Master Thesis

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Designing a framework to enhance & implement customer orientation in buyer-supplier dyads.

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Preface.

Before you lies the graduation thesis "Designing a framework to enhance and implement customer orientation in buyer-supplier dyads" based on the participatory design of a framework developed with multiple participants at one case study organisation, Pezy Group. This graduation thesis has been written to fulfil the graduation requirements of the strategic product design master at the Delft University of Technology. I have been engaged in researching, designing, and writing this thesis from spring to winter 2021.

In 2019 I embarked on a new journey, university, to develop myself by expanding my understanding of strategy, innovation and broadening my horizon by encountering many inspiring people. However, to come to this point, in which I am on the brink of finishing my master's degree, was not self-evident. Starting my education in 2013 at the Hague university of applied sciences with the dream of becoming an industrial product designer quickly shifted to a more organisational vision towards innovation. After a semester at UC Berkeley, this drive to make an impact on an organisational and entrepreneurial level was confirmed. This was further strengthened in Delft and the electives at the VU Amsterdam.

The graduation assignment was initiated at the request of Pezy Group, where I previously undertook the role of business developer. By keeping in touch during my studies, this great graduation opportunity was possible to be formed. Therefore, I would express my gratitude to Henco Pezij, for entrusting me with working on the organisational challenges and who, for some reason, always knows how to interest and inspire me. Matching the ever-changing context of business and the goal of the thesis was challenging, but the design process allowed me to fulfil the assignment. Luckily, my colleagues of Pezy Group and the members of my supervisory graduation team were always available, supportive and willing to provide valuable perspectives. I would like to sincerely thank my supervisors, Albert, Sicco and Joyce, for their guidance during this graduation thesis (Img.1). I have always enjoyed our meetings, which provided plenty of insights and many new thoughts. In addition, I would like to thank Luuk for always being available to spar with me and providing clarity and great insights.

I also wish to thank all internal and external participants for sharing their extremely valuable experiences and ideas. In this product development industry, you are all too familiar with the process I went through for graduation. Thank you for understanding and your help. The organisation you work at is the product, and the users are the people interacting with it. You, internal or external, determine the experiences of others. The outcome is intended for you; you are the design.

To all others I have encountered and had the opportunity to get to know during my time studying in Delft, thank you! My friends, roommates, bridging peers, DSP ladies, and other lovely individuals. All had a unique and valuable impact on me and my journey.

Finally, I want to express my gratitude to my loved ones, the ones most close to me. Thank you for coping with my absence in this busy period of vagueness and changes. Thank you for your support, feedback, advice, kind words, and always keeping me motivated, as you always do. It served me well and is always greatly appreciated.

I hope you enjoy reading this thesis.

Daan F. F. Hittema

15-12-2021

Img.1 The supervisory team (LTR Albert, Joyce, Sicco)

Abstract.

The growth of a supplier is restricted when buyers have unmet expectations and thus frustrating experiences during the dyadic (between two parties) interactions. Hence the establishment of buyer-supplier relationships is limited. The organisational challenges of a supplier have a negative impact on the conveyed service quality. Customer orientation can create superior value for the customer and thus the service quality.

This graduation thesis approaches the challenge from the underexposed perspective of the supplier. The assignment aims to design a framework for supply organisations to enhance and implement customer orientation in buyer-supplier dyads. More specifically, it analyses and designs how the conversion phase of a Dutch service supplier, Pezy Group, can be more customer-oriented. In the context of the case study, customer orientation is the extent to which the supplier prioritises the customer's expectations and applies its knowledge of the customer in the organisation to create a positive experience. The conversion phase is defined as the process of translating the buyer's development request into a proposal for executing the project. The proposal concerns the service Pezy Group offers, in this case, integral product development projects.

From the analysis, it becomes apparent that different customers and their intended interaction result in various expectations and requires the supplier to organise their processes accordingly. A design goal is formed based on the defined and selected buyer-interaction archetype Structured Sophie. A framework is developed utilising participatory design methods, resulting in archetype specific customer journey of the conversion phase and an implementation roadmap for Pezy Group. Multiple validation sessions were organised to measure the expected impact of the future scenario on the customer orientation and thus service quality. Internal and external participants were selected (n=12) to evaluate the customer journey of the conversion phase using Likert scales.

The results showed that the proposed design changes of the customer journey contribute to Pezy Group's enhancement of customer orientation in buyer-supplier dyads. Archetype Structured Sophie has a product development request focused on conceptualising, gathering insights, and intending a transactional relationship for the execution phase. The results of the validated design indicate that for Pezy Group to enhance and implement customer orientation, the following organisational changes must occur. This thesis concludes that a change of roles, in which the operational support is empowered to establish and manage the Sophie buyer-interaction archetype, will enhance the experienced customer orientation. This change is enabled by the support of the account responsible and the usage of standardised proposals during the process.

