the friendly relationships between countries regardless of the differences between those countries. The treaty is also used to realize an efficient performance of the functions of diplomatic representations. The treaty on diplomatic relations consists of 53 articles. In general, it covers articles on the 'Sovereign equality of states, Maintenance of international peace and security, and The promotion of friendly relations among nations.' Some agreements in the articles are cited in the list below: (Overheid, 2020)

1. "Diplomatic relations between countries takes place by mutual consent.
2. Nothing in the current treaty shall be interpreted as an obstacle to the fulfillment of consular functions by a diplomatic mission.
3. The head of a mission or a member of the diplomatic staff is allowed to act as a representative of the sending state to any international organization
4. It is not allowed of the sending state to establish offices outside of the mission without prior consent of the hosting state (for both embassies and consulates)
5. The sending state has the right to use the flag and emblem on the property of the mission, residence, and on the transport of the head of mission.
6. 'The receiving State shall either facilitate the acquisition on its territory, in accordance with its laws, by the sending State of premises necessary for its mission or assist the latter in obtaining accommodation in some other way.'

7. *The missions of the sending state are inviolable, the receiving state or other parties are not allowed to enter without the consent of the head of mission. This is also the case for archives and documents (also inviolable)*
8. *'The sending State and the head of the mission shall be exempt from all national, regional or municipal dues and taxes in respect of the premises of the mission, whether owned or leased, other than such as represent payment for specific services rendered.'*

(Overheid, 2020)

Note that these agreements in the treaty are also applicable for co-located embassies/consulates. In a document by the legal department of MFA (Name of document: Info cowork Algemeen vedrag van wenen), co-location was analyzed from a legal perspective (including the agreements in the treaty). As stated above, a sending state cannot open an embassy/consulate or expand outside of the property without explicitly asking and receiving permission from the host country. This agreement in the treaty is also applicable to all the co-location leasing forms, even if the embassies/consulates are in another party's property (openhouse or coworking).

Another point made in the treaty that is relevant to consider in co-location is that the embassy/consulate, the residence of the head of mission (Chef de Post (CdP)/ambassador), and the residence of the diplomatic officers are inviolable. In terms of the right to place the flag and emblem, the following can be stated: the embassy's premises and the residence of the head of mission have the right to use/place the flag and emblem. Just like embassies, consulates are also inviolable and have the right to place the flag and emblem; note that this is only the case for the consulate building and not for the residence of the head of mission (consul-general). This distinction in rights is made more apparent in the table below:

Table 21. Overview of diplomatic immunity rights in embassies and consulates.

	Embassy	Consulate
Premises	Inviolable Right to place flag and emblem	Inviolable Right to place flag and emblem
Residence	Inviolable Right to place flag and emblem	-

To give a better understanding of the concept of inviolability, some examples of when it is applicable are cited in the list below (Overheid, 2020):

- *"Missions are not allowed to be entered by agents of the receiving country without permission of the ambassador or consul-general;*
- *Documents and archives of the diplomatic representation are also inviolable wherever and at any time;*
- *Attacks on person, freedom, and dignity of diplomatic agents are prevented by the receiving country with all necessary tools;*
- *A diplomatic courier also enjoys personal inviolability if official documents are being delivered and are not liable for any form of arrest or detention."*

Co-location and inviolability are critical to each other because if a building does not function as an embassy/consulate, the building is not inviolable. Co-location buildings are shared with other parties, meaning that there are parts within the building that do not function as the embassy/consulate; which, therefore, do not have the same rights as mentioned in the treaty (this is not the case if the partner is a diplomatic representation of another country because they also enjoy the diplomatic immunity). However, in the document by the legal department of MFA, it was mentioned that there are possibilities to let part of a building function as an embassy/consulate (this is a significant exemption for co-location with parties other than countries), which means that not the entire

building will be inviolable and has the right to place a flag and emblem. However, in order to make this possible and in line with the treaty of Vienna, it is required of the embassy/consulate to have its own entrance which is lockable from the other parts of the building (note that the accessibility of the entrance does not have to start from outside of the building). Thus, **a separate room or zone with an entrance that is lockable in any co-location leasing option is adequate.**

This limitation does give some restriction when it comes to the layout: using a layout in which MFA does not at least have one room/space which is lockable from the rest of the office is not possible; for example, the layout rented desks in which everything is shared with third parties is, in case of MFA, not applicable from a legal perspective. However, it was also mentioned that in extreme cases, the inviolability could also only be organized in the residence of the ambassador. As already mentioned before, in the case of flag, emblem, and inviolability, the ambassador's residence (only this residence and not that of the diplomatic officer, which does not have the right to place a flag and emblem) and the embassy premise have the same rights. In other words, MFA can choose to let the residence function as the embassy; also, in this case, it is still favorable to have a separate lockable room for the embassy within the residence of the head of mission. Note that this exemption is only possible for the embassy and not for the consulate and its residence, which means that **the rented desks layout is not possible to implement in the co-location of a consulate.**

4.5.2 The private sector

As stated in section 2.3, in which an example of co-location between private and public parties was analyzed, it was found that these established relationships mainly took form as a Public-Private Partnership (PPP). This could maybe also apply to MFA if it decides to co-locate with a private party. This sub-part will first start with a short description of the relationship between public and private parties in general (thus, not related to MFA), also known as the Public-Private Partnership (PPP). The second part will then take a look at the current perception of MFA on the relationships with third parties and other possibilities from a legal perspective and how this fits with the co-location leasing forms.

The private sector consists of parties that function outside the control of the governmental, this could either be for-profit or non-profit organizations (Ngwamba, 2014). There could be a variety of reasons why PPPs are established, for example: to join skills, knowledge, resources, and capital in order to realize a shared objective or public policy goals, cooperate in designing, fund, build, and operate projects, to mutually gain something from the collaboration, to spread risk, to increase innovation (for example in design, construction, operation of infrastructure), Etc. PPPs could be defined as *'A wide variety of procedures involving public and private institutions working together in some way.'* (Ngwamba, 2014, p. 29). PPPs come in different forms:

1. Public leverage: when a state decides to provide legal and financial resources to create a nurturing environment for businesses that allows them to perform their economic activities while growing. By doing so, additionally, the strategies of the organizations become aligned to the government; consequently, the private companies are encouraged to support public policies. (Ngwamba, 2014)
2. Contracting out and competitive tendering: In both forms, the government determines the nature of the needed services or projects (what is the service or projects, which requirements, Etc.) and selects a private party that will supply the service or develop the project. In the case of competitive tendering, the selection of the private party is determined based on the monitoring and evaluation of the different candidates. (Ngwamba, 2014)
3. Franchising: a private organization starts with the supply of a service that the government provided first; this shift is possible because a government provides the business with a license to supply these services. The revenues of the business are created with the delivery of the services. An example is the development of infrastructure by the private organization, which is later transferred to the state. (Ngwamba, 2014)

4. Strategic partnering: with this form of PPP, there are no boundaries between the government and the private sector regarding the delivery of services or projects. Instead of boundaries, the two parties decide to cooperate in order to share the beneficial outcomes mutually. (Ngwamba, 2014)
5. Joint venture (JV): in this type of PPP, both the private organization and the public sector decide to cooperate in supplying a service or the development of a project without the independence of both parties being harmed. This independence of both parties is ensured with the involvement of a separate independent actor responsible for the management and coordination of the project. Advantages are: public debt does not increase, innovative solutions, and risk is transferred. (Ngwamba, 2014)
6. Design-Build-Finance-Operate (DBFO) and other forms like: Build-Operate-Transfer (BOT), BOO, BOOT, and BDO. DBFO is a long-term partnership that lasts around 25 or 30 years. This partnership consists of the following phases; design, build, finance, operate, and manage. During those 25-30 years, the public party pays compensation for occupying the building. After the agreement, the property will be transferred to the public party. Advantages are: public debt does not increase, innovative solutions, and risk is transferred. (Ngwamba, 2014)

Why would a governmental organization or a private party choose to enter into a PPP? Here are some advantages listed: (Ngwamba, 2014)

1. Fiscal: constraints related to budgets decrease (no or little governmental funding), and risks are allocated to private parties.
2. Economical: the nurturing of local markets, which helps with economic modernization, the attraction of investments (both national and international), and realize more efficiency in developing projects (efficiency in development and management), Etc.
3. Technical: *'PPPs attract specialists and institutions of international standing and experience which allows the transfer and exchange of technology through training of local staff and initiation of new ideas'* (p. 47)
4. Social: projects respond to social needs (directly or indirectly), better quality of services; consequently, the living conditions of people are improved.
5. Political: redefinition of roles of government (in terms of market economies, in the delivery of services, Etc.), and there is no political influence into public projects.

Besides these advantages, there are also some disadvantages: *'unclear goals (leads to failure of PPP), accumulation of resource costs, unequal power, parties taking over power, impact on other services, organizational difficulties, and differences in philosophy among partners'*. (Ngwamba, 2014, p.48-50)

In the case of the Netherlands, PPPs in which risks are shared between the different parties are allowed and occur often. It is also allowed for the public sector to act as a market party and even carry the risks; this showcases that the Netherlands does not have strict boundaries between the public and the private sector. From a legal perspective, there are no specific laws or legal codes that are related to PPPs. According to Hobma (2011, p. 3-4), *'there is no such thing as a separate code of law for public-private partnerships, nor a distinct legal concept dubbed public-private partnership. Public-private partnership in itself is not a legal, but a social-academic qualification. All being said, however, existing legal concepts can be applied to public-private partnerships'*. Two of these legal concepts are a declaration of intent and partnership agreements. Both agreements are established between a governmental agency and a private party. An example is the establishment of an agreement to collaborate in an urban development project in which the ownership of the land is divided. As the name suggests, in a declaration of intent, the intention to collaborate is recorded, and an agreement is made to research if and how the cooperation can be achieved: a feasibility study. If, based on this feasibility study, both parties decide to partner up, they will enter into a partnership agreement. An example of what a partnership agreement consists of is as follows:

financial arrangements, the program, phasing and planning, the partnership model, and financial means and public law powers. (Hobma, 2011)

Co-location

Depending on the leasing form of co-location, different legal relationships could be established with private parties. Openhouse is the most dominantly used co-location form within MFA (especially third parties locating in MFA's property). However, only countries or semi-governmental agencies are found as co-location partners; note that this is the case for all co-location forms. In the case of other private parties locating themselves in the property of MFA, it has occurred in the past (sometimes it happened without permission). However, it is not favorably looked upon due to the following reasons:

- **Diplomatic reasons:** related to the treaty of Vienna: the immunity rights (inviolability of embassies and consulates) do not apply to private parties. However, as mentioned above, this can still be solved to a certain extent.
- **Tax issues:** MFA is only exempt from paying tax on rental costs for the rent received from diplomatic entities. However, MFA must pay tax on the rent paid by private parties. Rent is referred to as additional income. For example, if there is vacant space: all the extra revenues in the form of rental income are considered extra money, which is seen as profit and, therefore, tax has to be paid.
- **Rental price:** If MFA decides to lease its space to private parties with a market price, tax issues occur (not allowed to make profit as a governmental agency), MFA is, therefore, forced to ask for rent prices which only covers the costs (this is, however, also at odds with government real estate management regulation, which states that a market price should be charged). Sometimes, this price is a lot lower than the market price; the private party pays less than other parties. Therefore, this could be considered disguised state aid: related to the impartiality of the Dutch government. However, the rent price could also be higher if MFA makes large investments in a property (investments not in line with the market), this will push up the cost-effective price, while the market price remains relatively unchanged.
- **Level playing field:** If MFA teams up with a private party, it will probably occur without an open, public invitation to the private sector, but more based on an opportunity within the MFA network. This means that a private party can be associated with MFA, which will boost the private party's status. So the level playing field is disturbed. Opening up and inviting the private sector to participate in a selection process is considered too much of a burden for all parties and, in practice, will not work.

Keep in mind that semi-governmental parties are also considered private parties because they do not enjoy diplomatic immunity like public parties do. However, the limitations for other types of private parties are not applicable for semi-governmental parties; this is especially the case for the last three issues: tax, rental price, and level playing field.

Based on the list, it can be concluded that it is **challenging to co-locate with the private sector**. The first issue could be tackled, as mentioned in the section above on the treaty of Vienna. The issue of disguised state aid could be solved by just asking for the market price. The profit and the tax aspects, however, make this type of relationship challenging to establish. What if MFA decides to ask the market price for the rent and uses the profit to finance other things like maintenance, travel costs of diplomats, Etc.? The possibility of this has to be examined in future research. However, what is already known is that the biggest downside of this issue is the administration. There is nothing in place to run this kind of administration, leading to an extra burden on the organization.

A concept found within MFA that could be considered leasing to private parties is the concept of 'orange corners.' This concept was initiated by MFA and is only found in countries in the African continent; the concept is, however, managed and provided by a semi-governmental Agency

(RVO). With this initiative, young local entrepreneurs, Dutch entrepreneurs, Dutch SMEs in Africa are provided with office spaces, furniture, facilities, services, educational programs, Etc., to stimulate the growth of these businesses. This initiative could be considered as an incubator program and mooring place. However, these orange corners do not take place in the embassies or consulates but other offices (incubators or coworking spaces), except for one, which is in the Diplomatic Mission 24 (see table 24). This concept is allowed because it is only **temporary**. The orange corner concept is also in line with one of the PPP forms mentioned above: **public leverage**. In this case, MFA provides legal and financial resources to create a nurturing environment for businesses, which allows them to perform their economic activities while growing. The goal of MFA by implementing these orange corners is to tackle the unemployment problems in Africa, stimulate economic developments and contribute to economic growth, and foster mutually beneficial relationships with the countries (Dutch businesses are also provided with a landing platform). Note that the boundaries formed by the treaty of Vienna are also applicable in orange corners.

The level playing field was mentioned as one of the issues of co-location with private parties. It was explained that opening up and inviting the private sector to participate in a selection process is considered a burden for all parties and will not work in practice. This is the case for the openhouse form (thus, selecting the co-location partner), but also for the co-located form. The co-located form with private parties has to be considered from two different perspectives: renting/buying existing offices together with a private party (same applies as the openhouse form: selection process) or building an entirely new office/embassy/consulate for the co-location. The latter type takes more form as a PPP: it is not only about selecting the co-location partner, but the building will also be developed together. As already mentioned before, there are different types of PPPs; a type that could be interesting in the co-located form is **DBFO** (or other similar forms). Note that this type of PPP is only interesting if a **completely new building** is built; in other words, this type is not applicable for existing embassies/consulates. By choosing a DBFO partnership, MFA could leave the responsibility of designing, building, financing, operating and managing to the private party. (Ngwamba, 2014) This takes a lot of additional tasks away, which do occur with openhouse. These tasks then become the responsibility of the private party. This form of PPP also takes away the tax and rent issues mentioned above. However, it could **still create the image of disguised state aid** because of the co-location (even if it does not happen since MFA does not receive any rent in this form). If this leasing form of co-location is chosen with a private party and DBFO is used to achieve this, MFA needs to consider the following limitation: this type of partnership is long term, 25 to 30 years (Ngwamba, 2014), which does mean that the **flexibility aspects of co-location are not applicable any more**: no flexible leasing options, no flexible opening, and closing, Etc. In addition, this form is also not recommended due to the level playing field issues mentioned above.

In the case of coworking, no legal issues are found. Thus, this option is an excellent possibility to co-locate with the private sector.

4.5.3 Conclusion

How can the relationships of MFA with third parties due to co-location be explained from a legal perspective?, this was the question central in this section. What can be concluded is that in the co-location with countries, the treaty of Vienna is applicable. The co-location with the diplomatic representation of other countries does not cause legal limitations because they both enjoy diplomatic immunity.

The treaty of Vienna also sets boundaries for the co-location with private parties. The first point which can be made based on the treaty is that part of the building can be made inviolable **if there is at least a room or zone which can be lockable**. Another point is that in extreme cases, the embassy's function **can be placed in a room within the ambassador's residence**. **Implementing the rented desk layout is not possible in consulates** due to the two previously stated points.

In the case of co-location with the private sector, the following conclusions can be made from a legal perspective:

- **Long-term** co-location in the **openhouse** form (organized in the property of MFA) with **private parties** is difficult to achieve and not advised in this thesis. However, co-location with a **semi-governmental organization** is possible.
- **Short-term** co-location in the **openhouse** form (in the property of MFA), for example, with **startups**, is **allowed and possible**: public leverage (currently found in MFA with orange corners in the diplomatic mission 24).
- **Co-location with private parties in the leasing form** co-located could be possible in the development of new missions in the **PPP form DBFO**. However, the **flexibility aspect of co-location** is entirely lost in this **PPP form**; and is due to the demands of MFA not advised.
- Co-location in the leasing form co-located with private parties in existing buildings is not recommended due to the level playing field issue.
- From a legal perspective, **coworking** is the best form to co-locate with private parties without encountering significant legal issues.

4.6 Conclusion

What is the current situation within MFA, and how does co-location fit within the organization?

This question was the main question of this chapter; based on all the information presented in the different sections, the following conclusions can be made: To present how co-location fits within the Ministry of foreign affairs, the table below is used. In this table, the relevant adding value parameters (found in section 4.1) are placed against the a short overview of the CRE demands of MFA, which are derived from the stakeholder demands, the corporate strategy (objectives), and the CRE strategy (objectives). Against these parameters and demands, the possible advantages and disadvantages of co-location are placed to show what co-location could mean for MFA as a tool to achieve these demands and to achieve adding value. Note that these possible advantages and disadvantages are dependent on the leasing form and layout (more details found in chapter 6: SWOT analysis).

Table 22. Concluding table on the possible relation between co-location and the demands of MFA.

Adding value parameter (bold) and related MFA demand clusters (Cursive)	MFA CRE demands	Relevant co-location advantages or disadvantages
Satisfaction <i>Safety and Health</i> <i>Modernization</i>	Increase satisfaction employees with CRE Modern CRE	Increase satisfaction Overstimulation (decrease satisfaction, tackled with use variety of room types) Privacy issues (decrease satisfaction, tackled with use variety of room types) Better equipped spaces Increased interaction and collaboration
Image <i>International demands</i> <i>Sustainability</i> <i>Flexible network organization</i> <i>Modernization</i> <i>Representation</i>	Facilitate meeting and collaboration spaces (flexible network organization and international demands) Representative CRE Modernization (including CRE) Sustainable measures in CRE Good location and accessibility for network Hospitable, open, equal and transparent: Image	Unique selling point (openness, accessibility, sustainability, collaborative image) Better equipped spaces Environmental benefits (Sharing) Increased interaction and collaboration Expanded network opportunities Increased innovation and creativity
Culture <i>International demands</i>	Facilitate meeting and collaboration spaces (flexible network organization and international demands) Modernization (including CRE)	Increase interaction and collaboration Increased knowledge sharing Stimulate innovation and creativity

Adding value parameter
(bold) and related MFA
demand clusters (Cursive)

	MFA CRE demands	Relevant co-location advantages or disadvantages
<i>Flexible network organization</i> <i>Modernization</i> <i>Representation</i>	Representative CRE Good location and accessibility for network Hospitable, open, equal and transparent: Culture	Expanded network opportunities Better equipped spaces Unique selling point (openness, accessibility, sustainability, collaborative image) Flexibility
Health and Safety <i>Health and Safety</i> <i>Sustainability</i>	Ensuring safety and health of employees worldwide with CRE Increase satisfaction employees with CRE Increase productivity of employees with CRE	Increased satisfaction Increased productivity and performance Security issues Overstimulation (decrease satisfaction, tackled with use variety of room types) Privacy issues (decrease satisfaction, tackled with use variety of room types)
Productivity <i>Health and Safety</i> <i>Flexible network organization</i> <i>Modernization</i> <i>Long-term resilience of strategies</i>	Increase productivity of employees with CRE Efficiency in placement of employees Modernization (including CRE) Long-term CRE strategy and housing	Improved productivity and performance Efficiency in time, use of space, work, and costs Better equipped spaces Flexibility: layout, leasing conditions, up-and down scale, and opening and closing Overstimulation (decrease satisfaction, tackled with use variety of room types)
Adaptability <i>Flexible network organization</i> <i>Long-term resilience of strategies</i>	Flexible CRE Long-term CRE strategy and housing	Flexibility: layout, leasing conditions, up-and down scale, and opening and closing, stretches limits of RE resources
Innovation and creativity <i>Flexible network organization</i>	Flexible and modern CRE	Stimulate innovation and creativity Better equipped spaces Increased interaction, collaboration, and knowledge sharing
Risk <i>Flexible network organization</i> <i>Long-term resilience of strategies</i>	Flexible and long-term CRE strategy and housing Flexible network	Flexibility: layout, leasing conditions, up-and down scale, and opening and closing, stretches limits of RE resources Expanded network opportunities
Cost <i>Long-term resistance</i>	Long-term CRE strategy and housing	Cost effectiveness Decrease capital expenditures Higher leasing costs
Sustainability <i>Sustainability</i> <i>Long-term resilience of strategies</i>	Sustainable measures in CRE Long-term CRE strategy and housing	Environmental benefits (Sharing) Cost effectiveness and decrease capital expenditures Flexibility: layout, leasing conditions, up-and down scale, and opening and closing, stretches limits of RE resources
Corporate Social Responsibility (CSR) <i>Health and Safety</i> <i>International demands</i> <i>Sustainability</i>	Long-term CRE strategy and housing Representative CRE (Hospitable, open, equal, and transparent) Sustainable measures in CRE Promote International demands	Environmental benefits (Sharing) Cost effectiveness and decrease capital expenditures Unique selling point (openness, accessibility, sustainability, collaborative image) Increase interaction and collaboration

Adding value parameter
(bold) and related MFA
demand clusters (Cursive)

	MFA CRE demands	Relevant co-location advantages or disadvantages
<i>Represent Long-term resilience of strategies</i>	Good location and accessibility for network Increased satisfaction and productivity of employees	Flexibility: layout, leasing conditions, up-and down scale, and opening and closing, stretches limits of RE resources Increased satisfaction and productivity

To summarize what is presented in the table above, **co-location could be used to achieve the demands** of MFA related to the following subjects: the health of employees, international demands (meeting and collaboration), sustainability, flexible network organization (meeting and collaboration), flexible RE, modern RE, representative RE (image and culture), and long term CRE and strategy. Depending on the demands and core business of an embassy/consulate, an alternative co-location could be chosen to achieve those demands, more on this in chapter 6.

From a legal perspective, the co-location with countries or semi-governmental organizations does not cause any legal complexities; except for the absence of diplomatic immunity in case of the co-location with semi-governmental organizations. In terms of co-location with other **private parties** the following can be concluded on possible layouts and leasing forms:

- **Only implementing the layout rented desks, is not possible in consulates!**
 - In case of a consulate the presence of a lockable zone or room is needed.
- In an embassy all sorts of layouts are possible to implement.
 - In extreme cases, the function of the embassy can be placed in a room within the residence of the ambassador. Thus, lack of a lockable room is not a problem.
- **Long-term** co-location with commercial parties is **not recommended in an openhouse leasing** form (it could be possible but in need of further research, and will therefore not be recommended in this thesis). **Semi-governmental organizations are an exception.**
- **Short-term co-location in the openhouse form** (in the property of MFA) with **private parties is possible**, for example, startups: public leverage (now currently seen in MFA with orange corners in Mission 24)
- Co-location with private parties in the leasing form **co-located could be possible** in the development of new representation in the PPP form DBFO. However, the flexibility aspect of co-location is entirely lost in this PPP form; and is **due to the demands of MFA not advised**.
- Coworking is from a legal perspective the best form to co-locate with private parties without encountering major legal issues.

Chapter 5: Current co-location embassies and consulates

This chapter will continue with the current situation in MFA. However, this chapter will entirely focus on the current performance and perception of the co-location situation within MFA. Hence, the main question answered in this chapter is as follows:

What is the performance and perception of the current co-location embassies/consulates within MFA, and what can be learned from these current cases?

To obtain an answer to this research question, the chapter will consist of the following sections:

- The survey and response;
- Current perception and performance of the co-location diplomatic missions (embassies/consulates);
- An anecdotal success formula based on the results from the interviews;
- And a concluding paragraph.

5.1 The survey and response

Before developing the step-by-step plan, it is essential to understand what the state is of the current co-location cases: What is the performance of the existing co-location embassies/consulates? What is the perception of the Real Estate Managers (REM) and the occupiers of the co-location embassies/consulates? Are there successful cases? And what can we learn from them? The current state of the co-location embassies/consulates were assessed by use of three surveys. The main objective of these surveys was to make a **quick assessment** of the co-location cases. This assessment was used to select the **successful co-location embassies/consulates (the performance)**, essential for the execution of a **total of 5 interviews** (justification for the chosen number of interviews will be discussed in section 5.3). The survey was also used to determine **the currently encountered problems and perception**: Are the possible benefits clear and achieved? Are the potential disadvantages applicable in the co-location cases of MFA? Are the possible success factors implemented? What is the perception of the relation between co-location and adding value? In the table below, an overview is given of the focus of this section.

Table 23. Content of section 5.1.

Sub question	Sub-Sub question	Purpose	Respondents/ Sample
What is the performance of the current co-location embassies/consulates within MFA, and what can be learned from these current cases?	How will the current co-location embassies/consulates be assessed?	An explanation of the establishment of the surveys, an overview on the target group, an analysis of the targeted embassies/consulates, the actual response of the surveys.	Employees occupying locations Operational managers (OM) of the co-location offices Real estate managers (REM)

5.1.1 The survey and target group

As can be seen in the table above, three different respondent groups within MFA are relevant to the survey conducted for this thesis: Employees occupying the co-location embassies/consulates (this amount differs per location), Operational Managers (OM) located in the co-location embassies/consulates (each embassy/consulate has one operational manager), and the Real Estate Managers who are part of the CRE department within MFA. Each respondent group had a different survey, the difference in these surveys will be explained later in this section. However, in all three surveys, the questions were based on the theoretical backgrounds (see Appendix 5 for a detailed relation between the queries and literature) of co-location and adding value as presented in the previous chapters (Chapter 2 and 3). Therefore, the subjects of the survey questions were also derived from the different dimensions of the theoretical framework. The dimensions from the theoretical background are:

- The co-location forms and layouts (section 2.1);
- The possible advantages and disadvantages of co-location (section 2.2);
- The possible success factors and their conditions (section 2.4);
- The adding value parameters of CREM (section 3.2).

The dimensions used in the survey for employees were the possible advantages, disadvantages, and success factors. It was essential to include the actual co-location office occupants in the survey because some subjects of the dimensions can only be answered by the people occupying these offices. These subjects are mostly socially related subjects like satisfaction,

collaboration, interaction, knowledge sharing, privacy, overstimulation, Etc. The second group of respondents are the Operational Managers of the co-location offices. The subjects of the questions were formulated from a business operations point of view. The dimensions covered in this survey are: co-location layouts, expected advantages and disadvantages (operational/practical subjects), and success factors. The last respondent group are the Real Estate Managers; the dimensions covered in this survey are possible advantages, disadvantages, success factors, and adding value parameters. All questions from the dimensions were formulated from a business operations point of view, except the questions from the adding value dimension, which are also from a policy making point of view.

By covering the four dimensions in the surveys, the following can be determined: the degree to which the possible advantages mentioned in literature are achieved, if the expected disadvantages found in the literature are also found in the current co-location offices, the degree to which the success factors are implemented to gain certain advantages, the relation between the subjects and the found layouts, a clear overview of current implementation problems encountered and possible solutions, and the degree in which co-location is now considered as a potential tool to add value to the Ministry of Foreign Affairs. With the obtained information, the success of the co-location embassies/consulates can be determined, especially in terms of achievement of goals and advantages, and possible tools used to achieve these advantages and goals (success factors). The information on the current problems and disadvantages encountered is essential because it can determine what has to be changed to create more success in the present and future co-location cases. The questions on adding value give a better understanding of the Real Estate Managers' perception of the potential of co-location as a tool to add more value to the organization.

The answering options of all three surveys were mainly based on a 5 point Likert scale (excluding the I don't know options). The questions in all three surveys were formulated as positive statements. In other words, if a statement in the possible advantages dimensions is answered with agree, the potential benefit is achieved. In contrast, if a statement in the possible disadvantages dimension is responded to with agree: the possible disadvantage is not encountered. Consequently, the higher the amount of agrees or slightly agrees, the more successful the co-location case is.

The survey was sent to all the co-location cases (the diplomatic missions: embassies/consulates) within MFA; see table 24 below. In the table, the following is presented:

- The list of diplomatic missions (embassies or consulates) in which co-location is implemented;
- The leasing form (Openhouse in own property or third party's property, Co-located, or coworking);
- The co-location partner (countries, semi-governmental organizations, or NL and EU representations);

Table 24 is arranged based on the leasing form and initiation year; note that the initiation year is not included in this version of the thesis due to confidentiality reasons. After analyzing the table, it can be concluded that the most dominantly used co-location leasing form is openhouse (more precisely: openhouse organized in the property of MFA); the co-location partners in this form differ from countries to semi-governmental organizations. There are only 4 cases in which MFA is located in third parties' property (either countries or the EU). As for the last remaining three cases, the leasing form co-located is found in which the co-location parties are either countries or an EU representation.

There are 15 cases in which MFA co-locates with diplomatic representations of other countries, four cases with a EU representations, and the remaining 14 cases are co-locations with semi-governmental organizations. Thus, the spread between co-locations with countries and semi-governmental organizations is balanced. Co-location with the private sector is only found in one case, which is Mission 24 (orange corners); note that these are only startups to which MFA provides

a temporary nourishing environment. As mentioned in the legal perspective section (4.5), the government is allowed to provide startups with a temporary nourishing environment (private leverage).

The countries with whom is co-located are mostly EU members, except for two cases. This dominant group from Europe is found because there is a lot of common ground between the EU members, which makes the co-location easier (more on this in the interview results in section 5.3). The spread in terms of co-location embassies/consulates worldwide is as follows: nine cases of co-location are found in Africa, seven in Asia, 14 cases found in Europe, two in South America, and one case in the Middle East.

Based on the initiation year (not included in table 24 due to confidentiality reasons), it can be concluded that co-location started being actively implemented from 2013 until 2018. In the years before, co-location was not used as often. This could probably be explained because, in 2012, the Dutch prime minister and the minister of Belgium formally decided to use co-location to benefit from the opportunities offered by co-location. This agreement has caused many new co-locations to be initiated, which can also be seen in the table below.

The minimum amount of employees found in the 33 cases (excluding the internal co-locations) are four, whereas the maximum is 79. In terms of the number of employees, the following is found: 18 out of the 33 cases have around 10 to 20 employees, 4 cases with below ten employees, four with 21-30 employees and five with 31-40 employees, and only two cases are found in which the number of employees exceeds 60. Note that in table 24 the number of employees is not included due to confidentiality reasons.

Table 24. Overview of all the external co-location cases within MFA (list of diplomatic missions (embassies/consulates) in which co-location is implemented).

Nr.	Diplomatic missions (Embassy/consulate)	Leasing form	Co-location partner(s)
1	Mission 1	Openhouse: own property	Semi-governmental organization A
2	Mission 2	Openhouse: own property	Semi-governmental organization B
3	Mission 3	Openhouse: own property	Semi-governmental organization C
4	Mission 4	Openhouse: own property	NL and EU representations
5	Mission 5	Openhouse: own property	Country A
6	Mission 6	Openhouse: own property	Semi-governmental organization D
7	Mission 7	Openhouse: own property	Country A
8	Mission 8	Openhouse: own property	Semi-governmental organization B
9	Mission 9	Openhouse: own property	Semi-governmental organization D
10	Mission 10	Openhouse: own property	Country A
11	Mission 11	Openhouse: own property	Country B
12	Mission 12	Openhouse: own property	Country C
13	Mission 13	Openhouse: own property	Country D
14	Mission 14	Openhouse: own property	Semi-governmental organization E
15	Mission 15	Openhouse: own property	Country A
16	Mission 16	Openhouse: own property	Country E
17	Mission 17	Openhouse: own property	Semi-governmental organization F
18	Mission 18	Openhouse: own property	Semi-governmental organization G
19	Mission 19	Openhouse: own property	Country F
20	Mission 20	Openhouse: own property	Semi-governmental organization E and H
21	Mission 21	Openhouse: own property	Semi-governmental organization E
22	Mission 22	Openhouse: own property	Semi-governmental organization C

Nr.	Diplomatic missions (Embassy/consulate)	Leasing form	Co-location partner(s)
23	Mission 23	Openhouse: own property	NL and EU representations
24	Mission 24	Openhouse in own property	Orange corners
25	Mission 25	Openhouse: own property	Semi-governmental organization A
26	Mission 26	Openhouse: own property	Country G
27	Mission 27	Openhouse: third party's property	Country H
28	Mission 28	Openhouse: third party's property	Country E
29	Mission 29	Openhouse: third party's property	EU
30	Mission 30	Openhouse: third party's property	Country A
31	Mission 31	Co-located	Country A
32	Mission 32	Co-located	Country H
33	Mission 33	Co-located	NL and EU representations

The survey to the embassies or consulates were sent via mail. The surveys for Operational managers and employees were sent to each embassy/consulate listed in the table above. Each embassy/consulate has one operational manager. It was asked to let the operational managers of every location fill in the survey. As for the employees' survey, it was requested of the CdP's (Chef de Post/Ambassador or consul-general) and the operational managers to send the survey to the employees of the location who can best help with the research on co-location: at least 1 or 2 employees. The Real Estate Managers' survey was sent to the DBV-HF department of MFA (the survey was sent to 10 respondents). All three respondents groups had around two weeks to fill in the surveys.

