

A person is seen from behind, wearing a grey t-shirt with a large, vertical, torn-paper-style graphic on the back. The graphic features a black background with white floral patterns. The person is standing in a room with several whiteboards or posters on the wall. Other people are partially visible in the foreground and background.

Towards strategic co-making at Etro: measuring and mastering relational success factors

Graduation Thesis

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Hopefully, you'll have some fun reading this thesis!

Hidde Slobbe
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Abstract

Keywords: Inter-organizational Relationships - Trust - Co-creation - Strategic Co-making - Relational Success factors

This report describes the graduation project for the MSc program Strategic Product Design. The client in this project is Etro Vastgoedzorg, a real estate maintenance company. Etro has a need for having and providing overview on client satisfaction, with the clients being several large housing corporations. To create this overview, the initial research was conducted on which factors were essential for the client satisfaction by performing interviews with several clients. These interviews and further research led to the conclusion that the relationship of both actors can be improved by a different way of working, but first there is a need for making steps in terms of building trust. This led to further research on building trust in inter-organizational relationships and concluded in a measurement model on relational succes factors. To master these factors, a handbook has been made for implementing co-creation in the way of collaborating of the relationship. Both the measurement model and the implementation of co-creation have become building blocks for creating long term relationships, based on mutual goals and mutual trust. The conclusion of this research is that by using the two objects of measuring and co-creating, both actors (Etro and Client) can build actively and cooperatively towards improving their relation.

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1. Introduction

This report is the result of a graduation project for the master Strategic Product Design. The client of this project is Etro Vastgoedzorg, a real estate maintenance company.

The main ambition of Etro Vastgoedzorg is to become the 'Coolblue' of the Dutch real estate maintenance industry. Like Coolblue, Etro wants to become a company where client satisfaction is centralized and they want to achieve this with the focus on working together with their clients, strive for added value, become a leader in the industry, focus on sustainability, controlling their primary process and work a lot with data and IT. Overall they want to transform their company from being a contractor to a strategic co-maker.

Etro is a real estate maintenance company which works for four of the largest housing corporations of the Netherlands. Within the scope of this project, those four housing corporations were the clients on which the client satisfaction rate needed to be based with the particular focus on the MSO department of the company. To start analyzing the client satisfaction of Etro, the project started with an industry analysis, a company analysis and an analysis on how other industries were measuring and visualizing client satisfaction. This last part led to examples like NPS and other difficult formula-wise units, which could be applied to the scope of this project. However, this company wanted a personalized way of measuring which was applicable on their main goal; becoming a leader in strategic co-making. However, when performing interviews with three of the four clients the project changed.

The interviews concluded that measuring tools for client satisfaction were already present in some fashion and that the most relevant question for the cooperation of the two companies (Etro and their Housing Corporation) wasn't about putting data points of the operation of MSO in a dashboard. Etro

was still perceived as a contractor and not as a company who was making steps towards strategic co-making, and if Etro wanted to change this perception the focus should be more on how they perform on the soft level of the cooperation.

One of the most important conclusions of these interviews was that the reason why Etro now still was perceived as a contractor, was a lack of personal trust in the inter-organizational relationship. Several studies (for instance Pinto et al., 2009) concluded that the basis of project satisfaction and project success is trust from both actors in a cooperation. To achieve a high project satisfaction both actors need to be handling on relational level rather than on contractual level. A problem which occurred in the context of Etro and its partners.

This conclusion led to a change within the project, where the focus became on mapping out which steps Etro and its client will need to make to build this mutual trust and build towards a cooperation where strategic co-making is central. Additionally, there has been research on which barriers need to be overcome before this process can start of becoming a strategic co-maker, which led to a measuring instrument focussing on relational success factors, which lead to an estimation of the readiness for strategic co-making.

A three step model is created in which Etro will help their clients understand the value of trust, measure success factors within their relationship and master those factors with the help of co-creation. This measurement is done by an adapted version of a trust-measurement model. Next to this plan, a handbook for co-creation has been introduced and validated with several students, to show a way on how to improve and strengthen several opportunities which will follow out of the measurement tool.

1.1. Initial Context and Project Brief

This graduation project started as a follow-up from an earlier assignment during the course 'Design Innovation 4.0 in Supply Networks: Transforming Supply Networks into Automated Ecosystems'. The conclusion of this project was that further research could have been done on the stakeholders around Etro, which will examine the performance of Etro.

The main indicator of Etro's performance is Client Satisfaction, where the client is this housing corporation. However, now the information streams with the client presented both internal and external are often incomplete and not always on time. There is also a lack of knowledge on which data is relevant to measure Client Satisfaction and which data is relevant to share with the clients. 6 project leaders are working on daily basis with the different departments and the different housing corporations on this main ambition. There is a clear need of an overview in this Client Satisfaction, later referred as 'CS'.

Already known indicators for CS are the amount of complaints of tenants on Etro's work, the outstanding tasks of Etro, the lead time of fixes, the first time fix rate and the tenant satisfaction. But there should be more factors that are relevant to monitor within a system. The input of this system could be data on the operation, but also could be a satisfactory rating system provided to all the relevant stakeholders. In the current situation, the information lacks relevancy and isn't complete. There is also no output towards the clients. The output needs to provide an overview, this could mean that it will manifest in a dashboard with all the relevant data, but could also be a social change, where the solution will be in a new way of working.

The overall question is determined on:
What defines the Client Satisfaction of Etro and how can we envision overview of this Client Satisfaction-rate to maintain it for the upcoming years?

The goal of this project is to see which indicators and data are relevant for the Client Satisfaction on the whole company, mainly focussed on the departments Service and Mutation, and also for the clients, mainly focussed on Eigen Haard and Ymere or Pré Wonen. These factors need to be manifested in a customer integrated solution which gives an overview of this CS for both Etro and their clients, to make the solution bipolar on input and usage.

Initial assignment:

Design a customer integrated monitoring system on Client Satisfaction, which will be bipolar (Etro-Client) on input and usage. Also design an implementation strategy in which Etro can maintain and improve the Client Satisfaction rate for the upcoming years

1.2. Frames During Project and Outline Thesis

During this project, multiple phases and reframes have taken place in order to solve the initial assignment and to provide value towards Etro and its stakeholders. This report describes the most essential parts and therefore make use of the double diamond which is proposed by the British Design Council (2005) and have split this up in two important double diamonds. The first diamond describes the initial research of the project brief on client satisfaction and concludes with the pivotal moment which happened during a later phase of the project, an extra interview with the client Pré Wonen. This interview and previous research led to the conclusion that in order for mastering the relationship with the clients of Etro on client satisfaction, first a solid base of trust need to be build. Therefore a whole second double

diamond is presented in this report, which is based on trust and relational success. This double diamond concludes in a measurement model on trust, which should give all stakeholders tangible target fields to improve on within the relation. The second part of the first diamond describes how the stakeholders can master these relational success factors and this have led to the implementation of co-creation. A handbook is made for the relationship of Etro and Pre Wonen and is validated with students to prove its value towards both stakeholders. After the conclusion of the two double diamonds, there has been reflected on the process and on the value which is delivered for the cooperation of Etro. There have been made recommendations on which additional research or testing is needed for the implementation of the models which are created.

This thesis report describes the process of this graduation within the order of the 4 steps which have been made during the project. It initially describes the original project brief and the research on client satisfaction. Following it describes the whole research on trust, which led to the adapted model of Smolders on relational success within the cooperation. Following it describes how to master the established relational success factors within the scope of Etro and its partners and concluding it ends in a reflection on how much worth all solutions are for all stakeholders within this assignment and if the solutions can work or additional research will be needed.

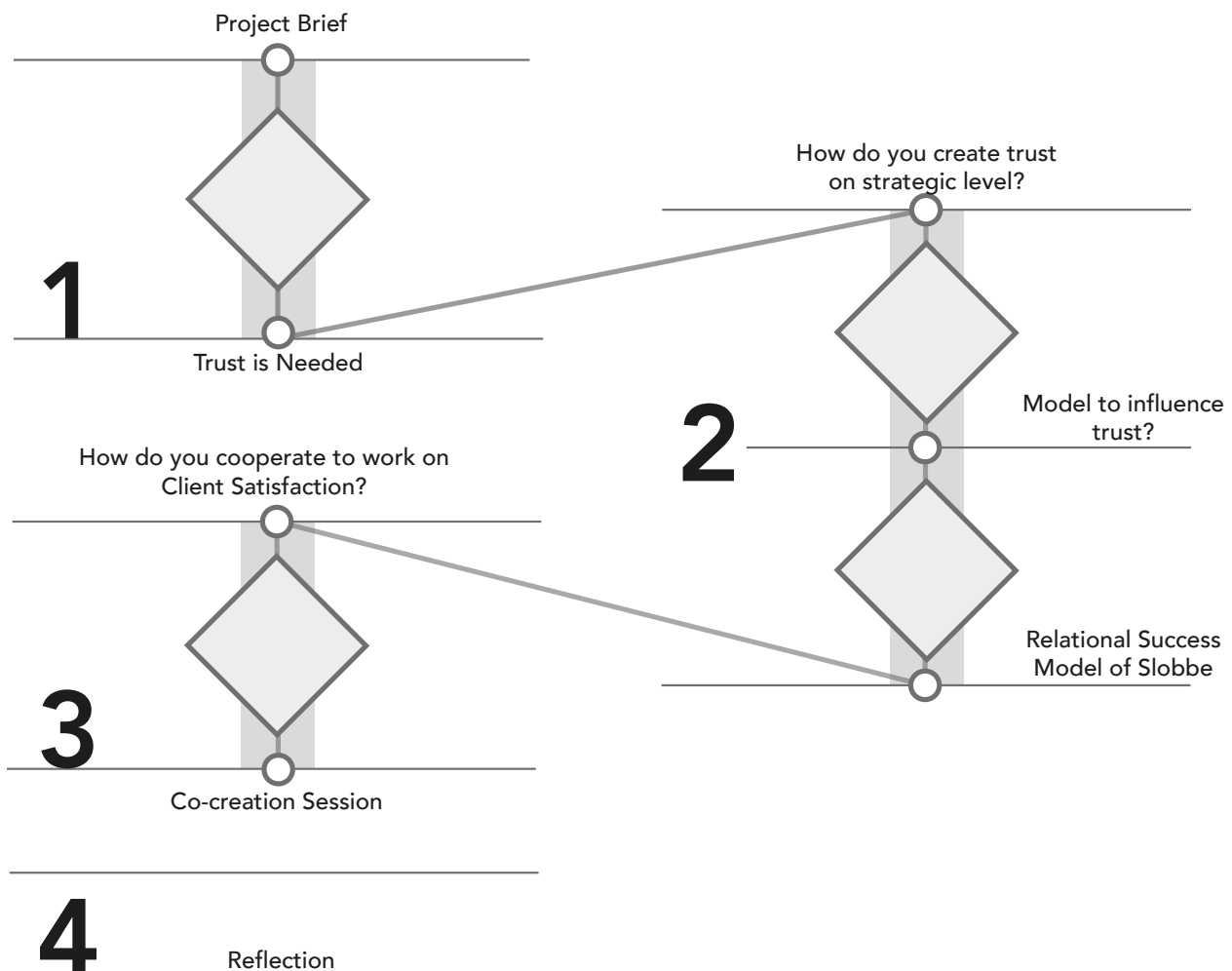


FIGURE 1.1. AN OVERVIEW OF THE PROJECT IN TWO SEPARATE DOUBLE DIAMONDS.

Part 1. Client Satisfaction



2. Initial Research

2.1. Etro Vastgoedzorg

Etro Vastgoedzorg is a real estate maintenance company which has the vision to become a strategic co-maker in 2025. Etro has 175 employees and an approximate yearly revenue of €37 million and is a part of investment company Scheybeeck N.V..

Currently they are portrayed as a contractor, however with trends like digitalization and more complex challenges like sustainability within construction, a new way of working is required to stay competitive.

Etro takes its pride in their human-centred orientation. The main indicator of their performance is client satisfaction, a combination of different forces, described and researched later in this project. The focus on client satisfaction gives guidance towards the mission of becoming a strategic co-maker, a direction that comes from the inspirations of companies such as Coolblue.

To define which steps are necessary to become this strategic co-maker, first there must be defined what that term means and how it fits in the context of Etro and its managerial plan. Next to that there has been done research on how to look at client satisfaction and how it could be measured. The internal research also has focussed on the relevant stakeholders within the scope of the project, which are further investigated in a work visit and with an outline of the way of working, focussed on the most relevant contact moments for the ambition of becoming strategic co-maker and raise the client satisfaction rate.

2.2. Management Vision for 2025

The ambition of Etro is to become 'The Coolblue of the real estate maintenance', which is widely described in the management plan with the vision of 2025. With six pillars as seen in the image, the goal is to move from



FIGURE 2.1. OVERVIEW OF ETRO'S MANAGEMENT VISION OF 2025

just being a contractor to become a strategic co-maker.

Like Coolblue, Etro wants to become a company where client satisfaction is centralized and they want to achieve this with the focus on working together with their clients, strive for added value, become a leader in the industry, focus on sustainability, controlling their primary process and work a lot with data and IT. Overall they want to transform their company from being a contractor to a strategic co-maker. Initially this project focussed on pillar 5, where Etro thinks that data and information technology(IT) will play a large role in the future of the real estate maintenance. The goal of pillar 5 is to let IT help getting grip on daily operations and help giving insight both internal and external. This is the reason why the focus on client satisfaction sets the first step of this pillar. Getting insight and giving this to the clients on their preferred indicators with the help of data and IT.

But during this project the focus has more shift in the wider ambition of becoming a strategic co-maker. Therefore there needs to be established what a strategic co-maker should be and what the client think Etro should become to stay relevant and competitive in this market. This project should contain the first steps in becoming this strategic co-maker for 2025.

For determining the definition of strategic co-making, there has to be made a separation of the two terms, strategic and co-makership.

Several papers (Van Eck(1985), Broersma(1991), Clauwaert(1993)) have been analyzed to come up with the following definition for co-making:

'Co-makership is a concept that involves a long-term, collaborative relationship between two or more neighboring firms in the supply chain, i.e. an assembler and a supplier. In this respect, co-makership can be considered as a subset of supply chain management'

Co-makership is the idea of working towards a long-term relation by having mutual values and a mutual goal with your trade partner. But what makes the distinction with the strategic prefix?

Although there are a lot of different perceptions on the word strategy, in this context it means that the co-operation has competitive and profitable purposes. Strategy is about a long term aim focussed on an overall ambition, the goal within this context is to create a long term aim on which both sides are improving. Strategic co-making should be the result of relational thinking and push each other towards an improved operation, where both partners benefit from, a one plus one equals three situation.

In the context of Etro, strategic co-making is the goal of improving the relation with the clients, the housing corporations. In several steps, Etro wants to work towards a situation where personal trust is higher, the collaboration becomes pro-active on both sides and where Etro can have the main ambition to focus on client satisfaction. Etro wants to set themselves apart from the other co-makers in their focus on client satisfaction, and therefore becoming a leader of example within the context of strategic co-making. To have this ambition there needs to be a solid basis of trust, the allowance of vulnerability

and there need to be set common goals which are worked out both internal and external.

2.3. Client Satisfaction

The focus on client satisfaction is a strategic guideline for bringing identity to Etro's path towards the goal of strategic co-making. To get a basic understanding of client satisfaction and how it has been referred to in science, a literature research has been conducted. This led mostly to papers focussing on frameworks or mathematical models to reduce client satisfaction to a number.

For instance, a conceptual framework to access the client satisfaction in the building development process which has been researched is the model of Nzekwe-Excel, C. (2012), as shown in the picture.