The delivered archetype specific framework concludes that the conceptual customer journey and implementation roadmap, once executed, increases the service quality of the buyer-supplier interactions, supports the conversion phase related activities, and may indirectly contribute to the degree of profitability of Pezy Group. Implementing the proposed changes by change management methodologies is recommended, as indicated in the roadmap. Since this graduation thesis is based on one case study, future research is required to investigate the generalisation of the recovered insights and the designed framework.

"Customer orientation start by employees understanding the expectations of their contacts"

Table of contents.

The graduation thesis refers to two types of appendices. These two documents are supplied separately. The publicly accessible attachment is called the "appendix", followed by the chapter number (a). In addition, there is a confidential attachment. This is referred to as "appendix", followed by the letter C for confidential and the chapter number (b).

a. Appendix nr.
b. Appendix C-nr.

Supply organisations strive to provide their customers with positive and quality experiences. The supplier contributes products or services in an exchange, and the customer, or buyer, is the recipient of the needed items. However, according to research (Meyer & Schwager, 2007), many customers have frustrating experiences when interacting with suppliers. Frustrating experiences by the customer results in reoccurring issues and questions directed to the provider, low customer satisfaction and lost revenues. For commercial organisations, the lost revenue is an incentive to address the customer experience and thus its customer orientation (Meyer & Schwager, 2007). This graduation thesis defines customer orientation as follows; The ability to put the customer's interest first and generate and apply knowledge about the customer to meet their needs and expectations (Kohli & Jaworski, 1990; Narver & Slater, 1990; Piller et al., 2010).

This manifestation of lost revenues does not even include the service provider's cost per acquisition. The consequences of not understanding customers result in additional effort and investments in trying to meet a customer's expectations (Brook, 2021). The additional efforts and costs are, in turn, the outcome of organisational challenges like; internal misalignment, tension, and frustration due to the unclarity of the customers' expectations and how to answer them. These lost sales opportunities and internal challenges restrict the growth of an organisation. Nevertheless, there could be another reason for organisations to grow; in some cases, the customers demand more complete services (Starbuck, 1965). For organisations to offer positive experiences in their service towards customers, they need to know their customers. Research (Pelham, 2000) indicates how understanding the customer needs are essential determents of performance. Namely, Pelham (2000) concludes that being market or customer-oriented is related to the organisation's growth. Hence, the suggestion is made that the growth strategy should emphasise the firm's ability to understand their customers to create superior customer orientation value compared to their competitors. The superior value results from the customer's positive experience during their interactions and journey with the supplier.

Plenty of research is conducted concerning customer orientation and the interactions of buyer-supplier relationships. However, these buyer-supplier relationships are approached from the buyer's perspective. This thesis will research how a B2B service supplier can enhance its customer orientation in buyer-supplier relationships to improve the service quality, overcome organisational challenges and contribute to the supplier's growth. Therefore a holistic and participatory design method is chosen as an approach for this research. This design approach aims to ensure a viable, feasible and desirable outcome. By involving the stakeholders' perspectives, the intended solution meets the needs and expectations of the supplier's employees and the buyers. This method will be structured by the double diamond process (Design Council, 2019).

First, the literature and the context of Pezy Group are analysed in the discovery phase. The following defining phase will scope the identified challenge into a clearer design brief, including the contours of a customer orientation framework. The next diamond will start by developing ideas and solutions to enhance the customer orientation and, in turn, will be validated. Finally, the details of the framework are presented and accompanied with concluding advice for supply organisations. The framework will contribute to customer understanding and thereby indirectly improve the supply organisations' service capabilities. Thereby consequently mitigating the previously mentioned organisational challenges.

This graduation thesis is executed at one supply organisation which functions as case study. Pezy Group is an organisation that presented its organisational challenges and desire to enhance its customer orientation. Pezy Group is a supplier of design and engineering services in the B2B industry of product innovation and development in the Netherlands. In accordance with the organisation and the Delft University of Technology, the aforementioned research interface has been identified. It is accepted as it aims to contribute to the academic literature of buyer-supplier dyads and creates added value for the industry. Pezy Group will function as a case study for the research.

The Pezy Group organisation and its context are further introduced in the upcoming part. Subsequently, the goal of this thesis will be explained more in-depth in the research setting of customer orientation at Pezy Group. The motivation and urgency to address the organisational challenge of Pezy Group are then introduced. Finally, the assignment is discussed, including clarifying the approach, scope and deliverables.