5.1.2 Response overview

From the 10 Real Estate Managers to whom the surveys were sent, seven responses were received. The number of responses is presented below for the surveys to the co-location embassies/consulates (Survey to the operational managers and employees). From the 33 co-location embassies/consulates, the spread of responses in terms of location is around 64% (21 out of the 33). In the table per embassy/consulate, the % of response is presented for each survey (OM (Operational Manager) or E (employees)). Note that per embassy/consulate, there is only one operational manager; thus, if the response % of OM is 100%, it means that the operational manager has responded. The % of respondents of the survey for the employees is determined by dividing the number of respondents by the total amount of employees (excluding the Operational Manager and the Chef de Post (CdP)).

Table 25. Overview of respondents per embassy/consulate.

Nr.	Diplomatic missions (Embassy/consulate)	Respondents	% response per case
1	Mission 5 Openhouse in own property	Operational manager	OM: 100% E: 0%
2	Mission 6 Openhouse in own property	Operational manager	OM: 100% E: 0%
3	Mission 10 Openhouse in own property	Operational manager	OM: 100% E: 0%
4	Mission 11 Openhouse in own property	Operational manager	OM: 100% E: 0%
5	Mission 12 Openhouse in own property	1 Employee	OM: 0% E: ≈2,6%

Nr.	Diplomatic missions (Embassy/consulate)	Respondents	% response per case
6	Mission 13 <i>Openhouse in own property</i>	Operational manager (not entirely filed in) 1 Employee	OM: 0% E≈4%
7	Mission 14 <i>Openhouse in own property</i>	Operational manager	OM: 100% E:0%
8	Mission 16 <i>Openhouse in own property</i>	Operational manager 1 Employee	OM: 100% E: 25%
9	Mission 19 <i>Openhouse in own property</i>	Operational manager 1 Employee	OM: 100% E:10%
10	Mission 20 <i>Openhouse in own property</i>	Operational manager 1 Employee	OM: 100% E≈1%
11	Mission 21 <i>Openhouse in own property</i>	Operational manager	OM: 100% E:0%
12	Mission 22 <i>Openhouse in own property</i>	Operational manager	OM: 100% E:0%
13	Mission 23 <i>Openhouse in own property</i>	Operational manager	OM: 100% E:0%
14	Mission 24 <i>Openhouse in own property</i>	Operational manager	OM: 100% E:0%
15	Mission 25 <i>Openhouse in own property</i>	Operational manager 1 Employee	OM: 100% E≈3%
16	Mission 26 <i>Openhouse in own property</i>	Operational Manager	OM: 100% E:0%
17	Mission 28 <i>Openhouse in third party's property</i>	Operational manager	OM: 100% E:0%
18	Mission 29 <i>Openhouse in third party's property</i>	Operational manager	OM: 100% E:0%
19	Mission 30 <i>Openhouse in third party's property</i>	Operational manager 3 Employees	OM: 100% E≈18%
20	Mission 32 <i>Co-located</i>	Operational manager 4 Employees	OM: 100% E≈14%
21	Mission 33 <i>Co-located</i>	Operational manager 3 Employees	OM: 100% E≈21%

The figure below presents the amount of respondents (frequency) per embassy/consulate from which at least one response was received either from the operational manager or from the employees.

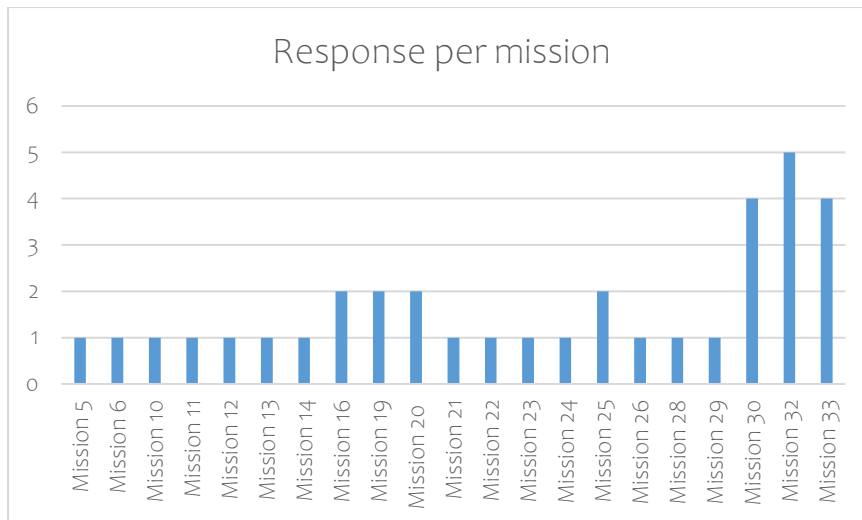


Figure 8. Overview of overall responses per diplomatic missions (embassy/consulate).

To conclude, the response to the survey of the Real Estate Managers is relatively high (70%). The number of responses from the embassies/consulates is also pretty high (64% of the 33). The response of the survey for the operational manager is also not inadequate: around 58% (19 out of the 33 OM). However, the employees' survey response is not high, as can be seen in the last column of the table above. The table showcases that from 12 of the 21 embassies/consulates there was no response received from employees, 6 out of the 21 cases had one response, and 3 out of the 21 cases had more than one response. Hence, the **survey results per embassy/consulate are not strong representations of the performances of these cases due to the low response rate (especially for the socially related subjects: survey for employees)!**

5.1.3 Conclusion

The sub-question answered in this section is as follows: *How will the current co-location embassies/consulates be assessed?* As presented above, the co-location cases were evaluated using three surveys for three different response groups: the Real Estate Managers of MFA, and the Operational Managers and the employees functioning within the embassies/consulates. What can be concluded, from the information presented above, is as follows:

- The leasing form:
 - The most dominantly used co-location leasing form is openhouse (in own property). The co-location partners within this form are either countries or semi-governmental organizations.
 - A total of four cases are found with an openhouse in third parties' property leasing form and three cases with a co-located form. In both forms, the co-location partner is either a country or an EU representation (in which different EU countries are co-located).
- The co-location partner:
 - Countries (mostly EU members) and semi-governmental organizations are the most dominantly found groups as a co-location partner. This is due to the common ground between these partners and the small number of limitations encountered with these partners (from a legal perspective, see section 4.5 for more details).
- The number of employees per mission:
 - Around half of the embassies/consulates has a total number of employees between 10 and 20. In contrast, only two cases have more than 60 employees. Note that this is only about the employees of MFA.

Another conclusion which can be made is that the response to the surveys is relatively low, especially in the case of the survey for employees. The limitation caused by the small amount of response is that the representation of the socially related subjects in each dimension is not strong.

5.2 Current performance of co-location embassies/consulates

Table 26. Focus of section 5.2.

Sub question	Sub-Sub question	Purpose	Structure
What is the performance and perception of the current co-location embassies/consulates within MFA, and what can be learned from these current cases?	What is the perception and performance (best performing/most successful) of the co-location embassies/consulates, and which problems are currently encountered?	A quick assessment of the current co-location offices, in terms of (performance) successfulness: success in terms of achievement of the advantages and goals, assess possible tools to achieve those advantages and goals, possible problems and disadvantages encountered, and perceptions of co-location in general (including from a business operation and policy making point of view).	General results: found layouts and partners, possible advantages, disadvantages, SuccessFactors, adding value, found issues and solutions. Results per embassy: possible advantages, disadvantages, and success factors

This section will present the results of the analysis of the survey response. This section's division will be as follows: first, the survey results per dimension (possible advantages, disadvantages, success factors and adding value parameters, and issues and solutions) in the three different surveys for Real Estate Managers, Operational Managers, and Employees will be presented. For the first three dimensions, the response of the three surveys is combined. Because many questions from the surveys overlap, overlapping questions are found: between the surveys of the operational managers and the real estate managers and between the surveys of the operational managers and the employees. By combining the results of these overlapping questions, a better representation of the perception is given. The last sub-section will present the performance per embassy/consulate; this section formed the basis for the selection of cases for the interviews presented in section 5.3.

Note that during the survey analysis, two shortcomings were found in the surveys, which has influenced the response. The first shortcoming was already briefly mentioned in the previous section: the small response to the employees' survey. This response influenced the results of the socially related subjects in the three dimensions: possible advantages, disadvantages, and success factors. Besides the small response, the spread of the response per case is also not even: from 57% of the embassies/consulates no response of employees were received, from 29% only one employee responded, and from the remaining 14% more than one employee responded.

The second shortcoming has to do with an error found in the survey for the operational managers. **Unclear** was found in the **question formulation** regarding the perspective in which the questions had to be answered: it was only necessary to consider the embassy/consulate in which they are located and not co-location and its potential as a whole. This unclarity of the questions was already predicted. Therefore, some measurements were taken beforehand: a statement was included in the survey's introduction and the formulation of some questions; see chapter 1, section 1.4.2 for more detail. However, it seems like these measures were not enough; there is a high chance that this statement was overlooked, forgotten, or not understood. If this statement was missed, it could cause confusion, for example: 'Co-location is an option to open or close and embassy/consulate fast.' It can be seen in this example that if the question is isolated, there is nothing that refers to the co-location embassy/consulate in which the respondents are residing (See appendix 6 for the other survey questions). Thus, there is a possibility that a group of respondents answered the question

while only considering their co-location office. In contrast, some could have responded to the question considering co-location in general (for example, instead of does this co-location office provide flexibility, could co-location offer flexibility). As already mentioned above, this error was found in the survey for operational managers; in other words, the responses to the operational subjects in the three dimensions (possible advantages, disadvantages, and success factors) could have been influenced by this error.

Due to these two shortcomings, the **survey results are not strong representations of the performance and perception of these embassies/consulates**, the reliance of these results with regards to literature is, therefore, also not strong. Hence, findings in literature cannot be discarded based on these results. The divided answers found per subject can also partly be explained due to these shortcomings.

5.2.1 Found layouts and partners

In the different leasing forms, different layouts were found within the embassies/consulates. Within the **openhouse** leasing form, three layouts were found: six cases with an **executive suite** layout. Out of these 6 cases, the diplomatic mission 16 is a doubt case: the serviced office and hybrid office categories were both answered with neutral. There is a possibility that this embassy's layout belongs to the serviced office or hybrid office layout. Five cases with a **serviced office** layout were found; there is a possibility that Mission 14 can't be categorized into the serviced office layout because the serviced office category was the only one answered with neutral while others were responded to with disagree. Three cases implement a **hybrid office** layout (Mission 10 is a doubt case: the hybrid offices category was answered with neutral while others were responded to with disagree).

In the cases of the **openhouse** leasing form **within the property of the third party**, there is one case found with an **executive suite** layout and one with a **serviced office** layout. In the **co-located** leasing form, only **hybrid offices** are used.

Within the different leasing forms and layouts, there is a tendency in terms of co-location partners. In the **openhouse** forms, there is a mix of both countries and semi-governmental organizations found in both executive suites and serviced offices. In hybrid offices, only countries are found as partners (this is the case for all embassies/consulates with a hybrid office layout regardless of leasing form). In the co-location form **openhouse in the third party's property**, both executive suites and serviced offices, the co-location partner is either a country or the EU. In the **co-located** form, only countries are found as partners due to the hybrid office layout.

5.2.2 Possible advantages

In the figure below, a summary of the responses on each different subject from the possible advantages dimension is presented; see appendix 6 for the related questions per topic. The number in parentheses behind each topic showcases the number of respondents for that particular subject (17: responses from the employees, 25/26: responses from operational managers and real estate managers, and 21: responses from the operational managers). The list of advantages goes from more socially related benefits (interaction, network, creativity, etc.) to more practical/operational advantages (flexibility, efficiency, etc.).

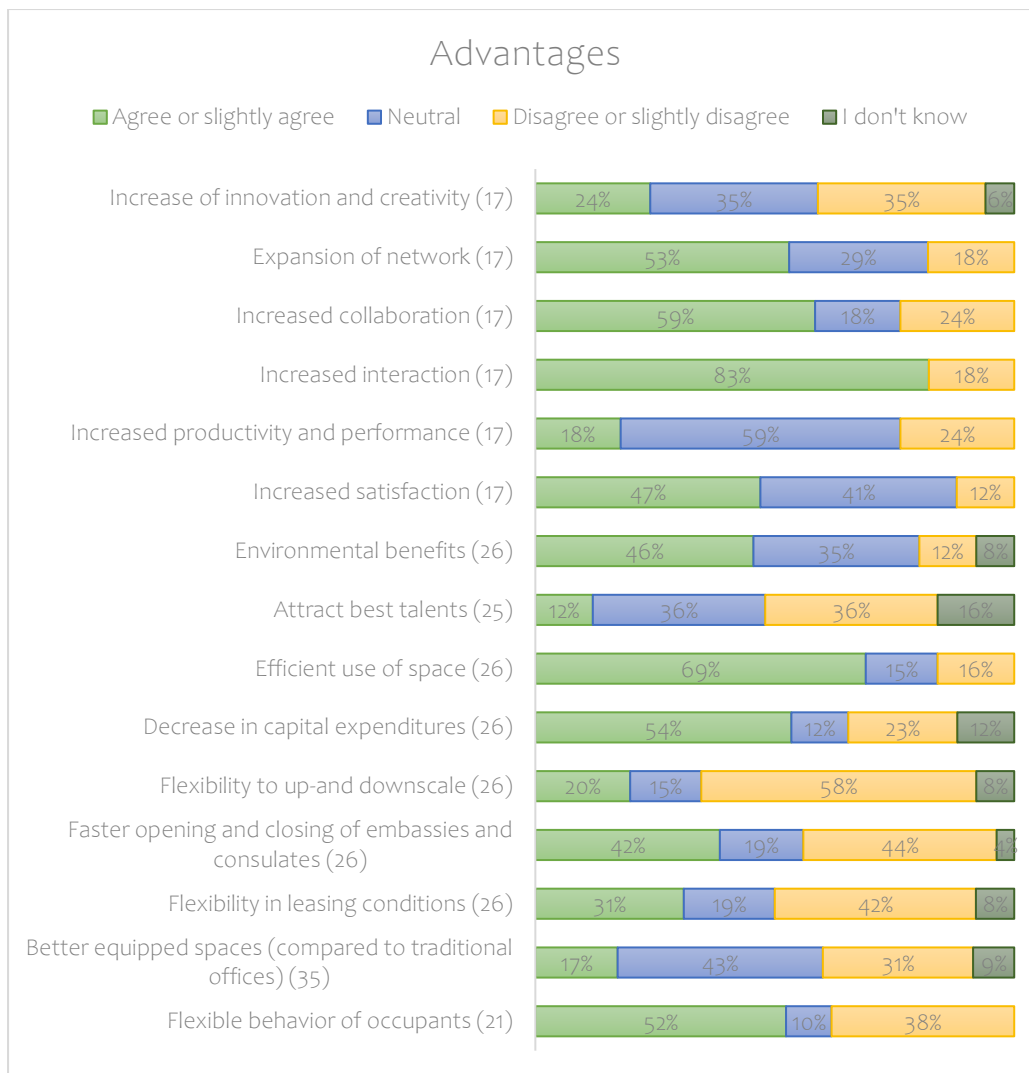


Figure 9. Overview of response from all three surveys on the possible advantages subjects.

Due to the unclarity in the survey for operational managers, it is seen that there are a lot of divided responses when it comes to the operational advantages: environmental benefits, attract best talent, faster opening and closing, flexibility in leasing conditions, and better-equipped spaces. Note that the socially related subjects have also been affected by the low response rate, which, could have either caused divided responses or lack of high achievement percentages.

With regards to the achieved advantages, a careful conclusion is made based on the chart above: out of the 15 subjects, the following possible benefits are, according to the survey, achieved in the co-location cases within MFA:

- Increased interaction with third parties (83%)
- Efficient use of spaces (69%)
- Increased collaboration with third parties (59%)
- Expansion of network due to the presence of third parties (53%)
- Decrease of capital expenditures (54%)

Out of these advantages, only increased interaction and efficient use of space have high achievement percentages, whereas the other benefits do not have a response with a high achievement level. The advantage flexibility to up-and downscale is the only advantage with a high disagree/slightly disagree response level. Note that, these survey results do not imply that the benefits are actually achieved or not achieved in all 21 cases, or, for example, that interaction is achieved in 83% of the 21 embassies/consulates. These results just present a general perception on

the achievement of possible advantages mentioned in literature; the survey gives an answer to a question like: how does the possible advantage, flexibility to up-and downscale, perform in general within the current co-location cases? This statement can also be applied to the other dimensions mentioned in the following section.

The following was found from further analysis: the responses from the surveys found are dependent on the leasing form and layout used within the co-location cases. The following conclusion can be made: the majority of operationally related advantages are not achieved because they are dependent on the leasing form. For example, the advantage flexibility to up-and downscale is not achieved due to the most dominantly used leasing form openhouse in the property of MFA. This form does not give the hosting party that many practical advantages besides financial benefits (rent for excess space, optimization of portfolio, and efficiency of space use). This is probably the reason why a lot of disagrees are found in terms of possible advantages. Note that a cautious conclusion is made due to the divided responses found, which were caused by the shortcomings of the surveys mentioned above.

The response to socially related advantages is too low to draw conclusions on the relationship between layout and response. The hybrid office layout is the only category in which a careful conclusion can be made in terms of response on the socially related advantages: in most cases with a hybrid layout, these social advantages are achieved; this can be explained by the open workplace which is found in this layout.

5.2.3 Possible disadvantages

The chart below gives an overview of the responses per subject within the possible disadvantages dimension. Like the previous chart, the number stated behind the subject is the number of respondents per question: 17 presents the response of employees and 26 the response from the operational managers and real estate managers.

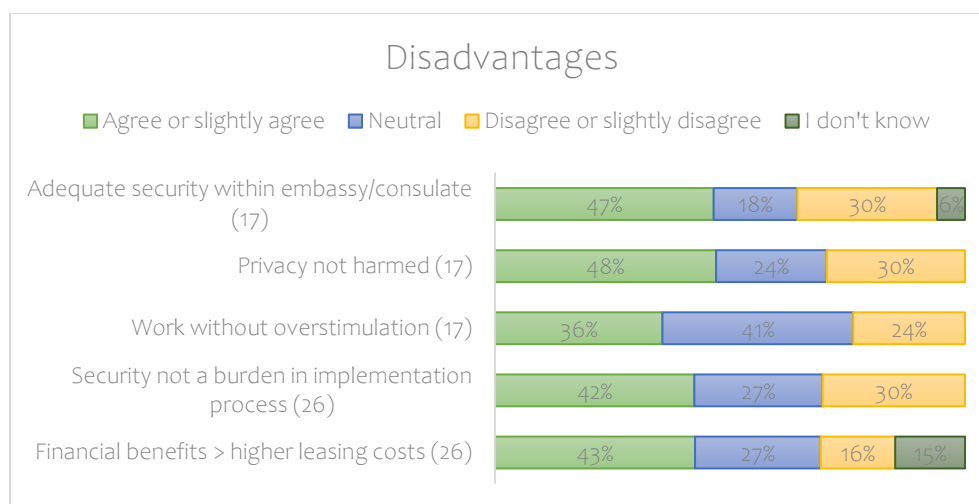


Figure 10. Overview of responses per subject in the possible disadvantages dimension

Again the unclarity in the questions for the operational managers (practical/functional questions rather than social) could have caused confusion, which explains the divided responses as seen in this chart. The topics influenced by this shortcoming are: security is not a burden in the implementation process, and financial benefits outweigh the higher leasing cost. The other topics also show divided responses. This could probably be explained by the small and widely spread response of the survey for employees; consequently, there is no strong representation.

A careful conclusion is made that in 4 of the five subjects, the most dominant answer category is agree or slightly agree. This statement is also backed with further analysis, in which was found that not in many embassies/consulates did the respondents disagree or slightly disagree with the statements on the possible disadvantages, which means that in most cases, the disadvantages are not found or did not perform badly, except for four cases (Missions 5, 25, 30, 32). The fact that the performance in terms of disadvantages is not bad, could, for most of the subjects, be explained with the layouts found within these offices: in every case, each party has its own private office. Note that the subjects of the disadvantage dimension were: security within the implementation process, physical and cybersecurity within the embassy/consulate, harmed privacy due to the presence of third parties, overstimulation due to the company of third parties, and financial benefits vs. higher leasing costs. The first four subjects are mainly related to the layout; having a private office can decrease the occurrence of these possible disadvantages. The response on the last topic, financial benefits vs. higher leasing cost, can be explained with the leasing form instead of the layout. Openhouse in own property is the most used leasing form, in which MFA leases the excess space within their embassies/consulates: generating revenue. Hence, MFA paying higher rent is in the current situation not the case. To conclude, the possible disadvantages are dependent on the layout and, in some cases, the leasing form.

5.2.4 Possible success factors

This part will present the responses related to the questions on the implementation of possible success factors. In the chart below the numbers represent the following: 36 responses from operational managers and employees, 26 responses from operational managers and real estate manager, and 17 responses from employees.

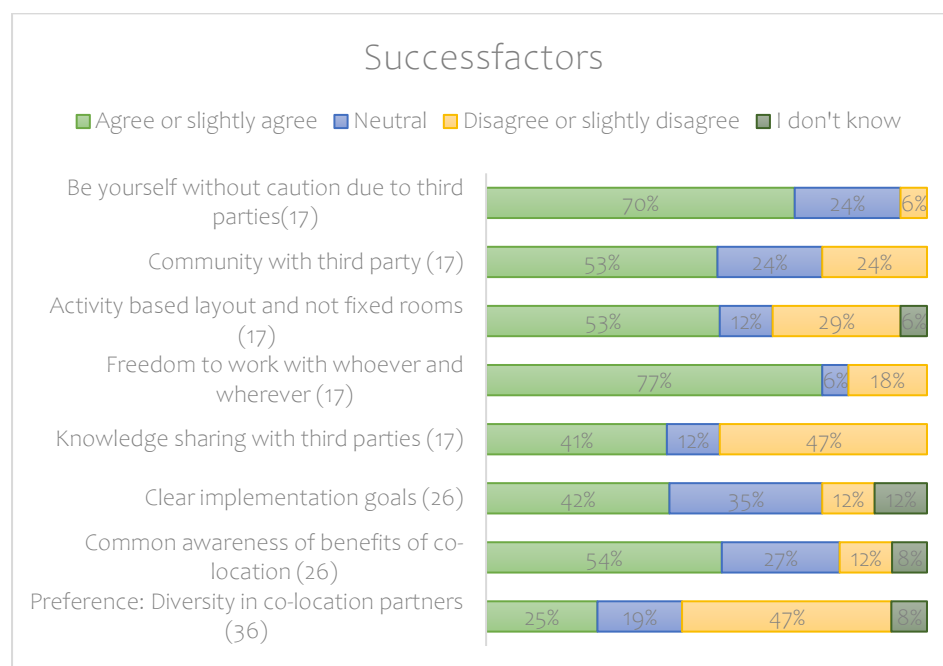


Figure 11. Responses of the surveys on the implementation of possible success factors.

The only two success factors which have a high score are freedom to be yourself without the caution of third parties and freedom to work wherever and with whoever. The other achieved success factors are listed below:

- Freedom to work with whoever and wherever (77%);

- Related advantages: increased satisfaction, increased collaboration and interaction, and stimulate innovation and creativity.
- Be yourself without caution due to the presence of third parties (70%);
 - Related advantages: Increase in satisfaction.
- Common awareness of benefits (54%);
 - Related advantages: Increased overall performance of co-location and peaceful coexistence.
- Creation of community with third parties (53%);
 - Related advantages: expansion network, an increase of interaction and collaboration with third parties, an increase of productivity and performance.
- Activity-based layout and not fixed rooms (53%);
 - Related advantages: Increased interaction and collaboration with third parties, and increase job satisfaction.

Co-locating with a variety of partners is perceived as unfavorable in the survey; preferences are mostly found in co-locating with like-minded countries, NGO's, and sometimes startups. This preference is not different from the current co-location partners. This negative opinion on the diversity in partners can be explained from a legal perspective (see section 4.5). Another possible explanation is found in the stakeholder demands in relation to their adding value parameters, presented in section 4.1. From this analysis, it was found that the most prioritized adding value parameter was Corporate Social Responsibility. MFA wishes to make a social impact with co-location, and it is not in its interest to help an already successful commercial company with co-location.

In general, the implementation of the practical success factors (like diversity in partners, common awareness of benefits of co-location, and clear implementation goals) do not show any strong link to the form or layout implemented in these co-location embassies/consulates; simply because these subjects are not related or connected to the layout, form or partner.

In terms of the implementation of social success factors, no firm link could be found between the success factors and the layouts: executive suites and serviced offices, mainly due to the small response of the employees. However, in the embassies/consulate with a hybrid layout a robust dominant response category was found: out of the 8 cases with a hybrid layout, seven have a dominant agree or slightly category (around 88%). This result is related to the relation between the layout and the subjects of the possible success factors. The potential success factors which were covered in this survey are mostly about improving the social advantages of co-location to benefit optimally from the co-location. For example, the success factor creation of community with third parties; the factor could increase the achievement of the following benefits: interaction with third parties, collaboration, knowledge sharing, Etc. A hybrid layout incorporates an open plan workplace, which encourages the mixing of people; this could be the primary reason why most of the respondents in this layout have chosen agree or slightly agree as their response category. In other words, the use of the success factors and the achievement of the advantages are mostly found in the embassies/consulates with a hybrid layout.

It is difficult to pinpoint the association between the success factors and their related possible advantages or disadvantages; because the surveys were not designed to detect the association between these dimensions (a lot of the benefits, disadvantages, and associated success factors were separated due to the division of surveys (three different surveys)). There were, however, some significant associations found (the success factors and advantages were, in these cases, not separated). Note that these associations will not be used as hard evidence for the achievement of certain benefits due to the previously stated problems in the survey and because the advantages are not only dependent on the success factors stated below:

- A significant association between the subjects: increased collaboration and knowledge sharing with third parties (p-value: 0.01). The low implementation % of the success factor knowledge sharing could have influenced the somewhat lower percentage of responses in the agree or slightly agree category for the subject collaboration; however, the low implementation % of this success factor, has not entirely decreased the responses in this answer category because collaboration is also dependent on other points, and the reaction in the agree category for knowledge sharing is exceptionally divided (41% agree and 47% disagree).
- Association between freedom (p-value: 0.009) and being yourself (p-value: 0.005) and increased satisfaction. This freedom (to work wherever and to be yourself) does not seem to positively influence the possible advantage, because satisfaction is ambivalent and is also influenced by different factors. Still, looking closer, the achievement of this success factor could maybe explain the low percentage of responses found in the disagree or slightly disagree answer category for the subject satisfaction (12%).
- A significant association was found between community building and collaboration (0,001) and interaction (0.012). The high percentage of interaction with third parties could explain the somewhat higher response rate in the category agree/slightly agree for the subjects creation of community (53%) and collaboration (59%).

5.2.5 Adding value

The questions on adding value were only asked to the Real Estate Managers. As already mentioned before, seven responses were received. In the chart below, the reactions of the RE managers are presented.

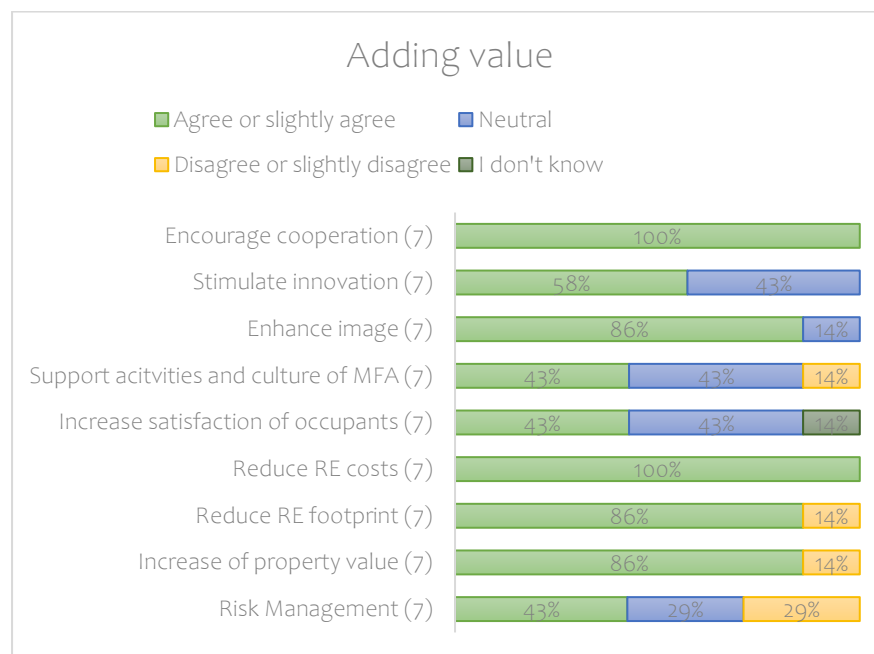


Figure 12. Perception of co-location as a adding value tool.

As shown in the chart, the perception of co-location as a tool to add value to MFA is not bad. The majority of the responses were in the following answer possibilities: agree, slightly agree, and neutral. Thus, the potential of co-location as an adding value tool is also recognized within MFA. Note that some of these adding value parameters had diverging responses: increase of satisfaction and support culture of MFA. This can probably be explained by the fact that in the case of supporting culture, co-location does not have a direct influence on this (not an immediate advantage); this

could, however, be an indirect value of co-location. As explained above, satisfaction is difficult to measure due to its ambivalent nature; thus, divided answers are not surprising.

5.2.6 Found issues and their suggested solutions

The found issues are categorized into different subjects. The list below will present the problems per subject, and if mentioned (in the survey), the related solutions will be given. Note that these found issues do not apply to all the embassies/consulates, however, the specific diplomatic mission from which the issues and solutions were found will not be mentioned in this version of the thesis due to confidentiality reasons.

- Security
 - *'No separate entrances, thus co-location partner has access to the office space when we are not in the office. Nothing has happened, but security-wise this raises some eyebrows.'*
 - Given solution: *'Separate entrances, technically not easy and investment would be proportionally huge given the fact this is a rented building.'*
 - *'Stop with co-location'*
 - *'As a security coordinator, you do not have a good idea of who is inside the building during the event of an eviction. This is already a challenge with our staff.'*
 - Solution: *'Make clear agreements and that they are responsible for the Headcount of their staff members and any visitors. Naturally, co-location colleagues are also included in the evacuation drills.'*
 - *'Security must be at the level of the most vulnerable organization in the building, not all co-locaters would agree with that'*
 - *'The only solution to every co-location issue is that they must be dealt with before the parties co-locate, i.e., a clearly documented written co-location agreement honored by all parties involved.'*
 - *'Different thoughts about security.'*
 - *'Solutions should be at the capital level.'*
- Facilities and services
 - *'Issues with the use of facilities, others need to be taken into account.'*
 - Solution: *'Set clear arrangements'*
 - *'Issues with cleaning staff and cleaning of office space, and with shared services like canteen.'*
 - *'Issues with the organization of meetings and rooms to concentrate for some hours'*
 - *Don't look only at the current situation of people working at the embassy, but also to the near future.*
 - *'Having co-location partners increases the operational tasks.'*
- Financial:
 - *'Financial responsibility towards the co-location not always honored'*
 - *The only solution to every co-location issue is that they must be dealt with before the parties co-locate, i.e., clearly documented written co-location agreement honored by all parties involved.*
 - *'Move out.'*
 - *'Payment problems on repairs of shared property and Willingness to share the cost of investments'*
 - *'Either break up or adjust the attitude.'*
- Community
 - *'Current co-locater has no interest or contributes in collaboration on the work floor. Internal relation is minimum.'*
 - *'Move out.'*

- *‘There might be issues which we would have dealt with differently as NL embassy’*
 - *‘Stop with co-location’*

What can be concluded from this list is that the issues found are mostly related to operational issues. This probably also explains why there was a need to develop a policy that offers some guidelines. These operational problems are mostly found because the leasing form openhouse in own property is dominantly implemented. The form openhouse does not offer possible benefits, such as low commitment like a coworking form does; instead, more operational tasks are found compared to locating in a traditional embassy/consulate.

5.2.7 Results per embassy/consulate

This section will be divided into three sub-sections based on the dimensions covered in the survey for the occupants: possible advantages, disadvantages, and success factors. Per dimension, a chart will be presented, giving a simplified overview of all the responses for the questions in all three dimensions (for a more detailed overview per mission, see appendix 8). In these charts, the response per embassy/consulate will be presented as follows: The different locations are mapped in a sequence based on their average given grade by the respondents to their co-location embassy/consulate (which is shown behind the location in brackets). The numbers in the bars represent the number of responses per answer category and results in a sum when added up). Note that the sums differ between dimension and within dimensions. These sums imply different things and will be explained in more detail in each sub-section.

It is essential to keep in mind that the questions in all three dimensions were stated as positive statements; in other words, if the response is agree for a particular question, it means that in case of possible advantages, the advantages are achieved. In case of the possible disadvantages, the disadvantages are not encountered; and for potential success factors, the success factors are implemented. Consequently, the higher the number of responses categorized in agree or slightly agree, the more possible advantages of co-location are achieved, the more possible disadvantages are not encountered, and the more possible success factors are implemented. Thus, the greener the more successful.

Possible advantages

In the chart below, a simplified overview is given of all the responses for the questions in the possible advantages dimension in the survey. As already mentioned before, the numbers in the bars result in a sum when added up. In this dimension, there are mainly three different sums, and these represent the following:

- The type, number of respondents, subjects covered from dimension:
 - A sum of 16: one response from the operational manager and one response from an employee. 16 subjects covered;
 - A sum of 9: one response from the operational manager. Nine subjects covered;
 - A sum of 7: one response from an employee. Seven subjects were covered.