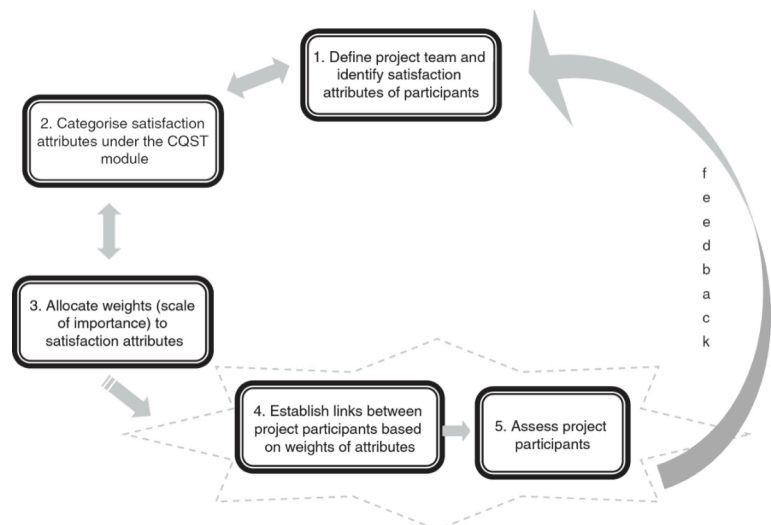


FIGURE 2.2. CQST - MODULE OF CLIENT SATISFACTION BY NZWEKE-EXCEL, C. (2012)

To categorise different attributes there has been made use of an CQST-module, which focusses on cost, quality, safety and environment. To compare this with the situation of Etro, it could be helpful to make use of a certain model. However, in a later stage of this process, the conclusion have been made that all these factors are systemic and therefore almost all boundary conditions. What can be learned from all these papers is that it could be a goal for this research

process to define several relevant factors to determine which define Etro's client satisfaction. With these factors a module can be made, to give overview and grip on this satisfaction rate.

All the papers which have been researched in the earlier phase of the project were mainly focussed on the hard indicators in processes. These were assessed in the interviews with the clients and although they were defined as relevant, they weren't crucial for the opinion of Etro for the client's satisfaction. That's why the focus has been shift to the softer part of the co-operation, things like empathy and trust. The reasoning behind this change was mainly due to the already present information on hard indicators, but also because of the larger issues with the soft factors within the cooperation. This is further explained in chapter 3.

If Etro wants to become the 'Coolblue of the real estate maintenance industry,' they should focus more on the soft side of their co-operation. Clients demand a personal relation, wants to be heard and don't evaluate Etro dominantly on numbers. (Also validated in the interviews) Key performance indicators (KPI's) are useful to measure impact, but the dominant factor is the way of collaboration and the required input the housing corporations can have on the process of Etro. The clients want to be included in this process, as the result of mutation and services has their name on it. In the current co-operation the most relevant problems to fix are within these soft side and therefore the solution shouldn't be about giving a dashboard on KPI's, but moreover there should be a focus on improving the consultations and discussions on relational level. In that way, strategic co-making will become possible and therefore the client satisfaction will raise too.

2.4. Analysis on Way of Working

To make a thorough investigation of the client satisfaction of Etro, guidance was needed and further research on the way of working.

Therefore the choice have been made to mainly focus on the client relationships within the department of MSO, which is mainly focused on mutation services.

The questions need to be answered on which different factors are relevant within this scope and therefore there has been research both internally and externally. The internal parts are discussed in this subchapter on the way of working of Etro.

2.4.1. MSO - Mutation and Service Process

The Mutation and Service department of Etro is the department which provides operational help on direct services and making the properties of housing corporations ready for new tenants within an agreed amount of time. With certified handymen and projectleaders which are doing licensed inspections Etro helps their clients in the improvement and reparations of

Within mutation the most important contact moments for defining the client satisfaction and the relationship between client and Etro to become a strategic co-maker are the moments of direct contact: the calls, the meetings and discussions and all the communication around the project. All the hard aspects in the performance are perceived as less critical for the relationship in between Etro and client. Also the role of the tenant is less important, as they aren't present in a happy flow, which Etro is trying to improve and realize.

In a so-called happy flow, Etro wants to create a collaboration in which there is no hinder in the planning of a project supervisor. The current situation is a project supervisor which has an uneven load of distribution within the workflow, because of clients that are handing

out tasks on the pace of ended contracts, this problem is also discussed during the pressure cooker. In a good working flow on mutation, Etro knows and controls the start and the end of the project, in which planning is controlled by the project supervisor. This means that there are expected times when the asbestos control is released and that communication lines between housing corporation and project supervisor are clear and strong. The communication moments are the most important during the whole flow of mutation, because if the preparation and processing phase are well organized, there shouldn't be any problematic parts within the execution phase. Focus on the beginning and end phase, it is clear that the way of working is crucial. In this way of working, the reflection should be about clarity, openness, room for innovation and a critical look at the way client and Etro communicate. The work-visit concluded that there is a lot of room for innovation in this way of working and that for strategic co-making it is essential that direct communication and fulfilling agreements will be improved. This must happen on all three levels of cooperation; strategic, tactical and operational level.



FIGURE 2.3. THE THREE DIFFERENT LEVELS OF COOPERATION

The cooperation within MSO, works on three different streams with the housing

corporations. On operational level, on tactical level and on steering group level. The operational level is focussed on the execution of project leaders together with the team of repair experts. The tactical discussions are focussed on the execution of the strategic plans and the installment of workgroups. Steering group level are the directors at one table, with talks about ambitions and long-term plans.

After the conduction of the interviews and the scope was solely focussed on Pre Wonen, the choice have been made to explicitly focus on tactical and steering group level, as within these streams the soft factors are more relevant and are necessary for a high client satisfaction.

The operational level has been explored in the beginning of the project with a work visit and the barriers and enablers which were concluded from this were mainly focussed on communication level, which is basically solved on tactical level. Also within the scope of Pre Wonen, the operational level is the best cooperating level of the three different streams. The work visit is further described in the appendix F.

2.5. Client Analysis Needed

Concluding the internal research on Etro and their mission of becoming a strategic co-maker, the most important part is that the focus on client satisfaction is a guideline towards this mission. The focus must be on the soft side of client satisfaction, as co-making is about creating a long term relationship based on mutual trust. Client interviews and further research on working relationships need to prove insights on what is really important for the performance of Etro and which behavior is needed to become strategic co-maker and how to raise the relational factors and to determine which relational factors are important. All other external stakeholders need to be investigated, in which way they also have influence on the

overall opinion of the clients. A additional conclusion is that within the mutation, the most relevant contact moments are all the direct communication moments; meetings and discussions on differences in quotations and bills. This also results in a certain relevancy in having a good working relationship; that's why the way of working and the why of working (client centered process) are essential for creating a working cooperation. Therefore the choice has been made to not solely focus on a data dashboard, but more focus on the barriers and enablers in the contact moments in between client and Etro for realizing a better functioning relationship and raise the client satisfaction.

3. Client Analysis

3.1. Interview with Three Clients

During the phase of the project, where the main focus was on the initial assignment of the focus on client satisfaction, three interviews were conducted with three of the four largest clients of Etro; Pre Wonen, Ymere and Eigen Haard.

These interviews resulted in the conclusion that the hard factors, focussed on results of the operational side of Etro weren't sufficient enough to completely give an overview of the relationship of Etro and their clients and therefore couldn't give a clear overview on client satisfaction. Several questions were asked and answered on the current state of the different levels of cooperation, on the overall performance of Etro and these questions resulted in a differentiated view on Etro. Each housing corporation had a different approach on how they would evaluate Etro and therefore had a different view on the performance of Etro. A common conclusion was that all actors missed several elements within the current way of working of Etro for achieving the mission of becoming a strategic co-maker. Certain barriers and enablers have been found and further investigated in combination with the data and further literature.

The following subchapters discuss the topics discussed and the main conclusions of the interviews.

3.1.1. Interview Topics

In the frame of creating insight and overview of client satisfaction, three interviews were conducted with the following structure:

- Main question: Which elements determine customer satisfaction with Etro for housing corporations?
- Sub-question: What is the current relationship between housing corporation and Etro?

- Sub-question: How does the current process work?
- Sub-question: Where are the areas for improvement in the current process?
- Sub-question: How does the housing association evaluate Etro and what determines satisfaction?
- Sub-question: In which way is Etro perceived; as a contractor or a strategic co-maker?

Additional questions were focussed on the openness towards innovation and being included in the process of creating these improvements. The overall performance has been evaluated and the respondents have been asked to be critical on the performance of Etro.

3.1.2. Interview Conclusions

After conducting the three interviews, the results were shared with the management team of Etro. The separate conclusions of these interviews can be found in appendix G.

Overall the conclusion can be made that the client satisfaction of the clients of Etro are based on hard factors and certain KPI's within the process, while the problematics with Etro discussed during the interview were mainly focussed on the soft factors of the cooperation. Etro performs high on standard process times and on tenant satisfaction, however all three clients concluded that they need to improve on the more intangible parts of their services. This asks for a different approach of this project and requires a different focus. The most interesting part of the interviews were the topics on vision and on the current perception of Etro. Clients were asked if Etro was already making steps towards their ambition of becoming a strategic co-maker. Several barriers were concluded from these interviews on where Etro should improve to start this new way of having a relationship with their clients.

'If Etro starts to have more active input on our mutual relationship, then we can finally get rid of the level of detail'

The main barrier for a good strategic co-

makership and a high client satisfaction was the level of trust in between the two parties. It was noticeable that the three profiles were different and require different handling, however it can also be concluded during the interviews that all three parties want to make steps towards a better working co-makership. Evaluating these results with the management team Etro also concluded that the largest differences in between the different clients are due a big difference in the quality of personnel per different customer. It is important to notice that these conclusions must lead to different ways of handling towards the specific client, but overall the objective is to ensure that the focus of both parties in the relation should be on acting with relation trust, something which is further explained in the next chapter. In a later phase of the project a second interview was conducted with Pre Wonen, which provided more in depth insight on their view on the relationship with Etro, which is further described in an upcoming chapter.

'Smart collaboration is always welcome, although it remains a nail that has to be driven into the wall'

3.2. Initiatives within Cooperation

To explore and summarize the further research on external activities around Etro, several initiatives for strategic co-makership and an improved way of working have been explored. These initiatives have been used as guidelines for the further design phase and should provide a more logic picture in which phase Etro is in within their cooperations.

3.2.1. Improvement Plan Ymere

After the fraud case, which has a massive impact on the relationship between Ymere and Etro, a reform plan was created for guidelines and support in this improvement of

the relationship. In this reform plan there were several interesting conclusions: Ymere asks for pro-activity in the co-operation on the development of future plans. This something which is currently lacking at Etro. Ymere also asks for Etro to be more committed towards the agreements which are made in the co-operation. Another point of interest is the way Ymere asks Etro to provide more information on the operation, which is currently lacking. Therefore they asked to also provide a dashboard with relevant data on the KPI's of the co-operation.

3.2.2. Pressure Cooker Ymere

As a result of sharing some early conclusions, which focussed on new ways of working, the assumption was made by the management team that they already were taking a good step in innovation with their client Ymere. Together with two other co-makers they have been working since two months in a new way of working, which should tackle problems more constructive and with the use of creativity. However, the visit of the session concluded that the industry has a lot to improve within this way of working. The whole session has been discussed in the appendix, but the main conclusions were that these practices had the lack of speed, that client and co-maker had not shared values within the conversation and that innovation methods were misinterpreted and therefore not used in the way it should be. The problematic relation between co-maker and Ymere was clearly visible during the session, which was driving on emotions and gut feeling, where there was a lack of alignment and also not all relevant stakeholders were at the table. There were large discussions on what the right problem was to fix and also a lot of pass through of responsibilities. For Ymere, there weren't any real decision makers (seniors) at the table and also problems with the asbestos controle weren't fixed because the stakeholder wasn't at the meeting. The session also screamed for a third party, which was an owner of the

session, a neutral force in emotional discussions and someone who keeps the session at speed. A lot of conclusions are further discussed in the barriers and enablers for strategic co-making.

3.2.3. Proeftuin Eigen Haard - KBK

Another initiative of strategic co-making has been made by Eigen Haard, which is currently re-evaluating their own processes with a so-called 'Proeftuin'. It is a testing ground in which they try to set the first steps into a smarter collaboration with their contractors. Right now, they have made the choice to work together with KBK bouwgroep, a co-maker which is also working with Ymere.

In this 'proeftuin', they have given KBK a certain area within their field and the room to prototype with new ways of working. For instance, they are prototyping 'flowplanning' in a full area code.

The first reactions on this 'proeftuin' have led to an improved process and more satisfaction under the project supervisors. They have the feeling of ownership and an active role in the innovation within the co-operation.

3.3. Scope to Pre Wonen

During this phase of the project, several conclusions were already drawn on barriers and enablers for a well working cooperation in between Etro and its clients. The barriers were mainly focussed on a lack of trust within Etro and its clients, mainly focussed on the relational handling of both actors. Next to this a certain disconnection within the different streams (operational, tactical, steering group) of Etro towards their cliental base. Towards the thinking of becoming a strategic co-maker, the most important conclusion was the lack of shared values and goals. The enablers to work on the lack of trust and to build towards shared goals can be found in the willingness of both actors to improve on the way of working and a need for innovation.

After sharing these barriers and enablers and the project was leaning towards an advice for a new way of working, the choice was made to solely focus on one client for the rest of the project. As Eigen Haard and Ymere were already making steps with an improvement on the way of collaborating with their contractors, the scope was focussed on Pre Wonen.

The main conclusions of the first interview with Pre Wonen were that there was a lack of personal trust and a main focus on contract-handling within the cooperation. Next to that, Pre Wonen wanted a more pro-active attitude from Etro within the tactical and steering group conversations. And additionally, during the conversations and feedback sessions with Etro, they perceived Pre Wonen as a difficult partner for their ambition of becoming a strategic co-maker.

Chronically, the upcoming steps in the project were focussed on improving the way of working and cooperating with Pre Wonen, which was done in a design phase. This design phase was also focussed on building trust and work towards relational handling. However, the project had an important turn-around moment, where the project pivoted with a differential focus. This will be further discussed in the upcoming chapter.

4. Pivot Moment with Pre Wonen

During the mid-term phase of the graduation project, the choice was made to focus on solely one client, Pre Wonen. This choice was made because of the renewed scope towards strategic co-making and the conclusion during the mid-term was that strategic co-making would become way more feasible for Etro if they would add something new to their way of working: a creative session. The building blocks for strategic co-making were at that moment focussed on building relational trust by applying co-design or co-creation, so after the first diamond, the main thought was that we should work with creative sessions to work towards a better connection in between Etro and their clients. This all to raise the client satisfaction of Etro and to create a place where co-making can happen. However, when this creative session was planned and created, there was a barrier in persuading Pre Wonen to let Etro create this session.

There was a problem behind the problem, first there needed to be made steps before these creative sessions could happen and before co-making would be possible. Action research is about being active in the environment where you do research and this approach led to the conclusion that there are other priorities for Etro right now. Mapping out everything which is happening around Etro, what is happening around the company, which factors influence the company and also on which streams is their collaboration with the housing corporations. This design-way of thinking led to the conclusion that for strategic co-making something else was needed.

So why did Pre Wonen reject Etro and me as graduator to lead a creative session within this cooperation? There were several pre cursors which are explained in the following subchapter.

4.1. Pre Cursors for Strategic Co-making for Pre Wonen

During an extra interview with the contact manager of Pre Wonen, about the rejection of the creative session, several pre cursors came out of the interview, which is completely described in appendix B. The first precursor that need to be overcome are an improved way of communication with the use of the right data, with a proper connection in between the two actors of the cooperation with the right dashboards of data. The second precursor is having more universal communication and to focus more on being open and transparent within the meetings on management level. The third precursor is an improvement on participation during those communication moments, which has to be focussed on being pro-active and focussed on vision, not only daily operations. These precursors are further explained in the following subchapters.

Pre Wonen on their Resistance towards Co-making: 'There should be a good connection, all the data needs to be in order and being communicated well on both sides, the all round communication needs to be improved. Apart from those improvements, the operation must continue to run at a quality level.'

4.1.1. Data

The first pre cursor which was described by Pre Wonen was the lack of use with data. Etro is currently in a transition with their information infrastructure and the benefit of this renewed system will be that they can make a KOVRA-link. This KOVRA-link helps in the data connection within this cooperation.

'We are currently in a phase, where we are very busy with the creation of a data-connection, which has now priority no.1 to fix with Etro.'

During the interview Pre Wonen wanted more transparency on their cooperation and how current operations are working within their fields. In the current situation Pre Wonen has to trust on the work of Etro and has to make use of sample-tests with quality managers to look at the performance of Etro.

'There need to be more transparency in data and within communication, before we can focus on next steps with a creative session'

If co-creation or creative sessions will happen within this cooperation, Pre Wonen demands that Etro will become more transparent and give more information. Also there need to be more agreements on how to measure certain values as process-time and house vacancies.

'There is still a lack of information, which must first be sorted out before we can discuss improvements' 'In that case, I would rather wait until we are properly linked with Etro, before we start improving processes.'