1.1 Introducing Pezy Group

The Pezy Group Holding is an overarching product development entity with locations in the Netherlands and Singapore. Pezy Group was founded by the brothers Henco and Bert Pezij in 1995 Groningen. Henco remains active in the company as CEO, director and major shareholder. Over the years, through natural growth and acquisitions, the Pezy Group innovation accelerators organisation, part of the holding, has grown to +85 “Pezianen” spread over the three Dutch locations; Groningen, Houten and Eindhoven.

Henco Pezij (July 2021) describes Pezy Group innovation accelerators as follows: “Pezy Group is a high-end multidisciplinary full-service provider of design, engineering, electronics and industrialisation. Pezy Group is the preferred partner for professional organisations, promising start-ups and talented professionals for co-developing & realising new products & devices. With our multidisciplinary know-how, creativity, pilot factory, and network, we bring product ideas to reality fast, flexible, and reliable. We create first of a kind smart and complex products, small series and support our customers towards production and market introduction.”

1.1.1 Core services

Pezy Group has three distinct services and business models to collaborate with its buyers:

- **Product development:** Integrated product development, the core service, takes place at Pezy Group, in which the organisation is responsible for managing the activities and achieving the deliverables. This service can be further divided into projects and assignments. The difference between projects and assignments are based on the scope and budget of the request. Projects require a project manager since various stakeholders are involved and have a longer lead time than assignments in which the lead developer manages the activities. Projects can have different aims, and consequently, the level of complexity varies. Examples are new product development (NPD), integrated product development (IPD) and front-end innovation (FEI). The business model of product development is based on a fixed price or hourly based invoicing.
- **Interim professionals:** Interim professionals is the support and knowledge-based temporary hire of Pezy Group employees. With secondment, the buyer is responsible for managing the activities and achieving the deliverables. This business model is based on contracts and hourly based invoices.
- **Production:** Production at Pezy Group means prototyping and offering a product supply chain of small series. Pezy Group has possession of prototyping tools at every office. However, in Groningen, the pilot factory can create manufacturing tooling and produce small-series production. With these facilities and specialists, Pezy Group can set up the supply chain, quality control, or guide buyers in the industrialisation of their product. This business model is mainly based on IP development and getting products to market.

Household Appliances

Enriching consumers’ life at home, that may assist in household functions (e.g., cooking and cleaning) or improve the living conditions in the house (HVAC).

Health Technology

Personal health; Support healthier lifestyles, personal hygiene, prevention & disability aid. Empowering people to take control of their well-being.

Healthcare; Products which solve health problems and improve quality of lives. Medical class 1 non-evasive

FMCG

Consumer packaged goods. Packaging goods with an expiration date (often food). Complex dosing and dispensing.

Industrial Appliances and Equipment

Equipment, models and components which are often part of a larger system of products or service business model. (HTS&M, Manufacturing,)

Fig.1 Target domains Pezy Group (2021)

1.1.2 Competencies

Within these services, Pezy Group applies various competencies of product innovation. These competencies can be related to design, engineering, electronics or industrialisation. Pezy Group currently highlights the following three specialisations:

- Complex plastic product development
- Circular product development
- Smart product development

1.1.3 Target domains

Pezy Group is active for different buyers in various sectors and industries. Marketing and commerce mostly communicate with the market expressing Pezy Group ‘s services and competencies to answer the buyers’ needs. Since the competencies can be applied in many sectors and industries, Pezy Group decided not to approach specific market segments. Nevertheless, Pezy Group has identified four target domains (Fig.1): Household Appliances, Health Technology, FMCG & Industrial Appliances and Equipment. These domains give a sense of Pezy Group’s portfolio of project, products and buyers.

1.2 Organisational challenge

The management team of Pezy Group identified multiple challenges when it became apparent that the current primary process, especially regarding the commercial proposal development, was not being fully adopted by its employees. The primary process of Pezy Group describes the key process of the core service of product development in projects. It follows the customer’s development request through the organisation. Stakeholders, multiple supporting secondary or sub-processes and supporting documents are described in the primary process. Challenges were especially identified in the conversion phase, in which the development request of the buyer is translated into a proposal and hopefully a commitment for execution. The Pezy Group management team (June, 2021) have noticed the following challenges:

Much effort in ad hoc approach

Employees of the commerce department apply an ad hoc approach in determining the needs and developing a fitting proposal for each potential buyer. As a result, leaders of the commercial department have indicated that much effort is spent between the commercial and operational departments to achieve a mutual understanding and alignment regarding the buyer’s request. Operation is involved in providing commerce with input regarding the product development approach for the proposal.

Misalignment in developing a proposal

A common belief is that the current handover of information between commerce and operation is less than optimal. According to management, commerce calls this phenomenon “doing double sales”. First, the buyer needs to be convinced of Pezy Group’s competencies. Secondly, the operation must be available and fully informed about the buyer’s request. In the internal handover, vital information gets lost in translation, consequently resulting in a proposal that does not always meet the buyer’s expectations.