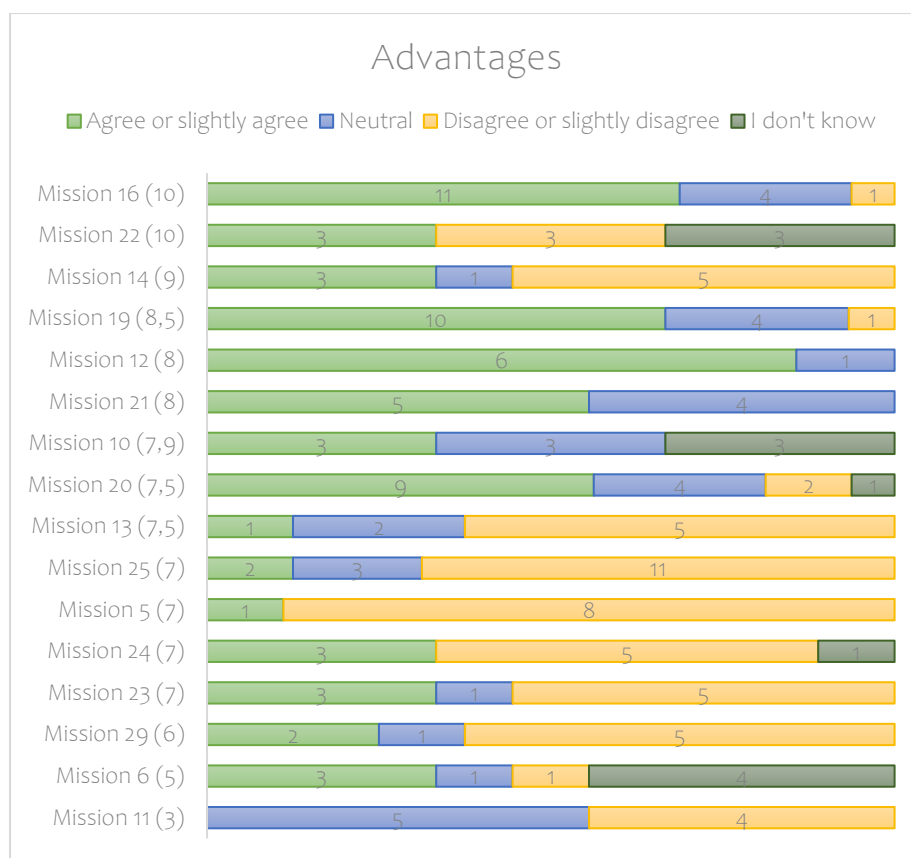


Figure 13. Response per embassy/consulate on the possible advantages

Based on these charts, the following conclusions can be made:

- The respondents' given grade is not always in correspondence with the amount of agrees or disagrees given.
 - For example, the given grade to Mission 25 is a 7; however, out of the 16 different subjects, 11 were said not to be achieved.
 - A possible reason for this is that the achieved advantages outweigh the missed out benefits or vice versa.
- The two best performing cases are Mission 16 and Mission 19, both in terms of grade and achieved advantages, whereas the least performing cases according to this survey are Mission 5 and Mission 25.

There were also some embassies/consulates with more than two responses; the analysis of these embassies/consulates had to be slightly broader (because for one possible advantage, different answers were given). In the charts below, these cases are presented. Like the cases above, the sum per chart represents the type of respondent and number of possible advantages covered in the survey: a sum of 9 (the response of the OM) and 7 (response of employees).



Figure 14. Possible advantages overview response for embassies/consulates with more than two responses: Missions 32, 30, and 33.

In these charts, it can be seen that within one embassy, the amount of agrees vs. the amount of disagrees differs a lot. Take Mission 32, for example; while the OM is quite negative (8 out of the nine are categorized into disagree or slightly disagree), E1 is positive, with 6 out of the seven subjects answered with agree. This difference within one embassy/consulate could be explained due to the differences in OM and employees' surveys. The possible advantages subjects in the survey for the OM are from a business operations/practical point of view (decrease capital expenditures, flexible leasing conditions, Etc.). In contrast, the subjects in the employees' survey are more about social aspects (interaction, collaboration, Etc.). This statement is not only the case for the embassies presented above (figure 13 and 14) but also for the embassies/consulates in the charts that will follow.

Possible disadvantages

The sums based on the numbers in the graphs represent the possible disadvantage subjects (a sum of 5 means five different topics (security, privacy, etc.), the type of respondents (OM or Employee), and the number of respondents per embassy. A sum of 2 (one response from the OM), A sum of 3 (one response from an employee), and a sum of 5 (response from the OM and an employee).

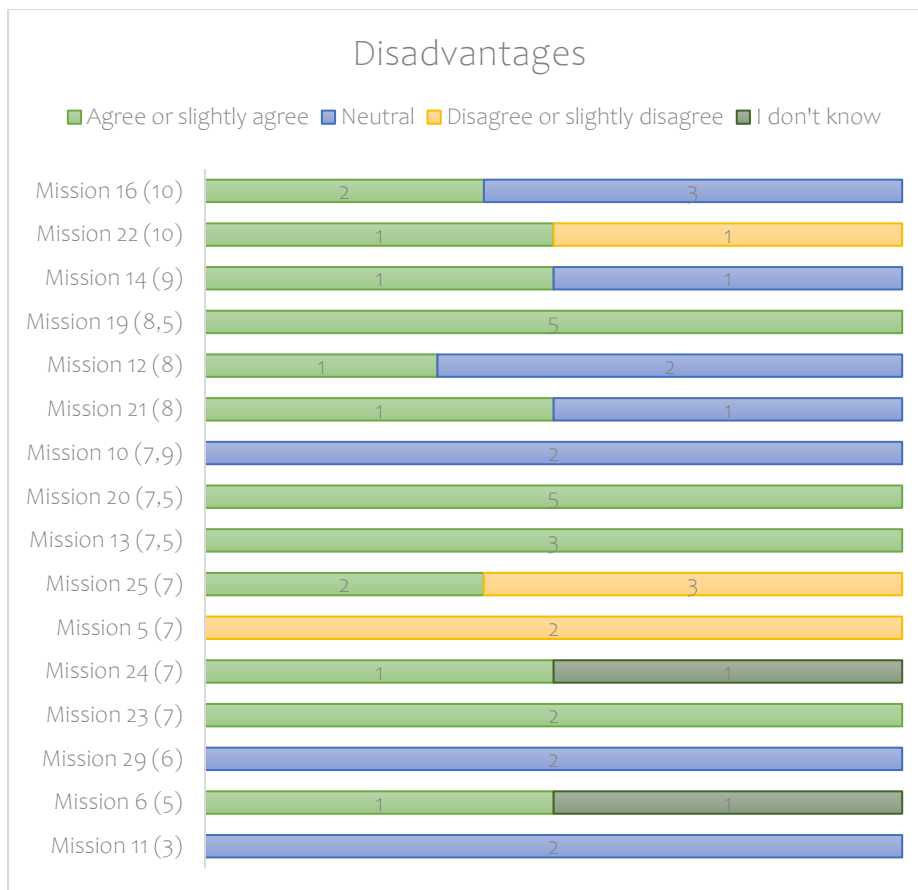
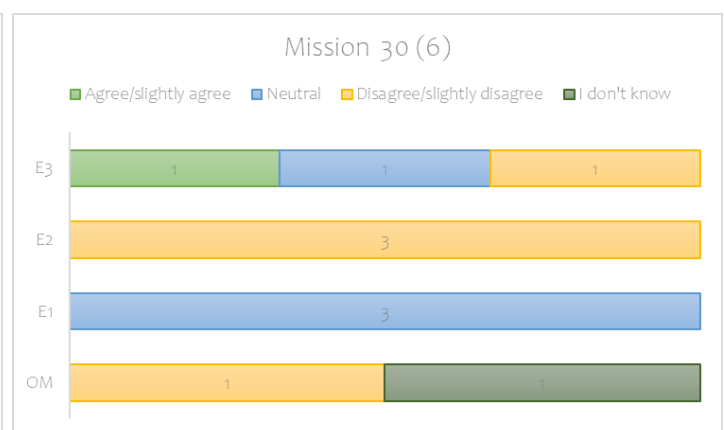
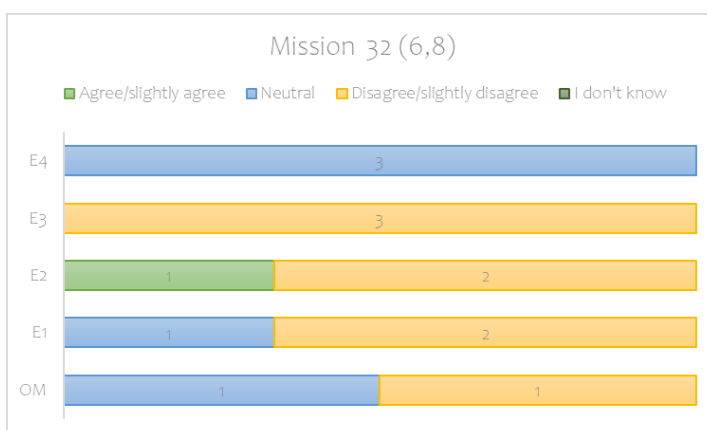
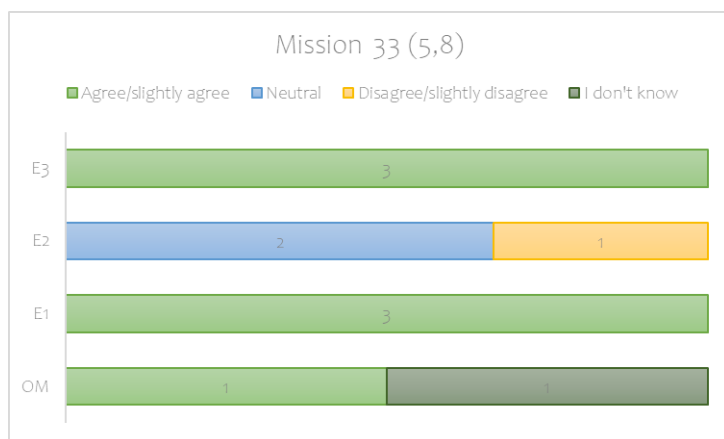


Figure 15, Response per embassy/consulate on disadvantages

The cases with more than two responses are viewed separately in the charts below. In these charts, the sum of possible disadvantages is either 2 (operational manager) or 3 (employee). Mission 32 takes a quite negative stance: the potential disadvantages according to literature, are found in the embassy. In contrast, Mission 33 takes a positive stance despite having both the same leasing form and layout. This showcases that the common thread is difficult to find between different embassies/consulates. Note that diverging responses within one embassy/consulate can be explained due to the differences in questions between operational managers and employees.





Figures 16. Possible disadvantages responses of embassies/consulates with more than two responses: Missions 32, 30, and 33

In terms of disadvantages, the most successful are: Missions 13, 19, 20, and 23. And the cases in which many disadvantages are found are Missions 5, 25, 30, and 32.

Possible success factors

The sums (added up from numbers in bars) relevant for this dimension are as follows:

- A sum of 3 (1 response of the OM, three possible success factors covered).
- A sum of 6 (1 response of an employee, six possible success factors covered).
- A sum of 9 (represents one response of the OM and one response of an employee, nine subjects covered).

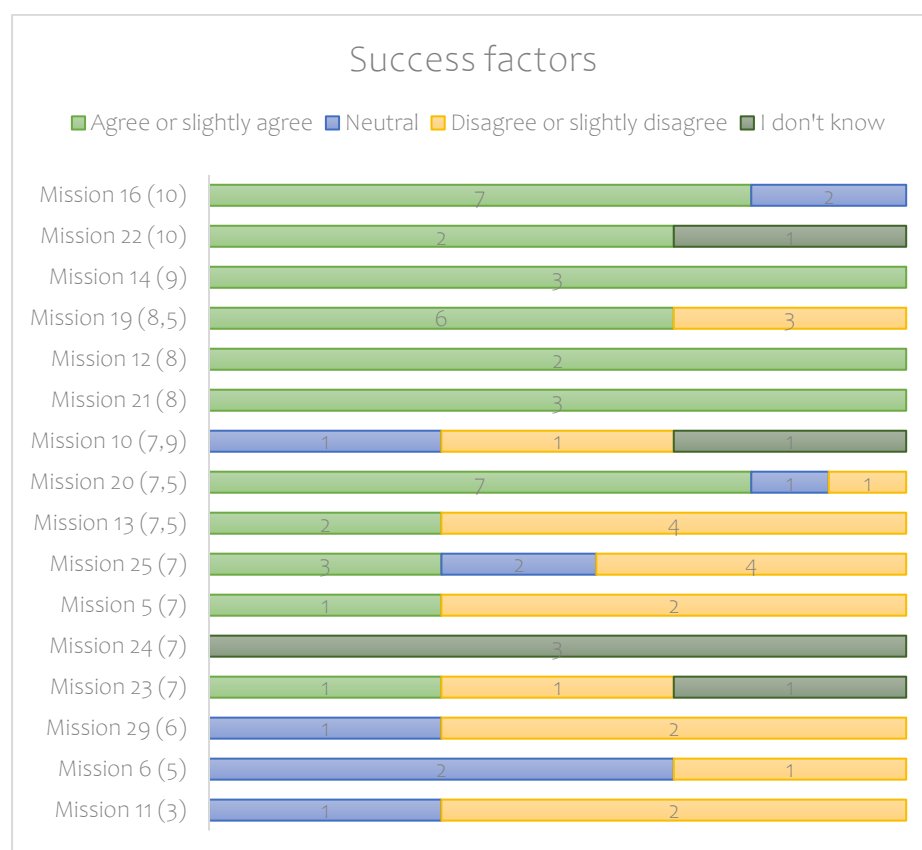


Figure 17. Response per embassy/consulate in the possible success factors dimension.

See the charts below, for the cases with more than two responses. Out of these three cases, Mission 30 seems to take a neutral stance, except for E3. In contrast, the other two cases tended to choose agree or slightly agree more often. A reason for this could be that Missions 32 and 33 both have a co-located leasing form and hybrid offices as its layout; which could explain the similar responses, contrasting to the responses of Mission 30. As mentioned before, the diverging answers within one embassy/consulate can be explained with the differences in questions in the surveys between operational manager, practical questions, and employees, socially related questions.



Figures 18. Possible success factors overview of embassy/consulates with more than two responses: Missions 32, 30, 33

In terms of implementation of success factors, the following embassies/consulates score well: Mission 21 (100% agree or slightly agree), Mission 16 (78% agree or slightly agree), Mission 14 (100% agree or slightly agree), Mission 12 (100% agree or slightly agree), and Mission 20 (78% agree or slightly agree).

5.2.8 Conclusion

What is the perception and performance (best performing/most successful) of the co-location embassies/consulates, and which problems are currently encountered? This question was central in the survey design and this section. With the use of the three surveys, answers were obtained. Note that the survey results are not strong representations of the performance and perception of co-location because of the small response and uneven spread (in the survey of the employees), and the unclarity of the question formulation found in the survey for the operational managers. Nevertheless, some careful conclusions are made. Some factual conclusions are: the most dominantly used leasing form of co-location is openhouse organized in the property of MFA. Additionally, it was found that only with this form co-location with semi-governmental agencies is found; in all other forms, the partners were either countries or EU representation in which multiple countries co-locate. Countries and semi-governmental parties are also the most prominent groups

of co-location partners found within the co-location cases. Within the encountered leasing forms the following layouts were found:

- Openhouse:
 - Executive suites (43%);
 - Serviced offices (36%);
 - Hybrid offices (21%).
- Openhouse in third party's property:
 - Executive suite and serviced office.
- Co-located:
 - Hybrid offices.

Keep in mind that, in some cases, it was difficult to pinpoint the exact layout based on the survey results only. In addition, the maps of the embassies were not available; hence, double-checking was not possible. Consequently, there could be some errors within the statements on layouts.

The performance and perception on the occurrence of social advantages in general is not good; 3 out of the seven socially related advantages are considered to be achieved in the current co-location cases (of which only one is achieved with a high percentage: increased interaction with third parties). The main reason for this is due to the dominantly used layouts implemented within the cases: executive suites and serviced offices. In these layouts, only some basic facilities and services are shared, and no working spaces (for example, meeting rooms). These two layouts score the lowest when it comes to the achievement of social advantages. If social advantages want to be achieved, it would be advised to implement hybrid offices. However, due to the implementation of these layouts (executive and serviced offices), the occurrence of disadvantages is also not high (private offices). Note, however, that the perception is not that well within the possible disadvantages dimension (for 4 of the five subjects, the most dominant answer group is agree/slightly agree, but the percentage is between 42 to 48%).

In terms of operational advantages and disadvantages, these are mainly dependent on the leasing form. Due to the dominantly used openhouse form, operational advantages are generally not achieved; the only two advantages efficiency in space use and financial benefits are achieved (however, with a low percentage: just over 50%). Openhouse also increases the occurrence of operational problems. Thus, if MFA wishes to achieve more operational advantages or decrease the operational problems, it would be recommended to use another form, for example, coworking.

The results of the possible success factors dimension, showcases that the implementation of the success factors is mainly found in the hybrid office layouts because the success factors are mostly related to co-location's social advantages. As mentioned above, hybrid offices have the highest level of achievement of social advantages due to the use of open-plan workplaces. In this type of layout, the implementation of the socially related success factors becomes easier.

The potential of co-location as an adding value tool is also recognized within MFA. Note that some of these adding value parameters had diverging responses: increase of satisfaction, and support culture of MFA. This can be explained by the fact that in the case of supporting culture, co-location does not have a direct influence (not a direct advantage); this could, however, be an indirect value of co-location. Satisfaction is difficult to measure due to its ambivalent nature; thus, divided answers are not a surprising occurrence. Which emphasized the importance of the implementation of a variety of success factors. However, in general it can be said that the perception of co-location as an adding value tool is good.

The issues mentioned within the survey are related to the following subjects: Security issues (for example, alignment issues), issues with the sharing of facilities and services, financial issues (no rent paid), and issues related to community (no collaboration, minimal interaction). It was also found that, in each of these subjects (except community), a given solution was better preparation of co-location and set exact arrangements and rules.

The conclusions made regarding the performance per embassy/consulate are:

- Possible advantages dimension
 - Best performing in this dimension: Missions 16 and 19
 - Not so well-performing: Missions 5 and 25.
- Possible disadvantages dimension
 - Best performing: Missions 13, 19, 20, and 23
 - Not so well-performing: Missions 5, 25, 30, and 32.
- Possible success factors dimensions:
 - Best performing: Missions 12, 14, 16, and 21
 - Not so well performing: Missions 5, 11, 13, and 29.

5.3 The anecdotal success formula

Based on the survey results, five cases were selected for the interviews. The reason for the execution of five interviews is due to the scope of this thesis (especially in terms of time). However, it was found during the execution of the interviews that the main message of these five interviews all comes down to the same thing. In other words, even if more than five interviews were conducted, the main message would probably still be the same. Thus, the results found from these five interviews will be enough to give a good representation and generate a tailored success formula based on the responses from the selected cases. The reoccurrence of the main message within the different interviews can mainly be explained due to the vagueness around the concept of co-location within MFA (no supporting strategy; see section 4.4 for more details); in addition, the strategic use of RE and facilities is not really at the top of mind within MFA: mostly for the operational managers.

These interviews were executed for a better understanding on the found performances of the five cases: what is the reason behind the responses received from these embassies/consulates. However, these interviews will mainly be used to find an answer to the sub-sub research question: *Is there an anecdotal success formula that can be applied to MFA?*

Table 27. Research question and purpose of section 5.3 in relation to research question of this chapter.

Sub question	Sub-Sub question	Purpose	Interviewees
<i>What is the performance and perception of the current co-location embassies/consulates within MFA, and what can be learned from these current cases?</i>	<i>Is there an anecdotal success formula that can be applied to MFA?</i>	Generate an anecdotal success formula which will be used to improve the implementation of co-location.	Mission 16 Mission 19 Mission 25 Mission 30 Mission 32

In the list below the five selected cases are presented with a justification on why these five particular co-location cases were selected:

- Mission 16:
 - Performs well in terms of both given grade and the different dimensions (especially in the possible advantages and success factors dimensions).
- Mission 19:
 - Also performs well in terms of grade and response in the different dimensions (in all three dimensions).
- Mission 25:
 - Given grade and response to questions in the dimensions are not aligned (grade is 7, but in most dimensions the response is not so positive).
- Mission 30:

- Unlike the three cases mentioned above, this diplomatic mission is one of the few cases in which the co-location form openhouse within the property of the third party is used. The selection of another co-location form could provide new insights.
- Mission 32:
 - Just like mission 30, this diplomatic mission also implements a co-location form which is not encountered often within the CRE portfolio of MFA, namely: co-located.

The first three cases all use the same co-location form: openhouse in own property. However, the cases differ in terms of co-location partner. The last two cases are different because of the co-location form. Selecting diverging cases was critical in the thesis because it provides insights on success factors from different perspectives. In the case of MFA, this is extremely important due to the different contexts found within the organization: locations worldwide, different types of partners, different co-location countries, different forms, different demands, Etc.

The interviews were semi-structured interviews, in which the questions were determined beforehand. However, in this type of interview there was still room for improvising in terms of question sequence and new questions based on the given answers. The questions formulated for the five interviews differ because the questions were mainly based on the survey results, which are unique in each case. The dimensions used to formulate the questions in the survey also applied in these interviews: Layout, possible advantages, possible disadvantages, and possible success factors. Two dimensions are added: issues and solutions found in the surveys and the co-location partner. Note that the transcript of the interviews is not included in the appendix and the results presented in this section only contain part of the findings of the interviews, due to confidentiality reasons.

The structure of this section will be as follows: For each case, a short overview of some facts and figures are given, followed by a summary/conclusion of the results (more detailed results are not available due to confidentiality reasons).

5.3.1 Diplomatic mission 16

Average grade co-location office: 10

Co-location facts:

- Co-location form: Openhouse;
- Co-location partner: Country E.

Co-location survey results:

- Amount of respondents:
 - Operational manager and one employee who have both been working in the embassy for four years.
- On the used layout there is some unclarity (will be elaborated on in the interview);
 - Executive suites?
- Response from both the Operational Manager and Employee:
 - Possible advantages:

Table 28. Response OM and E of the embassy: possible advantages

Increased innovation and creativity		
Expanded network		
Increased formal collaboration with third parties		
Increased informal interaction with third parties		
Increased productivity and performance		
Satisfaction with co-location office		
Environmental benefits		
Efficiency in space use		
Decrease in capital expenditures	Attract best talent	
Flexible behaviour	Faster opening and closing of offices	
Flexible leasing conditions	Better equipped spaces	Flexibility to up-and downscale
Agree/slightly agree	neutral	Disagree/slightly disagree

- o Possible disadvantages:

Table 29. Response OM and E of the embassy: possible disadvantages

	Security is not a burden in implementation process	
Adequate security	Work without overstimulation	
Privacy is not harmed due to presence third parties	Financial benefits > Higher leasing costs	
Agree/slightly agree	neutral	Disagree/slightly disagree

- o Possible success factors:

Table 30. Response OM and E of the embassy: possible success factors

Activity based layout		
Freedom to work wherever and with whoever		
Clear implementation goals		
Be yourself without caution		
Knowledge sharing on regular basis		
Common awareness	Creation of community with third parties	
Diversity in partners	Diversity in partners	
Agree/slightly agree	neutral	Disagree/slightly disagree

Background information

The Netherlands and country E are co-located together in the same office on the same floor with shared facilities, services, and spaces. The layout used in the embassy corresponds to a hybrid office with the shared meeting space.

Conclusion:

According to the interview, the embassy is successful because most of the possible advantages are achieved (especially, informal and formal interaction and collaboration), and no occurrence of disadvantages and other issues. The success of this embassy is due to the following factors:

- Good and clear agreements, which reduced the chance of encountering disadvantages and issues.
- Open communication and relations, for example, when changes or problems occur.
- The small size of the co-location, which makes it easier to implement (especially for the occurrence of interaction and collaboration: importance of personal chemistry/level), manage, and take each other into account. The small sized co-location provides the embassy with more dynamics and new and fresh influences; consequently, satisfaction could be increased.
- Support from all involved parties:
 - o This applies to the leaders and employees of both parties.
- A layout/setting in which a lot is shared.
- Co-location has to be interesting for both sides (importance of balance in the achievement of benefits).
- Do things together, these can both be in informal or formal settings. But do not force this, only if there is a need from both parties. Doing things together can help with the personal connection and sense of togetherness.
- It has to click between partners.
- Good preparation before co-location on capital and local level (between leaders).

- Respect the differences between parties.

5.3.2 Diplomatic mission 19

Average co-location grade: 8.5

Co-location facts:

- Co-location form: openhouse;
- Co-location partner: Country F.

Co-location survey results:

- Two responses:
 - The operational manager and one employee who have been working in the embassy for three years.
- Layout used: Hybrid office (mix of private offices and open plan workspaces).
- A detailed overview of the responses related to the dimensions are presented (both Operational manager and employee):
 - Possible advantages:

Table 31. Response OM and E of the embassy: possible advantages

Faster opening and closing of offices		
Expanded network		
Increased formal collaboration with third parties		
Increased informal interaction with third parties		
Satisfaction with co-location office		
Better equipped spaces		
Efficiency in space use	Increased productivity and performance	
Decrease in capital expenditures	Increased innovation and creativity	
Flexible behaviour	Flexibility to up-and downscale	
Flexible leasing conditions	Better equipped spaces	Environmental benefits
Agree/slightly agree	neutral	Disagree/slightly disagree

- Possible disadvantages:

Table 32. Response OM and E of the embassy: possible disadvantages

Work without overstimulation		
Financial benefits > Higher leasing costs		
Security is not a burden in implementation process		
Adequate security		
Privacy is not harmed due to presence third parties		
Agree/slightly agree	neutral	Disagree/slightly disagree

- Possible success factors:

Table 33. Response OM and E of the embassy: possible success factors

Creation of community with third parties		
Knowledge sharing on regular basis		
Common awareness		
Be yourself without caution		
Freedom to work wherever and with whoever		Activity based layout
Clear implementation goals		Diversity in co-location partners
Agree/slightly agree	neutral	Disagree/slightly disagree

Background information

In terms of co-location layout, a hybrid layout is implemented within the embassy in which, for example, meeting rooms, kitchen, etc. are shared.

Conclusion:

The survey results and the interview results are not in accordance with each other. In the survey of the employees, it was said that interaction and collaboration with the third party takes place; however, according to the interviewee, this is not the case. As mentioned before, due to the employees' small response, it is difficult to create an accurate representation with the survey results only, which explains the diverging response. For this reason, the interview results will be leading.

From the conducted interview, it can be concluded that this co-location embassies' success is mainly due to the achievement of practical/functional advantages rather than social advantages like interaction or collaboration. Practical advantages in terms of decrease in costs of the building per person, and optimal and efficient use of property (use of excess space).

Thus, what can be concluded from this interview, is as follows: the lack of interaction and collaboration does not affect the success of this co-location office (the practical advantages are significant in this co-location). The lack of interaction and collaboration is due to the layout and lack of common ground between the partners. The size of the co-location, in terms of employees, makes the co-location practical. The same reason why social benefits are not achieved is also one of the reasons why disadvantages and problems are not encountered: distance due to layout avoids frictions, the division between both parties provides a positive experience, clear arrangements between parties, open dialogues, good relation with the co-location party, and similar culture in terms of friendliness, orderly, organized, keep to agreed rules, and also enjoy clear and open communication.

5.3.3 Diplomatic mission 25

Average co-location grade: 7

Co-location facts

- Co-location leasing form: openhouse;
- Co-location partner: Semi-governmental party A and two more parties.

Co-location survey results:

- Response list:
 - The operational manager who has been working in the office for two years;
 - One employee who has been working in the consulate for one year
- No clarity on layout: needs to be elaborated on in the interview.
- A detailed overview of the subjects and the responses will be presented in the tables below.
 - Possible advantages:

Table 34. Response OM and E of the consulate: possible advantages

		Faster opening and closing of offices
		Increased innovation and creativity
		Expanded network
		Increased formal collaboration with third parties
		Increased informal interaction with third parties
		Increased productivity and performance
		Flexibility to up-and downscale
	Satisfaction with co-location office	Flexible leasing conditions
Decrease in capital expenditures	Environmental benefits	Better equipped spaces
Efficiency in space use	Attract best talent	Flexible behaviour
Agree/slightly agree	neutral	Disagree/slightly disagree

- Possible disadvantages:

Table 35. Response OM and E of the consulate: possible advantages

Privacy is not harmed due to presence third parties		Security is not a burden in implementation process
Financial benefits > Higher leasing costs		Adequate security
		Work without overstimulation
Agree/slightly agree	neutral	Disagree/slightly disagree

- o Possible success factors:

Table 36. Response OM and E of the consulate: possible success factors

Clear implementation goals		Creation of community with third parties
Freedom to work wherever and with whoever	Common awareness	Activity based layout
Diversity in partners	Be yourself without caution	Knowledge sharing on regular basis
		Diversity in co-location partners
Agree/slightly agree	neutral	Disagree/slightly disagree

Background information:

Unlike the previous cases, the co-location partners found are not in correspondence with what was found in the administration. From the administration, it was found that the co-location partner is a semi-governmental organization A. However, from the survey and interview, it comes forward that there are two more semi-governmental parties.

The consulate provides the co-location partners with their own private office; located on the same floor with some shared facilities, services, and rooms.

Conclusion

Just like Mission 19, the survey results and the interview results are not in line with each other. The survey results were quite interesting because the given grade was a 7, but the achieved advantages were low, and the encountered disadvantages were high. However, from the interview, it can be concluded that the grade 7 gives a better representation of the success. From the interview, it has become evident that the consulate is more successful than initially found in the survey.

The given grade has to do with benefit of co-location related to collaboration and knowledge sharing. The drivers behind the occurrence of interaction and collaboration are: common ground (*connecting layer* or *shared factor*) between the different parties, and build on things together (formal and informal, for example, lunch, MT meetings, consultations, etc.). A point of improvement, mentioned in the interview, that could increase collaboration is related to the layout: level of sharing could be increased.

From the interview it was found that disadvantages or problems are not encountered within the consulate because of the clarity in communication (for example, when problems occur), and there is no large diverging cultures between the parties.

General advice given by the interviewee that is also in line with the results of Missions 16 and 19, was as follows: 'Co-location is possible and has a lot of potential if it is well thought out and implemented. But it is important to look at what the core business of the post is? Who are you going to co-locate with? Do you have common points or is it purely a matter of money? The question for co-location should be made more neutral. The "No unless" policy is by definition negative and stops initiatives before they have started....'

5.3.4 Diplomatic mission 30

Average grade co-location office: 6

Co-location facts:

- Co-location form: Openhouse in third party's property;
- Co-location partner: Country A.

Co-location survey results:

- Amount of respondents:

- The operational manager who has been working in the embassy for 14 months;
- Four employees who have, in general, been working in the embassy from 14 months to a little over two years.
- Co-location layout: Serviced office.
- Response:
 - Possible advantages

Table 37. Response OM (highest table) and E (lowest table) of the embassy: possible advantages

Flexible leasing contracts		Flexible behavior
Flexibility to open and close		Flexibility to up-and downscale
Decrease capital expenditures		Efficiency in space use
Environmental benefits	Better equipped spaces	
Agree/slightly agree	neutral	Disagree/slightly disagree
		Increased innovation and creativity (3x)
	Satisfaction with co-location office (2x)	Satisfaction with co-location office
	Increased productivity and performance (2x)	Increased productivity and performance
	Expanded network (2x)	Expanded network
Increased informal interaction with third parties (2x)		Increased informal interaction with third parties
Better equipped spaces (2x)	Better equipped spaces	
Increased formal collaboration with third parties	Increased formal collaboration with third parties	Increased formal collaboration with third parties
Agree/slightly agree	neutral	Disagree/slightly disagree

- Possible disadvantages

Table 38. Response OM (highest table) and E (lowest table) of the embassy: possible disadvantages

		Security is not a burden in implementation process
Agree/slightly agree	neutral	Disagree/slightly disagree
	Privacy is not harmed due to presence third parties	Privacy is not harmed due to presence third parties (2x)
	Adequate security (2x)	Adequate security
Work without overstimulation	Work without overstimulation	Work without overstimulation
Agree/slightly agree	neutral	Disagree/slightly disagree

- Possible success factors

Table 39. Response OM (highest table) and E (lowest table) of the embassy: possible success factors

Common awareness		Diversity in co-location partners
Agree/slightly agree	neutral	Disagree/slightly disagree
		Knowledge sharing on regular basis (3x)
Diversity in co-location partners	Diversity in co-location partners (2x)	
Activity based layout (2x)	Activity based layout	
Creation of community with third parties	Creation of community with third parties	Creation of community with third parties
Be yourself without caution	Be yourself without caution	Be yourself without caution
Freedom to work wherever and with whoever	Freedom to work wherever and with whoever	Freedom to work wherever and with whoever
Agree/slightly agree	neutral	Disagree/slightly disagree

Background:

The organization of this co-location embassy is as follows: the Dutch embassy is placed within the property of Country A. The layout found in the survey is in line with what was found in the interview.

Conclusion

What can be concluded, from this interviewee, in terms of success factors is that the success of co-location is mainly dependent on a well thought out initiation process. Thus, asking critical questions is of great important; not only questions on the demands but also on the co-location partner: What do you wish to achieve? With which party? What is the image of the potential co-location partner in general? What is the image of the potential partner in the host country? What influence will this co-location have on the image of the Dutch embassy/consulates? How will the co-location be organized, both in terms of form and layout? What are the responsibilities of both parties? Etc.