4.1.2. Communication

'What I have tried to challenge Etro to, I wanted to look for the expertise that Etro has acquired from the other (housing) corporations about what works and what is being innovated with them. That exchange doesn't take place, and then my reaction is that we are far from ready to start the creative part, because we can only do that when the operational part is running smoothly.'

A conclusion from the first interview with Pre Wonen was that there was already a lack of personal trust within this cooperation. The Etro-Pre Wonen cooperation lies a lot on contractual trust and within the contract of Pre Wonen Etro has to focus a lot on performance. Because of this performance-contract Pre Wonen demands from Etro that they will perform also within the communication during tactical and steering

group meetings. While Pre Wonen is satisfied with the daily operational execution of Etro, they think that they can improve with how they present themselves on tactical and steering group level.

'I rather want the cooperation run more smoothly, that I don't have to check all bills and prices, check if they keep their agreements, only when those things are in place, then we are ready for creative sessions.'

Pre Wonen expects that Etro shares their experiences of the cooperations with the other housing corporations and hope that Pre Wonen will benefit from their innovations. It is important for Etro to fix this before the cooperation can start with thinking of co-creation. However, it should be addressed that the passive attitude of Pre Wonen isn't benefitting the willingness of sharing more information towards them.

'The quality of Etro is generally very good, our experiences with Etro are generally very good. I only miss their input within our meetings, both at steering group level as on tactical, improvement level.' ***'Come with experiences and some innovative ideas'***

4.1.3. Participation

With an improved communication Pre Wonen also asks an improved participation from Etro within their collaboration. During the interview, there was an intensive discussion in who should start with a participative attitude to start a co-making relation and if Pre Wonen wasn't just asking for anything, while don't look into the mirror. However, this also raised the question how we could objectify or give overview of these soft parts of the cooperation. If both parties will improve their participation within the cooperation, it would be a start for a co-maker relationship. A follow up or concrete fields for improvement will lead to reasons why to apply creative sessions.

When looking at a timeline/journey map, the participant shows what are the most essential parts within the cooperation to make improvements on:

'Active participation within meetings, on management level' 'On operational level everything is running quite good and these men know how to find each other.' 'But it's more about a little extra what Etro could bring, about how we can approach standard processes differently, learnings from other clients, a more proactive and open attitude from Etro.'

4.1.4. Overall Conclusion of Precursors

'You don't want a controlling relationship, but a cooperative relationship'

When sharing the information of the second interview with Pre Wonen, the management team of Etro reacted quite projecting, they weren't agreeing on the conclusion. Etro lacked a search for connection, but also only wanted the other actor to change within the cooperation. Therefore, they also need to be confronted with an objectified visualization of the opinion of the other actors within their cooperations. This whole situation of a search for improvement in communication, data and participation raised the question what was needed for both actors to see the value on changing their relationship handling from contractual towards relational, from aggressive to empathic, the answer lies in the three step model which is created further within this project.

Strategic co-making as a dot on the horizon, that's where Etro wants to go. The initial goal of the process was to create a data-dashboard and a data plan. Focussed on the operation and the general content of the work Etro does. However, Etro needs to take a step back and look at the soft aspects of the cooperation. Open up more, because there is a lack of vulnerability. Co-creation as a means

to gradually put that softer side on the table. Facilitating co-creation sessions ensures that you create a sounding board and that you can make the collaboration more empathetic. Now there are still barriers for clients like Pre Wonen, that's why the first primary focus should be on gaining insight with data, improve the communication and participation.

4.1.5. Barriers and Enablers for cooperative working

Out of the previous research with the conducted interviews, the initiatives for a better working cooperation and this interview with Pre Wonen, there have developed several barriers and enablers for strategic co-making, which were early reasons for the implementation of co-creation:

Barriers

- Lack of Personal Trust and Relational Handling
- Lack of Shared Values
- Disconnection in between departments and different streams of cooperation (different levels)
- Incompleteness and disagreement on information and data
- Misunderstanding and lack of experience in innovation

Enablers

- Unfamiliarity with innovation
- Need for a leader within the industry
- Existing faith in the management of the organization

The proof of these different factors is further explained in the appendix C.

The conclusion of this chapter is that within the cooperation of Etro and Pre Wonen, there are still pre cursors and barriers to fix, before co-creation and strategic co-making can happen. Therefore a three step model is created to have a tangible path in controlling the relational handling of this cooperation,

which is described in an upcoming chapter combined with a way to measure and master the relational success.

4.2. Towards building on trust

The main conclusion of the first phase of this project is that Etro's need for overview on client satisfaction won't be efficient and thoroughly enough, when the only focus will be on operational performances. The relational side of the performance needs to be evaluated and several barriers need to be overcome before steps can be made on client satisfaction. Therefore, an extra double diamond on building trust has to be made during this project. More research on relational handling, inter-organizational trust and an effective way on measuring relational factors is needed to create tangible handles for working towards a better cooperation. NPS and other client satisfaction measuring methods aren't sufficient enough for this scope and there is a need for a certain mirror to confront both actors that this relation will not improve if they won't handle more relational.

Part 2. Trust



5. Second Diamond Brief

As the research-phase of the first diamond concluded, an extra dimension in this project is needed to work sufficiently on the relation of Etro and its clients. Therefore a new design brief has been made to give guidelines in the process of developing solutions. This brief focusses on building trust in the relationship and create concrete handles for developing the relationship.

The research has led to the conclusion that an innovative approach was needed and that becoming a strategic co-maker and raising the client satisfaction is being opposed by trust issues and the lack of relational handling in current meetings and overall actions. The interviews also concluded that there are three completely different characters in the three interviewed clients and that they should each have different approaches to make relational handling possible, which have led to several barriers for strategic co-making. At the end, the steps towards improving the client satisfaction and the workability of the cooperation need to be re-established to effectively create a relevant and workable solution. Therefore, this project takes a step away from the established management plan and gives an alternative view towards what is needed for Etro to become a strategic co-maker.

This is the second reframe of the project question, this is also due to the fact that when the scope become more focussed on Pre Wonen, there were more barriers and precursors present than initially discovered. Therefore the focus has changed from co-creation sessions towards the measurement of relational success factors. The cooperation of Etro and Pre Wonen lacks opportunity fields in which they should improve on the soft side of the collaboration and lacks knowledge on where are the exact problems within their cooperation. Therefore, the project question for this frame has become:

Overall Question:

Which relational success factors define the relationship in between Etro and its partners and how can this collaboration measure and improve these factors for becoming a strategic co-maker?

The assignment is changed, mainly from focus from client satisfaction to all relational success factors which are building blocks for strategic co-making. Conclusively, this project has led to a bi-polar monitoring system of relational success factors and there has been made a step-by-step plan in implementing several solutions towards improving these success factors.

Assignment:

Design a multiple step model and a measurement method on relational success factors, which will be bipolar (Etro-Client) on input and usage.

6. Research on Trust

6.1. Trust

As the interviews, the work visit and the reflection with the management team concluded: a main barrier within this inter-organizational relationship is the way of handling together in the contact moments in between client and Etro. This way of current handling has been focussed on contracts, setting every agreement into stone and a culture of controlling each other without having an important empathic aspect: Trust.

Bachmann (2001) concludes that trust and power are the foundations in controlling trans-organizational relationships. The paper concludes that at least one of those two factors can be dominating in a relationship like the cooperations of Etro. In terms of power, the relationship of Etro is hard to change and control by a dependent company like Etro, however controlling trust will be key in the transformation from contractor to co-maker. Six (2017) concludes that building this trust should be done by looking at relational signals, by looking at positive relational signals, by removal of distrust or by avoiding negative signals within the relation. This way of thinking has led to the model which will be further explained in this project. Introducing trust-enhancing policies will improve the whole relation of Etro and its partners.

An important paper for this whole research has been the phd-research of Alf Smolders on trust in inter-organizational relationships (2018). The most important part within this relationship is the way of handling when problems occur or when innovation could happen. The paper concludes that for a good collaboration both parties should focus on relational handling and have a personal trust in each other. A relational approach will lead to a controlling situation within collaborative relationships. (Minnaar, 2017 and 2019) When

comparing this way of thinking, a lot of similarities can be found with the way of thinking of strategic co-making. To start the long term relationship, which is favored by both client and Etro, the thinking of strategic co-making is about the level of bipolar personal trust. Therefore the conclusion is that, if Etro wants to become this strategic co-maker, relational handling should be the foundation of a new way of working, to repair and improve the damaged trust levels of some clients.



FIGURE 6.1. CONCEPTUAL FRAMEWORK OF PROJECT SUCCESS (PINTO ET AL, 2009)

This conceptual framework of Pinto et al. (2009) also shows the value of mutual trust within organizations like these. It describes that both actors within a cooperation have different factors of trust and that all these factors can positively lead to project success if there is a satisfaction within the working relationship. Three key precursors to trust are ability, benevolence and integrity (Reilly & Lojeski, 2009) and could also be applied within this collaboration.

6.2. Research of Smolders

As the interviews, the work visit and the reflection with the management team concluded: a main barrier within this inter-organizational relationship is the way of handling together in the contact moments in between client and Etro. This way of current handling has been focussed on contracts, setting every agreement into stone and a culture of controlling each other without having an important empathic aspect: Trust.

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Further research of Smolders is visible in the subchapters quadrants of trust and the upcoming chapter on models on trust.

6.3. Basic Conditions for Good Relationship

After conducting the interviews and the focus has transitioned from measuring client satisfaction towards the focus on strategic co-making, the question has to be raised what are the basic conditions for a good cooperation?

Several sources claiming that the basic conditions are about having an effective culture, having leadership and good working communication. Further research claims that also trust and the right team building mentality are playing a large role in this. Lurie (2016) claims in an ethical paper that cooperation as a phenomenon haven't got received enough attention within the academic world. It tends that each cooperation has to find out what makes or breaks them themselves and here is where this project comes in. The paper of Lurie also describes that basic trust is an important pre-

condition for cooperation which is concluded from several other researches. Cooperation can be evaluated in terms of performances and its results, a good working relationship is a means not an end.

However, this sounds reasonable and simple, the interviews concluded that the current situation of Etro implied several factors which are lacking on having a good relationship. Therefore, further research have been conducted on team building and trust, because of these themes were discussed during these interviews.

6.4. TORI-model

Forming an alliance like a strategic co-making relationship should feel like building a team. The theory of Gibb (1978) which provides the TORI-model expresses a team's movement. Team building is about trusting relationships (T), (O) open communication, (R) self-realization and (I) interdependence. This model helps this project in guiding the different factors which will make or break the cooperation of Etro and its partners. Open communication is key and asks for more transparency within the way of working. Something which has been found missing in the cooperation during the interviews. Self-realization asks for an eye-opener and an active agency or ownership on enabling relational handling.

6.5. Quadrants of Trust

Another important part of the research of Smolders are the quadrants of trust. (Smolders 2018) These quadrants describe the different ways of handling of two actors in an inter-organizational relationship and what influence the type of acting have on the ability to solve problems. The main goal for Etro should be that both actors will move towards relational handling and therefore act on personal trust. Personal trust should lead to a high level of issue resolution and has a distinctive connection with the goal of strategic co-making. In the quadrant system, as shown in the figure, the balance in between system and

personal trust has been shown. Where system trust mainly focusses on contractual handling and personal trust on relational handling.

		Asset owner (monopsony power)	
		System trust	Personal trust
Maintenance contractor (oligopoly power)	System trust	Low level of issue resolvment	Bias of resolvment towards maintenance contractor
	Personal trust	Bias of resolvment towards asset owner	High level of issue resolvment

FIGURE 6.2. SYSTEM-PERSONAL TRUST QUADRANT

Relational success will be possible if both actors decide to chose to handle relational on personal trust.

6.6. Relational Success Factors

The whole cooperation of Etro and its partners is asking for factors of relational success. Therefore a process has been made, inspired by the multi-layered framework of A. Smolders (2018) on trust within inter-organizational relationships.

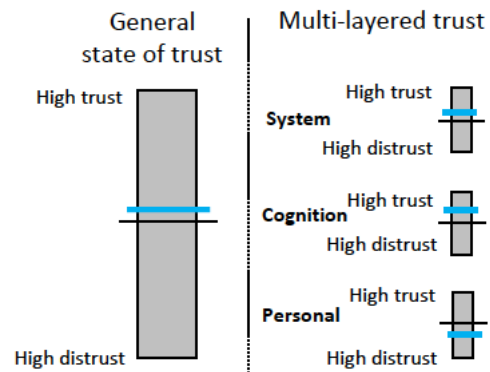


FIGURE 6.3. AN EXAMPLE OF THE TRUST MODEL OF SMOLDERS(2018)

Several factors within the research of Smolders have been selected and together with the designers gut of the researcher and other conclusions of this literature review there have been evaluated different success factors within the relation of Etro. These factors can be found in the chapter 7.3. and the reasoning behind the adaptation of the several factors.

7. Modelling on Trust

To create a tangible model for building on trust, a 3 step model of Smolders have been used in which he describes how two organizations can work on their trust relation. These three steps have been adapted towards the scope of this project and can be seen in the upcoming chapter. However, first the work of Smolders is here discussed and the reasoning behind the change of several elements and factors.

7.1. Measurement Model of Smolders

Within the three steps of Smolders, the second step is the creation of a measurement model on trust factors. This model is visible in the following figure:

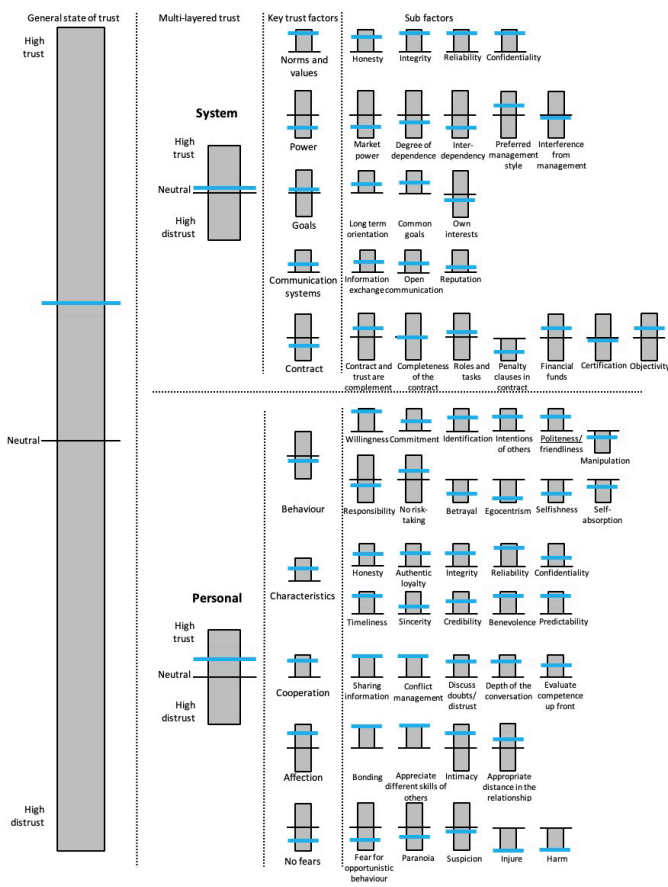


FIGURE 7.1. MULTI-LAYERED FRAMEWORK OF TRUST AND DISTRUST OF SMOLDERS, LARGER VERSION IS VISIBLE ON FIGURE 7.3

The model created is behind the reasoning of the perception that an inter-organizational relationship needs to have a sound balance in between trust and distrust. The model is a visualization of results retrieved from quantitative research and possible in-depth interviews.

7.2. Change the model to scope

For this project, the choice have been made to change this model towards the scope of Etro and to make an alternative or adapted version for measuring relational success. The incentive or main thought around this change is that in the relationship of Etro and its clients, the main goal shouldn't be to build a certain level of trust. But to have tangible input on relational success, which can mean the same but has different wording.

The goal of the model is to set the first steps into a measurement tool on relational success and additionally to provide a certain mirror to the key players within the relationship of Etro and Pre Wonen. The first test have been exploited with only six key figures in the cooperation, for both experimental and practical reasons. The end goal of the creation of an adapted model is to provide a tailor-made model on which the first steps can be made for mastering the relational success factors, which can happen with the use of co-creation. This process is further discussed in the upcoming chapter.

7.2.1. Changing the Perspective

As already mentioned in the previous sub-chapter, a model is needed for measuring relational success factors, not solely based on trust and distrust, as is shown in the figure of the multi-layered framework of Smolders. So why this change in meaning and wording? It is all about changing the perspective.

The model of Smolders is focussed on an inter-organizational relationship and is seeking towards trustfactors which are helping or

blocking when solving conflicts. The model which is needed for Etro and its partners is seeking for the same results, while preventing of making the conversation about negative factors and a pointing culture. The goal of the renewed model is to build towards relational success and therefore the wording of several elements of the framework of Smolders have changed. This can be seen in the category names, where for instance 'Key Trust Factors' will be renamed towards 'Key Factors for Cooperation'. This will hopefully lead to a culture in which the end goal will become to explicitly build on towards a better cooperation instead of knowing if you trust each other. Most of the trustfactors of Smolders are still relevant and used in the renewed model, as they form the base of relational success, however a change in wording of the overall factors is needed for a change of perspective.

As shown in chapter 6, the base of relational success can be found in the TORI-model of Gibb (1978) which is originally build on a team's movement. Where a trusting relationship is one part, but open communication, self-realization and interdependence are also crucial factors. These factors should also be addressed in the renewed model of Smolders, focussed on relational success.

7.2.2. Towards Adapted Model of Smolders

To measure differential success factors of the relationship of Etro and Pre Wonen, first there have to be defined which factors will be evaluated by the participants and how they will be rating these factors. The different factors are inspired from the model of A. Smolders (2018) and from the other literature sources which are used in the search for building blocks of strategic co-making. All factors are categorized in being a systemic/contractual factor or being a personal factor, which are two different aspects of being ready for strategic co-making. Apart from that, the

factors are clustered in key-factors for co-making, to make the whole system more readable and clear.

All questions were focused on the cooperation and applicable for all managerial meetings. There has been made a difference in scale of measure to test if this would give different results and there has been a question on the evaluation of current managerial meetings which is visible in the appendix D.

7.2.3. Chosen Relational Success Factors

For pragmatic reasons and to extend the chance of attention while filling in the survey, the choice have been made to make an adapted version of the measurement model of Smolders. This adaption has reduced the amount of trust factors and several factors have been changed towards the scope of Etro. In the figure 7.3, the model of Smolders is shown with highlights of which factors have been used or are adapted for the renewed model on relational success.

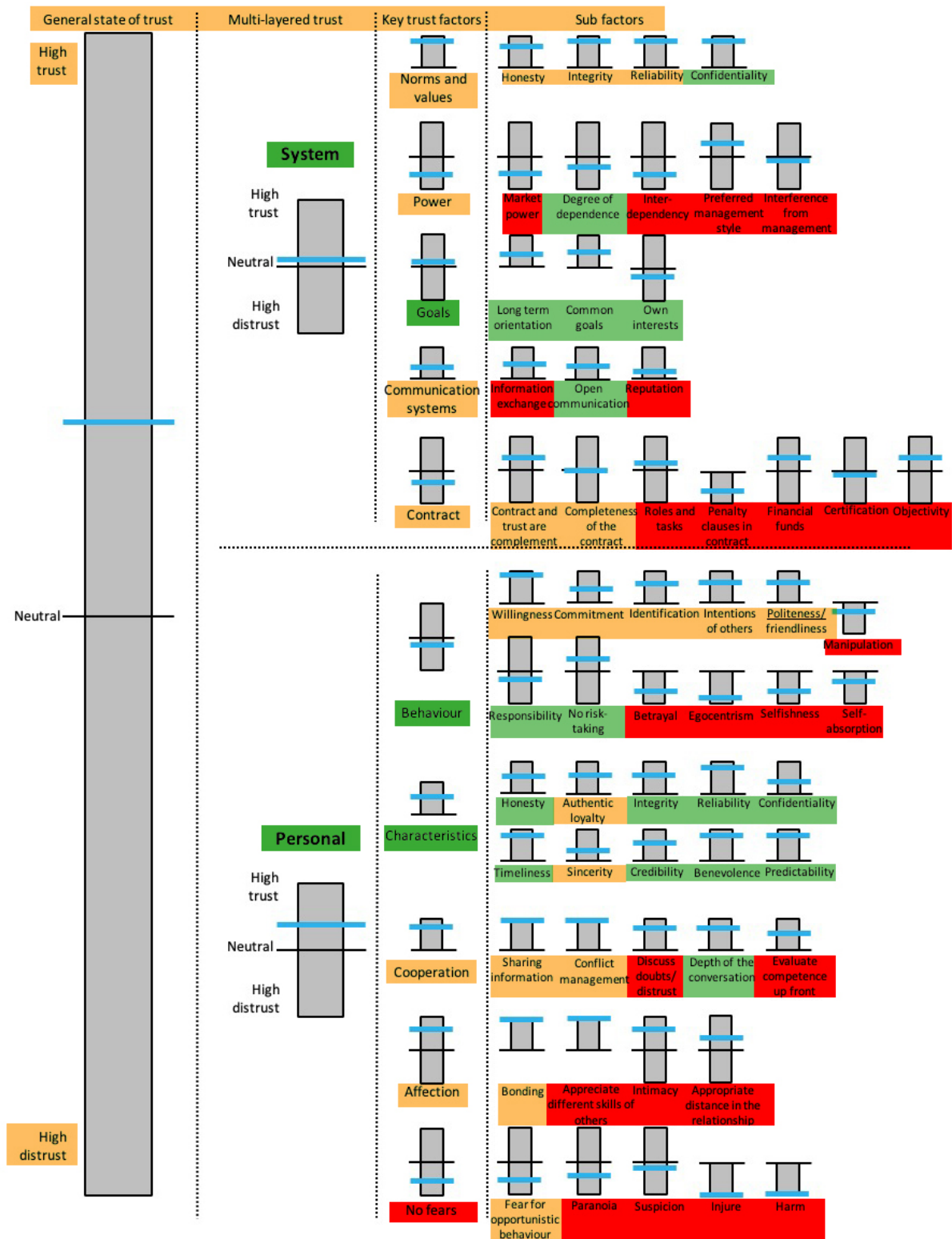
An example of this is about on the performance on contract and within consultations. The model of Smolders provide seven different factors on contract performance, however the goal of this research is to steer both actors away from contractual handling, that's why these factors have been melted into two factors: performance on contract and performance on tasks.

Positive factors have been highlighted in the survey, the negative factors have been neglected. The only real negative factor which stayed in the survey was 'inciting fear,' the reason for this was to check if the participants were filling in the survey with full attention. This happened with one participant and has been recovered. Fear factors have been removed, because co-creation will be more effective if it comes out of positive thinking, if it wants to succeed in this reluctant industry.

Several names have been renamed because of the questioning methods within the survey and to make all factors more distinctive. In the table, an overview of the chosen relational factor and the chosen scale of measure has been shown. The reasoning for the differentiated scale of measure on 'values' has been the exploration if participants would evaluate several factors more negatively or conservative, if the scale would change. Early results have shown that this scale of measure didn't had a solid differential effect.

Multi-layered Factor	Key Factors for cooperation	Relational Success Factors	Output	Scale of Measure
System	Values	Trustworthy Communicative Cooperative Attitude Credible Transparent Confidential	Positive Effect Relation	Scale -5 to +5
	Power and Communication	Dependability Open communication	Ambiguous effect on relation	Likert scale 1 to 5
	Goals	Shared values Long-term oriented Own interest	Positive Relation	Likert scale 1 to 5
	Performance	Performance on contract performance on tasks	Ambiguous effect on relation	Likert scale 1 to 5
Personal	Behaviour	Active in consultations Opportunism Pro-active No risk-taking Responsible	Ambiguous effect on relation	Likert scale 1 to 5
	Characteristics	Honesty Integrity Loyal Objective Timeliness Confidentiality Predictable Benevolence	Positive Relation	Likert scale 1 to 5
	Cooperation and Affection	Willingness to cooperate Depth of the conversation Search for connection Inciting fear.	Ambiguous effect on relation	Likert scale 1 to 5

TABLE 7.2. A QUICK REPRESENTATION OF THE RELATIONAL SUCCESS FACTORS WHICH WERE PRESENTED IN THE SURVEY



- Used in new model
- Adapted or Combined in the new model
- Omitted in the new model

FIGURE 7.3. AN OVERVIEW ON THE ORIGINAL MODEL OF SMOLDERS COMBINED WITH HIGHLIGHTS ON THE USE WITHIN THE ADAPTED MODEL FOR RELATIONAL SUCCESS

8. Models for Relational Success

8.1. A Three Step Model towards Relational Success

To simplify the process of building relational trust and to create a certain framework for future purposes, three steps have been identified to help this process. These steps are inspired from the model of A. Smolders (2018) and a presentation he gave with three similar steps for building trust in inter-organizational relationships in a regulated tender environment. This three step model is also inspired by the eight-step model of Kotter which is described by Doll, Y., & Miller, B. (2008).

The addition which have been made in this model is the implementation of co-creation within the mastering-phase and the differentiated success factors, which are also further described in the developing phase of the report.

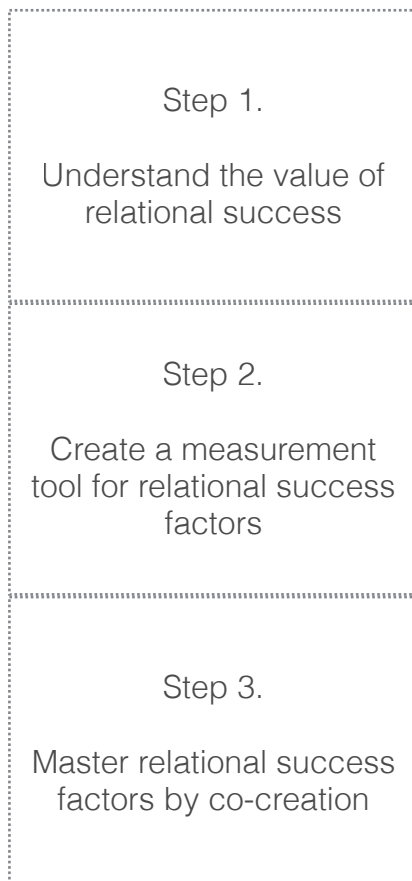


FIGURE 8.1. A THREE STEP MODEL TOWARDS BUILDING RELATIONAL SUCCESS

Step 1. Confront

The first step in building relational trust is the confront-phase, it is where actors in the relationship need to understand which value lies in relational trust and how it could improve the cooperation. To confront, it could help to show them real-time examples of their own cooperation in which they are stuck in contractual handling or aren't aware of the improvements that can be made in the relationship. This confront-phase should serve as an eye-opener, where all actors will be convinced that the way forward for their cooperation is the focus on relational handling.

This report and this graduation project is hopefully the eye-opener for Etro and Pre Wonen.

Additional assets which could be used for this phase are already initiated measurements with the measurement-tools, certain proof that this way of working already works in other cooperations and the PhD report of A.Smolders (2018) could be an eye-opener. To overcome the first possible hesitations from certain actors, like for instance Pre Wonen had during this project, it could help if there are already some measurements with the relational success factors combined with the fact that it is filled in bi-polar. This could mean that actors can be confronted with a certain bias they have on their own performance and therefore serve as a mirror and a wake-up-call, that other actors don't perceive them as they do of themselves.

Step 2. Measure

When all actors see the value of relational handling and want to see which opportunities will arise when they start mastering these factors, the start should be to measure the relational success factors. Within current corporate culture it is important to quantify certain factors within the cooperation and this model tries to give certain numbers and value to the soft side of the relationship. This measurement tool is further described in the

upcoming chapters and is one of the crucial steps within accepting that relational handling could have worth for cooperations like Etro has with their clients.

Step 3. Master

After measuring the success factors of the cooperation in between Etro and their client it is important to look at the results and to use that as a starting point for improvement. The relationship now has a certain number or a certain color and the mastering-phase is about analyzing these results and turn them to action. The steps of mastering the relationship are further described in the process, but will make use of co-creation. This research has concluded that by using co-creation as a means, it is possible to work on the relation success factors both active and passive. Active by using the arising opportunity fields as a topic for a co-creation session and passive by the nature of a co-creation session where collaborations will be improved and stimulated. With targeted interventions the trust-relationship will be improved, this process can be accelerated by the use of an external (relationship) coach or a neutral facilitator for the creative sessions. The whole cooperation will thrive by applying relational handling with co-creation and by focussing on improving the relational success factors with co-creation.

8.2. Test and Results of Measurement Renewed Model

The survey on relational success factors has been conducted with six important figures within the cooperation of Etro and Pre Wonen, three representatives of Etro, who are in the management level of their organization, and three representatives of Pre Wonen, who are fully responsible for the cooperation with Etro within their company. The conclusions of the survey are therefore not that extensive to have saturated results, however these results can give the first hints and an indication of what type of results the measurement tool can give for Etro and its clients.

The survey on relational success factors has been processed with the use of Qualtrics (the survey software) and the visualization of tables and graphs have been processed with the use of Tableau, a data visualization tool.

To assure that the surveys were filled in correctly, some tricks have been used to assure that the participant was being active and aware during the evaluation of certain factors. For instance, some performance-factors are having a negative impact on the overall cooperation and therefore their Likert-score should be as low as possible, if this negative factor isn't present during the conversation. After analyzing the first results, it could be concluded that those negative factors had a lower score than the positive factors and therefore it can be concluded that the participants were filling in the survey appropriately.

To assure that participants could open up about the cooperation as good as possible, an open field of text was presented after each question to give participants the chance to add text next to their evaluations.

Additional texts of participants:

- 'Within this cooperation, I am in need for a dot on the horizon. This cooperation lacks vision.'
- 'My personal feeling is that we are now stuck somewhere between the client/contractor-relationship and a co-making relationship. At operational level, we have found each other completely, but this can be further developed at tactical and steering group level.'
- 'Basically there is a good cooperation, however, there is more to it than we get out of it right now.' 'We get stuck in contract-issues a bit. This is also due the different DNA's within the contractors'

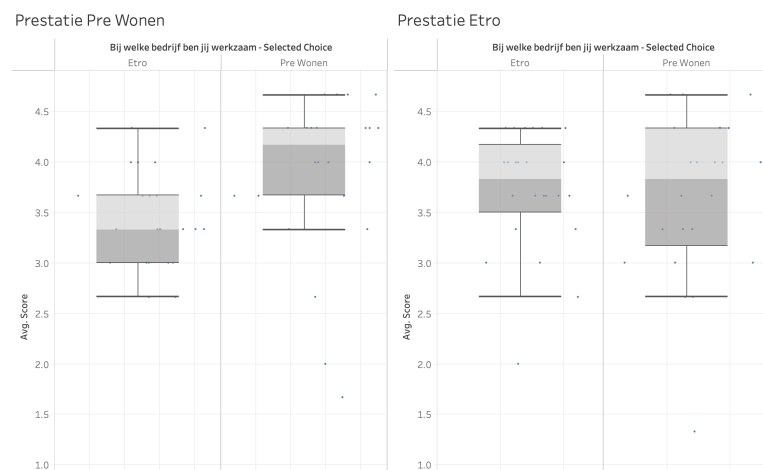


FIGURE 8.2. A VISUALIZATION OF THE DASHBOARD WITH PERFORMANCE FACTORS, WHICH IS INTERACTIVE WITHIN THE TABLEAU SOFTWARE.

8.2.1. Result Table and Figures

The first results are an overview of the categories within the performance and the evaluation factors of the cooperation, the second figure is solely focussed on the 1-to-5-performance factors and are presented in an interactive table within Tableau. Appendix E shows the whole results-table with each factor being represented individually.

Per Bedrijf	Systeem Per..	Groups QuestionID	Bij welke bedrijf ben jij werkzaam..		
			Etro	Pre Wonen	Grand Total
Etro	Systeem Etro	Uitvoering Etro	3.833	4.167	4.000
		Normen en Waarden Etro	2.619	2.333	2.476
		Macht en Communicatie Etro	3.500	3.333	3.417
		Doelstellingen Etro	3.556	3.667	3.611
		Total	3.119	3.024	3.071
	Persoonlijk Etro	Samenwerking en Affectie Etro	3.500	3.083	3.292
		Karakteristieken Etro	4.000	4.000	4.000
		Gedrag Etro	3.600	3.533	3.567
		Total	3.765	3.647	3.706
		Total	3.473	3.366	3.419
Pre Wonen	Systeem Pre Wonen	Uitvoering Pre Wonen	3.500	3.833	3.667
		Normen en Waarden Pre Wonen	1.619	3.286	2.452
		Macht en Communicatie Pre Wonen	2.833	4.500	3.667
		Doelstellingen Pre Wonen	3.889	4.111	4.000
		Total	2.548	3.714	3.131
	Persoonlijk Pre Wonen	Samenwerking en Affectie Pre Wonen	3.250	3.833	3.542
		Karakteristieken Pre Wonen	3.375	3.833	3.604
		Gedrag Pre Wonen	3.667	3.667	3.667
		Total	3.431	3.784	3.608
		Total	3.032	3.753	3.392
Grand Total			3.253	3.559	3.406

FIGURE 8.3. RESULTS OF MULTI-LAYERED MODEL LIMITED TO THE DIFFERENT CATEGORIES OF RELATIONAL SUCCESS.