The leasing form, openhouse in third party's property, decreases the occurrence of operational issues and extra operational tasks that do occur in an openhouse co-location organized

in the property of MFA. However, it can limit MFA in terms of, for example, changes in layout, privacy, security, etc.

5.3.5 Diplomatic mission 32

Average grade co-location office: 6.8

Co-location:

- Co-location form: Co-located;
- Co-location partner: Country H.

Co-location survey results:

- Amount of respondents:
 - The operational manager, who had only been working in the embassy for four weeks: started in September;
 - Four employees: with a working period between one to six years.
- Co-location layout: Hybrid office.
- Response:
 - Possible advantages

Table 40. Response OM (highest table) and E (lowest table) of the embassy possible advantages

		Flexible behavior
		Better equipped spaces
		Flexible leasing contracts
		Flexibility to open and close
		Decrease capital expenditures
		Flexibility to up-and downscale
		Efficiency in space use
Agree/slightly agree	Environmental benefits	neutral
	Better equipped spaces	Disagree/slightly disagree
	Increased productivity and performance (3x)	Better equipped spaces (3x)
	Increased innovation and creativity (2x)	Increased productivity and performance
		Increased innovation and creativity
Satisfaction with co-location office (3x)		Satisfaction with co-location office
Increased informal interaction with third parties (4x)		
Increased formal collaboration with third parties (3x)	Increased formal collaboration with third parties	
Expanded network (3x)	Expanded network	
Agree/slightly agree	neutral	Disagree/slightly disagree

- Possible disadvantages

Table 41. Response OM (highest table) and E (lowest table) of the embassy: possible disadvantages

	Security is not a burden in implementation process	Financial benefits > Higher leasing costs
Agree/slightly agree	neutral	Disagree/slightly disagree
	Work without overstimulation (2x)	Work without overstimulation (2x)
	Privacy is not harmed due to presence third parties	Privacy is not harmed due to presence third parties (3x)
Adequate security	Adequate security	Adequate security (2x)
Agree/slightly agree	neutral	Disagree/slightly disagree

- Possible success factors

Table 42. Response OM (highest table) and E (lowest table) of the embassy: possible success factors

	Diversity in co-location partners	
	Common awareness	
	Clear implementation goals of MFA	
Agree/slightly agree	neutral	Disagree/slightly disagree
Activity based layout (4x)		
Freedom to work wherever and with whoever (3x)		Freedom to work wherever and with whoever
Creation of community with third parties (3x)	Creation of community with third parties	
Be yourself without caution (3x)	Be yourself without caution	
Knowledge sharing on regular basis (2x)	Knowledge sharing on regular basis	Knowledge sharing on regular basis
Diversity in co-location partners	Diversity in co-location partners	Diversity in co-location partners
Agree/slightly agree	neutral	Disagree/slightly disagree

Background:

The co-location form used within this embassy is the co-located form, in which both the Netherlands and country H are the main tenant. The layout used is a hybrid layout in which, for example, the meeting rooms, kitchen, reception, etc. are shared.

Results/conclusion:

Based on this interview, three main success factors of co-location were found. The first factor has to do with the importance of clear rules and arrangements between the co-location partners on different subjects that are not only relevant between capitals but also on a local level. The second factor is the importance of being able to cooperate reasonably with the co-location partner. This cooperation becomes more manageable when both parties are like-minded, for example, in the way of working or thinking. Like-mindedness can also increase interaction and collaboration. Good cooperation between partners becomes more critical when more spaces, facilities, and services are shared. The last factor is an overarching factor, which is about having a well-prepared process before choosing to co-locate and the actual implementation. Thus, knowing what the needs, goals, wishes, Etc., are when co-locating. Note that this preparation for co-location is not only on the local level but also on the capital level.

5.3.6 Conclusion

The answer to the question central in this section and the interviews is as follows: *Is there an anecdotal success formula that can be applied to MFA?* The table below presents 11 factors that contributed to the success of the co-location embassies/consulates, which were interviewed. These factors found in the interview are similar to the solutions found in the surveys: the most important factor which contributes to the success of co-location is having a well prepared planning phase: why co-location? what are the goals? what are the demands? who is the partner? which rules and agreements are important?, Etc.

Note that the factors in the table were only based on the factors obtained from the interviews, and no input from literature is found in the table below. In chapter 6 the relation between the success factors found in the literature and from the interviews is presented.

Table 43. An overview of the success factors found from the interviews.

Success factor/formula	Description
Good and clear arrangements and rules	This is important for the prevention of a lot of disadvantages and issues, from: security issues to issues caused by shared facilities and services.
	This factor is also important to overcome the differences between parties. However, it is also important to respect and accept differences
	Having clear rules between the co-location partners on different subjects, that are not only relevant between capitals but also on a local level: for example, how to use space, etc.
Open and clear communication	If problems are encountered it is important to have open and clear dialogues with the co-location partner(s).

Success factor/formula	Description
	For good cooperation and to successfully deal with problems, open and clear discussion are extremely important. This becomes more important the more space, facilities, and services are shared.
Size of the co-location	A small co-location makes the co-location more practical and easier to manage, for example: it becomes easier to take each other into account. For example, around 15 or 20.
	Too much of a size difference, will have negative influence on the co-location: it will be considered living with..., instead of co-locating with..... For example, a difference of 50 or 100.
	Increases interaction and collaboration with third parties. The personal factor/chemistry is extremely important for interaction and collaboration. With a small sized co-location it becomes easier to be in contact with each other: personal factor is bigger in small sized settings.
	The addition of an another party creates more dynamics, fresh influences, and increases job satisfaction. This is especially the case for embassies/consulates with a small amount of employees.
Support of co-location from both parties	If the occupants of the co-location embassy/consulate are proud and support their co-location office, the commitment of the occupants to co-location increases and, therefore, the effort to achieve a better implementation will also increase.
The layout	A setting in which a lot is shared contributes to the success of co-location, especially in terms of the social advantages: like interaction, collaboration, etc.
	Locating on the same floor or clustering workspaces between parties, for example, could increase interaction and collaboration.
	Sometimes a little bit of distances is better it avoids frictions, disadvantages, and problems. This distance could be on a low level like having your own private office or having an own entrance.
Mutual benefits for both parties	By having mutual benefits, the effort and commitment from both sides to achieve or maintain these benefits will be balanced.
Do/build on things together	These can both be formal and informal, for example: staff lunches, MT meetings, celebrating a Christmas together, go to consultations together, work on projects together, etc. This increases the connection and sense of togetherness with the partners. Consequently, interaction, collaboration, peaceful co-existence, good ambiance, etc. are increased.
	However, these events should not be forced. There has to be a need from both parties
Common ground between the partners	Increases the will and need to interact and collaborate. Creates more synergy, it clicks better if common ground is found. Thus, being like-minded, for example, in the way of thinking, makes good cooperation easier to achieve.
	Note that having differences between parties is not a problem you don't have to become one, just having a few common grounds is enough to increase interaction and collaboration. And respect the differences to keep a good ambiance and synergy.
	Having large diverging cultures, could make the implementation of co-location more difficult.
Extensive and detailed preparation before the implementation of co-location	Extensive discussion within MFA and the potential new co-location embassy/consulate. Discuss: the core business of the mission, what do you want to achieve (interaction, flexibility, financial aspects, etc.), who do you consider as potential partners, what is the image of the potential partner: in general and in the host country, what effect does the co-location have on your image (including the effect of the partner), etc.
	Good discussion between different parties both on capital level and also on local level between the occupants (at least between the leaders). Discussion points: differences and assess if you can accept them, possible mutual benefits, level of support, set clear rules and arrangements, find common ground, etc.
	Now it is often seen that the decision making only happens between headquarters, however, since the occupants of the co-locations need to make sure that the co-location runs smoothly it is critical to involve them in the decision making process. Thus, not only decision making between capitals, but involve the local level too (at least the leaders or managers).
Take a neutral stance: the policy	Formulate the no, unless... policy more neutrally. The current negative formulation stops the initiative even before the actual start. Be neutral, don't push the co-location away with a negative policy, but careful consider the options and weight the advantages and disadvantages against each other and against the demands and objectives of the particular embassy/consulate.

Success factor/formula	Description
Determine the demands and objective that need to be achieved with the implementation of co-location before the start of the co-location clearly.	Success of co-location is not only determines with social advantages, a co-location embassy/consulate can also be success due to the achievement of practical benefits,(for example: optimal use of property, generate rent, etc.). It is, therefore, extremely important to determine the objectives per embassy/consulate before the start of the co-location; having clear objectives makes it easier to communicate to the occupants and to work towards the achievement of those benefits.

5.4 Conclusion

The main question central in this chapter is as follows: *What is the performance and perception of the current co-location embassies/consulates within MFA, and what can be learned from these current cases?* The answer to this question is obtained from the executed surveys and interviews.

What can be concluded from the survey results is that there is a low achievement of social and operational advantages of co-location. This low achievement is mainly due to the dominantly used layouts (executive suites and serviced offices) and the co-location form (openhouse organized in the property of MFA). In the case of the layouts, the executive suites and serviced offices score the lowest in the achievement of socially related advantages. However, these layouts score the best in avoiding socially related disadvantages, such as privacy issues, overstimulation, Etc.; note that the survey does not provide strong evidence for this statement due to the employees' low response rate. As for the openhouse leasing form organized in the property of MFA, it was found that the potential operational advantages of co-location, like flexibility, are not achieved. The main advantages of such a form are the efficient use of excess space and financial benefits. This dominantly used leasing form does, however, increase the occurrence of operational problems, which is also one of the causes of the negative perception of co-location within MFA, especially from the perspective of Operational and Real Estate Managers. Aside from the problems mentioned in the survey, some solutions were also given; a solution found multiple times was a better preparation of co-location and setting clear arrangements and rules. In the case of the perception of co-location as an adding value tool, it can be said that the perception of co-location as an adding value tool is good.

Based on the interviews, an anecdotal success formula was developed, consisting of 11 success factors. The main message of this success formula is that most factors fall back to the fact that the level of preparation determines the success of co-location. The more extensive and detailed the preparation is, the more successful the co-location will be. In other words, the decision-making process should be thought out well. What do you wish to achieve? Why do you wish to co-locate? With whom are you co-locating? Where are you co-locating? What are the wishes of the co-location partner? What image does the co-location partner have? Are there mutual benefits for both parties? Etc.

Thus, it can be concluded that there is room for improvement in the current co-location cases. Especially in terms of the low performance and the negative perception of co-location, which are mainly caused by the choices made (the layout, form, partner, Etc.) and a lack of a proper preparation process (for example, as found in Kinshasa and the survey). The lack of a good planning process is also seen in the fact that there is no supporting strategy for co-location within MFA and in the current policy (which takes an opposing stance: that stops co-location before even starting). In the following chapter, a step-by-step plan is presented that includes a more detailed planning process to make the decision making and implementation of co-location easier and add value to MFA.

Chapter 6: The step-by-step plan to adding value

This chapter will present the answer to the main research question of this thesis: *How can co-location be used as a tool within the CRE strategy and as a part of the CRE portfolio that adds more value to the organization, specifically in the Ministry of Foreign Affairs?*

The information obtained from all the preceding chapters will be combined into the step-by-step plan presented in this chapter: a decision tree, SWOT analysis, success formula, and possible assessment KPI's. These tools can be used to make the future implementation of co-location within the Ministry of Foreign Affairs (MFA) easier. Moreover, the step-by-step plan's products can be used as management tools to ensure a good preparation process for co-location and that the co-location intervention will positively impact the organization (add value to MFA).

6.1 Introduction

The step-by-step plan and the associated tools will be based on the phases and steps of the extended Value Adding Management model developed by Jensen and van der Voordt (2016) (refer back to chapter 3 for more details). This model is once again shown below:

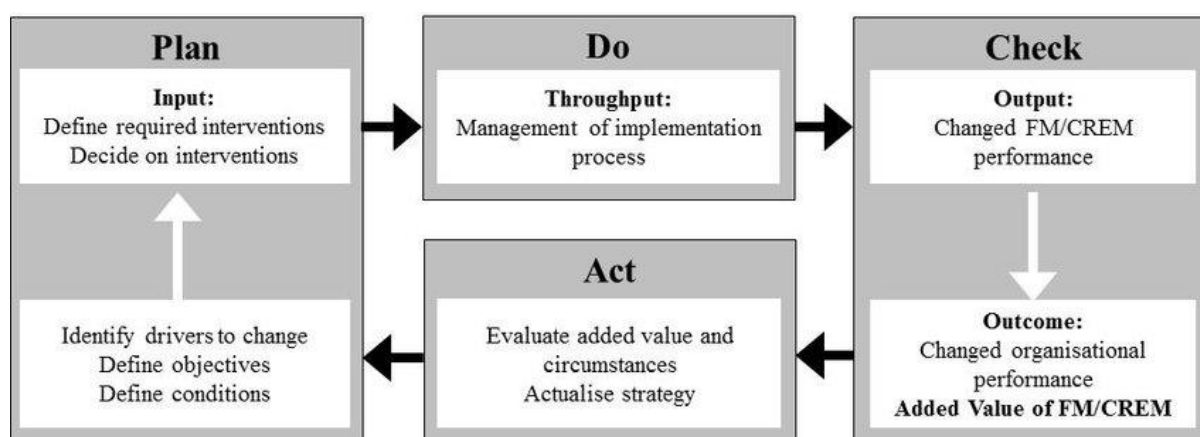


Figure 19. The extended VAM model by Jensen and van der Voordt (2016, p.301).

As shown in figure 19, the model consists of 4 phases: the plan, do, check, and act phase. This chapter will also be divided into these four phases. For the plan phase, the first few steps were already presented in detail in chapter 4 and 5 (this part falls under the lower block in the plan phase of the model): *define drivers of change, objectives, and conditions of MFA (includes the following aspects: objectives and conditions of the organization (demands of stakeholders and strategic analysis of the strategies of MFA (includes the assessment of alignment and performance of the CRE portfolio)), relevant adding value parameters, and an identification of the current situation of the co-location cases.*

The last two steps of the plan phase will be presented in this final chapter: mapping the co-location alternatives interesting/relevant for the Ministry of Foreign Affairs (MFA), and assessing the possible co-location alternatives for the final decision making. Selecting the most suitable alternative depends on the demands of MFA. Hence, it is crucial to place the possible alternatives against the organization's demands for a better selection. These three steps will all be included within the decision tree, which will be presented at the end of the plan phase; note that the decision tree will also incorporate relevant success factors based on the success formula presented in the Do phase.

The chapter will then proceed to the second phase: the do phase. This phase is based on chapter two and chapter five: the success factors found in the literature, the anecdotal success formula

based on the results of the interviews, and solutions/factors found from the survey. As mentioned in chapter three, the do phase is about the implementation the chosen CRE intervention. Thus, to ensure a well implemented co-location, advice will be given based on the on the developed success formula. The final products of this phase, are two management tools: a success formula (the success factors and their conditions), and a recommendation of elements that should be included in the MoU.

Following this second phase, the step-by-step plan will then proceed to the last two phases: check and act; the steps in these two phases are necessary to perform after implementing the chosen co-location alternative. In the step-by-step plan of this thesis, the check phase will be a recommendation list consisting of possible KPI's that can be used to assess the implementation of the co-location. The act phase will be shaped as an exemplary section that will provide an example of how to deal with the check phase results.

The figure below provides a detailed presentation on the remaining actions of the step-by-step plan presented in this chapter. Before starting each phase, this diagram will present the steps taken in a particular section.

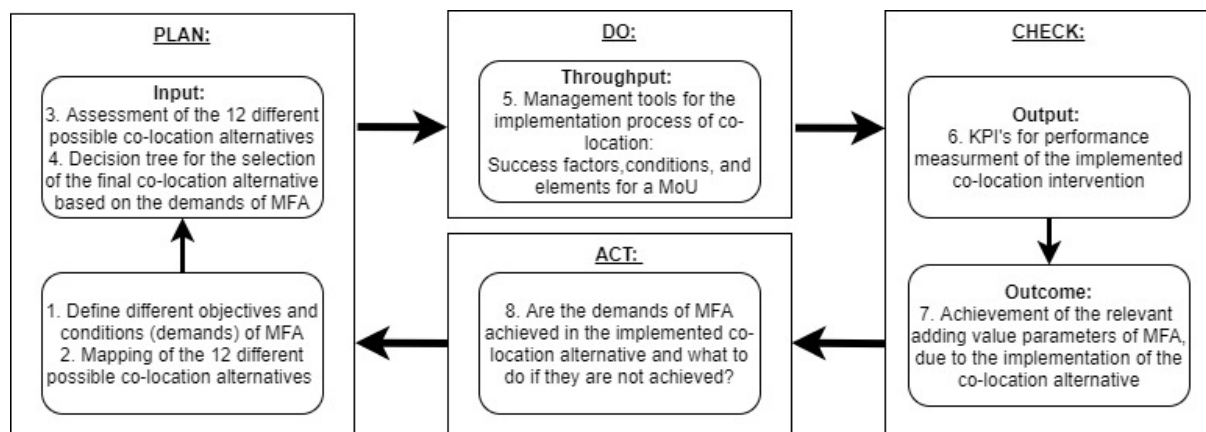


Figure 20. Overview of remaining steps taken in chapter 6 (simplified version of the extended VAM model by Jensen and van der Voordt (2016)).

6.2 Plan phase

This section will discuss the following actions of the step-by-step plan (see figure 21): first, the different demand clusters of MFA will be presented. This will then be followed by a short overview of the possible co-location alternatives. Continuing with an assessment of these different alternatives with the use of a SWOT analysis. The assessed co-location alternatives will be placed against the demand clusters using a decision tree.

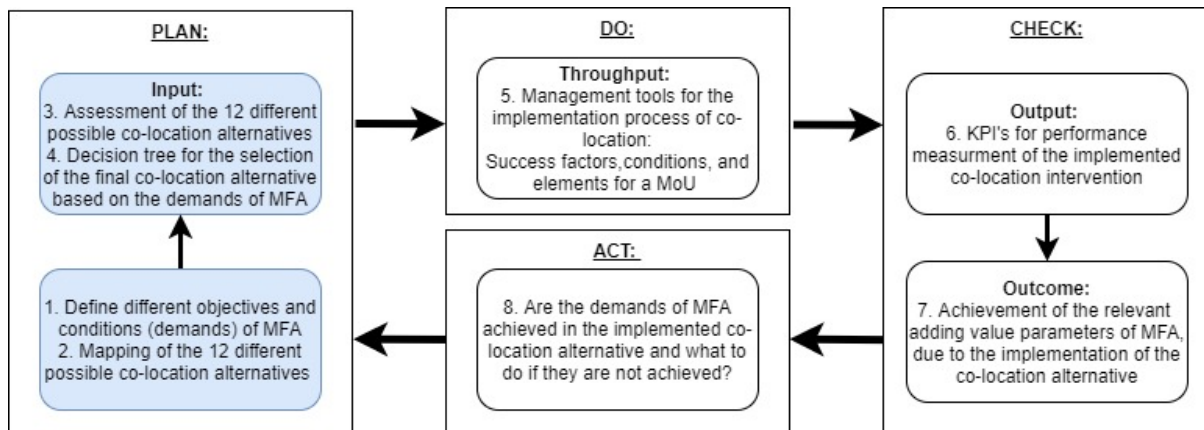


Figure 21. Steps taken in the plan phase based on the extended VAM model of Jensen and van der Voordt (2016)

6.2.1 Demand clusters

It is essential to first determine the different possible demands of MFA before it is possible to map, assess, and select an appropriate co-location alternative. This step is important because the demands relevant for each embassy/consulate could differ and, therefore, the best solution differs per case. In other words, the starting point of the step-by-step plan and the decision tree is to determine which demands are essential for the particular situation: What goals do MFA (in general) and the embassy/consulate wish to achieve? What are the demands of the embassy/consulate and MFA? Which partner fits best in this particular situation? What form of co-location fits best within the demands of the embassy and MFA? Etc.

Note that co-location is not the only possible solution for the achievement of the different demands of MFA. Hence, as a manager it is important to not exclude any other CRE intervention while making a decision. Thus, ask questions like, What objectives and wishes need to be achieved? What are possible options? What do the options offer (an assessment of the possibilities)?, Etc. Thus, if co-location is considered as an option, this step-by-step plan can be used for a better decision making with regards to co-location: Is co-location a good option? And what does co-location offer that other CRE interventions do not offer (an assessment)?

The different demands used in the step-by-step plan, the decision tree, are based on the nine stakeholder demand subjects presented in section 4.1.1. These subjects have some overlapping aspects, therefore, they have been categorized into 4 different clusters:

1. **Conditional demands:** These demands are important to incorporate in each CRE decision making process and, therefore, in each new case of co-location. Hence, the cluster is the starting point of the decision tree.
 - a. Legality: Incorporate legality, in terms of law, treaties and policies, in every CRE decision making process. For example: ensure inviolability, incorporate flag, emblem, shield, Etc.
 - b. Safety and health: Ensure safety (security) and health of employees (Safety measures and health (for example: satisfaction, productivity, Etc.)), the Netherlands (Safety), and the world (encourage international safety) in each CRE decision.
 - c. Consular assistance: Provide proper consular assistance in every Corporate Real Estate. This is top priority as it is the primary function of MFA. Includes: helping Dutch people abroad with good support and consular assistance.
2. **Flexibility and efficiency demands:**
 - a. Flexible network organization: Includes the aim of becoming flexible and efficient in the deployment of people (landing places for new colleagues), resources, and services; which includes flexibility and efficiency in CRE (for example: flexible layout, flexibility in opening and closing, and up-and downscaling).

- b. Long-term resilience: Covers the long-term resilience of MFA policies and strategies in general (feasibility, efficiency, integration of knowledge, flexibility, Etc.) and specifically of CRE strategies and portfolio (feasibility, flexibility, proactive strategies, Etc.). The importance of long term resilience, especially in terms of CRE, is dependent per country. In countries with a lot of risks, resilience in the CRE is extremely important, hence, flexibility in leasing conditions would, for example, improve this resilience. In contrast, in countries with more stability, long-term resilience would be approached differently (for example, for long term CRE, owning would be more obvious).
 - c. Modernization: Includes the modernization and digitalization of the work environment and process, and of the consular assistance provided by MFA. Due to modernization and digitalization the workspace environment changes, for example, more excess space.
 - d. Environmental sustainability: Incorporating environmental sustainability into the decision making. For instance, ensure availability of sustainable resources for everyone, incorporate sustainable measures in CRE decisions, Etc.
- 3. **Image demands:**
 - a. Representation: To represent the Netherlands abroad: a good international reputation, promote a competitive position, strengthen and represent the Dutch culture sector, fitting, representative (hospitable, open, transparent, and equal), and attractive CRE. The desired image is dependent on the environment of the country in which an embassy/consulate is located. In some countries, the traditional embassies/consulates that represent the Dutch culture are important, whereas, in some countries innovative and modern approaches are more appreciated.
 - b. Modernization: Modernizing and digitalizing is also related to the desired image of MFA. With this demand MFA could showcase itself as the frontrunner in modernization, for example: a frontrunner in modern and innovative work environments, in technology, in being hospitable, open, equal and transparent, Etc.
- 4. **Network and collaboration demands:**
 - a. International demands: Promote an international trade economy, open world economy, peace, stability, legal order, prosperity, Etc. Thus, strengthening the international function of MFA is important. This requires of the international network to be strengthened, hence, CRE should facilitate meeting and collaboration spaces.
 - b. Economic and social sustainability: Stimulate economic (sustainable economic developments, globalization, Etc.), and social (increase employment in development countries, responsible use of tax money, Etc.) sustainability. This aspect also differs per country, for example, in a developing country in Africa it would be interesting to stimulate social sustainability by increasing employment.
 - c. Flexible network organization: Strengthening and broadening the network of MFA in both the Netherlands and worldwide (a flexible network) by stimulating meeting and collaboration (facilitate meeting and collaboration opportunities and spaces in CRE).

Note that a particular embassy/consulate does not necessarily fit within one of the four clusters. A specific embassy/consulate could consider one or more clusters to be important. The sequence in which the demand clusters were presented is not random. Especially the placement of the first cluster, conditional demands, is critical. As already stated above, it is mandatory to incorporate this cluster in each co-location case because certain limitations are caused due to these conditional demands (more on this in the following sections and decision tree). Thus, it is recommended to start at the first demand, legality, and then following through to the other demands of the cluster. After going through these conditional demands, the remaining three demand clusters are selected based

on the needs and goals of a particular case. It is highly recommended to first read through each cluster before selecting the relevant demands; this will provide better and more robust decision making with regards to co-location.

6.2.2 Mapping of the different co-location alternatives

After determining which demands are needed in a particular case, it is essential to know all the available possibilities for co-location. One of the conclusions of chapter 2 is that there are three possible leasing forms and four layouts of co-location considered in this thesis. Based on these different leasing forms and layouts, 12 different alternatives of co-location are found. See the table below for the alternatives and description.

Table 44. All possible co-location alternatives for the co-location considered in this thesis.

	Executive suites	Serviced office	Hybrid office	Rented desk
Openhouse	Organization opens up its own property for third parties. Only the property (each organization has its own office) and some basic facilities (toilet, parking, etc.) and services (basic administrative reception, internet, security) are shared.	Organization opens up its own property for third parties. The property (each organization own office) and facilities (for instance, the kitchen, canteen, lounge areas, gym, toilets, parking lots, Etc.) and business services (reception, internet, security, printers, cleaning, Etc.) are shared	Organization opens up its own property for third parties. All facilities and services are shared. In terms of layout the office consist of private offices for each organization and an open plan workspace which is entirely shared.	Organization opens up its own property for third parties. This layout does not contain private offices but only consists of an open plan workspace in which everything is shared and desks are rented
Co-located	Different organization decide to co-locate together by both becoming the main tenant or owner of the same property. Only the property (each organization has its own office) and some basic facilities (toilet, parking, etc.) and services (basic administrative reception, internet, security) are shared.	Different organization decide to co-locate together by both becoming the main tenant or owner of the same property. The property (each organization own office) and facilities (for instance, the kitchen, canteen, lounge areas, gym, toilets, parking lots, Etc.) and business services (reception, internet, security, printers, cleaning, Etc.) are shared	Different organization decide to co-locate together by both becoming the main tenant or owner of the same property. All facilities and services are shared. In terms of layout the office consist of private offices for each organization and an open plan workspace which is entirely shared.	Different organization decide to co-locate together by both becoming the main tenant or owner of the same property. This layout does not contain private offices but only consists of an open plan workspace in which everything is shared and desks are rented
Coworking	When organizations decide to locate themselves based on a membership in an office renting facility (for example, WeWork, Spaces, Regus, Etc.). Only the property (each organization has its own office) and some basic facilities (toilet, parking, etc.) and services (basic administrative reception, internet, security) are shared.	When organizations decide to locate themselves based on a membership in an office renting facility (for example, WeWork, Spaces, Regus, Etc.). The property (each organization own office) and facilities (for instance, the kitchen, canteen, lounge areas, gym, toilets, parking lots, Etc.) and business services (reception, internet, security, printers, cleaning, Etc.) are shared	When organizations decide to locate themselves based on a membership in an office renting facility (for example, WeWork, Spaces, Regus, Etc.). All facilities and services are shared. In terms of layout the office consist of private offices for each organization and an open plan workspace which is entirely shared.	When organizations decide to locate themselves based on a membership in an office renting facility (for example, WeWork, Spaces, Regus, Etc.). This layout does not contain private offices but only consists of an open plan workspace in which everything is shared and desks are rented

As concluded in chapter 4, there are some limitations in terms of possible alternatives of co-location. Therefore, a distinction will be made: possibilities for co-location with countries and possibilities for co-location with the private sector.

If it is decided that the co-location will occur with the diplomatic representations of other countries: all alternatives, mapped in the table above, are possible because the co-location with

countries does not cause any limitations from a legal perspective due to the diplomatic immunity they also enjoy. For each co-location form, the following statements can be made:

- Openhouse:
 - Organized in the property of MFA: currently the most dominantly used form, however, note that issues such as increased operational tasks can occur.
 - In the property of a third party: Closest to the idealistic coworking form, MFA can benefit from advantages such as: faster opening and closing and no extra operational tasks. However, unlike the coworking form, MFA will have less say in how things should be dealt with inside the premises of the third party; this was also mentioned as one of the issues in the survey and interview.
- Co-located:
 - Less operational tasks than the openhouse form (in own property), due to the shared responsibilities and risks. But a lot of the operational benefits of co-location are lost in this form, see the SWOT analysis (section 6.2.3) for more details.
- Coworking:
 - Most ideal form of co-location, because one can benefit from the pleasures of co-location without experiencing the burdens that occur in the other two forms, such as: the increase of operational tasks. However, the use of coworking is less realistic than the other two forms, due to the organizational issues which occur; for example: it takes a lot of convincing of the co-location partner. But, if MFA manages to find a country that is also interested in co-locating in a coworking space, it would be highly recommended to do so.

The selection of the best layout is also dependent on the demands of the particular embassy/consulate, thus, with the use of the decision tree and the SWOT analysis a decision should be made.

Unlike in co-location with countries, there are some limitations if MFA wishes to co-locate with private parties, including semi-governmental organizations (because just like private parties, these organizations do not enjoy diplomatic immunity). For the first limitation with regards to the forms, the following applies:

- Openhouse:
 - Short-term stay: the use of this form is possible, however, MFA will then take on a competitive role. Moreover, it is not looked upon well if a governmental party competes with a private party. Even in the orange corners initiative, the startups are placed within the embassy in one case, in all other cases the startups are located in other places.
 - Long-term stay: **Only possible for semi-governmental parties**, but not for other private parties due to legal issues as mentioned in section 4.5, for example, level playing field issues, tax issues, Etc.
- Co-located: **Not possible** from a legal perspective, the level playing field is disturbed.
- **Co-working:** Co-location in this form is possible with all private parties regardless of size, type, and time. In case of this form, MFA can benefit from the co-location with private parties, without encountering any legal issues.

With regards to the different layouts, the following limitation occurs:

- **The rented desks layout is not recommended to use in case of embassies, and not possible to use in consulates.** This is due to the treaty of Vienna, to be more specific due to the diplomatic immunity, which private parties do not enjoy (see section 4.5 for more details).
 - In embassies, it is not impossible to use a rented desk layout because in extreme situation the embassy function can be placed within the residence of the ambassador. However, this is not really realistic to implement within MFA.

The limitations caused by the different types of co-location partners showcase the importance of starting with the conditional demand clusters when using the decision tree, more specifically, the legality demand as a starting point. Besides, the survey results also showed some signs of these limitations. It was found from the survey that diversity in the co-location partners (especially co-locating with private parties) is not positively perceived; this negative perception can partly be explained by the limitations that occur when co-locating with private parties.

6.2.3 Assessment of alternatives

For the selection of the best alternative, an assessment of the possible alternatives has to be executed. In the book of Jensen and van der Voordt (2016), it was mentioned that a possible method for the assessment of the different alternatives is the SWOT analysis. The SWOT analysis is presented in the table below for all the 12 alternatives. This analysis, assesses the alternatives regardless of partner (country or private party) or type (embassy or consulate); which is also the reason why the decision tree and SWOT analysis have to be used together. Note that all possible advantages and disadvantages of co-location found from literature, as presented in section 2.2 (see link to section in table description), are used for the assessment, and nothing is disregarded based on the survey results.

Table 45. SWOT analysis based on the possible advantages and disadvantages of co-location as presented in section 2.2. Please refer to [tables 5 and 6](#) for a complete overview of the advantages, disadvantages, description, and [sources](#).

	Executive suites	Serviced office	Hybrid office	Rented desk
Openhouse	Strength: Unique selling point (openness and accessibility), Optimization of portfolio, Efficient use of space, Financial benefit in the form of rent, Openhouse in third party's property: Faster opening and closing, low commitment (no extra operational tasks)	Strength: Unique selling point (openness and accessibility), Optimization of portfolio, Efficient use of space, Financial benefit in the form of rent, Increased interaction, Openhouse in third party's property: Faster opening and closing, low commitment (no extra operational tasks)	Strength: Unique selling point (openness and accessibility), Optimization of portfolio, Efficient use of space, Financial benefit in the form of rent, Increased interaction, Increased collaboration, Expansion of network, Increased job satisfaction, Improve knowledge sharing Openhouse in third party's property: Faster opening and closing, low commitment (no extra operational tasks)	Strength: Unique selling point (openness and accessibility), Optimization of portfolio, Efficient use of space, Financial benefit in the form of rent, Increased interaction, Increased collaboration, Expansion of network, Increased job satisfaction, Improve knowledge sharing, Increased productivity and performance, Stimulation of innovation and creativity, Openhouse in third party's property: Faster opening and closing, low commitment (no extra operational tasks)
	Weakness: No social advantages, In need for a lot of commitment (extra operational tasks), No flexible leasing options, No flexibility in opening and closing Openhouse in third party's property: Less say in layout, how things should be dealt with, etc.	Weakness: In need for a lot of commitment (extra operational tasks), No flexible leasing options, No flexibility in opening and closing Openhouse in third party's property: Less say in layout, how things should be dealt with, etc.	Weakness: In need for a lot of commitment (extra operational tasks), No flexible leasing options, No flexibility in opening and closing Openhouse in third party's property: Less say in layout, how things should be dealt with, etc.	Weakness: In need for a lot of commitment (extra operational tasks), No flexible leasing options, No flexibility in opening and closing, Harmed privacy, Security issues, Overstimulation Openhouse in third party's property: Less say in layout, how things should be dealt with, etc.