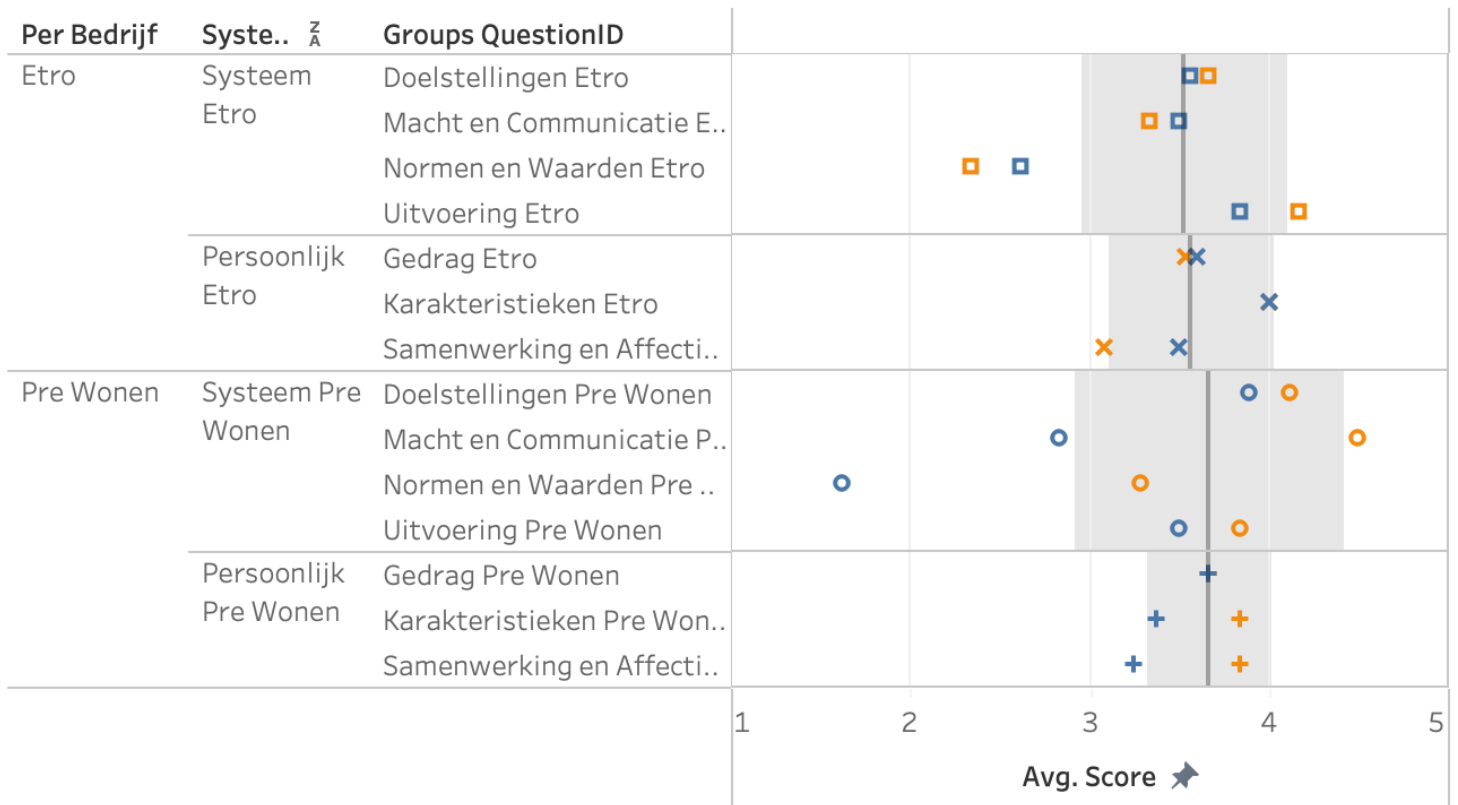


FIGURE 8.4. VISUAL REPRESENTATION OF CATEGORY SCORES IN TABLEAU SOFTWARE

8.2.2. Visual Overview of Measurement Model on Relational Success Factors

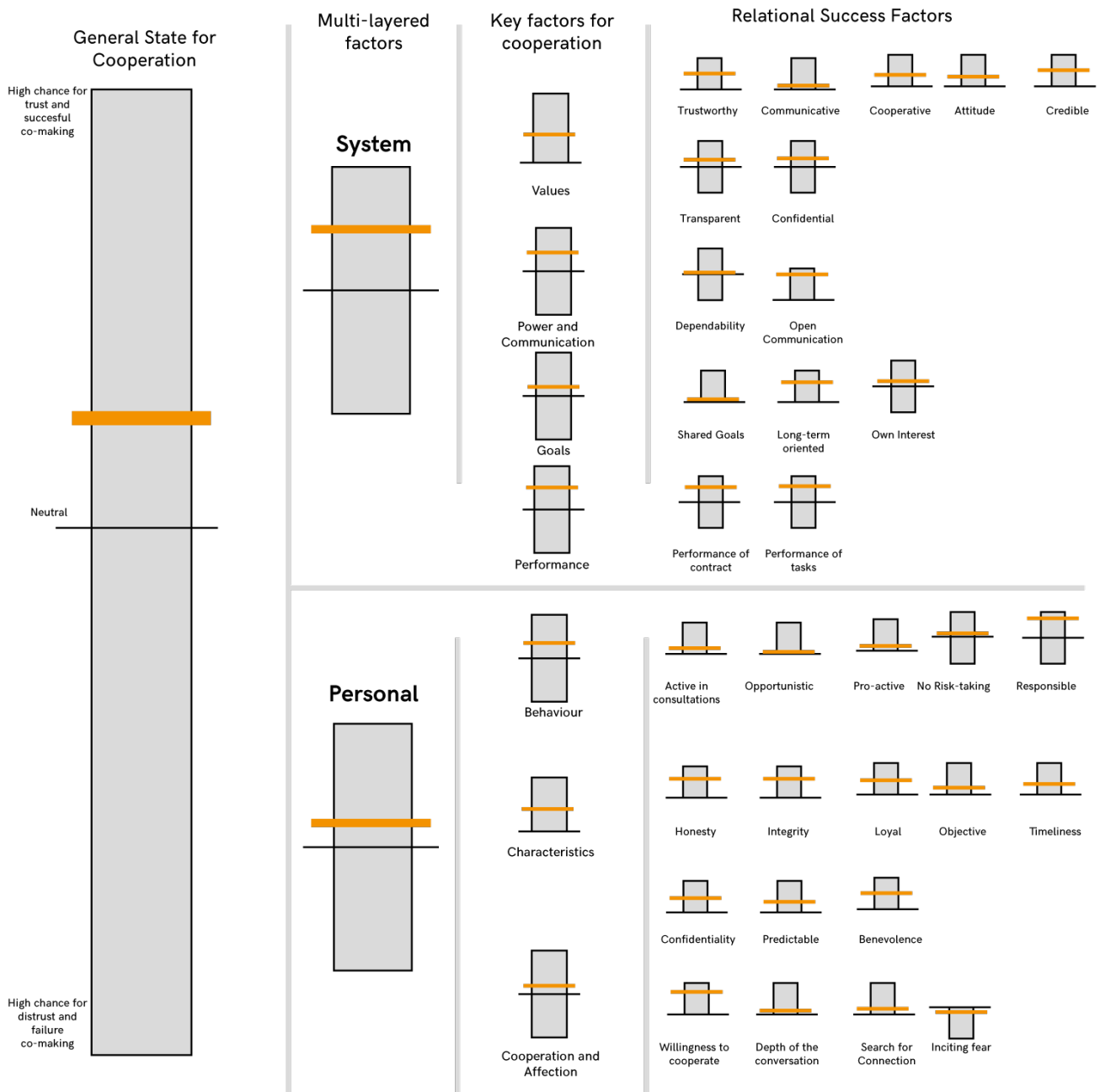


FIGURE 8.5. THE RESULTS OF THE ADAPTED MODEL OF SMOLDERS ON ETRO REPRESENTED IN ONE OVERVIEW. (THE RESULTS OF PRE WOMEN ARE VISIBLE IN THE APPENDIX)

8.2.3. Opportunity Fields

It isn't possible to make certified conclusions out of a quantitative survey which is only filled in by six persons within the cooperation. Therefore, the focus shouldn't be on looking at the exact numbers of the different factors, but the results can be used to look for the first trends which are visible in the table and the dashboard within Tableau.

The overall success factors were rated quite positive for the overall state of the cooperation (average of around 3.5-4.0). However it should be stated that within the philosophy of strategic co-making, that a neutral stance (score of 3) on a factor can have a negative effect on the whole cooperation. Therefore, these results are still leading to certain factors where there is room for improvement. The improvement of these factors, are actions which could be better explained and presented as opportunity fields. This change of wording will lead to a more positive and active approach towards negative factors within the cooperation. It is also needed for analyzers of these results to find a balance in searching for positive and negative key points within the survey. Where there is mutual understanding on what contributes positively to the relationship, it is also appropriate to give these as handles for an improvement of the negative key points. By searching for common ground within the results, it would be much easier to give the right dot on the horizon. The results of this measurement tool will help to develop a certain trajectory to get that dot on the horizon with mutual values and mutual understanding. The survey ends in both positive and negative key points, but showing these positive factors will be essential to make working on the negative factors more approachable and attractive.

The individual highlighted factors are being discussed in the appendix E, while here are

the collaborative fields for improvement for the cooperation of Etro and Pre Wonen:

Creating Shared Goals for the Cooperation

Both parties have given negative scores towards each other and themselves on having shared goals within the cooperation. Earlier literature research has shown that having common ground and common goals are essential for a good relationship and therefore this field has been proved again to be really important. It should be important to provoke this discussion within the corporate collaboration of Etro and Pre Wonen, which is now focussed on contracts with performances that can only be completed individually.

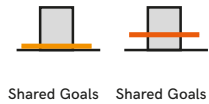


FIGURE 8.6.1. SCORES OF ETRO AND PRE WONEN ON SHARED GOALS

High Willingness for Cooperation

The willingness for Cooperation was a highly scored factor within the survey, where both parties are willing to cooperate. But how does this align with other conclusions that have been drawn during this whole graduation project? It seems that the willingness is there, but there is a lack of structure within the current levels of cooperation to actually co-operate. Upcoming sessions could use this willingness as argumentation and proof that both parties want to change their approach from contractual handling to relational handling.

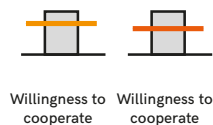


FIGURE 8.6.2. SCORES OF ETRO AND PRE WONEN ON WILLINGNESS TO COOPERATE

More alignment in being active during managerial meetings

The current results show a difference in perception of how active the two actors are within the managerial meetings (tactical and steering group), while Etro values the attitude of Pre Wonen as active within the cooperation, they are being evaluated as inactive from Pre Wonen. There is an opportunity in

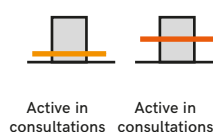


FIGURE 8.6.3. SCORES OF ETRO AND PRE WONEN ON BEING ACTIVE IN MEETINGS

the alignment of the activeness during these meetings. This should be handled by both actors, Etro needs to behave more active, while Pre Wonen needs to allow Etro to change their behavior. The bipolarity of this opportunity field is essential for relational success.

Improving the reflective ability of both actors

A concrete conclusion of this first measurement was that there was a clear difference in the way both actors perceive themselves and in how they are being rated by the other actor. For instance, Pre Wonen rates themselves higher on all performance and power factors as Etro rates them. While the truth will be somewhere in the middle, this lead to the conclusion that within this collaboration the use of this measurement model should have an important part in creating more reflective capabilities. This conclusion is an opportunity field, as this could also be a starting point for improvement during a co-creation session. When you use the most distant factors within the survey, it could provoke discussions where actors are forced to look more in the mirror.

Performing without self-interest by using the capability of performing on tasks

Both actors score relatively high on performing with self-interest, a negative factor for a good working relationship.

However, these characteristics can be used in a positive way, as there need to be provided insight on how this self-interest can benefit the whole operation. Another factor to use for this opportunity field is the performance on completing tasks, which is rated highly within this survey. Co-creation session can be oriented on how to make these tasks, which are performed in good fashion, can be formulated that it will benefit both the

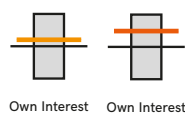


FIGURE 8.6.4. SCORES OF ETRO AND PRE WONEN ON HANDLING ON OWN INTEREST

cooperation and the self-interest of both actors. A creative mindset will help creating shared goals with individual benefits, so it will help both actors in argumentation within their own company.

The first results have shown that several issues found in interviews were also reflected in the measurement model. For instance, the lack of shared values and goals in the cooperation, which could be activated in the master-phase of the three step model.

It is important to highlight, that the largest delta's of the measurement model will lead to the most interesting opportunity fields and therefore are the most interesting topics for the Master-phase.

8.3. From Measure to Master

Now that a model on trust has been explored and adapted to the situation of Etro. It is the next step to explore the mastering phase of the three step model. Earlier research has shown that pushing innovations isn't in the DNA of the cooperation and that there is a disconnection between operational and managerial sides. Changing the way of working could help pushing these innovations and will therefore also help in making improvements on relational success factors. A frequent conclusion in this research is that the cooperation lacks shared goals and values, which discovered during the interviews, the different initiatives and the measurement model. For mastering relational success, these common goals and a new improved way of working is recommended and therefore a new design challenge is born.

Additional research and further examination of the measurement model will be needed for drawing saturated and validated conclusions. This is being discussed in the reflection chapter.

Part 3. Mastering the Relationship



9. Design Brief for first Diamond

After the second created double diamond is concluded in the adapted measurement model of Smolders combined with several target fields to work on, the next phase of the first double diamond can continue.

The initial double diamond is focussed on providing overview and control on client satisfaction. Therefore, the initial research have led to a conclusion where several barriers and enablers for working on this CS have come up. A conclusion which is drawn, is that the main focus to work on CS should be on the soft factors of the cooperation. Therefore the second double diamond has provided insight on which factors are relevant for this specific relation. The next step is however the question on how to work on these factors. This will lead to the following question:

How can we design a way of working in which both actors of the cooperation can work together to boost the client satisfaction rate?

The frame of this question can be focused on how the different relational success factors can be mastered with an improved or differentiated way of working.

The results of the previous chapters can be used to provide an extensive solution to this question. In the first diamond on client satisfaction, information was gathered with several interviews and literature. This research has already give the barriers that within current cooperation both actors had a lack of relational handling and that there was disconnection in between managerial vision and operational execution. This gives a gap which can be closed with an improved way of working.

The second double diamond on trust, resulting with the adapted measurement model of Smolders, gave additional evidence on the lack of shared goals and the lack of reflective ability in the cooperation. Another result from the measurement model was that both actors were performing on self interest and more alignment within consultations on activeness is needed, factors which are essential for working on an improving cooperation.

All these results of previous research have led to this phase, where the focus should be on alignment and a structured way for improving and innovating in the domain of MSO and their relation.

These problems and questions have led to the advice of the implementation of co-creation. Which is further discussed in the upcoming chapters.

9.1. Towards the Solution

Managerial decisions and parts of the vision need to be made approachable and executable for the operational side. Now these two streams are loose (as claimed by Ymere during the interviews) and there is a lack of control on the general direction of the cooperation.

The results of the measurement model have shown that both actors are good at performing tasks in the cooperation, however it also is addressed that both actors handle on contracts and within this scope handle on self-interest. If using the strength of performing tasks, the only thing which needs to change is the way tasks are being generated. If these assignments are being generated by both actors and not only be based on a sole actor, the whole cooperation can improve.

The goal of an improved way of working should be to master the relational success factors at one table with both management

and operation presented and therefore fix the existing holes in the cooperation.