	Executive suites	Serviced office	Hybrid office	Rented desk
	Privacy is harmed	Privacy is harmed	Privacy is harmed	Privacy is harmed
	Opportunities: Better equipped spaces, Cost effectiveness, Attract best talent, Environmental benefits, Increased interaction	Opportunities: Better equipped spaces, Cost effectiveness, Attract best talent, Environmental benefits, Increased collaboration, Expansion of network, Increased job satisfaction, Improve knowledge sharing	Opportunities: Better equipped spaces, Cost effectiveness, Attract best talent, Environmental benefits, Stimulation of innovation and creativity, Increased productivity and performance	Opportunities: Better equipped spaces, Cost effectiveness, Attract best talent, Environmental benefits
	Threats: Lose flexibility to up-and downscale in own property	Threats: Lose flexibility to up-and downscale in own property	Threats: Lose flexibility to up-and downscale in own property, Harmed privacy, Security issues, Overstimulation	Threats: Lose flexibility to up-and downscale in own property,
Co-located	Strength: Unique selling point (openness and accessibility), Cost effectiveness, Shared responsibility, Shared risks	Strength: Unique selling point (openness and accessibility), Cost effectiveness, Shared responsibility, Shared risks, Increased interaction	Strength: Unique selling point (openness and accessibility), Cost effectiveness, Shared responsibility, Shared risks, Increased interaction, Increased collaboration, Expansion of network, Increased job satisfaction, Improve knowledge sharing	Strength: Unique selling point (openness and accessibility), Cost effectiveness, Shared responsibility, Shared risks, Increased interaction, Increased collaboration, Expansion of network, Increased job satisfaction, Improve knowledge sharing, Stimulation of innovation and creativity, Increased productivity and performance,
	Weakness: No social advantages, No flexible leasing options, No flexibility in opening and closing, No flexibility to up and down scale	Weakness: No flexible leasing options, No flexibility in opening and closing, No flexibility to up and down scale	Weakness: No flexible leasing options, No flexibility in opening and closing, No flexibility to up and down scale	Weakness: No flexible leasing options, No flexibility in opening and closing, No flexibility to up and down scale, Harmed privacy, Security issues, Overstimulation
	Opportunities: Stretches limits of RE, Attraction best talents, Optimization of portfolio, Environmental benefit, Decrease capital expenditures, Better equipped spaces, Increased interaction,	Opportunities: Stretches limits of RE, Attraction best talents, Optimization of portfolio, Environmental benefit, Decrease capital expenditures, Better equipped spaces Increased collaboration, Expansion of network, Increased job satisfaction, Improve knowledge sharing,	Opportunities: Stretches limits of RE, Attraction best talents, Optimization of portfolio, Environmental benefit, Decrease capital expenditures, Better equipped spaces , Stimulation of innovation and creativity, Increased productivity and performance,	Opportunities: Stretches limits of RE, Attraction best talents, Optimization of portfolio, Environmental benefit, Decrease capital expenditures, Better equipped spaces

	Executive suites	Serviced office	Hybrid office	Rented desk
	Threats: Disagreement on who owns building, In need for extra commitment (more operational tasks), Alignment issues	Threats: Disagreement on who owns building, In need for extra commitment (more operational tasks), Alignment issues	Threats: Disagreement on who owns building, In need for extra commitment (more operational tasks), Alignment issues, Harmed privacy, Security issues, Overstimulation	Threats: Disagreement on who owns building, In need for extra commitment (more operational tasks), Alignment issues
Coworking	Strength: Unique selling point (openness and accessibility), Increased flexibility to up-and down scale, Increased flexibility to open and close (efficiency in time), Cost effectiveness, Stretches limits of RE, Decreased capital expenditures, Better equipped spaces, Low commitment	Strength: Unique selling point (openness and accessibility), Increased flexibility to up-and down scale, Increased flexibility to open and close (efficiency in time), Cost effectiveness, Stretches limits of RE, Decreased capital expenditures, Better equipped spaces, Low commitment, Increased interaction	Strength: Unique selling point (openness and accessibility), Increased flexibility to up-and down scale, Increased flexibility to open and close (efficiency in time), Cost effectiveness, Stretches limits of RE, Decreased capital expenditures, Better equipped spaces, Low commitment, Increased interaction, Increased collaboration, Expansion of network, Increased job satisfaction, Improve knowledge sharing	Strength: Unique selling point (openness and accessibility), Increased flexibility to up-and down scale, Increased flexibility to open and close (efficiency in time), Cost effectiveness, Stretches limits of RE, Decreased capital expenditures, Better equipped spaces, Low commitment, Increased interaction, Increased collaboration, Expansion of network, Increased job satisfaction, Improve knowledge sharing, Stimulation of innovation and creativity, Increased productivity and performance,
	Weakness: Higher leasing costs, No social advantages	Weakness: Higher leasing costs	Weakness: Higher leasing costs	Weakness: Higher leasing costs, Harmed privacy, Security issues, Overstimulation
	Opportunities: Attraction best talents, Optimization of portfolio, Environmental benefits, Good location and accessibility, Increased interaction, Diversity in collaboration	Opportunities: Attraction best talents, Optimization of portfolio, Environmental benefits, Good location and accessibility, Increased collaboration, Diversity in collaboration, Expansion of network, Increased job satisfaction, Improve knowledge sharing	Opportunities: Attraction best talents, Optimization of portfolio, Environmental benefits, Good location and accessibility, Diversity in collaboration, Stimulation of innovation and creativity, Increased productivity and performance	Opportunities: Attraction best talents, Optimization of portfolio, Environmental benefits, Good location and accessibility, Diversity in collaboration,
	Threats: Lose representativeness in terms of old traditional architecture	Threats: Lose representativeness in terms of old traditional architecture	Threats: Lose representativeness in terms of old traditional architecture, Harmed privacy, Security issues, Overstimulation	Threats: Lose representativeness in terms of old traditional architecture,

Just like the survey, this SWOT analysis showcases that the achievement of the socially related advantages and disadvantages are dependent on the layouts and the operationally related advantages and disadvantages are dependent on the form.

The SWOT analysis should be used together with the decision tree to select the best solution. The decision tree is used to narrow down the amount of alternative. Thus, in the cases the decision tree offers a few options, the SWOT analysis can be used to weigh the remaining choices

against each other and, therefore, help with the final decision making. Thus, the SWOT analysis can be used to place different options against each other without the need of further research. As already mentioned before, understanding what the goals, needs, Etc., are per case is the first critical step; after this step, continue with the narrowing down of options and the selection of the best solution using the decision tree and the SWOT analysis.

6.2.4 The decision tree

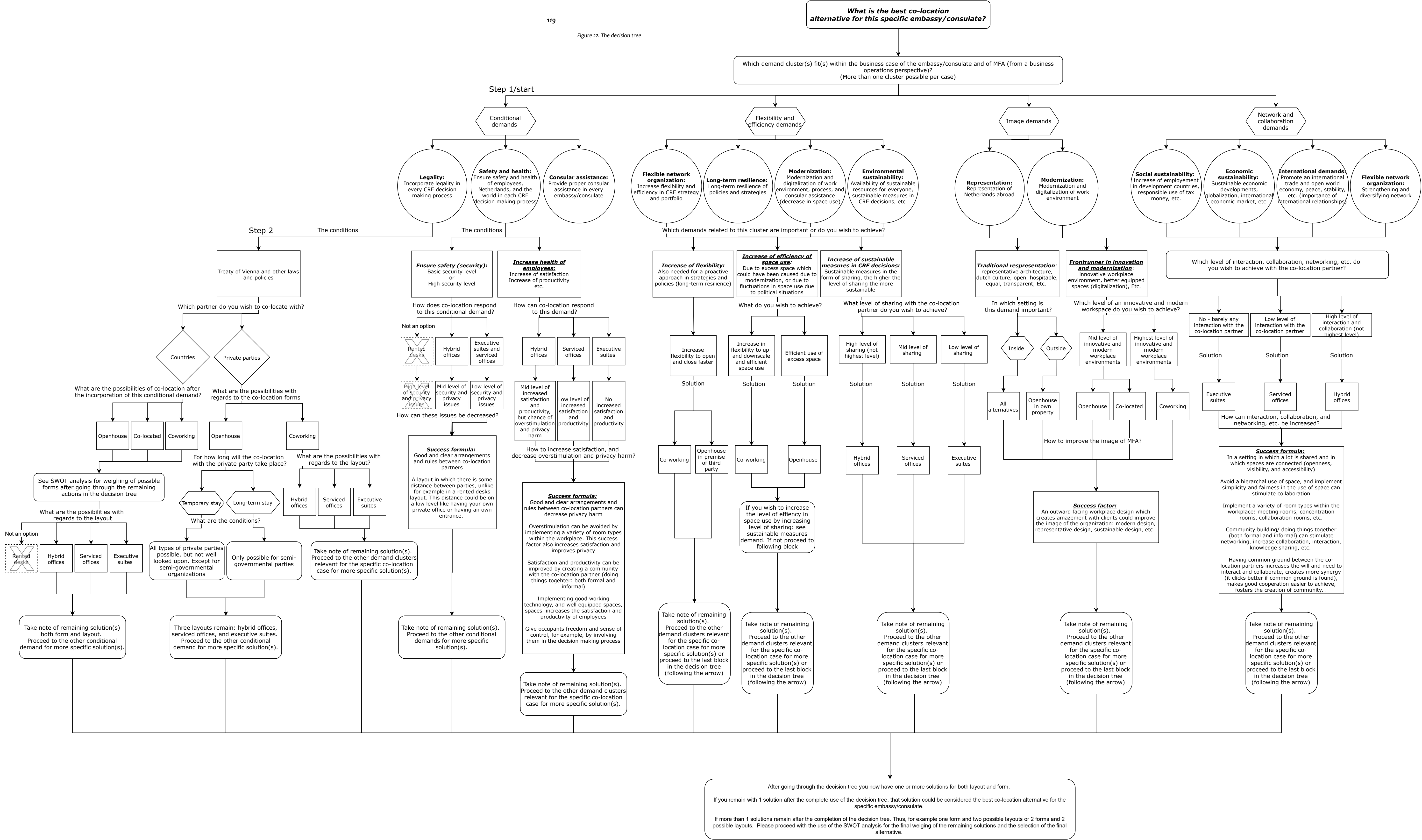
The main question which can be answered with the use of the decision tree is *What is the best co-location alternative for a specific embassy/consulate?* The selection of an alternative is dependent on demands of the embassy/consulates and MFA. Hence, the decision tree is started with a selection of the relevant demand clusters for the embassy/consulate in question. The first starting point in terms of the demands clusters are the conditional demands, specifically: legality. After going through the steps of the legality demand, continue with the other conditional demands and the remaining three clusters. As already mentioned before, it is recommended to first read through each cluster before selecting the relevant demands; this will provide better and more robust decision making with regards to co-location. Note that a variety of demand clusters can be picked per case, and the weighing between these profiles can be done on own initiative. After the selection of the relevant demands, go through the steps of the decision tree related to those selected demand clusters. After completing this action, one or a few options of the co-location alternatives remain. If one alternative remains (thus, one recommended form and one layout), this can then be considered the best alternative for the specific embassy/consulate. In case more than one alternative remains, for instance, one form and two layouts or two form and two layouts, use the SWOT analysis for the weighing between the remaining alternatives. For example, write down the results of the SWOT analysis for each remaining layout or form, and determine which layout and form fits best within the demands of the specific embassy/consulate. The form and layout that scored the best based on the SWOT analysis is then the best solution.

It is critical to restart the step-by-step plan again when a new co-location case is considered because each embassy/consulate has an unique context. During the selection of an alternative, being critical is essential, hence, starting with questions like What do I wish to achieve? Who is the best co-location partner? What are the pros and cons?, Etc., is critical for the success of co-location; this statement will also become more apparent in the Do phase with the presentation of the success formula of co-location.

It can be concluded, that depending on the objectives, needs, wishes, Etc. (demands), an alternative could be chosen with the use of the decision tree and the SWOT analysis. By making CRE decisions based on the demands of an organization, more value can be added to the organization; as concluded in chapter 4, the different demands of MFA are related to specific adding value parameters, hence, achieving these demands with the use of co-location could result in more value being added to the organization as a whole.

Note that the decision has not been validated within MFA yet due to the scope of this research (lack of time). It is, therefore, recommended to first validate the decision tree and SWOT analysis before the actual use.

Figure 22. The decision tree



6.3 Do phase

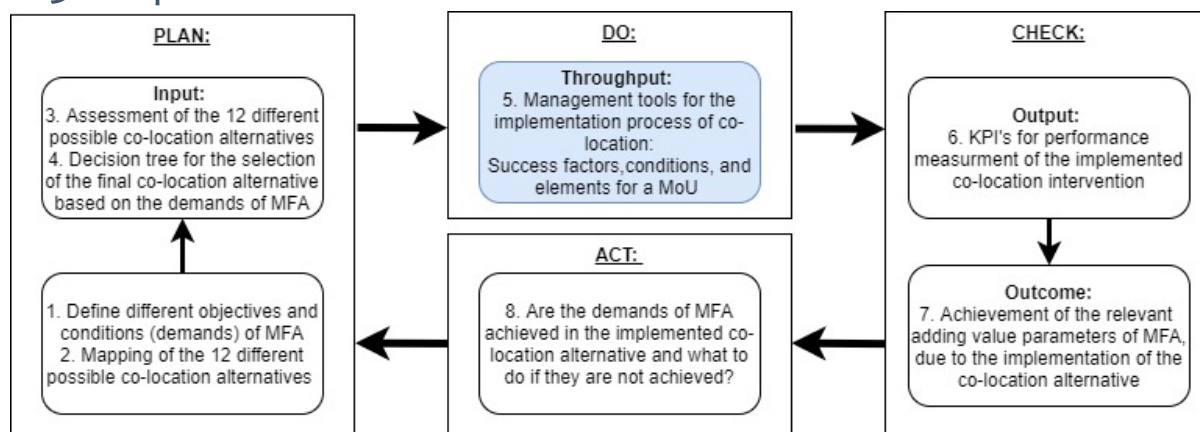


Figure 23. Steps taken in the do phase based on the extended VAM model of Jensen and van der Voordt (2016)

After selecting the best alternative, it is essential to manage the chosen alternatives as well as possible (see figure 23). Thus, the question central in this phase is what tools can be used to improve the implementation of the co-location? How can the co-location be more successful? In this thesis, it is suggested that the implementation of co-location can be improved using the success formula presented in the table below. This success formula has been developed by combining the possible success factors found in the literature (section 2.4) and the success factors found in the interviews (section 5.3); the success factors found in the surveys are the same as the results of the interview, hence, these were also included in the success formula. The first column of the table presents the success factors. Followed by a description of the (possible) definitions related to the factors. The last column presents the outcome of these possible success factors (what is improved or achieved by implementing a specific success factor). The justification of the sequence used to present the success factors will be explained after the table.

The success formula has not been tested yet within MFA (in terms of use, ease of understanding the factors, effectiveness of factors, Etc.), and is, therefore, recommended to be tested for future research.

Table 46. The final success formula based on literature and interview results.

Nr.	Combined success formula	Description	Possible advantage and disadvantages of co-location
1	Take a neutral stance: the policy (Interview and section 2.4)	Formulate the no, unless... policy more neutrally. The current negative formulation stops the initiative even before the actual start. Be neutral, don't push the co-location away with a negative policy, but carefully consider the options and weight the advantages and disadvantages against each other and against the demands and objectives of the particular embassy/consulate. (Interview)	Overall performance of co-location,
2	Extensive and detailed preparation before the implementation of co-location (Interview and section 2.4)	Internal extensive discussions within MFA and the potential new co-location embassy/consulate are needed for a successful co-location; critical to also discuss with potential employees of the embassy/consulate. Discussion points: the core business of the mission, what do you want to achieve (interaction, flexibility, financial aspects, etc.), who do you consider as potential partners, what is the image of the potential partner: in general and in the host country, what effect does the co-location have on your image (including the effect of the partner), Etc. (Interview)	Better implementation of co-location in general
		External discussion between MFA and the co-location partner both on capital level and also on local level between the occupants (at least between the leaders).	Better implementation of co-location in general Prevention of the occurrence of problems

Nr.	Combined success formula	Description	Possible advantage and disadvantages of co-location
3	Freedom and sense of control (section 2.4 and interview)	Discussion points: differences and assess if you can accept them, possible mutual benefits, level of support, set clear rules and arrangements, find common ground, etc. (Interview)	
		Prepare occupiers for co-location with the use of serious gaming. Serious gaming could change the culture and behavior (for example, become more open for collaboration and interaction with third parties), and it could provide occupiers with more information on co-location and its possible advantages and disadvantages. Due to serious gaming, learning through a game, the following points are promoted: emotional involvement, active engagement, give policy makers constant feedback, Etc. (van Liempt, 2012)	Better implementation of co-location in general, Stimulate commitment and support for co-location, Increase interaction, collaboration, network expansions, and knowledge sharing
		A high level of control can be achieved by involving users of co-location buildings in the decision-making process, for instance: letting the employees decide with whom they would like to co-locate. Now it is often seen within MFA that the decision making only happens on a capital level between headquarters. However, since the occupants of the co-locations need to make sure that the co-location runs smoothly it is critical to involve them in the decision making process. Hence, it is essential to give employees the freedom to work with whom they wish and the freedom to choose the space they want to work in. It is crucial for the management team to identify their needs and to involve them in the decision-making process; in other words, work closely together to create an environment which meets the goals of the organization as a whole but also the needs of the employees.	Increase of job satisfaction, Stimulate innovation and creativity, Overall performance of the co-location, due to more commitment and support of employees
4	Determine the demands and objective that need to be achieved with the implementation of co-location before the start of the co-location clearly. (Interview)	Giving a sense of control could also be on a low level like giving people the freedom to personalize space, for example, with decorations like photos. (Lukjanska, 2016; Hartog, et al., 2018; Theander, 2018; Interview)	
		Success of co-location is not only determined with the achievement of social advantages, a co-location embassy/consulate can also be success due to the achievement of practical benefits,(for example: optimal use of property, generate rent, etc.). It is, therefore, extremely important to determine the objectives per embassy/consulate before the start of the co-location; having clear objectives makes it easier to communicate to the occupants and to work towards the achievement of those benefits.	Overall performance of the co-location embassy/consulate
5	Support of co-location from both parties (Interview and section 2.4)	Strong leadership is important from both parties on three different levels: leadership at the top, leadership at the middle, and leadership at the co-location office. Strong leadership also involves the commitment of leaders, for example: showing enthusiasm, support, and commitment, careful implementation process, Etc. (DeArmond et al., 2015; van der Voordt, 2003)	Improve performance of co-location in general, Peaceful coexistence
		While support from leaders is important, the support and commitment of employees is also essential too. If the occupants of the co-location embassy/consulate are proud and support their co-location office, the commitment of the occupants to co-location increases and, therefore, the effort to achieve a better implementation will also increase. Support could be increased with the use of serious gaming which takes place before the actual start of the co-location. (Interview; DeArmond et al., 2015; van der Voordt, 2003; van Liempt, 2012)	
6	Mutual benefits for both parties (Interview)	By having mutual benefits, the effort and commitment from both sides to achieve or maintain these benefits will be balanced.	Improved effort and commitment, Improved overall performance of co-location
7	Common ground between the partners (Interview and section 2.4)	Having large diverging cultures, could make the implementation of co-location more difficult. Hence, finding common grounds between parties increases the will and need to interact and collaborate, creates more synergy (it clicks better if common ground is found), makes good cooperation easier to achieve, fosters the creation of community. (Interview; Bates, 2011)	Increased interaction and collaboration, Creation of community
		Common ground between parties is easier to find if agglomeration of same and similar organization takes place, for example, like minded parties. The occurrence of the agglomeration similar organizations also stimulates innovation. (Interview; Theander, 2018)	Stimulation of innovation and creativity

Nr.	Combined success formula	Description	Possible advantage and disadvantages of co-location
8	Size of the co-location (Interview)	However, this does not mean that it is about being exactly the same, instead some differences make co-location more interesting; because the more people present from different backgrounds, the more different types of knowledge are spread; consequently innovation and creativity is stimulated. Having differences between parties is not a problem you don't have to become one, just having a few common grounds is enough. In addition, it is important to respect the differences to keep a good ambiance and synergy. (Interview; Theander, 2018)	Stimulation of innovation and creativity. Good ambiance and synergy
		A small co-location makes the co-location more practical and easier to manage, for example: it becomes easier to take each other into account. For instance, around 15 or 20. In addition a small sized co-location, increases interaction and collaboration with third parties. The personal factor/chemistry is extremely important for interaction and collaboration. With a small sized co-location it becomes easier to be in contact with each other: personal factor is bigger in small sized settings.	Easier implementation of co-location, Prevention of problems Increase of interaction and collaboration; Knowledge sharing Creation of community
		The addition of an another party creates more dynamics, fresh influences, and increases job satisfaction. This is especially the case for embassies/consulates with a small amount of employees.	Increased job satisfaction, Increased interaction, Improved knowledge sharing, Stimulate innovation and creativity
		Too much of a size difference, will have negative influence on the co-location: it will be considered living with..., instead of co-locating with.... For example, size differences of 50 or 100.	Negative influence on perception of co-location in general
9	The layout (Interview and section 2.4)	Implement a variety of room types related to the activities needed in the office: concentration/seclusion rooms, meeting rooms, lounge areas, collaboration rooms, coffee corners, etc. (Hartog, et al., 2018; van der Voordt & d'Ancona, 2013; Lauwereys, et al., n.d.; Theander, 2018; Holienka & Racek, 2015)	Decrease lack of privacy; Avoid overstimulation; Avoid harmed job satisfaction; Increase interaction and collaboration
		An 'inward-facing design' could increase social advantages like interaction, productivity, Etc. An 'Inward-facing design' could be interpreted as a design that focuses on providing comfort and fostering relationships for the co-location space users. A form of inward-facing design could be a workplace design in which the work spaces and facilities between the partners are connected or shared (openness, visibility, accessibility) because chance of sudden encounters are increased. For example: locating on the same floor, clustering of workspaces between parties, kitchen, recreational facilities, Etc. (Interview; Spinuzzi, 2012; Rashid, 2013)	Increase of interaction and collaboration; Creation of community Improve productivity and performance
		Sharing too much workspace, as in the rented desk layout, could sometimes cause disadvantages and problems. Hence, sometimes distances are better for the avoidance of frictions, disadvantages, and problems. This distance could be on a low level like having your own private office or having an own entrance. When deciding which layout to use it is important to outweigh the disadvantages and advantages of a layout, against the objectives you wish to achieve. (Interview)	Decrease security issues, Decrease privacy issues, Decrease overstimulation, Peaceful co-existence
		It is advised to avoid hierarchal space usage, instead allocate the space with simplicity and fairness. (Theander, 2018)	Stimulate collaboration
		'Outward-facing design' could create amazement with clients of co-locaters. This, could be used to improve the image of the organization, some examples: modern design, representative design, clean, comfortable, sustainable, Etc. (Spinuzzi, 2012)	Improve Image
10	Good and clear arrangements and rules (Interview)	This is important for the prevention of a lot of disadvantages and issues, from: security issues to issues caused by shared facilities and services (as mentioned in the survey other need to be taken into account). Thus, it is important to have clear rules between the co-location partners on different subjects, that are not only relevant between capitals but also on a local level: for example, how to use space, etc.	Decrease security issues, Decrease privacy issues, Prevention of problems, Peaceful co-existence
		This factor is also important to overcome the differences between parties, however, it is also important to respect and accept differences.	Peaceful co-existence
11	Open and clear communication (Interview and section 2.4)	For good cooperation and to successfully deal with problems between the co-location partners, open and clear discussion/dialogues are extremely important. This becomes more important the more space, facilities, and services are shared. (Interview)	Prevention of problems and conflicts, Peaceful co-existence Increase interaction and collaboration

Nr.	Combined success formula	Description	Possible advantage and disadvantages of co-location
		Open and clear communication from the leaders to the employees on the co-location goals, benefits, purposes, and methods; this can increase the commitment of employees. (DeArmond et al., 2015; Lukjanska, 2016)	Better overall performance of co-location
12	Community building (do/built things together) (Interview and section 2.4)	Community building (do/built things together) could increase the achievement of social advantages like increase of interaction, collaboration, Etc. Doing things together can both be formal and informal, for example: events, community managers, lunch lectures, guest speakers, conferences, celebrating a Christmas together, go to consultations together, work on projects together, Etc. This increases the connection and sense of togetherness with the partners. (Interview; Spinuzzi, 2012; Gandini, 2015; DeArmond et al., 2015; Bates, 2011; Nagy & Lindsay, 2018; Artto et al., 2016)	Stimulate networking, Increase interaction, Increase collaboration, Knowledge sharing, Increase productivity and performance, Increase satisfaction, Peaceful coexistence and good ambiance
		Community building could be fostered even more if co-locaters have the same visions, shared values, or objectives on specific subjects. Hence, to maintain communities in co-location offices, the owners of these spaces need to encourage and stimulate the creation of social contacts between members, with the use of: space, resources, languages, shared values, and interests. (Holienka & Racek, 2015)	
		However, community building should not be forced. There has to be a need from both parties. If there is a need, it is then important to start with community building as fast as possible instead of waiting for the natural creation of the community. (Interview; Holienka & Racek, 2015)	Creation of community
13	Good working technology and well-equipped spaces (Section 2.4)	Sharing should become a positive thing among co-locaters. Thus, effectiveness in sharing could be promoted if users get something back from it, for example, good technology, better furniture, good contribution to image, variety of room types, etc. (van der Voordt, 2003; Dixon, 2018; Lauwereys, et al., n.d.)	Increase of job satisfaction, Increase of productivity

The factors presented in the table above are used before and during the implementation of co-location. In general, these factors have the following output:

- Prevention of issues, problems, and disadvantages;
- The peaceful coexistence of the different partners;
- The overall performance of the co-location;
- Increase and better achievement of social advantages like interaction, collaboration, satisfaction, knowledge sharing, etc.

Most of the success factors all go back to the fact that successful co-location, regardless of the alternative, is dependent on a good preparation before the start of co-location. This statement is based on the fact that in each success factor the basics of asking critical and detailed questions before the selection and implementation of co-location is found. What are the demands (needs, wishes, objectives, Etc.) that need to be achieved with the co-location embassy/consulate? Which form and layout are most suitable for this? Which partners are most suitable? What is the image of the co-location partner? What image would the co-location give to other parties? Which similarities and differences are found between the partners and how to overcome these differences? What are the mutual benefits? Which agreements can prevent problems? Is there support for the co-location from both parties (on the capital and local level)? These are some examples of questions that have to be asked before the implementation of co-location. This extensive and detailed preparation can partly be achieved using the step-by-step plan: decision tree, the SWOT analysis and the success formula.

The success factors in this formula are organized based on two things: success factors relevant for the business case of MFA, in other words, co-location partners do not have to be involved with the implementation of these success factors (factors 1 till 4); and factors related to a new business case that has to be implemented with the involvement of the co-location partner (factors 5 till 13). The reason for the use of this sequence is because the success factors are now

aligned to the steps of the step-by-step plan. It is constantly mentioned throughout this chapter that knowing what MFA wishes to achieve in the co-location embassy/consulate is a critical first step, see the questions above. The success factors 1 till 4, are all related to this first step of knowing what is needed before the start of the implementation. The factors that follow, 5 till 13, are also used to improve the implementation process, however, these factors are more important to implement when the extensive discussions with the co-location partner takes place. Hence, the implementation process of MFA should first be started with internal discussions on the objectives, needs, wishes, etc. of the organization. During this process the success factors 1 till 4 could be implemented. After the internal brainstorming sessions on co-location, external discussion will have to take place with the co-location partner. This could be considered the second phase of the implementation process in which a new business case should be developed together with the co-location partners. During this second phase the success factors 5 till 13 could be implemented.

Some factors within the success formula can be used to increase the achievement of specific advantages and avoid the occurrence of the possible disadvantages of co-location. These possible advantages and disadvantages also fit well within the demands of MFA, for example, in some demands having a high level of interaction with third parties is important. Therefore, it was decided that the success factors directly related to the demands are included within the decision tree. With the decision tree, users can now easily see whether the implementation of specific alternatives can be improved using success factors.

The decision tree, SWOT analysis, and the success formula are tools that can be used to improve the selection and implementation of co-location. However, the preparation process does not stop after the implementation of the success formula. The step-by-step plan and the introduced tools in this thesis can be seen as a first step towards an improved preparation process for the implementation of co-location. It would, therefore, be interesting for future research to develop a more detailed preparation plan that can be used as a tool to prepare both leaders and employees on the use of co-location. An example of an element in a more elaborate preparation plan for MFA is a MoU (memorandum of understanding). MFA already uses a MoU for the implementation of co-location. For a more elaborated preparation plan, it would be interesting to implement some of the critical success factors into the MoU. These success factors have to be factors that do not change regardless of which alternative of co-location is selected; this allows MFA to develop a standard format of the MoU that can be used for every potential co-location embassy/consulate. The most important subjects which are recommended to be included in the MoU based on the success formula are as follows:

- The partner:
 - Discuss goals, needs, and core business of both parties.
 - Determine mutual benefits between partners.
 - Find common grounds between parties
 - For example: both from the EU, same way of working etc.
 - Determine differences between parties and assess the willingness to accept those differences.
 - Determine expectations from each other and assess the level of commitment to make the co-location successful.
- The organization of co-location:
 - Determine ways of communication between partners when, for example, problems occur.
 - For example: who to inform and who not?
 - How are formal dialogues/discussions organized?
 - What are the responsibilities and roles of the partners?
 - How are security and privacy organized and protected?

Note that these subjects do not change regardless of form, layout, wishes, Etc.; in other words, these subjects have to be discussed in every new co-location case. After discussing the subjects, both parties will know more about each other and, therefore, make the MoU more detailed. An example will be given to make this more clear: it was found from the standard MoU (including the subjects presented above) that MFA and the co-location partner wish to increase the interaction and collaboration between each other. It is then essential to record in the MoU how this will be achieved. Some examples of questions that have to be answered are as follows: How are meetings organized? Who will be responsible? For what type of subjects will collaboration take place (for example, political)? How will space be shared? What is private? How is the shared space used (rules and arrangements)? Where will the meetings be organized? Thus, a distinction is made between an MoU organized on the country/capital level and an MoU established locally. The MoU on the capital level can be seen as a standard MoU which does not change, and the local MoU changes depending on the context of the new co-location case.

6.4 Check and act phase

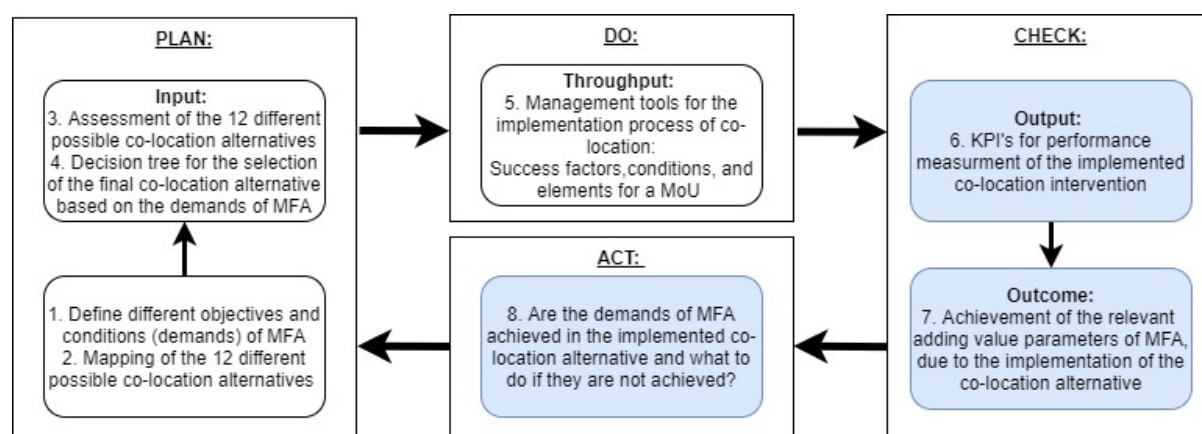


Figure 24. Steps taken in the check and act phase based on the extended VAM model of Jensen and van der Voordt (2016)

After the selection and implementation of the co-location alternative based on the decision tree, SWOT analysis, and the success formula, it is essential to assess if the achieved performance is in line with what the organization wished to achieve, and if it is, therefore, in accordance with the relevant adding value parameters of MFA. In this section, some possibilities with regards to this assessment will be discussed. The table below presents the possible Key Performance Indicators (KPI's) per demand subject and their related value parameters. All the given possible KPI's at least cover one adding value parameter; sometimes, one KPI covers a variety of adding value parameters. This is because many of these parameters overlap; for example, CSR covers social responsibility on different levels, such as sustainability. Thus, for instance, the indicators capital expenditures, operation costs, maintenance costs, Etc., cover not only the adding value parameter cost but also (economic) sustainability and CSR. The recommended KPI's, listen in table 47, are mainly an adaptation of the KPI's as presented in the book of Jensen & van der Voordt (2016, p 77-233). The KPI's based on the book of Jensen & van der Voordt (2016), are altered to fit co-location and MFA.

Note that these KPIs are only recommendations/examples of how the performance of co-location can be measured. Thus, the list can be changed according to the wishes of the organization. There are different methods of measurement. Some methods are surveys (for example, incorporate questions on co-location in the annual surveys executed (employee satisfaction surveys)), interviews, observations in the co-location embassies/consulates or online (for example, reviews on the image of MFA), open discussions (in which, for example, pictures of different situations are shown that are compared to the co-location embassy/consulate), Etc. The demands in bold showcase the demands which are directly related to co-location.