The main problem for Ymere, was that there was a gap in between management and operation. Pre Wonen wanted more innovative thinking of management level and wanted Etro to become more pro-active. The combination of those two conclusions in part 1 have led to the insight that a different way of working was needed in the form of co-creation. Part 2 concluded that there was a lack of reflective ability, which can be fixed with co-creation.

A method is needed, where shared goals can be converted into performing simple tasks, a quality of both actors. The result of converting these goals to tasks will make handling on self-interest no longer self-evident. Co-creation is that method, where shared goals can be converted into ideas or actions that mainly serve the cooperation and help to make concrete tasks that have to be performed in the spirit of the partnership. Co-creation will improve this partnership both actively and passively.

The end goal of this master-phase is that an improved way of working will replace certain elements of the current consultation-stream on three different levels (operational-tactical-steering group). At Pre Wonen this will mainly focus on a differentiation within managerial meetings, at Ymere probably at operational meetings.

Mastering relational success can succeed with co-creation, as co-creation forces both actors to solve conflicts together and it can be used, like cement in the cooperation.

10. Co-creation

As noted numerous-times during this report, the scope of this project has changed several times. That's why most of the research on co-creation, was more focussed on the design part of this way of working, also called co-design. Co-design and co-creation are different terms, however, the literature on co-design really reflects positively on the terms of co-creation. The differences are explained in the upcoming quote:

'Co-design is an attempt to define a problem and then define a solution; co-production is the attempt to implement the proposed solution; co-creation is the process by which people do both'

- McDougall (2012)

As said in the quote, co-creation is a combination of co-design and co-production. Co-design is the process of actively work on the relational factors, and co-production is focussing on implementing the solutions within the operation. This is the reason that further research and testing is focussed on the term co-creation, but the arguments within literature are mainly focussed on the co-design part, as this part has the most relevant connection with the scope of the project.

10.1. Co-Design

When reflecting on the current way of working of Etro to the way of innovation works and is learned at the TU Delft, the question was raised if co-design could be not only used as part within this process to reflect on the way of working, but also as a means to fulfill the needs to become a strategic co-maker. Therefore, a research on co-design was conducted to see if the principles of this way of working enable the different problems defined in the earlier research.

Co-design is a way of working and a method for bringing all relevant stakeholders at one

table and creating solutions for the most relevant problems. If all stakeholders get aligned on the most relevant topics and co-create on solutions to fix or improve these topics both parties will get shared goals and empathy for the opponent in this business-relation.

10.1.1. Literature on Co-Design

Several papers have done research on the principles of co-design and how this enables certain elements in organizations, but what is co-design?

Co-design gives people the equal power in research, decision-making, design, delivery and evaluation. Current practices give people with the most power the most influence over decisions, while within co-design it is needed to share power. Co-design helps building a better social connection, by help paving trust among all actors. Co-design helps in focussing on the relationship in between all actors. By participation, you create urgency and ownership on the relevant actors. Co-design enables people to take part of the overall process and helps them with expressing their feelings and knowledge. By participating in these sessions, it also helps creating empathy and control on the existing problems. By listening to each other and designing together, there is also a more developed insight created on the gaps or differences in capability. Co-design helps filling these gaps on knowledge and makes everyone in the session a teacher and a student.

During the interviews there was also a lack of openness to change identified, something which can be solved by co-design. Co-design enables everyone involved to be an active agent of change (Mouchrek, 2020), it boosts collaboration and fosters the motivation of everyone involved. It leads to inclusive and credible solutions and has a strong focus on realization and implementation.

As seen in the paper of Pirinen (2016), co-design enables relations to cross boundaries and to find common ground in relations. Summarizing the paper concludes that co-design has the function to enable collaboration, create commitment in the organization, improve integration in the processes, make a concrete impact and let the method become a practice within an organization. The barrier of the lack of shared values can be fixed by the co-design, as this method helps thinking beyond individual goals and let its users define the bigger picture and set strategic goals. The barrier of the lack of personal trust, could be fixed by the characteristic of the active recognition of prejudices and misconceptions. Partners will be suspicious about the effect of co-design, but due to its identity it could lead to trust through making together. Co-design gives the effect of creating commitment and give each other the faith of implementing the solution created.

It is logical that co-design will overcome the barrier of the lack of experience on innovation, as it will be forced into the stakeholders with this method. However, it should be noted that it will be important that all stakeholders need help in this process. Doing things right is essential for the chance of success and therefore it is needed that a facilitator will be present and has certain experience and guidelines with innovation

10.2. Implementing Co-creation within Etro

When analyzing the results of the measuring tool, the conclusion with opportunity fields will lead to a starting point for improving. Therefore, there needs to be a constructive base on asking the right questions during those upcoming sessions. This change of thinking is quite easy for an educated designer, but isn't normal in current corporate culture. To turn the opportunity fields in constructive questions, we can make use of

the structure of how to or how might we-questions.

Only the change of a result towards an opportunity field towards a how can we-question, is already a major step towards different thinking in the relation.

For instance, Etro scores low on being active during tactical meetings, then the question which can be asked could be: How might we make Etro more active during tactical meetings?

To give this more context, you could also look at the performance of Pre Wonen, which are scoring much higher on being active, this could lead to the question: How might we make Etro as active as Pre Wonen during tactical meetings?

These questions will lead to a solid base of developing improvements for the collaboration in between Etro and Pre Wonen.

Another example is: Both parties score high on willingness to cooperate, however they score low on having shared goals within the collaboration. The How to-question than could be solely focussed on the negative factor: 'How might we ensure that both parties having more shared goals within the collaboration?'

But it could be more fun and motivating if we add the positive factor; 'How might we let both parties make use of their willingness to cooperate, while creating more shared goals within the collaboration?'

Right now, both actors in the relation have shown that they want to talk more about vision and innovation. If the survey can help them think of idea's and solutions it can change the whole mentality of their thinking. This way of thinking is much more constructive and will lead to clear goals for co-creation sessions, co-design sessions or creative thinking during tactical meetings.

10.3. Creation of Handbook with Students

Co-creation (and definitely the co-design part) isn't simply implementable and also has a lot of different types of manifestation. Therefore, there has been chosen to work on a handbook, which gives Etro overview and guidance towards

10.3.1. Creative Facilitation

The first initiative during this graduation project on co-creation was the help of the course 'Creative Facilitation' of the TU Delft. This two-week elective course is designed for students to learn how to host, attend and facilitate creative sessions with both design knowns and design unknowns. A part of this course is the moment where each individual student has to facilitate a creative session on a chosen scope. During this phase of the graduation project, the first hints towards a co-creation or co-design session were present and therefore, there has been made use of two students who have hosted a creative session on the scope of Etro and a imitated client, where the problems were on daily planning of the operation.

These sessions were mainly focussed on making connections between the operational side and the managerial side of the cooperation, rather than only fixing the relational handling of the managerial streams of both actors.

The two students hosted a session of 2,5 hours together with 5 participants each, while working on an improved working flow for the operational side of Etro.

The results of these sessions can be used as reference material for possible operational co-creation sessions for the future and have also been used as inspiration for the handbook created in the upcoming chapter.



PICTURE 10.1. THE TWO HOSTED SESSIONS OF THE COURSE CREATIVE FACILITATION



FIGURE 11.2. FRONT COVER OF HANDBOOK FOR CO-CREATION SEEN IN APPENDIX J

11. Handbook for Co-creation

As innovation and co-creation has different names and interpretations, a guideline is created for participants of a co-creation session.

11.1.Explanation of the Co-Creation Handbook

This object is the handbook for co-creation, which describes the co-creation session and helps participants to prepare and give an image of the session and helps a facilitator in the preparation of the session. The complete handbook can be found in appendix J.

11.1.1.Elements within the Handbook

Introduction

The whole handbook is focussed on preparing participants for a co-creation session and to see the whole picture of the co-creation process. As the timeframe of a session is short, this handbook should help to prevent discussions on form and make the participants confident and relaxed. The introduction explains this context and the origins of the handbook.

The Process explained

The next chapter explains the different phases of the whole co-creation proces and gives a brief explanation of each phase in the process. Reading this should give participants an idea on how the session should contribute to the overall process.



FIGURE 11.1. DIFFERENT PHASES OF CO-CREATION

Planning of Co-creation Session

The planning of the session is focussed on keeping it brief and tight, with the overall

duration of 2,5 hours. Several elements, like the ice-breaker, can vary with each session but the length need to be in the timeframe of the planning. Previous research, for instance during the pressure cooker with Ymere, has shown that long session don't help in the progression of ideation and will make discussions predominate the session, something which should be prevented.

Preparation for a Session

The preparation of the session should be done by both the facilitator of the session and the participants. The facilitator has a checklist in the handbook to follow and an important part of this preparation phase are the prep meetings with the participants. Here it is needed that the facilitator already discuss the theme of the meeting with each participant individual and already wins the first information and gives the facilitator the chance to change several elements of the problem scope.

Code of Conduct

The code of conduct is an important element within the session. As the participants are design unknowns, it helps if the basic rules for ideation are always present during the session. The facilitator also repeats the rules during the session and makes sure that these are visible somewhere in the meeting room. The rules are the following:

- Criticism should be postponed
- Freewheeling is welcome
- Innovating is combining and cooperating
- Quantity over quality

Protocol of Session

In the protocol of the session, the most important elements are further explained to give it more context for the participants. The facilitator is free to use these elements, but can choose for alternative options.

11.2. Testing the Co-Creation Handbook

Implementing the handbook for co-creation wasn't possible during the scope of the project. It was intended (during the pivotal moment with Pre Wonen), but the conclusion was that first their relational trust needed to be build and the three precursors for cooperation of Pre Wonen needed to be fixed.

This led to a following mission, in which the handbook could be presented with a certain validation session. This validation has taken place with several students and the goals and results are explained in the following subchapters.

11.2.1. Validation Setup

One of the most important goals of the validation is that the handbook which is created will be tested on use-ability and readability for future facilitators. Within the scope and possibilities of the research, this was the most relevant and approachable case to test. Therefore, three design-known students have participated individually in a validation session on the use-ability and approachability of the handbook.

These three design students are all students from the Technical University of Delft and all have a bachelor degree on Industrial Design. All three students have more than 5 years experience in the field of industrial design and are in the finalizing phase of their Masters degree. All three participants don't have followed the course 'Creative Facilitation' and don't consider themselves as an expert on facilitating creative sessions.

The goal of this study is to find out if these three students are becoming more confident in facilitating a co-creation session with the help of the handbook and furthermore to use their advice on a reiteration of the handbook.

11.2.2. Design of Validation

All participants have performed the session individually in a timespan of approximately 45 minutes. Before starting the session, all participants have been asked to sign a consent form and therefore agree on the use of the information for research purposes.

The validation is a within-subject design, where both open and closed questions are being answered by the participants. A within-subject design is used to initially measure the confidence level of the participants without the help of the handbook and afterwards to test the difference after the use of the handbook.

The test takes place in the online environment with two tools combined: Zoom and Miro. Zoom is the video tool for communication and a recording tool for analyzing the session, Miro is an online tool for providing a working space in which the assignment was visible and could be performed.

The open questions are asked by the researcher and have been analyzed for the iteration of the handbook. The closed questions are Likert-scale questions, which are being analyzed using Tableau. The Likert-scale questions are being used before and after the implementation of the handbook in terms of analyzing the levels of confidence and knowledge on facilitating a co-creation session. Next to the open and closed questions an open field was visible during the assignments in which participants could make use of post-its to make additional notes.

11.2.3. Test Procedure

After agreeing on the consent form, the participants are being questioned on their experience with co-creation sessions or creative sessions in general. After these first questions, the screen with Miro is visible with the first assignment for the participants. The participants are being asked to prepare a co-creation session within the scope of Etro and

Pre Wonen. Additional information can be asked to the researcher and it is important to let them prepare the steps they want to perform before they can perform the facilitation. 5 open questions are being asked to help them giving direction towards their facilitation design and it is important that they will present an informative picture to perform their knowledge on co-creation sessions. After this assignment, 5 Likert-scale questions are being presented on levels of confidence and knowledge on the performance of a co-creation facilitation.

After filling these questions, the handbook is shown in the Miro environment and the participant take approximately 10 minutes to read the handbook. After this the second assignment take place, which is the repetition of the first assignment, but with the help of the handbook.

During the performance of the second assignment, all advice and annotations are recorded for further analyzing. After the performance of the second assignment, the same 5 Likert-scale questions are being shown and answered by the participants.

The validation test is concluded with open questions focussed on providing feedback on the handbook design and to give more insight in if the participants agree with certain elements of the handbook.

11.2.4. Results

Likert-scale Questions

The results of the Likert-scale questions aren't assessed by an analyzing tool like SPSS, due to the lack of quantity in the amount of participants. However, still there can be said something on the differences in the scores of the participant on the different factors. First, the participants have not evaluated a factor with a decrease during the second assessment. Although this seems logic, the handbook could have given the participants an increased feeling of fear or responsibility which could resulted in a decreased factor on confidence.

All participants have assessed the overall score of factors higher in the second assessment after the implementation of the handbook, however not all participants have increased the same factors. In terms of confidence, being informed, having knowledge and being experienced.

Open questions results

The open questions and extra discussions during the validation session have shown that there is a value in the co-creation handbook. One important element of the handbook discussed was the planning. Before assessing the handbook, the participants were asked to make an estimation of the timespan for a session. The suggested planning, changed the view on the duration and made participants realize that a co-creation session will take longer than expected.

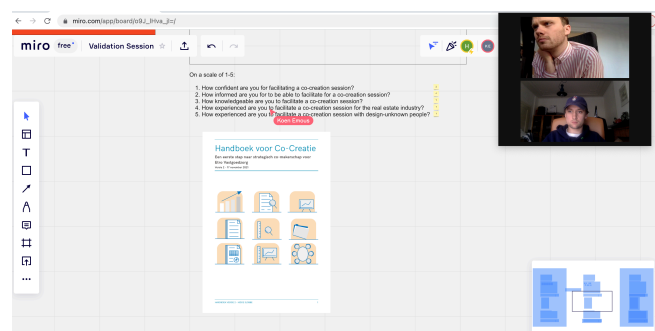
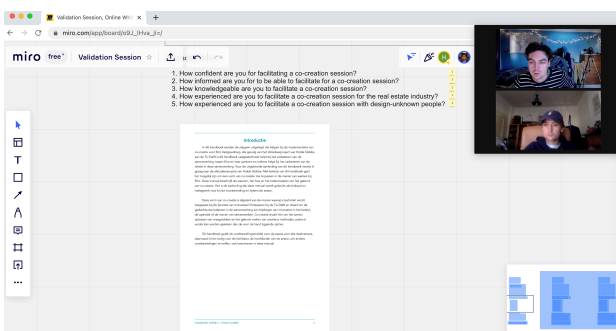


FIGURE 11.3. 2 PARTICIPANTS DURING THE VALIDATION SESSION

***'Preparation meetings are essential, this is something which I didn't think of initially, but it is essential for making the meeting go smoothly.'* - KE**

The overall reaction on the handbook was that it was a welcome tool for giving more grip to facilitating a co-creation session. The handbook suggested certain actions, which weren't thought of in the first assignment. One of those actions was the use of preparation meetings. All participants agreed that this would be a relevant action, which they would like to use if they would facilitate a co-creation session.

***'Handbook gave me a lot of insight in what a session like this would be and made me much more aware of what was asked from me. Now that I know what it this is, I would think that I could facilitate it.'* - DH**

Recommendations on the handbook were mainly on the topic of specific elements in the planning, the addition of visual elements in the handbook and the addition of an appendix with suggested methods. These recommendations have been added to the handbook.

***'I like that the handbook don't suggest for each different phase which method you should use. As facilitator I would like to make use of my own methods, which can fit in the planning.'* - KE**

***'The handbook needs more clarification in terms of methods. I would like to have an appendix with the suggestion of different ideation methods.'* - JW**

There was a contrast in between two participants on the suggestions of methods. One participant was clearly in favor of suggesting methods, while the other participant wanted to keep an individual approach. As a consequence of this contrast,

the choice have been made to add a small suggestion-subchapter.

Assignments

The assignments of designing the facilitation of a co-creation session have been assessed after the session, but didn't gave a clear view on an increase or decrease in knowledge of co-creation. This is being discussed in the upcoming subchapter.