Table 47. List of possible KPI's: mainly based on the KPI's found in the book of Jensen and van der Voordt (2016, p77-233), but altered to co-location and MFA.

Business demands	CRE demands	Related adding value parameters	Possible KPI's (Jensen & van der Voordt, 2016, p77-233)
Legality Policies Law Treaties	Legality: - Incorporate the flag, emblem, shield, etc. into CRE (related to treaties) - Ensure inviolability - Incorporate legal aspects into CRE decisions - Realize reciprocity in CRE	Risk Image Culture Corporate Social Responsibility (CSR)	Guarantee inviolability and right of placement flag and emblem in co-location cases.
Safety and health: - Of employees worldwide: More attention employees worldwide (unburden employees) - Of the Netherlands - Proper crisis management - Encourage international safety	Safety and health: - Ensuring safety of employees into CRE: incorporating safety and security measures - Ensuring health of employees: Increase satisfaction and productivity of employees with the use of CRE - Realize an optimal separation between work and private life	Health and safety Satisfaction Productivity CSR	% Absenteeism and sick leave in co-location vs. traditional embassies/consulates; Number of accidents (co-location vs. traditional embassies/consulates); Occupancy rate in co-location embassies/consulate; Number of complaints from co-location cases; Satisfaction with co-location: co-location partner, layout, flexibility, seclusion rooms, meeting rooms, multi-purpose rooms, diversity in room types, etc.; Satisfaction with level of security and privacy in co-location embassies/consulates; Individual productivity and team productivity. Perceived productivity (impact of co-location embassy/consulate (co-location form, layout, partner, etc.) on productivity); Excess for disabled employees in co-location cases; Turn-over rate of employees from co-location cases.
International demands: - Promote the international trade economy - Promote an open world economy - Strengthen the international function of MFA - Achieve a coherent Dutch policy and EU policy - Promote international peace, stability, legal order, prosperity, wellbeing and human rights - MFA as a to go to department for international issues within the government	International demands: - Facilitate a variety of meeting and collaboration spaces in embassies and consulates - Decrease distance the Hague and representative housing abroad	CSR Image Culture	How does co-location support the social responsibility of MFA (promoting international economy, strengthening international function); Perception/reputation of image due to co-location: external parties; Support collaboration and interaction in co-location embassy/consulate: open plan workspaces, shared rooms and facilities, opportunities to collaborate or to concentrate; Diversity in room types; Presence collaboration and meetings rooms within embassies/consulates (internal and external collaboration); To what extent does co-location support the demand to become hospitable, open, equal, transparent.
Sustainability: - Economic sustainability: stimulate sustainable economic developments, sustainable globalization, etc. - Environmental sustainability: sustainable resources available for everyone, etc. - Social sustainability: Employability of employees (national and international), fairness, focus on Dutch social issues, etc.	Sustainability: - Incorporate sustainable measures in CRE (sustainable CRE in 2030 (climate neutral portfolio in 2030))	Sustainability CSR Image Health and safety	Sustainable measures achieved in co-location embassies/consulates (energy consumption, labels (BREEAM), etc.); Competitive edge/reputation due to co-location (in relation to sustainability); Optimization of footprint due to co-location; Quality of space within co-location cases; Adaptability of CRE portfolio due to co-location; Occupancy rate in co-location embassies/consulate; Cost co-location vs. traditional embassies/consulates: capital expenditures; Operation and maintenance cost of co-location vs traditional embassies/consulates; Long term positive economic/societal/environmental impact of co-location case.

Business demands	CRE demands	Related adding value parameters	Possible KPI's (Jensen & van der Voordt, 2016, p77-233)
Flexible network organization: - Stimulate meeting and collaboration (for example: facilities, strengthen and broaden network (both in NL and worldwide), etc.) - Adequate and good communication facilities (for both internal and external use) - Efficient deployment of people, resources and services - Diversity in network and collaborations	Flexible CRE: - Flexible Layout (multi-purpose rooms, Activity based working, etc.) - Flexibility in opening and closing embassies and consulates - Flexibility in up- and downscaling - Efficiency in the placement of employees (landing place for new colleagues) - Facilitate a variety of meeting and collaboration spaces - Hospitable, open, equal and transparent - Good location, accessibility for network	Image Culture Productivity Innovation and creativity Adaptability Risk CSR	Perception of the image due to co-location: external parties; Support collaboration and interaction in co-location embassy/consulate: open plan workspaces, shared rooms and facilities; Diversity in room types ; Presence collaboration and meetings rooms within embassies/consulates (internal and external collaboration); Opportunities to collaborate or to concentrate; Spread, Location, and Accessibility of embassies and consulates (spread increased due to co-location?); Diversity in co-location partners; Amount of workplaces vs amount of employees in co-location embassies/consulates; Amount of Archives; Flexibility due to co-location: average time opening- and closing of embassies/consulates, leasing conditions, up- and downscale, multi-purpose rooms, etc.; Efficient and flexible placement employees and partners (amount of landing places in co-location cases); Level of innovative workplaces within co-location embassies/consulates (desk sharing, etc.).
Modernization: - Digitalization - Providing modern and digital consular assistance	Modern CRE: - Modern and adequate AV facilities and tools - Implementation of Time, place, and device independent working (TPAW) - Implementation of Activity based working (ABW) - Decrease distance the Hague and representative housing abroad	Innovation and creativity Satisfaction Productivity Image Culture	Satisfaction with ICT and equipment in co-location; Availability of AV facilities and services in co-location; How does co-location support modernization (for example no hierarchy in layout, TPAW, ABW, etc.); Perceived productivity due to equipment within co-location cases vs. traditional;
Representation: - Strengthen Dutch culture sector worldwide - Represent the Netherlands abroad - Promote a competitive position of the Netherlands - Create a good international reputation	Representative CRE: - Realize fitting and attractive CRE - Representation of Dutch culture within CRE - Hospitable, open, equal and transparent	Image Culture CSR	Perception Image due to co-location: external parties (which word/description fits MFA best); Amount of Dutch art and culture; Fitting and attractive co-location cases; Contribution of co-location to brand values (hospitable, open, equal, transparent, fair, and sustainable); Perception of Netherlands due to the implementation of co-location by MFA.
Long-term resilience of policies: - Good financial management - Efficiency in policy: integrate policy making and business operations (supply and demand, policy and execution) - Coherence foreign policy - Integration of knowledge	Long-term CRE strategy and housing: - Realize feasibility in CRE - Develop proactive CRE strategies - Working within a clear strategy framework, supported by all relevant stakeholders	Risk Adaptability Productivity Cost Sustainability CSR	Diversity in co-location partners; Spread, Location, and Accessibility of embassies and consulates (spread increased due to co-location?); Flexibility due to co-location: average time opening- and closing of embassies/consulates, leasing conditions, up- and downscale; Adaptability of co-location cases; Assessment of alignment of co-location with demands and strategies of MFA; Feasibility/affordability of co-location (cost vs. benefits); Cost of co-location vs traditional embassies/consulates: capital expenditures, operational and maintenance cost, etc.; Does co-location respond to dynamics of changing world (flexibility); Damage expenses;


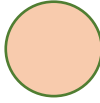
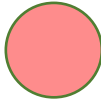
As already mentioned before, one of the measurement methods for the check phase are surveys. It is recommended to use surveys because it gives a wide spread of responses in a fast way. The surveys developed in this thesis can be used as the basis for an improved survey. The improvement of the survey consists of the following:

- Correct the two shortcomings of the survey: unclarity in question formulation and improving the number of responses by making the survey official in the organization (for example, add survey to annual employees survey and give respondents more time to fill in the survey).
- Add obtained findings from the surveys and interviews of this thesis in the survey, such as the success factors.
- Expand the survey by adding more KPI's for a detailed measurement of specific subjects:
 - Note that a lot of the KPI's used in the survey overlap with some of the KPI's in the table; however, the survey of this research does not implement the detailed KPI's, as presented in table 47, because due to the scope of the thesis an extensive survey was not possible.

The check phase's main objective is to know whether or not co-location has improved the achievement of the demands of MFA and if the relevant adding value parameters are therefore achieved. These two questions cannot be separated because the demands of an organization are closely linked to the adding value parameter. For example, if co-location has increased the number of interactions and collaboration with third parties, the partnership with these third parties is also strengthened. Hence, the network of MFA is strengthened, which means that MFA is one step closer to achieving the demand to become a flexible network organization. Consequently, the achievement of parameters like CSR, risk, image, etc., are also improved.

To organize the results obtained from the check phase, the table below can be used. This table provides MFA with a quick overview of where extra work is required. The table is only an attempt/suggestion to show how the results can be organized; for the use of this table, proceed to fill in the table further with the assessed demands and their related adding value parameters (see table 47 for other demands).

Table 48. Suggestion of possible tool that can be used to organize the results of the check phase.

Related adding value parameters	Demands	High achievement	Medium achievement	Low achievement
Image Culture Productivity Innovation and creativity Adaptability Risk CSR	Flexible network organization: - Strengthen and broaden network (stimulate meeting and collaboration with third parties) -			
Risk Adaptability	Long-term resistance: - Proactive RE strategy - Feasibility of CRE....			
....	Representation: - Hospitable, open, equal and transparent -			
.....			
....			

If based on this assessment it is found that the co-location does not achieve the demands of MFA, the following can be done: restart the process to see what went wrong, if possible, consider implementing the success factors, consider other alternatives of co-location, or be more critical and consider abandoning co-location. However, first, it is essential to determine why these demands were not achieved. The answer to this question can be found in the check phase. Like how the survey in this thesis had shown that social advantages are mainly not achieved in the current co-location cases partly due to the dominantly used layout, operational advantages are not achieved due to the use of the openhouse form, Etc. After determining what has caused the demands not to be achieved, one can decide what to do to improve the situation or other future co-location cases.

To give a better understanding of how the act phase should be approached, an example will be given: from the check phase, it was concluded that the demands on representation are not achieved/improved. For instance, it was found that partners, clients, Etc., did not find the representation of the embassy/consulate fitting and attractive: lack of traditional representation (design of the embassy/consulate). With further analysis, it was found that the co-working form was used; co-working space providers cannot offer MFA with a typical traditional embassy design since they also cater to the demands of other organizations. When looking further into the link between the co-location form and the representation demand, it was found that a more traditional representation is appreciated in the country where the embassy/consulate is located. During the decision-making, wrong choices were made, or other more critical demands outweighed the representation demands, which caused the co-working form to be chosen.

This example is only given to explain how one can deal with the results of the check phase. Note, however, that the situations in practice could be a lot more complicated and could need more research to determine why specific demands are not achieved, such as interviews.

6.5 Conclusion and Discussion

*How can **co-location** be used as a tool within the CRE strategy and as a part of the CRE portfolio that **adds more value** to the organization, specifically in the **Ministry of Foreign Affairs**?*

This question can, based on this research, be answered as follows: when different independent organizations decide to co-locate together in one building with shared facilities and services to benefit from each other, this is considered to be co-location. Co-location consists of three different forms, based on the forms found in Schreurs' (2019) research, and four layouts; hence, there are 12 possible alternatives of co-location considered in this thesis. From further analysis, it was found that the relevance of these alternatives for MFA is partly dependent on the co-location partner: countries (all alternatives possible) or private organizations (essential factors to consider: semi-governmental agencies or other private parties, long-term vs. short-term; for more details see section 4.5 or 6.2.2). The achievement of possible advantages, avoidance of possible disadvantages, and level of sharing are dependent on the alternative (see section 6.2.2 and 6.2.3, for more details).

In literature, it was found that Corporate Real Estate (CRE) only **adds value** if the organizational demands are achieved/supported by the CRE. For this achievement/support, strategic alignment is of great importance. Strategic alignment occurs on different levels: alignment between the strategies (CRE strategy and corporate strategy) and alignment between the strategies and stakeholder demands. Thus, if an organization wishes to achieve value with a particular CRE intervention, it is essential that this intervention supports the organization's demands; by doing so, more value is added. To ensure that a CRE intervention adds value, it is important to incorporate Value Adding Management. Based on this information found on adding value, it was decided that to realize adding value with co-location, the starting point of the step-by-step plan (including the decision tree) would be linking the organizational demands to the CRE intervention (co-location).

Within **MFA**, strategic alignment is achieved on all levels: between the strategies and between the strategies and the stakeholder demands. However, in practice, the alignment does leave some room for improvement (supply vs. demand), such as more flexibility is needed to open

or close embassies/consulates faster. MFA already uses co-location within the embassies and consulates; however, the problem is that these co-locations are not supported by any strategy. There is only a policy (for the openhouse form) that takes an opposing stance from the start and only tries to avoid operational disadvantages. The vagueness of this concept within MFA, caused by this negative stance and lack of strategy, has a negative influence on the success of co-location. From both the interviews and surveys, it was found that the occurrence of most problems and disadvantages within the co-location cases are caused by the lack of an extensive and detailed preparation process. Hence, problems, like frictions due to the lack of agreements on, for example, shared spaces or security, are encountered. Consequently, these problems negatively influence the perception of co-location; therefore, the success is harmed. Co-location is currently mainly used in the form: openhouse within the property of MFA to increase the efficient use of excess space while obtaining financial benefits. The use of this form and often the main objective of the co-locations (efficient use of excess) explain the survey results; which showcased that most of the social advantages and operational advantages are not achieved due to their relation to the implemented form (for example, no flexibility) and layout (for instance, no increase of collaboration). In addition, the vagueness of co-location within MFA causes a limited amount of value being added to the organization with the use of co-location. To assess whether co-location could be used to achieve the other relevant adding value parameters of MFA, the possible advantages of co-location were put against the CRE demands of MFA; from this analysis, it was found that co-location could be used for the achievement of various demands of MFA. Consequently, more value could be added to the organization.

Different models can be used to ensure that the CRE interventions, co-location, adds value to the organization. The model used in this thesis is the extended Value Adding Management model by Jensen and van der Voordt (2016) (for justification, refer back to chapter 3). Based on this model, a tailored **step-by-step plan** has been developed for MFA. The step-by-step plan consists of products that can be used to first select the best alternatives based on the demands MFA wishes to achieve with a specific co-location embassy/consulate: **the decision tree** and **the SWOT analysis**. The decision tree and SWOT analysis are both tools used to select the best solution in each new co-location initiative based on the relevant demands in that particular situation. After selecting an alternative, the step-by-step plan can then be used as a tool to manage the implementation of the chosen co-location alternative with the use of an **anecdotal success formula** (developed based on literature and interviews). This formula's success factors mainly pinpoint the importance of good preparation of co-location during the internal and external discussions. The last part of the step-by-step plan is needed to assess and, if needed, readjust the co-location after the implementation: the check and act phase. For assessing the co-location cases, a recommendation list of possible KPI's per demand and the related adding value parameters are provided. Note that the step-by-step plan (including the decision tree, SWOT analysis, anecdotal success formula, Etc.) has not been tested within MFA due to the scope of this thesis (timewise). Hence, the validation of this step-by-step plan is yet to be executed before the actual use of the plan.

The research in this thesis contributes to the field of Corporate Real Estate Management by continuing on the existing knowledge of co-location (usually found as coworking) and adding value with Corporate Real Estate. This thesis used the research of Schreurs (2019) as a basis for the used leasing forms of co-location. However, this thesis expanded the leasing forms with layouts based on literature from different resources. The similarity between the research of Schreurs and this research is that both try to develop a tool to add more value with co-location or "*offices as a service*" (as defined by Schreurs, 2019). Nonetheless, this thesis differentiates itself; this research's main contribution is on how value can be added with the use of co-location within governmental parties (MFA). As mentioned in chapter 1, currently, there is barely any literature found on the use of co-location as part of the strategy in governmental agencies. This research has shown that in practice,

co-location is used in governmental parties, specifically in the Ministry of Foreign Affairs (MFA). Thus, part of the gap in the lack of literature co-location within governmental agencies is closed.

In addition, the step-by-step plan contributes to a better implementation of co-location as a CRE intervention, which could be used to add value to MFA by achieving the organization's demands. This step-by-step plan and this thesis's structure continues to build on the extended VAM model by Jensen and van der Voordt (2016) by implementing this model for practical use in governmental agencies. The step-by-step plan developed in this thesis contributes to the field of CREM as a practical tool that can be used for governmental agencies. Although, this plan was developed in the context of the Ministry of Foreign Affairs. This tool could also easily be adapted to other public organizations with some slight alterations.

There are some improvement points in this thesis related to found errors and limitations that could have influenced the final results. The most critical error and limitations of this research is found in the surveys conducted to assess the performance of the co-location cases within MFA. The error is related to the unclarity in the question formulation found in the survey for the operational managers. The problem caused by this error was the dividedness in the responses of the operational subjects in the dimensions: possible advantages, disadvantages, and disadvantages. The possible occurrence of the error was predicted, and, therefore, measures were taken, but these measures were not enough. This error could have been avoided by ensuring that every question was straightforward in terms of needed perspective (refer back to chapter 5 for more details). A limitation that could have influenced the survey results is the small response and the spread of responses per embassy in the survey of employees. This limitation lowers the representation level of the responses on the social advantages, disadvantages, and success factors. The last limitation found in the survey has to do with the absence of the floorplans of the co-location cases. In some cases it was difficult to pinpoint the exact layout based on the survey results only. Due to the absence of the floorplans double-checking the layout in which the embassies/consulates were categorized in was not possible. Consequently, there could be some errors within the statements on layouts.

This error and limitations have lowered the reliability of the survey results and are, therefore, not a strong representation of the performance of the co-location cases. Hence, the extent to which the survey results correspond with literature and reality is harmed. This, in turn, influences the validity of the research method used to assess the performance of the current co-location embassies/consulates in MFA: the survey. Consequently, the conclusions made on the performance of the co-locations may not be valid. However, it can be stated that the conclusions, which were made based on the survey, did not show any abnormality when compared to the findings of other parts of the research, such as: literature, interviews, Etc. To limit the impact of the error and limitations on the rest of the research, if possible the findings of the literature or interviews were leading.

There are some possibilities for future research that could be recommended. The first and most relevant recommendation of future research would be to validate the step-by-step plan within MFA. First, the step-by-step plan and its products have to be tested in terms of ease and efficiency in use: easy to understand, clear in use, in line with the demands of MFA, Etc. The second validation step would be on the actual value of the products in the step-by-step plan, for example, using a pilot.

Another option for future research within MFA is research on the possibilities of co-location with private parties. Thus, how can the current obstacles be tackled in order to co-locate with private parties in the co-location form: openhouse. It is interesting for MFA to co-locate with private parties because of the flexible network organization demand, in which diversity in the network is recommended because of the uncertainty found in future scenarios of MFA. The scope of this research could be expanded to see how co-location with private parties could be achieved across all governmental agencies.

Some other future research possibilities are extensive research on the performance of the co-location cases within MFA, an extensive and detailed preparation plan for co-location within MFA,

and research possibilities related to the use of the developed step-by-step plan and its products in other public organizations or even private parties.

References

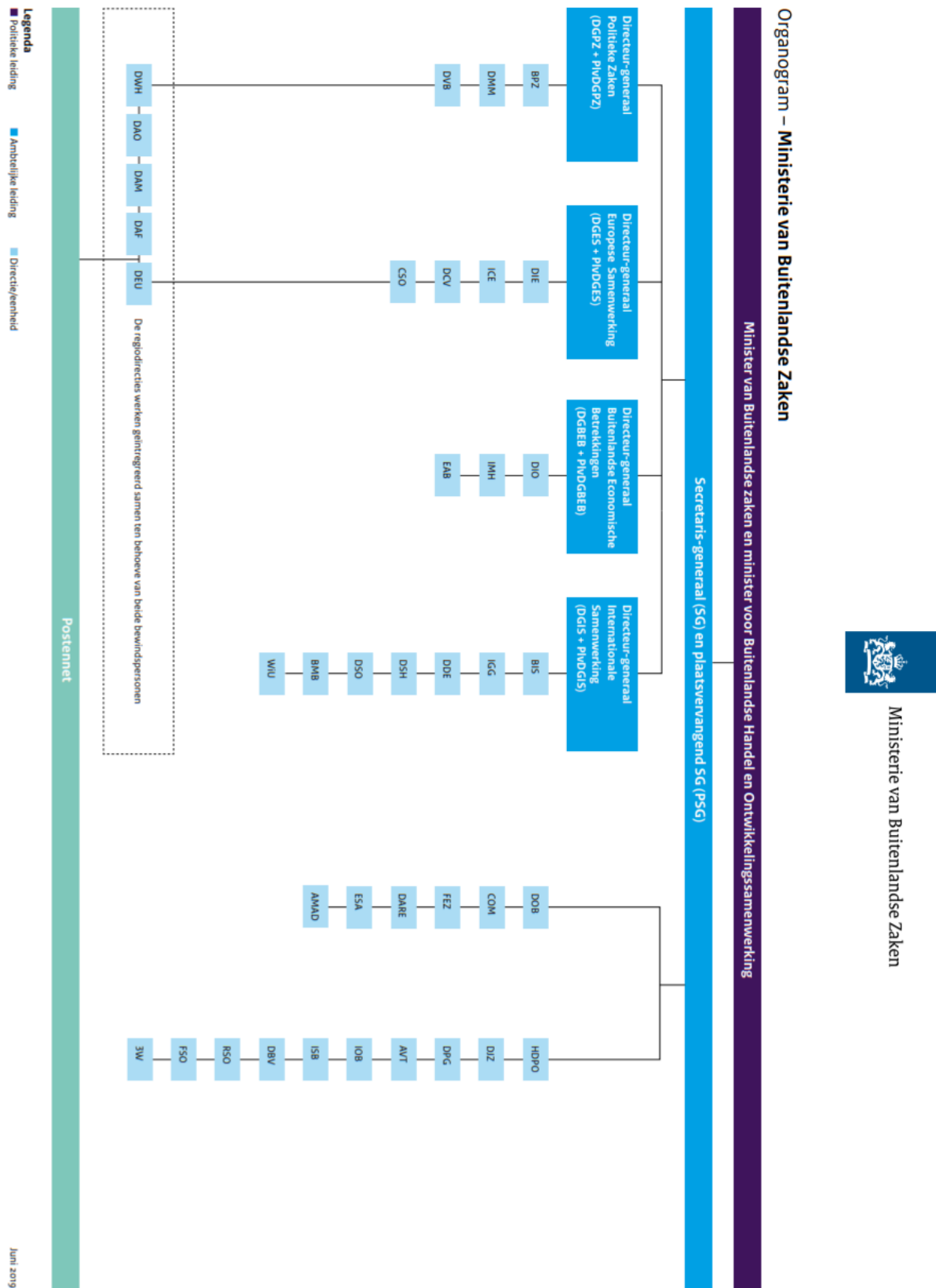
- Arkesteijn, M., Binnekamp, R., & De Jonge, H. (2017). Improving decision making in CRE alignment, by using a preference-based accommodation strategy design approach. *Journal of Corporate Real Estate*, 19(4), 239-264.
<https://doi.org/10.1108/JCRE-10-2016-0033>
- Arora, S., Nilawar, U. & Bhargava, P. (2017). Coworking space: The New Kid on the Block. Collier international. Retrieved from: <https://www.slideshare.net/colliersinternational2011/colliers-radar-india-coworking-space-the-new-kid-on-the-block>
- Artto, K., Ahola, T., Kyrö, R. and Peltokorpi, A. (2017), "Managing business networks for value creation in facilities and their external environments: A study on co-location", *Facilities*, Vol. 35 No. 1/2, pp. 99-115.
- Barendse, P., Binnekamp, R., De Graaf, R., Van Gunsteren, L., & Van Loon, P. (2012). *Operations Research Methods: For managerial multi-actor design and decision analysis*. Amsterdam: IOS Press.
- Bates, T., W. (2011). Community and collaboration: New shared workplaces for evolving work practices. Retrieved from: <https://dspace.mit.edu/handle/1721.1/66875>
- Boudreau, Kevin & Ganguli, Ina & Gaulé, Patrick & Guinan, Eva & Lakhani, Karim. (2012). Colocation and Scientific Collaboration: Evidence from a Field Experiment. *SSRN Electronic Journal*.
- Brown, L., & Barnett, R. (2004). Is the corporate transformation of hospitals creating a new hybrid health care space? A case study of the impact of co-location of public and private hospitals in Australia. *Social Science & Medicine*, 58, 427–444.
- Bryman, A. (2012). *Social Research Methods* (4th ed.). Oxford, United Kingdom: Oxford University Press.
- CoreNet (2015) *The Essential Guide to Corporate Real Estate*. Atlanta, GA
- Cresa (2017). Canadian coworking & shared office study. Retrieved from: <https://www.corenetglobal.org/KCO/content.aspx?ItemNumber=37875>
- Cushman & Wakefield. (2018a). Coworking 2018 - The flexible workplace evolves. Retrieved from: <http://europe-re.com/report/view/64682/coworking-2018-the-flexible-workplace-evolves-cushman-wakefield>
- Cushman & Wakefield. (2018b). COWORKING AND FLEXIBLE OFFICE SPACE. Retrieved from: <https://www.cushmanwakefield.com/en/united-states/insights/2018-coworking-report>
- DeArmond, M., Nelson, E., C., & Bruns, A. (2015). The best of both worlds: Can district-charter co-location be a win-win? Retrieved from <https://files.eric.ed.gov/fulltext/ED559807.pdf>
- Den Heijer, A.C. (2011). Managing the university campus: Information to support real estate decisions. Retrieved from: <https://repository.tudelft.nl/islandora/object/uuid%3A337ca4e3-2895-4fcf-ae9-752141bc6104>
- Dewulf, G., Den Heijer, A., De Puy, L & Van der Schaap, P. (1999). *Het managen van vastgoed binnen een publieke organisatie*. Delft University Press, Delft.
- Dixon, M. (2018). The workspace revolution: reaching the tipping point. Retrieved from: http://contact.regus.com/GBS18_Report_Download_Request
- Gandini, A. (2015). The rise of coworking space: A literature review. *Ephemera: theory & politics in organization*, 15 (1): 193-205.
- Hartog, L. M., Weijs-Perrée, M., & Appel-Meulenbroek, H. A. J. A. (2018). The influence of personality on user satisfaction: multi-tenant offices. *Building Research & Information*, 46(4), 402-416.
- Heywood, C., & Arkesteijn, M. (2017). Analysing fourteen graphical representations of corporate real estate alignment models. *Journal of Corporate Real Estate*, 20(1), 16–40.
- Holienka, M & Racek, F. (2015). Coworking spaces in Slovakia. *Comenius management issue*, 9 (29), 29-43.
- Hobma, FAM. (2011). Constitutional and administrative law comments on public-private partnerships in urban development : Experiences from the Netherlands. In s.n. (Ed.), *Fifth international conference of the international academic association on planning, law and property rights* (pp. 1-9). University of Alberta, Faculty of Law.

- Hurry, C.J. (2012). The Hub Halifax : a qualitative study on coworking. Retrieved from: <https://www.semanticscholar.org/paper/The-Hub-Halifax-%3A-a-qualitative-study-on-coworking-Hurry/1306b0dbb915e7d069f65228b0599ede8d3da#citing-papers>
- Ivaldi, S. (2017). UNDERSTANDING COWORKING: BETWEEN TYPOLOGY AND CONTRADICTION. Retrieved from: <https://core.ac.uk/download/pdf/141739247.pdf>
- Instant. (2017). The year of flexible workspace. Retrieved from: <https://www.instantoffices.com/blog/wp-content/uploads/2017/08/2017-The-Year-of-Flexible-Workspace.pdf>
- Jensen, P & Van der Voordt, Theo. (2016). Facilities Management and Corporate Real Estate Management as Value Drivers. How to Manage and Measure Adding Value.
- Kojo, Inka & Nenonen, Suvi. (2014). Evolution of co-working places: drivers and possibilities. *Intelligent Buildings International*. 9. 1-13
- Koninkrijk der Nederland. (2021). Congo, Democratisch Republic: Over ons. Retrieved from: <https://www.nederlandwereldwijd.nl/landen/congo-democratische-republiek/over-ons>
- Lauwereys, E., Van de Putte, M., & Vanden Berghe, J. (2015). Experimenteren met het Nieuwe Werken. *TH&MA*, 5-15, 18-21.
- Lukjanska, R. (2016). "A comparative study of coworking models within private, public and non-governmental sectors". Retrieved from: http://socialinnovation.lv/wp-content/uploads/2013/12/ENG_IO1_FINAL.pdf
- Miller, I., Nicole, O., Rich, K & Takao, M. (2016). Market potential for coworking spaces. Retrieved from: https://static1.squarespace.com/static/53c5668be4b0e6c64c682208/t/57f7e23329687f4dc6cb9140/1475863121183/CoworkingSpacesResearchReport_WSUVFINAL.pdf
- Ministerie van buitenlandse zaken. (2014). Samenvatting plan van aanpak modernisering diplomatie hervormen en bezuinigen BZ 2014-2016. Retrieved from: http://content.rp.rijkswb.nl/cis/content/media/rijksportaal/bz/01directies/com_4/nieuw_modernisering_diplomatie/B76_000000_COM_SV_Plan_v_aanpak_modernisering_A4_NL_P3.pdf
- MFA. (2019). Huisvesting en vastgoed buitenland: 'Derdenbeleid'. Retrieved from: http://content.rp.rijkswb.nl/cis/content/media/rijksportaal/bz/01directies/3w/pdf_bestanden/pdc_facilitair_1/real_estate_and_accommodation_abroad/pdf_3/derdenbeleid-1.pdf
- Nagy, G & Lindsay, G. (2018). Why Companies Are Creating Their Own Coworking Spaces. Retrieved from: <https://hbr.org/2018/09/why-companies-are-creating-their-own-coworking-spaces>
- Nelson, A., & Zappile, R. (2019). U.S. Flexible Workspace and Coworking: Established, Expanding and Evolving. *Colliers International*. US research report. Retrieved from: <https://www.colliers.com/-/media/files/apac/japan/flexible-workspace-report-us-english.pdf>
- Ngwamba, F. (2014). Public private partnerships : a policy analysis of the provision of public hospitals in South Africa. Retrieved from: <https://www.semanticscholar.org/paper/Public-private-partnerships-%3A-a-policy-analysis-of-Ngwamba/dfbfb11b560aded867dea9bac09718b8fdd8a76>
- Overheid: Wettenbank. (2020). Verdrag van Wenen inzake diplomatiek verkeer, Wenen, 18-04-1961. <https://wetten.overheid.nl/BWBV0004345/1984-10-07>
- Rashid, M. (2013). A study of the effects of colocation on office workers' perception. *Journal of Corporate real estate*, 15 (2), 98-116.
- Regus. (2018). FLEXIBLE WORKING, SOLID FACTS. Retrieved from: http://vastgoedberichten.nl/wp-content/uploads/2018/10/181017-Regus_FlexibleWorkingSolidFacts_SummaryReport.pdf
- Research Methods and Statistics. (2016). 4 2 Typologies of interviews [Video file]. Retrieved from <https://www.youtube.com/watch?v=oM1acdBAkao>
- Rijksoverheid. (2019). Organogram ministerie van Buitenlandse Zaken. Retrieved from: <https://www.rijksoverheid.nl/ministeries/ministerie-van-buitenlandse-zaken/organisatie/organogram>

- Schreurs, T. (2019) A strategic approach to 'Office as a Service': An explorative study into the optimization of the physical resource in order to obtain maximum added value. Retrieved from:
<https://repository.tudelft.nl/islandora/object/uuid%3A5b44449a-a472-4567-8983-e1d68908a28d?collection=education>
- Spinuzzi, C. (2012). Working alone together: coworking as emergent collaborative activity. *Journal of business and technical communication*, 26 (4), 399-441.
- Theander, L. (2018). The success of the coworking sector. Retrieved from:
<https://pdfs.semanticscholar.org/coae/1d855433a792dcf25127aedd596b55faedao.pdf>
- Van der Voordt, DJM. (2003). Kosten en baten flexibele werkplekken. *Overheid Facilitair*, 5(6), 23-24.
- Van der Voordt, T & d'Ancona, M. (2013). Het Nieuwe Werken vanuit het perspectief van de eindgebruiker.. *BOSS Magazine*. 16-21.
- Van der Voordt, T. (2016). The Delft legacy of Adding Value by CREM. Retrieved from:
<https://repository.tudelft.nl/islandora/object/uuid%3A4ca5d135-cf82-48ea-9a55-53a8365d8146>
- van Liempt, S. (2012). Serious game clean desk op de flexibele werkplek bij RO/EZ. Retrieved from:
<https://www.semanticscholar.org/paper/Serious-game-clean-desk-op-de-flexibele-werkplek-Liempt/7766bb370086140c6eb86de616582be262a2faf7?pdf>
- Vinokur-Kaplan, D. (2001). Nonprofit Landlords Leasing to Nonprofit Tenants: Legal and Managerial Strategies Used at Nonprofit Co-location Enterprises In the United States. *International Conference on Nonprofit Enterprises: Governing Development and Funding Innovation*. Retrieved from:
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.545.5923&rep=rep1&type=pdf>
- Vinokur-Kaplan, D. (2018). New Public Governance, Social services, and the potential of co-located nonprofit centers for improved collaborations. *Nonprof Pol Forum*, 8 (4), 445-464.
- Vinokur-Kaplan, D & McBeath, B. (2014). Co-located Nonprofit center: tenants' attraction and satisfaction. *Nonprofit management and leadership*, 25 (1), 77-91.
- Vogelaar, O., & Bertens, S. (2018). Flexibilisering van de kantorenmarkt. Retrieved from:
<https://www.jll.nl/content/dam/jll-com/documents/pdf/research/emea/netherlands/nl/jll-rapport-flexibilisering-van-de-kantorenmarkt-klein.pdf>
- Walsh, P., McGregor-Lowndes, M., & Newton, C. (2006). *Shared Services: Lessons from the Public and Private Sectors for the Nonprofit Sector*, CPNS Working Paper No 34. Brisbane: QLD.
- Weijs - Perrée, M., Appel - Meulenbroek, H. A. J. A., de Vries, B., & Romme, A. G. L. (2016). Differences between business center concepts in The Netherlands. *Property Management*, 34(2), 100-119. Retrieved from:
https://pure.tue.nl/ws/files/24215802/Paper_Property_Management.pdf
- Zhai, W. (2017). A Study of the Co-Working Operating Model. Retrieved from:
<https://dspace.mit.edu/handle/1721.1/108832>

Appendix

Appendix 1: Organogram (Rijksoverheid, 2019)



Appendix 2: Systematic literature review methodology

Co-location

The search terms presented in table 1, are used to introduce and understand the topic of co-location. These search terms are chosen on the assumption that all these could be possible synonyms of co-location.

Search terms	Results
Co-location OR colocation AND Real estate OR workplace design OR workplace	12700
Co-location OR colocation OR flexible workplaces OR flexible workspaces OR Coworking OR business center OR serviced offices OR amenity space OR flexible office OR dedicated space OR assigned space OR shared office OR open house	56800

The selection criteria for this question were:

- In the chosen literature an explicit definition of Co-location or its synonyms has to be given.
- Year range: 2000-2020
- The literature used for the theoretical framework were randomly selected for this sub-question, because heaps of literature had the same definition; thus extra criteria didn't have to be established.
- Note that a part of the literature used for this question were literature received from a previous student researcher who had a similar topic, especially literature used to determine the synonyms (Schreurs, 2019).

More on co-location

These search terms will be used to get a deeper understanding of co-location, including the advantages, disadvantages, and success factors.

Search terms	Results
Co-location OR colocation AND Real estate OR workplace design OR workplace AND advantages OR benefits AND disadvantages OR risks	6290
Flexible workspaces OR flexible workplaces AND advantages OR benefits AND disadvantages OR risks	19900
Coworking OR business center OR serviced offices OR amenity space OR flexible office OR dedicated space OR assigned space OR shared office OR open house AND advantages OR benefits AND disadvantages OR risks	63600

Table 2. Search terms second sub-question

The selection criteria can be formulated as follows:

- Year range: 2000-2020
- Many advantages and disadvantages listed in the relevant chapter were from documents found with the previous search terms on co-location.
- Just like the first sub-question the literature was randomly selected, because a lot of the information stated the same.
- Note that a part of the literature used for this question were literature received from a previous student researcher who had a similar topic, especially literature used for the synonyms (Schreurs, 2019).

What is missing

These search terms portray the gap found in literature with regards of co-location used in governmental organizations.

Search terms	Results
Co-location OR colocation AND real estate AND non-profit organizations OR not for profit organization OR public organizations OR public-private OR governments OR government agencies OR governmental organizations OR embassy OR embassies OR consulate OR Commission OR delegation OR ministries OR state agencies	1640
Flexible workspaces OR flexible workplaces AND non-profit organizations OR not for profit organization OR public organizations OR public-private OR governments OR government agencies OR governmental organizations OR embassy OR embassies OR consulate OR Commission OR delegation OR ministries OR state agencies	16800
Coworking OR business center OR serviced offices OR amenity space OR flexible office OR dedicated space OR assigned space OR shared office OR open house AND non-profit organizations OR not for profit organization OR public organizations OR public-private OR governments OR government agencies OR governmental organizations OR embassy OR embassies OR consulate OR Commission OR delegation OR ministries OR state agencies	17100
Overheidsinstanties OR consulaten OR ambassades OR ministeries OR overheid OR regering AND co-locatie OR colocatie OR flexibele werkplekken OR Coworking OR gedeelde werkplekken	2680

Unlike the first and second sub-questions this question had a list of selection criteria used for the selection of literature. Selection criteria used in this part, are:

- Year range from: 2000-2020.
- Cases of co-location, coworking, etc. selected, either had to be in a context of other governmental agencies, non-profit organizations, between public and private parties or organizations dealing with privacy and security.
- Search terms in both Dutch and English.
- Selection made on bases of title and abstract.
- First 100 results of each search term was analyzed, thus a total of 500 results were checked (by analyzing title and abstract).

There is barely any literature found on forms of co-location/flexible workspaces used in governmental agencies. The literature, found from the literature research, which seemed to be relevant for this thesis were 4 articles on co-location/flexible workplaces used in governmental organizations. However, after being analyzed explicitly it was found that these cases of co-location in governmental agencies were also not relevant, this is due to the fact that if Dutch embassies want to implement co-location to create workplaces in different countries the co-location will be with external parties and not within one organization. The ones found will be discussed below.

The first case of a flexible workspace type found in governmental agencies is the use of shared services within the police of 6 southern regions of the Netherlands (Zeeland, Midden & West Brabant, Brabant Noord, Brabant Zuid-Oost, Limburg Noord en Limburg Zuid). This thesis researched whether a shared service center can be used to improve the partnership between police forces on an interregional level. However, this research can't be seen as relevant case in this thesis, because it only addresses the concept of shared services within one organization which is the police and not between two independent organizations. (Van Bers, 2016)

Other cases of co-location within the government which were found in literature is the concept of ‘Rijkswerkplek’ or ‘Het Nieuwe Werken’. The Rijkswerkplek or Het Nieuwe Werken is a flexible workspace that every government official can use regardless of time or place. These flexible workplaces/shared services are used in order to become more efficient, innovative, flexible, etc. Just like the case of the police, this co-location is only on internal co-location; whereas the scope of this research is on external co-location. (Bakker & Van der Voordt, 2008; Van der Voordt & Ancona, 2013; van Liempt, 2012)

Consequences of co-location

These search terms can be used to portray the new relationships caused by co-location.

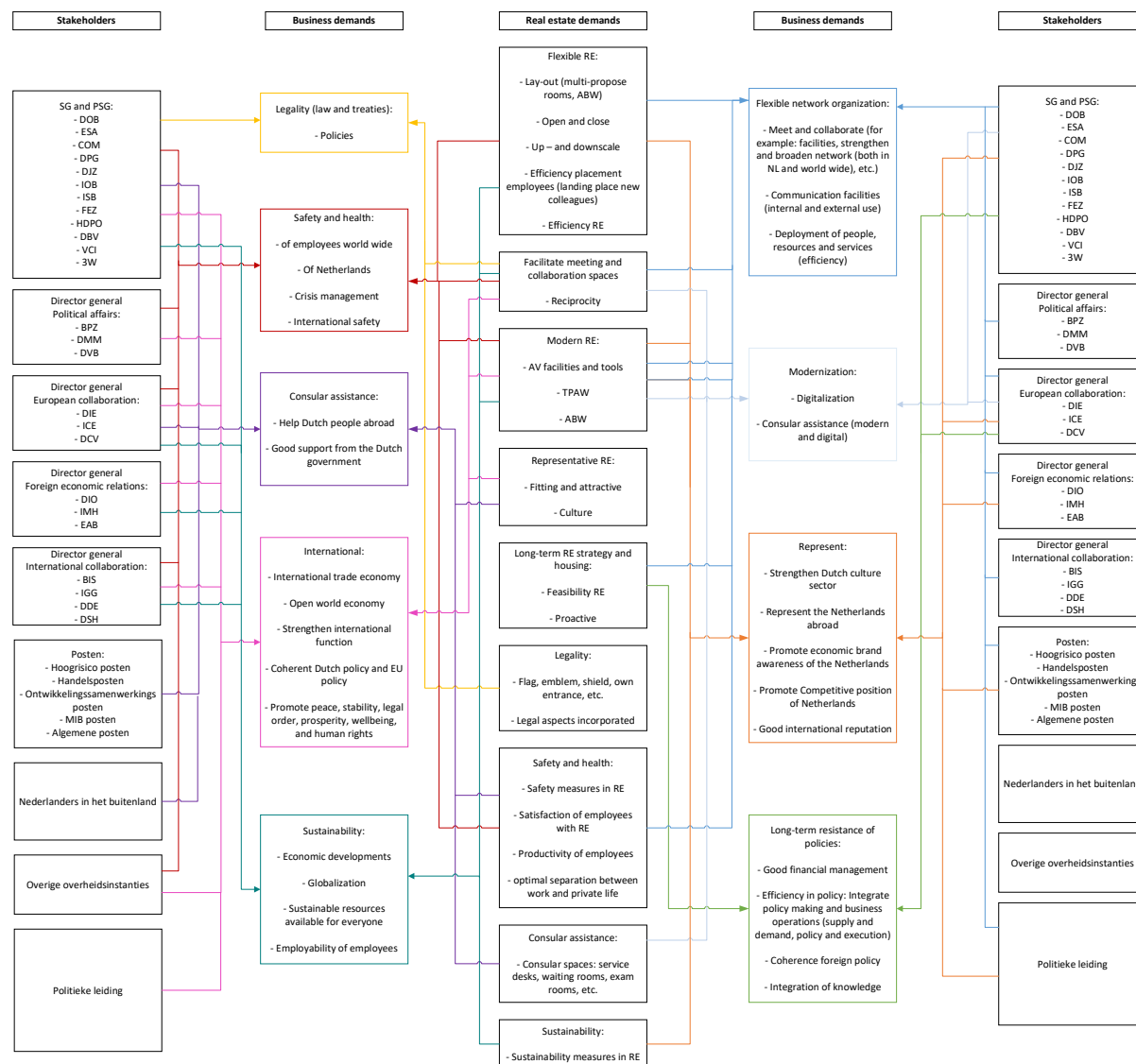
Search terms
Co-location OR colocation AND public private partnership OR PPP OR private law OR public law
Flexible workspaces OR flexible workplaces AND public private partnership OR PPP OR private law OR public law
Coworking OR business center OR serviced offices OR amenity space OR flexible office OR dedicated space OR assigned space OR shared office OR open house OR co-location OR colocation OR flexible workspaces OR flexible workplaces AND public private partnership OR PPP OR private law OR public law

Table 4. Search terms fourth sub-question

Selection criteria:

- Year range 2000-2020
- First 100 results analyzed based on title and abstract
- Selection based on information given by literature:
 - What are PPP's, how do you deal with PPP's, and what can be learned from PPP's which can be adapted in this thesis.

Appendix 3: Detailed overview of stakeholder demands



Appendix 4. Questions and answers for the assessment of the CRE portfolio

Q: Are legal aspects incorporated into the Corporate Real Estate decisions (both in the past and now) and the current CRE portfolio? Examples:

- incorporation of flag,
- emblem,
- shield,
- reciprocity
- etc.

A: Yes they are. These are considered to be part of our standard Program of requirements and working procedures.

Q: Does the CRE ensure the safety and health of the employees occupying the buildings?

Examples:

- Absenteeism and sick leave
- Number of accidents
- Number of complaints on health and safety
- Satisfaction with indoor climate
- Satisfaction with privacy
- Etc.

A: CRE ensures the safety and health of the employees by the standard Program of requirements and working procedures. If there are complaints or an indication of accidents or incidents leading to health and safety issues, the highest priority is given to these cases. Safety, health and security are our top priority in everything we do even if it means to shut down business or invest more in real estate. It is however driven by primarily larger issues and based on human intervention. We are not (yet) measuring actively the sick leave, number of accidents, etc. in relation to our real estate portfolio.

Q: What is the performance of the CRE in terms of supporting the consular assistance worldwide?

Examples:

- Spread of embassies and consulates worldwide
- Rooms, facilities, and services needed for consular assistance (including modernization)
- Etc.

A: This has always been one of the core elements in our real estate concept worldwide (every location). Counters are for example placed in almost every locations including special facilities in the back office (safe, extra security measures, fixed desks, etc.). Through modernization we see that consular assistance is optimized and/ or outsourced, leading to lesser use of the consular real estate facilities. In these cases there is an access of space that is not flexible to use by other working processes at the Embassy or Consulate.

Q: Does the CRE of MFA adequately facilitate the establishment of international relations and networks in order to meet international demands (such as stimulation of an international trade economy) and to become a flexible network organization? Examples:

- Is the spread of embassies/consulates worldwide adequate to establish diverse partners if needed?
 - Good location
 - Accessibility
- Adequate collaboration and meeting rooms within embassies/consulates?
- Does the physical environment support collaboration?
- Diversity in available workspaces and meeting areas?
- Accessibility of workspaces for colleges and third parties
- Satisfaction with seclusion rooms (meeting rooms, room booking systems, accessibility, etc.), multi-purpose rooms, desks and chairs, etc.
- Etc.

A: Whenever we relocate an intensive collaboration is started between the RE department and the local Embassy team to make sure we relocate to the best possible location, find out which facilities they need (Activity Based Working) and solve local cultural issues to make sure visitors of all kind feel welcome and respected. In practice, we find a location that is centrally located for all important network partners and mostly nearby transportation hubs. Furthermore, a mix of meeting spaces is incorporated in the concept like a representation room (VIP room with Dutch art and high quality Dutch furniture), smaller and bigger meeting rooms, a Multi-Purpose Room and different reception zones for different guests. Although this approach and concept is the case for every relocation, there is still more than half of the portfolio to relocate or to modernize to this concept. Satisfaction or productivity is not actively measured and translated into actionable insights (yet).

Q: How does the CRE portfolio perform in terms of sustainability? Examples:

- Climate neutral
- Certifications
- Energy consumption
- CO2 emissions
- Building adaptability
- Life cycle costs
- Comfort
- Indoor quality
- Safety and security
- Etc.

A: The current focus on sustainability for the MFA are on social responsibility and procurement. Another example is in work on building projects, with every project the project teams does a workshop based on a ambition web for sustainability goals. Furthermore, the MFA is developing an overarching strategy for sustainability incorporating plans and actions to meet the goals on sustainability as described by the Dutch government. This plan is now being developed at the operations department, leading to a mission for the real estate department.

Q: How does the CRE portfolio perform in terms of flexibility? Examples:

- Flexibility in layout (for example: multi-purpose rooms, ABW, efficient placement of employees (landing places) etc.)
- Flexibility in opening and closing new embassies/consulates
- Flexibility to up- and downscale
- Etc.

A: In all our projects the concept is based on Activity Based Working, leading to flexible facilities that can be used by everyone when needed. A certain amount of over dimensioning the number of facilities like workstations, makes sure that expanding the local team can be incorporated in the floorplan. A multi-purpose room is always part of this floorplan. In places where we do not have this concept of Activity Based Working we can see a certain amount of excess space due to the smaller workforce abroad. Due to government cutbacks, but also due to centralization or modernization (outsourcing, digitalization) less space is needed. This excess space is maybe not efficient but at the same time gives this flexibility. In opening or closing offices in a flexible way we can rely on colleagues with the expertise and experience of working truly worldwide. This means that where ever real estate is needed, we can deliver. This is a welcome form of flexibility for the

MFA where they can think of business plans, knowing that the expertise is available and ready. There is however still room for improvement to speed up projects, sometimes projects take a long time due to internal procedures (like procurement regulations) or scarce resources at the real estate department.

Q: Does the CRE meet the modernization expectation of the organization? Examples

- Does the RE support the improvement of communication both internally and externally?
- AV facilities and tools
- TPAW
- ABW
- Modernization of consular assistance
- Satisfaction with ICT and equipment
- Etc.

A: Wherever we have had the chance to roll out our ABW concept this is true. Part of this concept is a modern take on real estate, facilitating meeting places, flexible workstations, etc. AV-facilities are typical a responsibility just between the RE-department and IT-department, leaving room for improvement in the design/ project phase, as well as in operations.

Q: How does the CRE worldwide perform in terms of representation (of both the organization and the Netherlands), while still fitting the organization? Examples:

- What is the perception of external parties on the image of MFA: corporate identity and values?
- How does CRE contribute to particular brand values (hospitality, openness, equality, transparency, fairness, sustainability, etc..?)
- Dutch art and culture
- Etc.

A: The Real Estate concept is focused on a modern take on working (ABW) leading the way in the world and highlights typical Dutch characteristics like open, hospital and transparency. But even in older floorplans these characteristics are there, only a bit less or not yet backed by modern materials, furniture, etc. In both new and old concepts Dutch art is a key part of our real estate, bridging the gap between countries and cultures and often a conversation piece to our guests. In most of our concepts there are specific rooms (like the multipurpose room) to host events, and in all occasions we try to facilitate events in the Residence of the ambassador. All of the above leads to our unique selling point as a CRE department at the MFA: facilitating representation at a high standard.

Q: How long term is the CRE strategy and the CRE portfolio? Examples:

- Feasibility/affordability of RE
 - Financial underwriting (alignment with finance team)
- Efficiency of CRE portfolio
 - Enough right space but not more than necessary
- Proactivity of strategies and RE (future proof)
- Duration matching when deciding to lease or purchase RE (how long do you need the building for?)
- Etc.

A: Making long-term plans is hard in a flexible network organization. Many plans indicate that affordability, efficiency, etc. are under pressure due to a lack of resources. But the organization is

trained in making tough decisions or prioritize resources when needed. So the strategy is not worked out in a long-term plan, but rather based on guiding principles and internal rules or habits making resources fit our goals on the way. A good governance and taking responsibility is key in this process.

Q: Does the CRE strategy and portfolio respond well to the corporate strategy, stakeholder demands, and the primary process?

- Alignment

Q: Do you feel like the housing concepts is worldwide but still fits each different local context or could there be room for improvement?

- Use of clusters with similar requirements, types, etc. to not view each asset separately

A: Our strategy of guiding principles works well in line with the corporate strategy, both having an agile approach rather than a detailed plan. The portfolio however is widely dispersed, relatively small and used by our local teams with a strong position in the organization. This means alignment translated in real estate actions or interventions is intensive, and often asks for customization. Alignment of organizational and real estate strategy into alignment on a local level (primary process) takes time and effort.

Appendix 5: survey questions related to literature

Business strategy	CREM strategy	Colocation strategy	№	Questions	CREM	DM	Colleague	If agree this means	Action if agree	If disagree this means	Action if disagree	Source
There is a demand to become a flexible network organization, however mostly in terms of flexible RE	Incorporating flexibility in RE can help MFA get closer to its goal to become a flexible network organization	With this layout MFA could benefit of some aspects related to the business operations: flexibility, financial benefits (no huge capital expenditures, sharing of leasing costs, revenue), and political strategic partners. Disadvantages are not really applicable: security, privacy, overstimulation)	1	You and your co-location partner are physically separated, but located under one roof	0	1	0	That office can be categorized as a private office, in which co-location partners are under one roof but still separated. Thus benefits like collaboration are likely to not be achieved		See answer on following questions: 2 and 3		Nelson & Zapple, 2019
		This layout is a layout which stand in the middle of layout 1 and 3; this is also the case for the benefits and advantages: they are all on middle level	2	Each organization has its own office within one property, however, the following examples of facilities are shared: Internet, reception, canteen, restaurant, lounge area, parking lot, printers, etc.	0	1	0	Office can be considered as a business center: the level of benefits are higher and broader than of private offices.		See answer on following questions: 1 and 3		Wejts - Perres, Appel - Meulenbroek, de Vries & Rottme, 2016
The highest level of flexibility in terms of network can be achieved in this layout	The highest level of flexible RE can be achieved in this layout	All benefits can be achieved in this form, for example the highest level of knowledge sharing and collaboration can take place in this co-location layout. However disadvantages like security and privacy issues, overstimulation are also at its highest	3	The layout of your workplace could be described as follows: Private offices are combined with a shared open plan workspace, in this open plan workspace everything is shared (for instance: meeting rooms, desks, lounge areas, concentration spaces, collaboration spaces, canteen, etc.) with other parties.	0	1	0	The office can be seen as		See answer on following questions: 1 and 2		Instani, 2017
			4	The behavior of the employees in general, is in line with the flexibility of the workplace layout, in other words: the people use the space as flexible as what the workplace is offering			0	1	0			
The demands of all the stakeholders	How can RE be used to answer the demands of the stakeholders	How can the benefits of co-location respond to these demands	5	Which benefits listed below can be achieved with the implementation of co-location (more than one answer possible)?	1	1	1					
MFA wants to unburden its employees and wishes to increase the job satisfaction	RE has to respond to this demand of increasing the satisfaction	One of the advantages of co-location is the increase of job satisfaction	6	I am satisfied that I work in a co-location office.	0	0	1	something with the implementation of co-location is going well, which has caused a higher job satisfaction	Based on all answers try to find the reasons	There are some factors which have a negative influence on the satisfaction of occupants with the co-location office	Based on all answers try to find the reasons for the layout	(Regus, 2018)
MFA wants to become more result oriented/efficient (bringing policy and implementation together) in their workprocess which includes increasing the productivity and performance of employees	In the RE strategy it is stated that MFA wished to increase the productivity of employees with the help of RE	Productivity and performance are known to be affected by the physical and social environment. Due to the presence of third parties (the social environment) and flexible layout of the co-location offices productivity and performance could be increased	7	My productivity and performance is improved in this co-location office.	0	0	1					Rashid, 2013; Regus, 2018; Duikmond, et al., 2015
MFA wishes to become an open, hospitable, fair, and transparent flexible network organization	In order to achieve this RE has to fully support this demand	Co-location can be used to increase the interaction with third parties	8	The sharing of space and amenities with third parties has increased the amount of informal interaction with these third parties/co-location partners.	0	0	1	The implementation of co-location has increased sudden encounters and therefore informal interaction has increased	Research which factors could have contributed to this, for instance: the layout	Despite the presence of third parties the sudden encounters and informal interaction has not increased	Research which factors could have contributed to this, for instance: the layout	Rashid, 2013
MFA wishes to become an open, hospitable, fair, and transparent flexible network organization	In order to achieve this RE has to fully support this demand	Due to the informal interaction the formal collaboration with third parties can be increased	9	Informal social interaction with third parties has led to professional (formal) collaboration with these parties.	0	0	1	Co-location with third parties has increased compared to the collaboration in a traditional office.	This could be because of different factors: the layout, the increase of informal interaction	Increase of formal collaboration with third parties has not been increased due to the implementation of co-location	Which factors above contributed to this, and how can it still be achieved	Duikmond, Nelson & Bruns, 2015; Schreurs, 2019
MFA wishes to become an open, hospitable, fair, and transparent flexible network organization	In order to achieve this RE has to fully support this demand	Due to the increase of informal interaction and formal collaboration the current network of MFA can be expanded and therefore becoming closer to the goal of becoming a flexible network organization	10	This co-location office and partner has extended my network and that of our organization.	0	0	1	Co-location has increased the network opportunities for MFA as an organization		co-location is not considered a tool to or has not have a positive influence on the expansion of the network of individual and MFA as a whole		Arora, Nilawar & Bhargava, 2017
Innovation and creativity could give better perspectives when approaching world wide themes like: sustainability, safety, property, modernization	How can RE stimulate the increase of innovation and creativity	The collaboration with third parties increases the creativity of employees, consequently innovative ideas are generated	11	This co-location environment has led to more creativity and innovation for me as a professional.	0	0	1	Due to the different organization locating, interacting and collaborating together new creative ideas are generated. Therefore, creativity and innovation is increased		Probably due to the lack of interaction, collaboration, innovation and creativity are not stimulated		Winter, 2005; Nelson & Zapple, 2019
Related to the demand: modernization (including digitalization)	Demand to provide flexible and modern furniture and workplace layouts	Co-location spaces are often equipped with modern and good equipped in order to attract people and increase satisfaction	12	This co-location office is better equipped than other non co-location embassies, for example: better technology, better furniture, etc.	0	1	1	With the implementation of co-location, the equipped of the office has been modernized to increase the satisfaction unlike co-location		nothing has been changed expect the third party locating in the office, nothing is changed to make offices more attractive		Kaplan, 2001
Fast changing world, with shifts in the geopolitical environment and a more instable multilateralism. Thus, flexibility in policy making and business operations is of great importance	More flexibility in RE is needed in order to respond to the fast changing world and to get closer to the goal to become a flexible network organization	Co-location is a tool to incorporate more flexibility in the RE portfolio, due to the flexible renting contracts which can be a lot shorter than the traditional rental contracts	13	Co-location provides flexibility in rental contracts (for example: short- and long term options, contract cancellation terms, etc.).	1	1	0	Co-location has increased the satisfaction of co-location partners. This could be because of different factors: the layout, the increase of informal interaction		Due to open house being used realising short term contracts may not be beneficial for the host organization. In the case of co-located short term contracts may not be applicable at all		Arora, et al. 2017; Nelson & Zapple, 2019; Schreurs, 2019
Fast changing world, with shifts in the geopolitical environment and a more instable multilateralism. Thus, flexibility in policy making and business operations is of great importance	More flexibility in RE is needed in order to respond to the fast changing world and to get closer to the goal to become a flexible network organization	Co-location is a tool to incorporate more flexibility in the RE portfolio, for example due to flexible contracts	14	Co-location offices improve the flexibility when it comes to opening and closing the organizations property and therefore accelerates the moving process (in other words: co-location is an option to open or close an office fast).	1	1	0	This flexibility is due to the fact that MFA is scaling itself in the property of another organization, thus time is saved, searching location, building, etc.	Try to link it to co-location form and see if the reason for this flexibility is related to the form	Co-location has not added any flexibility to the opening and closing of embassies or consulates		Nelson & Zapple, 2019
Fast changing world, with shifts in the geopolitical environment and a more instable multilateralism. Thus, flexibility in policy making and business operations is of great importance	More flexibility in RE is needed in order to respond to the fast changing world and to get closer to the goal to become a flexible network organization	Co-location is a tool to incorporate more flexibility in the RE portfolio, for example due to flexible contracts	15	Up- and downsizing of the current properties of the Ministry of Foreign Affairs becomes easier with the implementation of co-location: in other words if more space is needed, the co-location concept makes it possible to lease additional space for short- and long term.	1	1	0	This especially the case in co-working spaces where the flexible layout and flexible rental contracts could probably be explained by the form and layout of the office		co-location has not increased the flexibility when it comes to up and downsizing, this could probably be explained by the form and layout of the office		Arora, et al. 2017
	Incorporate long-term planning of RE, including affordability		16	The capital expenditures (building project investments) are less when co-location is used	1	1	0	Due to MFA locating itself in already existing office of an organization, capital expenditures are less: no design cost, construction cost: maybe only some refurbishment cost		the costs/benefits are either so small that it is not notable, or the remodeling cost are extremely high		Nelson & Zapple, 2019
		The portfolio is optimized in the use of space, excess space is now used and therefore the space use has become more efficient	17	Due to the implementation of co-location, the use of space has become more efficient.	1	1	0	The space of MFA which used to be not used is now used and therefore space is used more efficiently. The use of space can also be efficient due to the multipurpose spaces implemented in the office		CO-location has not increased the efficiency of space use compared to a traditional office		Nelson & Zapple, 2019
A changing world in which the job market has become more competitive, thus recruiting new young talents will become more difficult	RE could help by offering attractive workplaces for young talents	Due to the usual modern layout, modern amenities, and opportunities to expand networks co-location could be used as a tool to attract new young talents	18	Co-location is a tool to attract young new talents.	1	1	0	the co-location office has made it more attractive (better equipment) or due to the collaborating image which co-location creates new young talents are attracted		Co-location does not offer more which could attract new talents		Nelson & Zapple, 2019
MFA wants to commit to sustainability	By realizing more sustainable RE MFA could come closer to this demand	More sustainable due to its sharing nature thus co-location offices are often greener	19	Sustainability can be an advantage of co-location.	1	1	0	users are aware of the fact that co-location is a way to be more sustainable, this is especially due to the sharing nature		It is a difficult benefit to recognize, people are not aware of this benefit		Regus, 2018
MFA wants to commit to sustainability	By realizing more sustainable RE MFA could come closer to this demand	Assessing awareness of this benefit	20	Which sustainable benefit do you think co-location could offer?	1	1	0					Regus, 2018
			21	My co-location office gives me the opportunity to work without being interrupted, distracted, or disturbed due to the presence of third parties.	0	0	1	Despite the presence of third parties there is no overstimulation happening either because of the layout or because of the lack of interaction with third parties		The presence of third parties has made it more difficult for employees to realize work which needs concentration		Nelson & Zapple, 2019
Security and safety are important demands	RE also have to meet these demands	In this co-location office with the presence of third parties, I have enough privacy: both visual as well as auditory privacy.	22	In this co-location office with the presence of third parties, I have enough privacy: both visual as well as auditory privacy.	0	0	1	the lack of privacy is not a issues which is created due to the presence of third parties.		The presence of third parties has damaged the amount of privacy of MFA		Rashid, 2013; van der Voordt, 2003
Security and safety are important demands	RE also have to meet these demands	The physical and cyber security in this co-location office is adequate, despite the presence of a third party.	23	The physical and cyber security in this co-location office is adequate, despite the presence of a third party.	0	0	1	co-location does not create a problem with security, security measures are easily adjusted and therefore not a reason of worry		The presence of third parties makes the implementation of security measures difficult		Hurry, 2012
Security and safety are important demands	RE also have to meet these demands	Security problems, both physical and cyber security, in co-location offices can be solved without it becoming a huge burden during the implementation process.	24	Security problems, both physical and cyber security, in co-location offices can be solved without it becoming a huge burden during the implementation process.	1	1	0					Hurry, 2012
		The financial benefits (for example: generate revenue with excess space, sharing of leasing costs, etc.) outweigh the sometimes higher leasing costs of co-location.	25	The financial benefits (for example: generate revenue with excess space, sharing of leasing costs, etc.) outweigh the sometimes higher leasing costs of co-location.	1	1	0	The higher leasing costs are not a reason of worry because the overall financial benefits are higher		the higher leasing cost are too high to not see it as a downside		Nelson & Zapple, 2019
Unburden employees, higher satisfaction of employees	RE could be used to achieve these demands	Willingness of employees to change demands	26	What percentage of employees do you think is happy with the implementation of co-location?	1	1	0					Nelson & Zapple, 2019
Geopolitical shifts and unstable multilateralism	RE needs to be flexible to respond to this uncertain world	What is the attitude of MFA when it comes to co-locating with different types of parties. Locating with different types of third parties could stimulate innovation and creativity	27	What type of co-location partners do you prefer to co-locate with (not necessarily the current co-location partners: more than one answer possible)?	0	1	1					Vinokur, Kaplan, 2018
Geopolitical shifts and unstable multilateralism	RE needs to be flexible to respond to this uncertain world	What is the attitude of MFA when it comes to co-locating with different types of parties. Locating with different types of third parties could stimulate innovation and creativity	28	I prefer to co-locate with different types of organizations (diverse set of co-location partners) rather than only with the same type of organization (like-minded countries).	0	1	1	employees are ready to co-locate with different organization and not only with like minded countries		The current situation in which the co-location partners are like minded countries are the best type of partners		Vinokur, Kaplan, 2018
Interact and collaborate more with other organization, in the name of becoming a flexible network organization.		Related to the advantage to increase collaboration, innovation and creativity	29	Knowledge sharing with third parties happens on a regular basis	0	0	1	Due to the stimulation of informal interaction and formal collaboration are increased and therefore innovation and creativity is also stimulated		the presence of third parties does not mean that actual knowledge sharing between these parties take place		Cunadi, Horsten & Bouteiller, 2014
Interact and collaborate more with other organization, in the name of becoming a flexible network organization.		Freedom to choose workplace and people to work with increase the collaboration among different organizations	30	I feel free to sit next to, and collaborate, with people from third parties.	0	0	1	There is enough freedom given to the employees, which consequently increase the amount of collaboration with third parties		employees do not feel like they have enough freedom to collaborate		Thaender, 2018
MFA want to become a equal organization,	hierarchy in space use does not complicit equality	the less hierarchy and the more simplicity and fairness could increase the amount of collaboration and interaction	31	The workplace layout is mostly an activity based office (mix of spaces for meetings, concentration rooms, collaboration spaces, etc.) rather than it being based on function profiles (everybody has its own room or a room per function type).	0	0	1	The layout of the offices is not based on hierarchy but more based on the activities (multipurpose rooms)		hierarchy plays a role in the allocation of space		Thaender, 2018

Appendix 6: survey questions

Survey for operational managers

This survey is part of a research, in collaboration with the TU Delft, in which co-location within the Ministry of Foreign Affairs (MFA) is analyzed. With this research the following products will be generated: An overview with all the realized co-location cases and their overall success rate, an anecdotal success formula for the implementation of co-location, and an assessment framework will be developed which can be used to implement co-location as good as possible.

The survey will take around 10 minutes to complete. Confidentiality of your answers will be treated carefully and strictly (your response will not be shared with third parties). If desired a follow up of this research can be send after the completion of this research.

Background information:

In this survey some subjects will continue to come back, it is therefore important to give a clear definition of these subjects. The subjects are defined as follows:

Co-location: A workplace in which organizations from different places co-locate together based on a lease contract or membership in one shared property with shared facilities and resources.

There are different options within co-location:

- Open house (in which one organization decides to open its doors of an owned property for a third party);
- Co-located (in which both organizations decide to become the main tenant or owner of the same property which will be shared between them);
- Co-working (office space is provided by an external co-working space provider, in which different organizations are located).

Before starting with the survey, the following has to be clarified about the questions: When answering the questions it is important to only consider the co-location part of the office you work in; in other words, this survey is not about your own workplace.