11.2.5. Discussion and Limitations

Due to the lack of many participants and different scenario's it is questionable what's the value of the validation session. Although, this session led to recommendations for the handbook and gave a more clear view on the role of the facilitators during a co-creation session.

The overall contribution of this validation is the confirmation of the usefulness of the handbook and the recommendations which led to the first iteration of the handbook.

This validation has been performed with a limited amount of time to found the right amount of participants and to also include the participants of the co-creation session. Therefore the quality of the validation hasn't been on the level which should be obtained if the data would be solid.

This validation has taken place in a short timespan at the end of the graduation project and therefore the choice have been made to scope the session to the achievable. More validation is needed for design unknowns, the practicalities of the handbook, like for instance the planning and the performance of a co-creation session within the scope of Etro and its industry,

11.3. Mastering Conclusion

The conclusion of the third part of this research is the development of a solution on the mastering of relational success.

The handbook for co-creation is partially validated in terms of the role of the facilitator, however further research is needed on the role of participants, the actual implementation on the industry. However, with the help of co-creation and the help of the handbook on co-creation, it can become possible to actively work on relational success-factors.

The upcoming part is focussed on evaluation and discusses the value of this project.

Part 4. Value: Reflection and Outro



12. Reflection on Process and Recommendations

Before concluding the whole graduation report, it is needed to reflect on the process of the project and to look at the possible value of this research. Therefore, first the changes within the project scope are discussed. Secondly, the value of the measurement model is discussed and consequently the overall idea of co-creation is discussed. Conclusively recommendations are made on the process and the value of the project is determined.

Project Scope:

During this project the scope changed several times due to different reasons. The initial scope changed due to a changing IT-environment within the company of Etro. The scope changed in later phase due to new insights of interviews and the pivotal moment with Pre Wonen. However these reasons were clear at the moment, it resulted in an unclear structure during the whole project. Reflecting on this process, the researcher could have had a more dominant attitude towards the initial assignment. Traditional elements within Etro and its industry created a recalcitrant attitude towards the current way of working and the strategic designer approach of reframing the assignment made the whole project fuzzy and unclear. The lack of control on the assignment and project scope can be seen throughout the report and the project results. In future projects it is needed to have a more dominant and pro-active attitude to not lose this control and to actively communicate the bigger picture, more of this is discussed in the personal reflection. There is still a lot of value in this project, however, the constant reframing of the assignment increased the complexity of the project a lot and therefore made the result less clear as intended. Reframing is a good practice for a designer, however the bigger picture should be taken in mind when doing.

Value of Measurement Model:

To academic standards, the current value of the measurement model cannot be determined on a valid base. A validation study would be needed to further map out the relevancy of each different factor, to study if the model is fully applicable on all clients of Etro and it would be needed to validate the choices that have been made in terms of the adaptation of the model of Smolders. However, reflecting on the process, the value of the measurement model has already proved itself during this graduation project. Initially a co-creation session was planned with the client Pre Wonen and after they rejected this, several pre-cursors came up. The project lacked a certain grip and a certain goal. The search for grip led to the measurement model of Alf Smolders, a model which was researched before but didn't had a certain purpose for this project. But why did it became relevant for this project? The value of measuring different factors of trust and relational success lies in both the act of measuring and the results. While filling in the questionnaire, participants were already making use of reflective practice, a lacking quality in this industry. The results also forced the actors to react and reflect on the cooperation with their clients. By only applying this model in the setting with six key players of the cooperation of Etro and Pre Wonen, it already showed enough handles to reflect and react on. It is recommended that further research will be done on this model, however the first reactions gave a clear image that this peer-reviewing way of working can be a building block towards a more relational approach.

On the overall value of the idea of implementing co-creation:

Somewhere during the creation of the idea of co-creation, the control got lost on the why of the project. This is mainly due to the chronological order of several events and thoughts. However, this led to several

reflections on what is the value of co-creation and if this project will become of a certain value for Etro or more project, which is left on the book shelf.

When entering part 3 in the report, the conclusion has been made in a fast way that co-creation is the solution of the proposed design brief. This conclusion is mainly made due to the fact that the idea of co-creation was already present before the whole measurement model idea was there and the end of the graduation was nearing. After several discussions with coach and chair, the decision was made to give the co-creation idea as an additional 'present' next to the three step model towards relational success. However the question needs to be asked if co-creation is the only or best way to master relational success.

Part 2 only helped in making the whole solution of part 3 more approachable for both Pre Wonen and Etro. Intuitional, co-creation was always the solution-direction. The initial partnership has ongoing conflicts which cannot be changed by only applying the co-creation method. Co-creation is the carrier of the message that the current mentality needs to change in the current relationships with the clients, especially with Pre Wonen and Ymere. This current mentality is focussed on content; costs and quality. The main principals in the relationship need to change in order to improve and make radical changes. Only, I have doubts if the industry is ready for these changes. In an ideal world the whole contract between contractor and housing corporation needs to change towards a servitization-model. Which I will explain further.

The current model forces both actors towards thinking on self-interest; from purchasing side (housing corp) on cost minimization, while the contractor focusses on maximizing turnover. This type of thinking will always lead to conflict. Co-creation puts both interest at one table, where total cost of ownership will

become important. The optimal solution for both actors on purchase and sales will become more clear.

Co-creation can lead towards a certain 'maintenance as a service'-model, however both actors need to claim they are in it for the long run. To work with this 'swapfiets'-model, it can ensure that Etro can choose for quality over cost, which will be profitable on long-term. Only if the contracts with their partners will become long-term, this will be possible. This will be essential and is in my opinion the only way to really become a strategic co-maker.

The current situation with current contracts makes that there is a mutual dependence but the starting positions are diametrically opposed. This ensures that a real solution of conflict will never be found, unless the contracts are amended and there is an 'in-it-for-the-longrun'-structure with a service fee-model.

Conclusively, this proposal of co-creation will then be one way and hereby being a carrier of the message. Perhaps another way of working or different approach makes it also possible to achieve this, only this hasn't been explored during this project, mainly because of time-issues and the chronology of this project.

Overall Value of Project:

Although the original goal of this research project hasn't been achieved, the value of this project has given a lot of insights for Etro and their cliental relationship. The approach of an industrial designer, where the client becomes the central figure and their wishes and needs are the most important has a good fit with the company of Etro Vastgoedzorg. This project has given Etro the insight that each client will need a different approach in terms of handling to maintain a long term working-relationship. Further research will be needed on the actual implementation of the three step model, however the first step can be concluded after

this graduation project. This project has confronted both Etro and its partners with the existing obstacles on the soft part of the relationship. Although, the initial project scope was focussed on hard data, this project has shown that first the soft relationship needs to improve. This insight can change the mentalities within the cooperation and this change will be needed for obtaining the ambition of becoming a strategic co-maker. The general question of this reflection can be if the presented solution is going to work. To give a valid yes, further research is needed. However, if the insights of this project will be used and implemented, I believe that the client satisfaction will improve either way.

13. Overall Conclusion

After reflecting on the value of the different elements of this project, this chapter concludes the overall graduation project. The process and the differentiation of scopes have led to a different conclusion, but has given a lot of answers and insights on Etro and their cliental relationships.

The initial question of this research project was to give insight in the client satisfaction of the clients of Etro and the result of this project is that each client needs a different approach but can be handled with the three steps of measuring relational success. The first step is the understanding that each client requires different handling and that mutual trust and relational handling is key for a good working relationship. The goal of Etro Vastgoedzorg is to fulfill the ambition of becoming a strategic co-maker in 2025 and this only can happen with partners, who are willing to co-create and to focus on the relation and not on the contract.

The second step in the process towards an individual approach, where the client and the relation with Etro and the specific client gets evaluated. This can be done by the measurement tool, which is an adapted model of the measurement model of Smolders. The insights of this measurement model will give colour to the specific relation and will give handles for problems and opportunities to tackle.

The third step will become the mastering of the factors of relational success, which can be done by co-creation. A handbook is created and evaluated to help Etro and future facilitators with the co-creation process. By working actively at the largest delta's of the measurement model in a cooperative space, it will be possible to work on the relation and improve the client satisfaction.

The reflection has shown that the overall value of this project lies in the insight that before the cooperations can work on the hard

concrete parts of the relationship, it is needed to work on the soft part of the relationship. The combination of the measurement model and the co-creation process will become building blocks for working at the client satisfaction and will help Etro in setting the first steps towards strategic co-making.

The following chapters are describing the discussion and the reflection on the personal process during this project.

14. Discussion

This project started as an assignment to create a dashboard or solution on giving overview and control on client satisfaction for Etro. This discussion describes if this goal is achieved, what the limitations were during this project and gives recommendations for further research.

This project began with the goal as an exploration for relevant data, which would determine the client satisfaction rate. However, in an early stage of the project, the practices of Etro showed that there were a lot of gaps in the data and these weren't possible to fill during this project. This was mainly due to a transformation within the IT-infrastructure of Etro and also due to the lack of relevant data in the cooperation. As an industrial designer, the approach of a project like this, is to set the client central and therefore interviews were conducted to question them on the real problems within the cooperation. This approach led to a change in the scope, where not data, but the trust-relation became central for this project. This change of approach have led to a different type of solution and therefore there is still a lot of room for research on relevant data points in the relation of Etro and its clients. This project has focussed on the soft part of the cooperation, but if this relation will improve on the relational success factors, it will be possible to research more on the concrete factors of the cooperation. It is important for these hard factors, that both actors will be included in the determination of the boundaries and the measurement method, without clarification and mutual agreements this data will not have any use.

This project has suffered from several obstacles, of which some are already discussed during the reflection. This led to limitations, on which further research is needed. For instance on the co-creation session.

The limitations of the validation session on the co-creation session are already discussed and showed that more research is needed to come up with valid conclusions. The lack of many participants and the missing of an actual planned session have made the overall research on co-creation thin and therefore further research is needed on the actual implementation of this method. This was mainly due to the limit of time at the project and due to the Covid-19 situation, where working at home was preferred. However, the process with Pre Wonen and the disagreement of attending a co-creation session showed that the relationships of Etro have precursors before actively cooperating on the relationship is possible. Time has also been a negative influence on the project. As a graduation project has a fixed amount of time sometimes planning have made crucial decisions during the project. Consequently, it limited the amount of time on tests, validation and a sound ideation.

Also the measurement model could have been validated more by a larger quantity of participants of the questionnaire within the model. This report has made use of six key players in the cooperation with Pre Wonen. However, further research is needed on what will happen if all relevant stakeholders will be included in the model and also what will happen with the other clients of Etro. The model can be used for further practices, however it is expected that this will happen in an iterative process.

Overall, the three step model which is created can be used as a building block for working towards strategic co-making. The elements of the measurement model and the co-creation session can be used in this model, but need further validation in terms of company-fit and data saturation. By using this three step model, additional needs will be discovered for working on a co-making relationship.

15. Personal Reflection

Overall this graduation project has been a rough journey in which both internal and external factors were blocking a fresh and healthy learning environment. Besides those obstacles, I have still managed to finish this project, which makes me proud.

COVID-19 hindered the project in practical matters and resulted in several setbacks during this project, but overall led to mental health issues personally. The largest win of this graduation project has been overcoming these issues and bringing the project to an end. This hasn't maybe the best Hidde possible in terms of communication and performance as a designer. However, in the hectic times where working at home became the new standard, this project has taught me a lot about myself and showed me what is important for keeping me healthy.

Before this graduation started, I have set some personal learning objectives, which are partly obtained during this graduation project. Firstly, the focus on report language and structure. This project has given me a lot of hassle on reporting and taught me a lot, however also given me the awareness that there is still a lot of room for improvement. However, I have made progress and learned a lot on report structure.

The second objective was to learn more on interaction in digital systems. This hasn't really happened, only with the use of Tableau. It was cool to learn a new tool during the graduation, however the scope of the project changed a lot, so I haven't explored the interaction within systems like these.

The third objective was to create a workable prototype for testing a profound solution. There could be made the case for the handbook, however I still believe that a real creative session and a practical prototype with a dashboard or something would have provided me more knowledge and experience on prototyping and testing.

Although the goals doesn't seem to have been obtained completely, I still believe that the journey of graduation and the differentiation of scopes and the amount of setbacks and changes during the project have taught me a lot. Personally there have been a lot of moments where I would have liked to quit this project and maybe in the beginning it would have been the better choice. However, now that I'm (almost) on the end of the road, I'm glad that I am there and I can be satisfied with the completion of my master. I hope that in the future I can also be satisfied with this report, but only time will tell.

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Pictures Report

Front Cover: @byfortytwo on Unsplash
Part Introduction: Repository of Etro
Vastgoedzorg

Appendices

A. Approved Project Brief

DESIGN
FOR OUR
future



IDE Master Graduation

Project team, Procedural checks and personal Project brief

This document contains the agreements made between student and supervisory team about the student's IDE Master Graduation Project. This document can also include the involvement of an external organisation, however, it does not cover any legal employment relationship that the student and the client (might) agree upon. Next to that, this document facilitates the required procedural checks. In this document:

- The student defines the team, what he/she is going to do/deliver and how that will come about.
- SSC E&SA (Shared Service Center, Education & Student Affairs) reports on the student's registration and study progress.
- IDE's Board of Examiners confirms if the student is allowed to start the Graduation Project.

USE ADOBE ACROBAT READER TO OPEN, EDIT AND SAVE THIS DOCUMENT

Download again and reopen in case you tried other software, such as Preview (Mac) or a webbrowser.

STUDENT DATA & MASTER PROGRAMME

Save this form according to the format "IDE Master Graduation Project Brief_familyname_firstname_studentnumber_dd-mm-yyyy".

Complete all blue parts of the form and include the approved Project Brief in your Graduation Report as Appendix 1 !

family name	<u>Slobbe</u>	<u>4957</u>	Your master programme (only select the options that apply to you):
initials	<u>HKH</u>	given name <u>Hidde</u>	IDE master(s): <input type="radio"/> IPD <input type="radio"/> Dfl <input checked="" type="radio"/> SPD
student number	<u>4365534</u>		2 nd non-IDE master: _____
street & no.	<u>1</u>		individual programme: _____ (give date of approval)
zipcode & city	<u>1</u>		honours programme: <input type="radio"/> Honours Programme Master
country	<u>1</u>		specialisation / annotation: <input type="radio"/> Medisign
phone	<u>1</u>		<input type="radio"/> Tech. in Sustainable Design
email	<u>1</u>		<input type="radio"/> Entrepreneurship

SUPERVISORY TEAM **

Fill in the required data for the supervisory team members. Please check the instructions on the right !

** chair	<u>Sicco Santema</u>	dept. / section: <u>DOS (MCR)</u>
** mentor	<u>Margreet Beets</u>	dept. / section: <u>DOS</u>
2 nd mentor	<u>Stefan Verkade</u>	
	organisation: <u>Etro Vastgoedzorg</u>	
	city: <u>Wormerveer</u>	country: <u>Netherlands</u>

Chair should request the IDE Board of Examiners for approval of a non-IDE mentor, including a motivation letter and c.v.

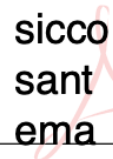


Second mentor only applies in case the assignment is hosted by an external organisation.

comments (optional) I can use the expertise of Margreet Beets on her knowledge of design methodologies, strategy in innovation and interaction within digital systems, whereas I can use Sicco Santema as an expert on supply integrated design and information exchange in cooperation. These two areas of expertise combined can cover the most important aspects of this project.

APPROVAL PROJECT BRIEF

To be filled in by the chair of the supervisory team.

chair Sicco Santema date 26 - 04 - 2021 signature 

Digitaal ondertekend door sicco santema
 Datum: 2021.04.26 18:01:10 +02'00'

CHECK STUDY PROGRESS

To be filled in by the SSC E&SA (Shared Service Center, Education & Student Affairs), after approval of the project brief by the Chair. The study progress will be checked for a 2nd time just before the green light meeting.

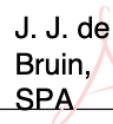
Master electives no. of EC accumulated in total: 27 EC

Of which, taking the conditional requirements into account, can be part of the exam programme 27 EC

List of electives obtained before the third semester without approval of the BoE

YES all 1st year master courses passed

NO missing 1st year master courses are:

name J. J. de Bruin date 03 - 05 - 2021 signature 

Digitally signed by J. J. de Bruin, SPA
 Date: 2021.05.03 14:52:26 +02'00'

FORMAL APPROVAL GRADUATION PROJECT

To be filled in by the Board of Examiners of IDE TU Delft. Please check the supervisory team and study the parts of the brief marked **. Next, please assess, (dis)approve and sign this Project Brief, by using the criteria below.