General information

1. If necessary, would you be interested in an interview after this enquiry to provide some extra information?
 - a. Yes
 - b. No
2. Which embassy/consulate are you currently working in?
 - a.
3. How long have you been working in this co-location site?
 - a.
4. Is this your first time working in a co-location office?
 - a.
5. Please grade the co-location office you currently work in, please consider co-location in general: the co-location type, layout, partner, location, etc. (from 1 to 10, 1=extremely bad, 10= extremely good).
 - a.

Co-location layout

The first few questions are about the layout of your co-location office, this is needed for the categorization of your co-location office. To what degree do you agree with the following statements?

6. You and your co-location partner(s) are physically separated, but located under one roof.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
7. Each organization has its own office within one property, however, the following examples of facilities are shared: internet, reception, canteen, restaurant, lounge area, parking lot, printers, etc.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
8. The layout of your workplace could be described as follows: private offices are combined with a shared open plan workspace, in this open plan workspace everything is shared (for instance: meeting rooms, desks, lounge areas, concentration spaces, collaboration spaces, canteen, etc.) with the co-location partner(s).
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
9. The behavior of the employees in general, is in line with the flexibility of the workplace layout, in other words: the people use the space as flexible as what the workplace is offering.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know

Potential advantages and downsides of co-location offices

In this co-location office you share space with another organization. In the next questions we want to understand which possible benefits and downsides co-location can give to you.

10. Which benefits do you consider as the top 3 benefits of co-location?
 - a. Increased job satisfaction
 - b. Improved productivity and performance
 - c. Increased informal interaction with third parties

- d. Increased formal collaboration with third parties (working together on projects or brainstorming about themes)
 - e. Expanded network opportunities (expansion of network through third parties)
 - f. Stimulation of innovation and creativity
 - g. Better equipped spaces
 - h. More flexibility in leasing conditions
 - i. More flexibility to up-and downscale
 - j. Increased efficiency in time (acceleration of moving process)
 - k. Decrease of building investments
 - l. Optimization of portfolio performance
 - m. Attract best talent
 - n. Environmental benefits
11. This co-location office is better equipped than other non-co-location embassies, for example: better technology, better furniture, etc.
- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
12. Co-location provides more flexibility in rental contracts in comparison to rental contracts in traditional offices (for example: short- and long term options, contract cancellation terms, etc.).
- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
13. Co-location is an option to open or close and embassy/consulate fast.
- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
14. If more space is needed, the co-location concept makes it possible to lease additional space easier for both short- and long term.
- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
15. The capital expenditures (building project investments) are less when co-location is used; especially when compared to traditional embassies/consulates.
- a. Agree
 - b. Slightly agree

- c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
16. Due to the implementation of co-location, the use of space has become more efficient.
- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
17. Co-location is a tool to attract young new talents
- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
18. Sustainability can be an advantage of co-location
- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
19. Which sustainable benefit do you think co-location could offer?
- a.
20. The financial benefits (for example: generate revenue with excess space, sharing of leasing costs, etc.) outweigh the sometimes higher leasing costs of co-location
- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
21. What percentage of the employees do you is happy with the implementation of co-location?
- a.
22. Security problems, both physical and cyber security, in co-location offices can be solved without in becoming a huge burden during the implementation process.
- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know

Possible success factors for co-location offices

In the following questions, we would like to assess the factors that could contribute to the achievement of the possible advantages of co-location.

23. What type of co-location partners do you prefer to co-locate with (not necessarily the current co-location partners; more than one answer possible)?
 - a. Other countries (like-minded)
 - b. NGO's (non-profit organizations)
 - c. Startups (businesses)
 - d. Medium sized private companies
 - e. Big established private companies
 - f. Other (please specify),
24. I prefer to co-locate with different types of organizations (diverse set of co-location partners) rather than only with the same type of organization (like-minded countries).
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
25. There is a common awareness (Real estate managers, Operational managers, and employees) of the benefits (for example: increased flexibility, expanded network opportunities, increased collaboration, etc.) which co-location could offer.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
26. The implementation goals which the ministry of foreign affair wants to achieve with co-location are clear: flexibility in real estate, financial benefits, (revenue from excess space), policy related collaboration, and establishing strategic partners.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
27. Give the implementation goal, flexibility in Real Estate, a score from 1 to 5 (1=extremely important, 3=neutral, and 5=extremely unimportant)
 - a. 1
 - b. 2
 - c. 3
 - d. 4
 - e. 5
28. Give the implementation goal, financial benefits, a score from 1 to 5 (1=extremely important, 3=neutral, and 5=extremely unimportant)
 - a. 1
 - b. 2

- c. 3
 - d. 4
 - e. 5
29. Give the implementation goal, policy related collaboration with third parties, a score from 1 to 5 (1=extremely important, 3=neutral, and 5=extremely unimportant)
- a. 1
 - b. 2
 - c. 3
 - d. 4
 - e. 5
30. Give the implementation goal, establishment of strategic partners, a score from 1 to 5 (1=extremely important, 3=neutral, and 5=extremely unimportant)
- a. 1
 - b. 2
 - c. 3
 - d. 4
 - e. 5

Implementation problems and solutions

In the questions below we want to understand the possible encountered problems of co-location.

31. Could you name 1-3 issues which you have encountered during your experience in a co-location office.
- a.
32. What could be possible solutions to these problems.
- a.

Survey for employees

This survey is part of a research, in collaboration with the TU Delft, in which co-location within the Ministry of Foreign Affairs is analyzed. With this research the following products will be generated: An overview with all the realized co-location cases and their overall success rate, an anecdotal success formula for the implementation of co-location, and an assessment framework will be developed which can be used to implement co-location as good as possible in order to not only satisfy the policy makers but also the employees.

The survey will take around 10 minutes to complete. Confidentiality of your answers will be treated carefully and strictly (your response will not be shared with third parties). If desired a follow up of this research can be send after the completion of this research.

Background information:

In this survey some subjects will continue to come back, it is therefore important to give a clear definition of these subjects. The subjects are defined as follows:

Co-location: A workplace in which organizations from different places co-locate together based on a lease contract or membership in one shared property with shared facilities and resources.

There are different options within co-location:

- Open house (in which one organization decides to open its doors of an owned property for a third party);
- Co-located (in which both organizations decide to become the main tenant or owner of the same property which will be shared between them);
- Co-working (office space is provided by an external co-working space provider, in which different organizations are located).

Before starting with the survey, the following has to be clarified about the questions: **When answering the questions it is important to only consider the co-location part of the office you work in; in other words, this survey is not about your own workplace.**

General information

1. If necessary, would you be interested in an interview after this enquiry to provide some extra information?
 - a. Yes (please add email)
 - b. No
2. Which embassy/consulate are you currently working in?
 - a.
3. How long have you been working in this co-location site?
 - a.
4. Is this your first time working in a co-location office?
 - a.
5. Which policy theme from the policy framework is related to your function, for instance: trade, European collaboration, consular, peace and safety, etc.
 - a.
6. Please grade the co-location office you currently work in, please consider co-location in general: the co-location type, layout, partner, location, etc. (from 1 to 10, 1=extremely bad, 10=extremely good)
 - a.

Possible advantages and downsides of co-location offices

In the co-location office you reside in, you share space with other organizations. In the next questions, we want to understand which possible up-and downsides co-location can give to you.

7. Which benefits do you consider as the top 3 benefits of co-location?
 - a. Increased job satisfaction
 - b. Improved productivity and performance
 - c. Increased informal interaction with third parties
 - d. Increased formal collaboration with third parties (working together on projects or brainstorming about themes)
 - e. Expanded network opportunities (expansion of network through third parties)
 - f. Stimulation of innovation and creativity
8. I am satisfied that I work in a co-location office.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree

- f. I don't know
- 9. My productivity and performance is improved in this co-location office compared to a traditional office.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
- 10. The sharing of space and amenities with the co-location partner(s) has increased the amount of informal interaction with these parties.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
- 11. Informal social interaction with the co-location partner(s) has led to professional (formal) collaboration with these parties.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
- 12. This co-location office and partner have extended my network and that of our organization.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
- 13. This co-location environment has led to more creativity and innovation for me as a professional compared to a traditional embassy/consulate.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
- 14. This co-location office is better equipped than other non-co-location embassies, for example: better technology, better furniture, etc.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
- 15. My co-location office gives me the opportunity to work without being interrupted, distracted, or disturbed due to the presence of the co-location partner(s).

- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
16. In this co-location office with the presence of the co-location partner(s), I have enough privacy; both visual as well as auditory privacy.
- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
17. The physical and cyber security in this co-location office is adequate, despite the presence of the co-location partner(s).
- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know

Possible success factors

In the following questions, we would like to assess the factors that could contribute to the achievement of the advantages of co-location.

18. What type of co-location partners do you prefer to co-locate with (no necessarily the current co-location partners; more than one answer possible)?
- a. Other countries (like-minded)
 - b. NGO's (non-profit organization)
 - c. Startups (businesses)
 - d. Medium sized private companies
 - e. Big established private companies
 - f. Other (please specify),
19. I prefer to co-locate with different types of organizations (diverse set of co-location partners) rather than only with the same type of organization (like minded countries)
- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
20. Knowledge sharing with the co-location partner(s) happens on a regular basis compared to a traditional embassy/consulate.
- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know

21. I feel free to move whenever and work with whoever I want.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
22. The workplace layout is mostly an activity based office (mix of spaces for meetings, concentration rooms, collaboration spaces, etc.) rather than it being based on fixed rooms per person)
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
23. There is a community created with the co-location partner(s).
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
24. I can b myself in this co-location office, instead of being cautious due to the presence of the co-location partner(s).
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know

Survey for Real Estate Managers

This survey is part of a research, in collaboration with the TU Delft, in which co-location within MFA is analyzed. With this research the following products will be generated: An overview with all the realized co-location cases and their overall success rate, an anecdotal success formula for the implementation of co-location, and an assessment framework will be developed which can be used to implement co-location as good as possible.

The survey will take around 10 minutes to complete. Confidentiality of your answers will be treated carefully and strictly (the response will not be shared with third parties). If desired a follow up of this research can be send after the completion of this research.

Background information:

In this survey some subjects will continue to come back, it is therefore important to give a clear definition of these subjects. The subjects are defined as follows:

Co-location: A workplace in which organizations from different places co-locate together based on a lease contract or membership in one shared property with shared facilities and resources.

There are different leasing options within co-location:

- Open house (in which one organization decides to open its doors of an owned property for a third party);
- Co-located (in which both organizations decide to become the main tenant or owner of the same property which will be shared between them);
- Co-working (office space is provided by an external co-working space provider, in which different organizations are located).

Before starting with the survey, the following has to be clarified about the questions: When answering the questions it is important to only consider the co-location part of the office you work in; in other words, this survey is not about your own workplace.

Potential advantages and downsides of co-location

In the following questions, we want to understand which possible up-and downsides the co-location with third parties in one property could have brought to you.

1. Which benefits do you consider as the top 3 benefits of co-location
 - a.

Potential advantages and downsides of co-location offices

In this co-location office you share space with another organization. In the next questions we want to understand which possible benefits and downsides co-location can give to you.

1. Which benefits do you consider as the top 3 benefits of co-location?
 - a. Increased job satisfaction
 - b. Improved productivity and performance
 - c. Increased informal interaction with third parties
 - d. Increased formal collaboration with third parties (working together on projects or brainstorming about themes)
 - e. Expanded network opportunities (expansion of network through third parties)
 - f. Stimulation of innovation and creativity
 - g. Better equipped spaces
 - h. More flexibility in leasing conditions
 - i. More flexibility to up-and downscale
 - j. Increased efficiency in time (acceleration of moving process)
 - k. Decrease of building investments
 - l. Optimization of portfolio performance
 - m. Attract best talent
 - n. Environmental benefits
2. Co-location provides more flexibility in rental contracts in comparison to rental contracts in traditional offices (for example: short- and long term options, contract cancellation terms, etc.).
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree

- e. Disagree
 - f. I don't know
- 3. Co-location is an option to open or close and embassy/consulate fast.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
- 4. If more space is needed, the co-location concept makes it possible to lease additional space easier for both short- and long term.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
- 5. The capital expenditures (building project investments) are less when co-location is used; especially when compared to traditional embassies/consulates.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
- 6. Due to the implementation of co-location, the use of space has become more efficient.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
- 7. Co-location is a tool to attract young new talents
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
- 8. Sustainability can be an advantage of co-location
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
- 9. Which sustainable benefit do you think co-location could offer?
 - a.

10. The financial benefits (for example: generate revenue with excess space, sharing of leasing costs, etc.) outweigh the sometimes higher leasing costs of co-location
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
11. What percentage of the employees do you is happy with the implementation of co-location?
 - a.
12. Security problems, both physical and cyber security, in co-location offices can be solved without in becoming a huge burden during the implementation process.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know

Possible success factors for co-location offices

In the following questions, we would like to assess the factors that could contribute to the achievement of the possible advantages of co-location.

13. There is a common awareness (Real estate managers, Operational managers, and employees) of the benefits (for example: increased flexibility, expanded network opportunities, increased collaboration, etc.) which co-location could offer.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
14. The implementation goals which the ministry of foreign affair wants to achieve with co-location are clear: flexibility in real estate, financial benefits, (revenue from excess space), policy related collaboration, and establishing strategic partners.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
15. Give the implementation goal, flexibility in Real Estate, a score from 1 to 5 (1=extremely important, 3=neutral, and 5=extremely unimportant)
 - a. 1
 - b. 2
 - c. 3
 - d. 4

- e. 5
- 16. Give the implementation goal, financial benefits, a score from 1 to 5 (1=extremely important, 3=neutral, and 5=extremely unimportant)
 - a. 1
 - b. 2
 - c. 3
 - d. 4
 - e. 5
- 17. Give the implementation goal, policy related collaboration with third parties, a score from 1 to 5 (1=extremely important, 3=neutral, and 5=extremely unimportant)
 - a. 1
 - b. 2
 - c. 3
 - d. 4
 - e. 5
- 18. Give the implementation goal, establishment of strategic partners, a score from 1 to 5 (1=extremely important, 3=neutral, and 5=extremely unimportant)
 - a. 1
 - b. 2
 - c. 3
 - d. 4
 - e. 5

Implementation problems and solutions

In the questions below we want to understand the possible encountered problems of co-location.

- 19. Could you name 1-3 issues which you have encountered during your experience in a co-location office.
 - a.
- 20. What could be possible solutions to these problems.
 - a.

Adding value

*Co-location could be a tool to add more value to the ministry of foreign affairs as a whole, in the following questions the possible points of adding value will be assessed. **When answering these questions please consider the current situation.***

- 21. Co-location has a positive influence on the management of risks, for instance due to the increase of flexibility.
 - a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
- 22. Co-location contributes to the increase of the property value
 - a. Agree
 - b. Slightly agree

- c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
23. Co-location is a tool to reduce the Real Estate footprint
- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
24. Co-location helps with the reduction of the Real Estate costs.
- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
25. Co-location has a positive influence on the satisfaction occupants.
- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
26. Co-location supports the activities and culture of the Ministry of foreign affairs, for instance; co-location support the organization with the establishment of collaboration between third parties and expansion of networks.
- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
27. Co-location can enhance the image (an open, hospitable, fair, and transparent flexible network organization) of the ministry of foreign affairs
- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know
28. Co-location is a good tool to stimulate innovation and generate new ideas because of the influence and the presence of third parties
- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree

- e. Disagree
 - f. I don't know
29. Co-location helps the cooperation between the ministry of foreign affairs and third parties.
- a. Agree
 - b. Slightly agree
 - c. Neutral
 - d. Slightly disagree
 - e. Disagree
 - f. I don't know

Appendix 7: General survey results

Results of the possible advantages dimension

Subject	Agree	Slightly agree	Neutral	Slightly disagree	Disagree	I don't know
Flexible behavior (21)	19%	33.3%	9.5%	-	38.1%	-
Better equipped (35)	8.6%	8.6%	42.9%	5.7%	25.7%	8.6%
Flexibility in leasing conditions (26)	-	30.8%	19.2%	15.4%	26.9%	7.7%
Open and close faster (26)	15.4%	26.9%	19.2%	3.8%	30.8%	3.8%
Flexibility to up and down scale (26)	7.7%	11.5%	15.4%	23.1%	34.6%	7.7%
Decrease in capital expenditures (26)	26.9%	26.9%	11.5%	7.7%	15.4%	11.5%
Efficient use of space (26)	53.8%	15.4%	15.4%	7.7%	7.7%	-
Attract best talent (25)	4%	8%	36%	4%	32%	16%

Subject	Agree	Slightly agree	Neutral	Slightly disagree	Disagree	I don't know
Environmental benefits (26)	42.3%	3.8%	34.6%	7.7%	3.8%	7.7%
Increased satisfaction (17)	29.4%	17.6%	41.2%	5.9%	5.9%	-
Increased productivity and performance (17)	11.8%	5.9%	58.8%	-	23.5%	-
Increased interaction with third parties (17)	23.5%	58.8%	-	5.9%	11.8%	-
Increased collaboration with third parties (17)	17.6%	41.2%	17.6%	5.9%	17.6%	-
Expansion of network (17)	17.6%	35.3%	29.4%	-	17.6%	-
Increase of innovation and creativity (17)	17.6%	5.9%	35.3%	5.9%	29.4%	5.9%

Results of the possible disadvantages dimension

Subject	Agree	Slightly agree	Neutral	Slightly disagree	Disagree	I don't know
Financial benefits > higher leasing costs (26)	7.7%	34.6%	26.9%	3.8%	11.5%	15.4%
Security is not a burden in implementation process (26)	26.9%	15.4%	26.9%	15.4%	15.4%	-
Work without overstimulation (17)	23.5%	11.8%	41.2%	11.8%	11.8%	-

Subject	Agree	Slightly agree	Neutral	Slightly disagree	Disagree	I don't know
Privacy is not harmed (17)	23.5%	23.5%	23.5%	11.8%	17.6%	-
Adequate security within office (17)	35.3%	11.8%	17.6%	17.6%	11.8%	5.9%

Results of the possible success factors dimension

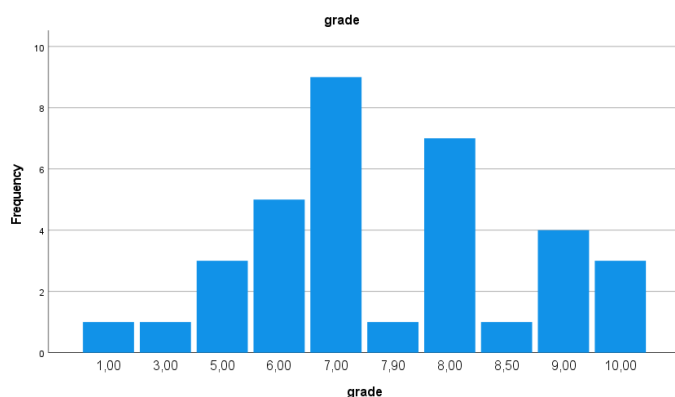
Subject	Agree	Slightly agree	Neutral	Slightly disagree	Disagree	I don't know
Diversity in co-location partners (36)	13.9%	11.1%	19.4%	13.9%	33.3%	8.3%
Common awareness of benefits (26)	30.8%	23.1%	26.9%	3.7%	7.7%	7.7%
Clear implementation goals (26)	26.9%	15.4%	34.6%	-	11.5%	11.5%
Knowledge sharing (17)	11.8%	29.4%	11.8%	11.8%	35.3%	-
Freedom to work with whoever and wherever (17)	64.7%	11.8%	5.9%	11.8%	5.9%	-
Activity based layout (17)	41.2	11.8%	11.8%	-	29.4%	5.9%

Subject	Agree	Slightly agree	Neutral	Slightly disagree	Disagree	I don't know
Community with third party (17)	17.6%	35.3%	23.5%	-	23.5%	-
Be yourself without caution due to third party (17)	41.2%	29.4%	23.5%	-	5.9%	-

Results of the adding value dimension

Subject	Agree	Slightly agree	Neutral	Slightly disagree	Disagree	I don't know
Risk management (7)	14.3%	28.6%	28.6%	-	28.6%	-
Increase of property value (7)	85.7%	-	-	-	14.3%	-
Reduce RE footprint (7)	85.7%	-	-	-	14.3%	-
Reduce RE costs (7)	42.9%	57.1%	-	-	-	-
Increase satisfaction of occupants (7)	28.6%	14.3%	42.9%	-	-	14.3%
Support activities and culture of MFA (7)	14.3%	28.6%	42.9%	-	14.3%	-
Enhance image (7)	28.6%	57.1%	14.3%	-	-	-
Stimulate innovation (7)	28.6%	28.6%	42.9%	-	-	-
Encourage cooperation (7)	28.6%	71.4%	-	-	-	-

Appendix 8: survey results per embassy



Grades given. Mean of grades is 7.15

Response: possible advantages per embassy/consulate, per layout, form, partner, and response group

Executive suites	Embassy/consulate (diplomatic mission)	Response divided into four categories	Dominant response category
Response OM	Mission 22 <i>Openhouse</i> <i>Semi-governmental party C</i>	3 Agree or slightly agree 0 Neutral 3 Disagree or slightly disagree 3 I don't know	Agree or slightly agree = Disagree or slightly disagree = I don't know
	Mission 6 <i>Openhouse</i> <i>Semi-governmental party C and D</i>	3 Agree or slightly agree 1 Neutral 1 Disagree or slightly disagree 4 I don't know	I don't know (1 point difference with agree..)
	Mission 29 <i>Openhouse (third party property)</i> <i>EU</i>	2 Agree or slightly agree 1 Neutral 5 Disagree or slightly disagree 0 I don't know	Disagree or slightly disagree
	Mission 24 <i>Openhouse</i> <i>Orange corners (startups)</i>	3 Agree or slightly agree 0 Neutral 5 Disagree or slightly disagree 1 I don't know	Disagree or slightly disagree
	Mission 23 <i>Openhouse</i> <i>NL and EU representation</i>	3 Agree or slightly agree 1 Neutral 5 Disagree or slightly disagree 0 I don't know	Disagree or slightly disagree
	Mission 16? (Serviced office and hybrid were neutral) <i>Openhouse</i> <i>Country E</i>	5 Agree or slightly agree 3 Neutral 1 Disagree or slightly disagree 0 I don't know	Agree or slightly agree?
Response employees	Mission 13 <i>Openhouse</i> <i>Country D</i>	1 Agree or slightly agree 2 Neutral 5 Disagree or slightly disagree 0 I don't know	Disagree or slightly disagree
	Mission 16? (Serviced office and hybrid were neutral)	6 Agree or slightly agree 1 Neutral	Agree or slightly agree?

	Openhouse Country E	0 Disagree or slightly disagree 0 I don't know	
Serviced offices	Embassy/consulate (diplomatic mission)	Response divided into four categories	Dominant response category
Response OM	Mission 11 Openhouse Country B	0 Agree or slightly agree 5 Neutral 4 Disagree or slightly disagree 0 I don't know	Neutral (1 point difference with disagree....)
	Mission 21 Openhouse Semi-governmental party E	5 Agree or slightly agree 4 Neutral 0 Disagree or slightly disagree 0 I don't know	Agree slightly agree (1 point difference with neutral)
	Mission 14? (serviced office was neutral, other options were disagree) Openhouse Semi-governmental party E	3 Agree or slightly agree 1 Neutral 5 Disagree or slightly disagree 0 I don't know	Disagree or slightly disagree?
	Mission 26 Openhouse Semi-governmental party C	4 Agree or slightly agree 4 Neutral 1 Disagree or slightly disagree 0 I don't know	Agree or slightly agree = neutral
	Mission 20 Openhouse Semi-governmental party E and H	5 Agree or slightly agree 2 Neutral 2 Disagree or slightly disagree 0 I don't know	Agree or slightly agree
	Mission 30 Openhouse in third party property Country A	4 Agree or slightly agree 1 Neutral 3 Disagree or slightly disagree 1 I don't know	Agree or slightly agree (1 point difference disagree...)
Response Employees	Mission 20 Openhouse Semi-governmental party E and H	4 Agree or slightly agree 2 Neutral 0 Disagree or slightly disagree 1 I don't know	Agree or slightly agree
	Mission 30 E1 Openhouse in third party property Country A	2 Agree or slightly agree 4 Neutral 1 Disagree or slightly disagree 0 I don't know	Neutral
	Mission 30 E2 Openhouse in third party property Country A	1 Agree or slightly agree 1 Neutral 5 Disagree or slightly disagree 0 I don't know	Disagree or slightly disagree
	Mission 30 E3 Openhouse in third party property Country A	2 Agree or slightly agree 3 Neutral 2 Disagree or slightly disagree 0 I don't know	Neutral (1 point difference with agree.. and disagree...
Hybrid offices	Embassy/consulate	Response divided into four categories	Dominant response category
Response OM	Mission 5	1 Agree or slightly agree 0 Neutral	Disagree or slightly disagree

	Openhouse Country A	8 Disagree or slightly disagree 0 I don't know	
	Mission 10? (Hybrid office was answered with neutral, rest was disagree) Openhouse Country A	3 Agree or slightly agree 3 Neutral 0 Disagree or slightly disagree 3 I don't know	Agree or slightly agree = Neutral = I don't know?
	Mission 19 Openhouse Country F	6 Agree or slightly agree 2 Neutral 1 Disagree or slightly disagree 0 I don't know	Agree or slightly agree
	Mission 32 Co-located Country H	0 Agree or slightly agree 1 Neutral 8 Disagree or slightly disagree 0 I don't know	Disagree or slightly disagree
	Mission 33 Co-located EU representation	0 Agree or slightly agree 1 Neutral 5 Disagree or slightly disagree 3 I don't know	Disagree or slightly disagree
Response employees	Mission 19 Openhouse Country F	4 Agree or slightly agree 2 Neutral 0 Disagree or slightly disagree 0 I don't know	Agree or slightly agree
	Mission 32 E1 Co-located Country H	6 Agree or slightly agree 1 Neutral 0 Disagree or slightly disagree 0 I don't know	Agree or slightly agree
	Mission 32 E2 Co-located Country H	3 Agree or slightly agree 3 Neutral 0 Disagree or slightly disagree 1 I don't know	Agree or slightly agree = Neutral
	Mission 32 E3 Co-located Country H	3 Agree or slightly agree 0 Neutral 4 Disagree or slightly disagree 0 I don't know	Disagree or slightly disagree (1 point difference with agree or slightly agree)
	Mission 32 E4 Co-located Country H	2 Agree or slightly agree 4 Neutral 1 Disagree or slightly disagree 0 I don't know	Neutral
	Mission 33 E1 Co-located EU representation	5 Agree or slightly agree 2 Neutral 0 Disagree or slightly disagree 0 I don't know	Agree or slightly agree
	Mission 33 E2 Co-located EU representation	4 Agree or slightly agree 3 Neutral 0 Disagree or slightly disagree 0 I don't know	Agree or slightly agree (1 point difference with neutral)
	Mission 33 E3	5 Agree or slightly agree 2 Neutral	Agree or slightly agree

	Co-located EU representation	<input type="radio"/> Disagree or slightly disagree <input type="radio"/> I don't know	
--	---------------------------------	---	--

Response overview: possible success factors per embassy/consulate, per layout, form, partner, and response group

Executive suites	Embassy/consulate (diplomatic missions)	Response divided into four categories	Dominant response category
Response OM	Mission 22 Openhouse Semi-governmental party C	2 Agree or slightly agree <input type="radio"/> Neutral <input type="radio"/> Disagree or slightly disagree 1 I don't know	Agree or slightly agree (1 point difference with I don't know)
	Mission 6 Openhouse Semi-governmental party C and D	<input type="radio"/> Agree or slightly agree 2 Neutral 1 Disagree or slightly disagree <input type="radio"/> I don't know	Neutral (1 point difference with disagree or slightly disagree)
	Mission 29 Openhouse in third party property EU	<input type="radio"/> Agree or slightly agree 1 Neutral 2 Disagree or slightly disagree <input type="radio"/> I don't know	Disagree or slightly disagree (1 point difference with Neutral)
	Mission 24 Openhouse Orange corners (startups)	<input type="radio"/> Agree or slightly agree <input type="radio"/> Neutral <input type="radio"/> Disagree or slightly disagree 3 I don't know	I don't know
	Mission 23 Openhouse NL and EU representations	1 Agree or slightly agree <input type="radio"/> Neutral 1 Disagree or slightly disagree 1 I don't know	Agree or slightly agree = Disagree or slightly disagree = I don't know
	Mission 16? (Serviced office and hybrid were neutral) Openhouse Country E	3 Agree or slightly agree <input type="radio"/> Neutral <input type="radio"/> Disagree or slightly disagree <input type="radio"/> I don't know	Agree or slightly agree?
Response employees	Mission 13 Openhouse Country D	2 Agree or slightly agree <input type="radio"/> Neutral 4 Disagree or slightly disagree <input type="radio"/> I don't know	Disagree or slightly disagree
	Mission 16? (Serviced office and hybrid were neutral) Openhouse Country E	4 Agree or slightly agree 1 Neutral <input type="radio"/> Disagree or slightly disagree <input type="radio"/> I don't know	Agree or slightly agree?
Serviced offices	Embassy/consulate (diplomatic missions)	Response divided into four categories	Dominant response category
Response OM	Mission 11 Openhouse Country B	<input type="radio"/> Agree or slightly agree 1 Neutral 2 Disagree or slightly disagree <input type="radio"/> I don't know	Disagree or slightly disagree (1 point difference with Neutral)
	Mission 21	3 Agree or slightly agree <input type="radio"/> Neutral	Agree slightly agree

	Openhouse Semi-governmental party E	0 Disagree or slightly disagree 0 I don't know	
	Mission 14? (serviced office was neutral, other options were disagree) Openhouse Semi-governmental party E	3 Agree or slightly agree 0 Neutral 0 Disagree or slightly disagree 0 I don't know	Agree slightly agree?
	Mission 26 Openhouse Semi-governmental party C	3 Agree or slightly agree 0 Neutral 0 Disagree or slightly disagree 0 I don't know	Agree or slightly agree
	Mission 20 Openhouse Semi-governmental party E and H	2 Agree or slightly agree 1 Neutral 0 Disagree or slightly disagree 0 I don't know	Agree or slightly agree (1 point difference with neutral)
	Mission 30 Openhouse in third party property Country A	1 Agree or slightly agree 0 Neutral 1 Disagree or slightly disagree 1 I don't know	Agree or slightly agree = disagree or slightly disagree = I don't know
Response Employees	Mission 20 Openhouse Semi-governmental party E and H	5 Agree or slightly agree 0 Neutral 1 Disagree or slightly disagree 0 I don't know	Agree or slightly agree
	Mission 30 E1 Openhouse in third party property Country A	0 Agree or slightly agree 4 Neutral 2 Disagree or slightly disagree 0 I don't know	Neutral
	Mission 30 E2 Openhouse in third party property Country A	1 Agree or slightly agree 2 Neutral 3 Disagree or slightly disagree 0 I don't know	Disagree or slightly disagree (1 point difference with neutral)
	Mission 30 E3 Openhouse in third party property Country A	5 Agree or slightly agree 0 Neutral 1 Disagree or slightly disagree 0 I don't know	Agree slightly agree
Hybrid offices	Embassy/consulate (diplomatic missions)	Response divided into four categories	Dominant response category
Response OM	Mission 5 Openhouse Country A	1 Agree or slightly agree 0 Neutral 2 Disagree or slightly disagree 0 I don't know	Disagree or slightly disagree (1 point difference with agree or slightly agree)
	Mission 10? (Hybrid office was answered with neutral, rest was disagree) Openhouse Country A	0 Agree or slightly agree 1 Neutral 1 Disagree or slightly disagree 1 I don't know	Neutral = Disagree or slightly disagree = I don't know
	Mission 19	2 Agree or slightly agree 0 Neutral	Agree or slightly agree (1 point difference with

	Openhouse Country F	1 Disagree or slightly disagree 0 I don't know	disagree or slightly disagree)
	Mission 32 Co-located Country H	0 Agree or slightly agree 3 Neutral 0 Disagree or slightly disagree 0 I don't know	Neutral
	Mission 33 Co-located EU representation	1 Agree or slightly agree 1 Neutral 1 Disagree or slightly disagree 0 I don't know	Agree or slightly agree = Neutral = Disagree or slightly disagree
Response employees	Mission 19 Openhouse Country F	4 Agree or slightly agree 0 Neutral 2 Disagree or slightly disagree 0 I don't know	Agree or slightly agree
	Mission 32 E1 Co-located Country H	5 Agree or slightly agree 0 Neutral 1 Disagree or slightly disagree 0 I don't know	Agree or slightly agree
	Mission 32 E2 Co-located Country H	3 Agree or slightly agree 1 Neutral 1 Disagree or slightly disagree 1 I don't know	Agree or slightly agree
	Mission 32 E3 Co-located Country H	3 Agree or slightly agree 2 Neutral 1 Disagree or slightly disagree 0 I don't know	Agree or slightly agree (1 point difference with neutral
	Mission 32 E4 Co-located Country H	5 Agree or slightly agree 1 Neutral 0 Disagree or slightly disagree 0 I don't know	Agree or slightly agree
	Mission 33 E1 Co-located EU representation	4 Agree or slightly agree 1 Neutral 1 Disagree or slightly disagree 0 I don't know	Agree or slightly agree
	Mission 33 E2 Co-located EU representation	2 Agree or slightly agree 2 Neutral 2 Disagree or slightly disagree 0 I don't know	Agree or slightly agree = Neutral = Disagree or slightly disagree
	Mission 33 E3 Co-located EU representation	5 Agree or slightly agree 1 Neutral 0 Disagree or slightly disagree 0 I don't know	Agree or slightly agree

Appendix 9: Interview questions + transcript:

CONFIDENTIAL