- Does the project fit within the (MSc)-programme of the student (taking into account, if described, the activities done next to the obligatory MSc specific courses)?
- Is the level of the project challenging enough for a MSc IDE graduating student?
- Is the project expected to be doable within 100 working days/20 weeks ?
- Does the composition of the supervisory team comply with the regulations and fit the assignment ?

Content: APPROVED NOT APPROVED

Procedure: APPROVED NOT APPROVED

remark : in title Envisioning overview is unclear, what is meant with this?
- however, the assignment is clear

_____ comments

name Monique von Morgen date 10 - 05 - 2021 signature _____

IDE TU Delft - E&SA Department /// Graduation project brief & study overview /// 2018-01 v30 Page 2 of 7
 Initials & Name HKH Slobbe 4957 Student number 4365534
 Title of Project Envisioning overview of client satisfaction within real estate maintenance

Envisioning overview of client satisfaction within real estate maintenance project title

Please state the title of your graduation project (above) and the start date and end date (below). Keep the title compact and simple. Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

start date 19 - 04 - 2021 06 - 10 - 2021 end date

INTRODUCTION **

Please describe, the context of your project, and address the main stakeholders (interests) within this context in a concise yet complete manner. Who are involved, what do they value and how do they currently operate within the given context? What are the main opportunities and limitations you are currently aware of (cultural- and social norms, resources (time, money,...), technology, ...).

I will be doing this project in collaboration with Etro Vastgoedzorg, which is a Real Estate Maintenance company with 175 employees and an approximate yearly revenue of €37 million. The operating structure of Etro is divided into four departments, each focusing on different work areas. These departments are: Painting & Concrete, Mutation, Service and Projects. Mainly, these departments maintain the buildings of 4 large housing corporations; Ymere, Pré Wonen, Eigen Haard and de Key.

Etro is a part of investment company Scheybeeck N.V. and takes pride in its human-centred orientation. The company is built around five core values, striving to be: Customer-oriented, Human-oriented, Results-oriented, Connecting and Innovative. The firm promises to be investing in sustainability and innovation, as well as in quality and safety. They describe their approach as cooperative and taking worries and care away from their customers.

The main indicator of Etro's performance is Client Satisfaction, where the client is this housing corporation. However, now the information streams with the client presented both internal and external are often incomplete and not always on time. There is also a lack of knowledge on which data is relevant to measure CF and which data is relevant to share with the clients. 6 project leaders are working on daily basis with the different departments and the different housing corporations on this main ambition. There is a clear need of an overview in this Client Satisfaction, later referred as 'CF'.

One of the most important stakeholder to take into account is the tenant of the buildings within the Housing Corporations, this project needs to investigate their role within the operation and how they influence the overall client satisfaction. Therefore it is important to look at all the touchpoints the tenants have with the operation of Etro. For this project it could also be relevant to look at the material suppliers, as they have a crucial role within the operation on lead time and first time fix. The last relevant stakeholders are the other Maintenance companies, as they play a part within planning and with overlapping tasks.

Already known indicators for Client Satisfaction are the amount of complaints of tenants on Etro's work, the outstanding tasks of Etro, the lead time of fixes, the first time fix rate and the tenant satisfaction. But there should be more factors that are relevant to monitor within a system. The input of this system could be data of the operation, but also could be a satisfactory rating system provided to all the relevant stakeholders. In the current situation, Etro is working with Power BI - rapporten (shown in image 1), which is a data tool to create oversight on the operations. However, now the information lacks relevancy and isn't complete. There is also no output towards the clients. The output needs to provide an overview, this could mean that it will manifestate in a dashboard with all the relevant data, but could also be a social change, where the solution will be in a new way of working.

The goal of this project is to see which indicators and data are relevant for the Client Satisfaction of all 4 departments, mainly focussed on the departments Service and Mutation, and also for the clients, mainly focussed on Eigen Haard and Ymere or Pré Wonen. These factors need to be manifestated in a customer integrated solution which gives an overview of this CF for both Etro and their clients, to make the solution bipolar on input and usage. This project ends in a implementation plan, focussing on the barriers and enablers to start and maintain this solution for Etro in the upcoming years.

space available for images / figures on next page

Personal Project Brief - IDE Master Graduation

introduction (continued): space for images

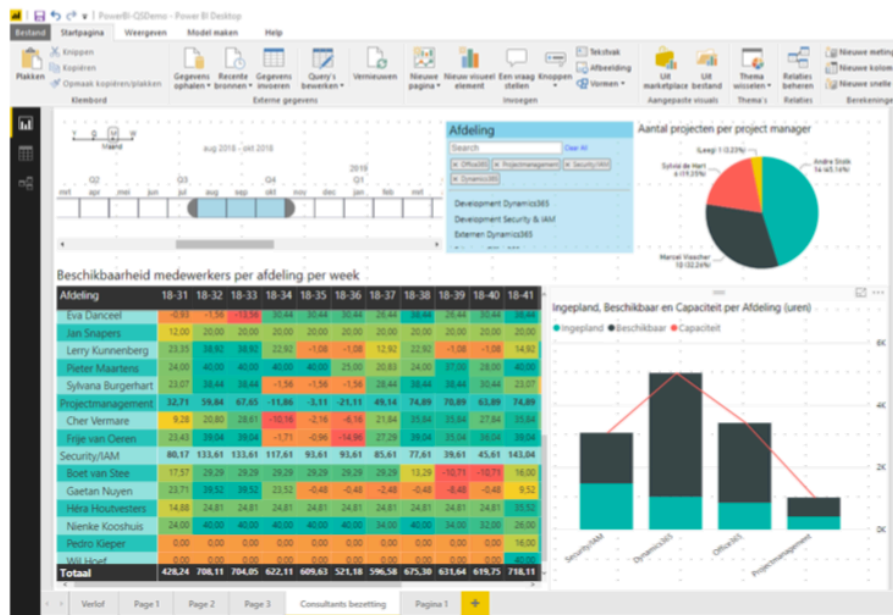


image / figure 1: An example of a Power BI Rapport

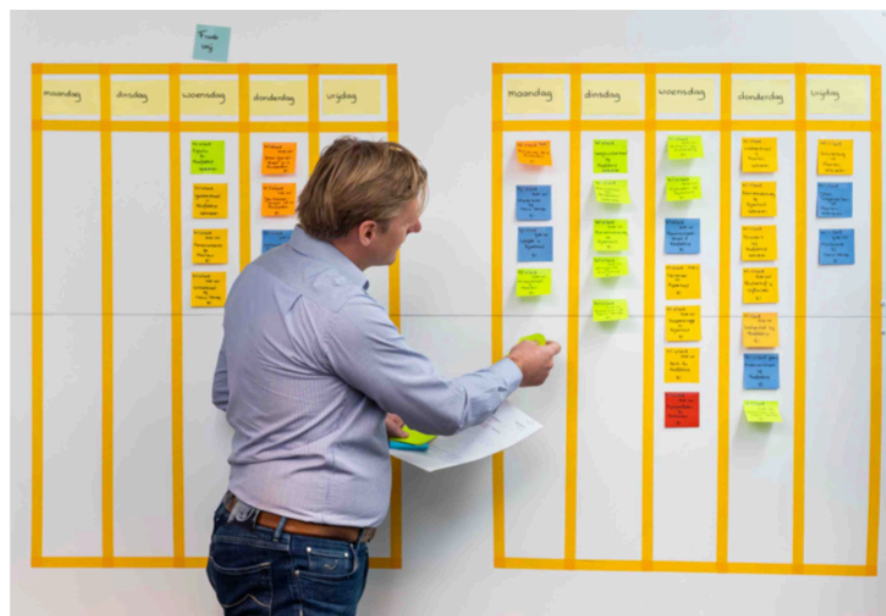


image / figure 2: A Projectleader of Etro in the current way of working

PROBLEM DEFINITION **

Limit and define the scope and solution space of your project to one that is manageable within one Master Graduation Project of 30 EC (= 20 full time weeks or 100 working days) and clearly indicate what issue(s) should be addressed in this project.

The main ambition of Etro Vastgoedzorg is to get the highest form of Client Satisfaction as possible, but when it comes to achieving this ambition, there is now a lack of overview and knowledge on how to measure it and how to maintain it.

Therefore it is important to look which factors are relevant to determine this CF and it is important to look at what type of communication with the clients is needed to maintain it. Etro is working with 4 different departments for 4 different large housing corporations, which all have their own relevant factors. This project will start focussing on only one company, the housing corporation Eigen Haard, and will create an overview for all 4 departments of Etro. After creating the first solution, there will be a validation step in comparing it to another housing corporation, probably Ymere or Pré Wonen, which is affiliated with Etro. The input will primarily be based on Eigen Haard and the second company.

The overall question will be:

What defines the Client Satisfaction of Etro and how can we envision overview of this Client Satisfaction-rate to maintain it for the upcoming years?

Etro is a company which is following in innovation, rather than lead in innovation. This means that in this project it is highly favoured to use existing tools and that there is room for implementation within known systems. However, this project could also be a first step into a new way of working for Etro. Therefore, strategic design can be used to create the right implementation plan to make the innovation manageable and feasible for a company like Etro.

ASSIGNMENT **

State in 2 or 3 sentences what you are going to research, design, create and / or generate, that will solve (part of) the issue(s) pointed out in "problem definition". Then illustrate this assignment by indicating what kind of solution you expect and / or aim to deliver, for instance: a product, a product-service combination, a strategy illustrated through product or product-service combination ideas, In case of a Specialisation and/or Annotation, make sure the assignment reflects this/these.

Assignment:

Design a customer integrated monitoring system on Client Satisfaction, which will be bipolar (Etro-Client) on input and usage. Also design an implementation strategy in which Etro can maintain and improve the Client Satisfaction rate for the upcoming years

within other industries on the same topic Therefore I plan to also interview experts on Client Satisfaction, Data management and experts on real estate maintenance. Within the analysis I will also perform a stakeholder analysis, will I interview the most relevant stakeholders, including the client and thereby define the most relevant factors to fulfill the ambition of client satisfaction. Thereafter, I will create the first solution and test this with both the chosen client and another client to validate certain elements. The conclusions of this test will lead to an iteration on the idea and next to that an implementation plan will be created to maintain the solution for the upcoming years. For the testing and implementation phase the solution will be build for both validation and presentation.

Eventually the output of this project will consist of three parts:

1. An Overview in which factors are relevant for measuring and sharing the main ambition of Etro; Client Satisfaction
2. A manifestation on how these factors are communicated within and outside Etro (Etro-Client)
3. A future plan and strategy on how to implement and improve several elements of this manifestation created for Etro and their clients.

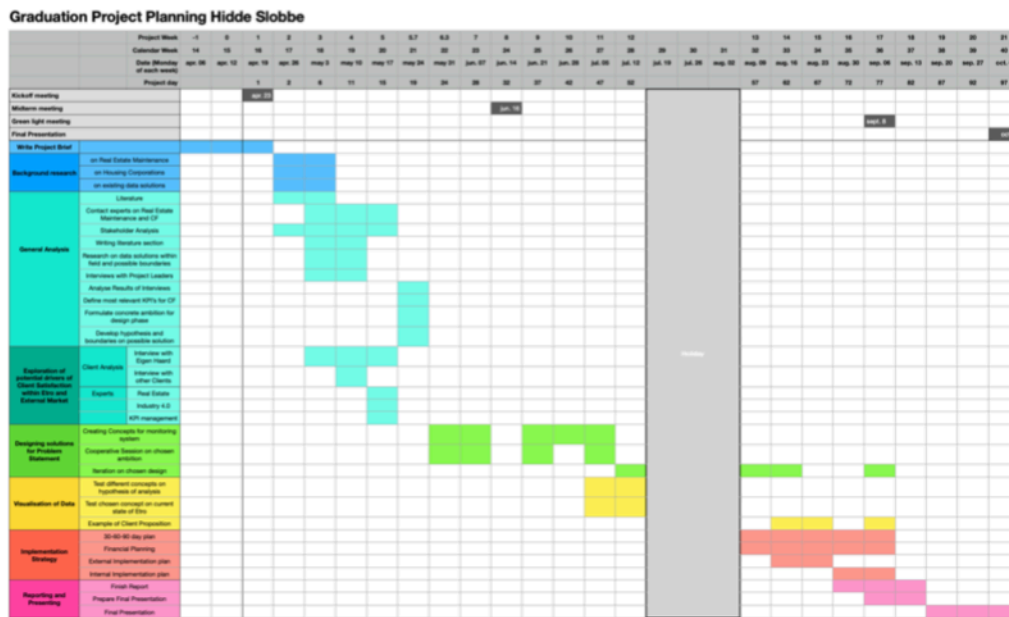


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PLANNING AND APPROACH **

Include a Gantt Chart (replace the example below - more examples can be found in Manual 2) that shows the different phases of your project, deliverables you have in mind, meetings, and how you plan to spend your time. Please note that all activities should fit within the given net time of 30 EC = 20 full time weeks or 100 working days, and your planning should include a kick-off meeting, mid-term meeting, green light meeting and graduation ceremony. Illustrate your Gantt Chart by, for instance, explaining your approach, and please indicate periods of part-time activities and/or periods of not spending time on your graduation project, if any, for instance because of holidays or parallel activities.

start date 19 - 4 - 2021 6 - 10 - 2021 end date



Because of the dutch holidays in april and may (Kingsday, Pinksteren etc.), I will make use of an extra week in this period. The three weeks of holiday are aligned with the Bouwvakantie of Etro.

MOTIVATION AND PERSONAL AMBITIONS

Explain why you set up this project, what competences you want to prove and learn. For example: acquired competences from your MSc programme, the elective semester, extra-curricular activities (etc.) and point out the competences you have yet developed. Optionally, describe which personal learning ambitions you explicitly want to address in this project, on top of the learning objectives of the Graduation Project, such as: in depth knowledge a on specific subject, broadening your competences or experimenting with a specific tool and/or methodology, Stick to no more than five ambitions.

Before this graduation project I got the chance to work with Etro Vastgoedzorg during the elective course Design Innovation 4.0 in Supply Networks. Together with 3 fellow students of TBM, we completed an assignment on implementing digitalisation on the workfloor of Etro. This project got me excited for several reasons, with the main reason that we could help a tech-conservative company with innovation and implementation. Also the playing field of real estate and its maintenance gives a lot of room for improvement. Within IDE projects I like to put myself onto projects where I have a feeling of personal frustration and within this field I have had a lot of experience with bad working communication, incomplete fixes and an overall operation where there is a lack of true innovation. The interesting part of Etro is that within their ambitions, they say that they don't want to be leading but following in innovation. As I can understand this from a business perspective, I hope that with this project I can inspire Etro to take little steps towards innovation. I also hope to learn more about their company structure and which hiccups will occur when I try to test certain solutions.

Another ambition I have during this project is to look at similar industries, where also there is a lack of innovation and a complex operative situation, to see how they have dealt with the same type of problems.

The last reason I have picked this topic is that I believe that strategic design can play a large role in the upcoming 4.0 industry. It is an industry where the human touch can be quick forgotten and also where creativity will be needed to create relevant solutions and new ways of working. I also believe that this could be a role for a future job I could apply for, which would make this project also relevant for me.

Next to the motivation for this project, there are also 3 learning goals I have set up to let this project develop some of the competences needed for a Strategic Designer.

1. Focus on report language and structure

Within previous projects I feel I haven't shown an academic standard on report language and structure, which is why this is something I want to focus on during this project. This I will do, by taking more time on this important part of the project and by creating feedback moments for co-readers to check on the quality of my work. At the end I hope to create a report with a high academic standard and also I hope to create a personal way of working in which I can keep this standard high for future purposes.

2. Learn more on interaction in digital systems

During this project I also want to focus on learning more about interaction within digital systems. As a strategic designer, we tend to create solutions more on a level where we'll assume that users want to use a certain solution and during this project I want to focus more in depth on the interaction of the users within these digital systems and to create a relevant and usable solution.

3. Create a workable prototype for testing a profound solution

To test this interaction I also want to be build a test situation where I can test the profound solution during this project. During my master the test phase of created solutions was sometimes lacking and therefore I hope to build a prototype during this project to really see a measurable effect of the solution, with this measurable effect I hope to really know what kind of impact my project could have for both Etro and its industry.

FINAL COMMENTS

In case your project brief needs final comments, please add any information you think is relevant.