Building relationships on all levels

Management suspects that the current conversion phase restricts the opportunity to establish and further develop more qualitative relationships with buyers. This suspicion is strengthened by the limited number of development requests of buyers through operational employees. The assumption is that this can be partly attributed to the fact that both departments, commerce and operational, have divergent goals, are not monitored equally, and communicate differently with buyers. A logical conclusion is made that, therefore, the proposals are not in alignment with the buyer’s expectations, the commercial capability remains underdeveloped and potential business opportunities and related revenue is lost.

The management of Pezy Group is convinced that the challenges can be addressed by enhancing the customer orientation of the organisation. In the discovery phase of this thesis the current situation, including the aforementioned challenges, and customer orientation will be researched to validate this assumption.

1.3 Positioning on customer orientation

The positioning of Pezy Group regarding the challenges and customer orientation is vital for this thesis to be executed successfully. Pezy Group’s approach, commitment and support to enhance the customer orientation of the organisation through this thesis, can be redirected to two main prior initiatives. These two prior initiatives include the culture audit of the organisation and the strategy, which emphasise the need for enhancing customer orientation. However, due to confidentiality, these initiatives are explained in the appendix C-1.

The culture audit emphasises the area of improvement, which is confirmed in the strategy. The strategy describes the need to further develop the market-orientation culture by enhancing the customer orientation to grow as a commercial organisation. There is organisation-wide support to enhance customer orientation, as it is regarded as a high priority.

1.4 Assignment

The positioning of the Pezy Group regarding customer orientation shows the motivation to address this topic. The strategy 2021-2023 document (Fuld, 2021) of Pezy Group describes the direction of enhancing customer orientation but lacks any specifics on what and where this change might occur. The assignment for this graduation is formulated to address the challenges of Pezy Group and contribute to the literature of byer-supplier dyads and customer orientation.

However, the initial project briefing (appendix 1) had a different goal, and the working title was called *"a psychological transition framework for lasting organisational change"*.
The original brief regarded the management of a change project. A literature gap was identified to increase the understanding of the human side of change and how to guide the affected employees through transition (Al-Haddad & Kotnour, 2015; Leybourne, 2016). The goal was to guide employees of an organisation through their psychological transition by designing a solution to reduce the experienced stress as described by Dahl (2011) and enhance the commitment to the project as mentioned by Shin et al., (2012).

The desired situation must be envisioned for a change project, which contrasts the current "flawed" situation. The case organisation of Pezy Group is set out to start such a change project regarding customer orientation, which is in alignment with their strategy. However, the envisioned future situation regarding the topic of customer orientation is yet unclear.

In conclusion, it became clear after several sessions with the supervisory team that researching customer orientation, defining the improvement areas of the organisation, and designing a solution to enhance customer orientation which can be implemented by change management, proved too ambitious and not feasible within the time restrictions of this thesis. Moreover, before this research shift, opportunities were discovered, contributing to the literary body of customer orientation and practical ways to add value to organisations. Therefore, a more focussed and feasible scope (1.4.4) was determined for this graduation thesis.

1.4.1 Goal of the assignment

The overarching goal is to improve the organisation's service by enhancing customer orientation in buyer-supplier interactions. By enhancing customer orientation, the organisation aims to improve service quality and indirectly increase the commercial capabilities of its employees. It is explicit that organisations are keener to form a relationship with another organisation when they have a high level of commercial competence (Ahuja, 2000).

This graduation thesis aims to create clarity on this matter, what aspects of the interaction contribute to customer orientation, and wherein the buyer-interaction should Pezy Group focus on improving their service process. This graduation project will review the available body of literature regarding customer orientation, analyse the organisation's context and the opportunities this research might present.

The discovered insights and knowledge will be used to design a conceptual structure that supports or guides Pezy Group and possibly other suppliers to enhance and implement a solution to enhance the customer orientation of their organisation. Thereby, the organisation receives a customer orientation framework to resolve some organisational challenges, initiate a change project, improve buyers' experience, and thus strengthen buyer-supplier relationships, which in turn contribute indirectly to the growth of the supplier organisation.

In summary, the goal of this graduation thesis' assignment is aimed to:

"Design a framework to enhance and implement customer orientation in buyer-supplier dyads"

Enhancing meaning increasing, albeit it being a supporting or stimulating framework. A framework is a structure or guide that allows for a particular outcome when certain activities are performed. In this case, the framework enhances customer orientation to the next level of an organisation. In this assignment, the case organisation is Pezy Group. A suggestion will be made on how to implement the framework in a supply organisation such as Pezy Group.

Buyer-supplier dyads are relationships between two parties. Customer orientation insinuates the focus on enhancing the relationship between the interactions of the seller; in this case, Pezy Group is the supplier, and the buyer is the customer.

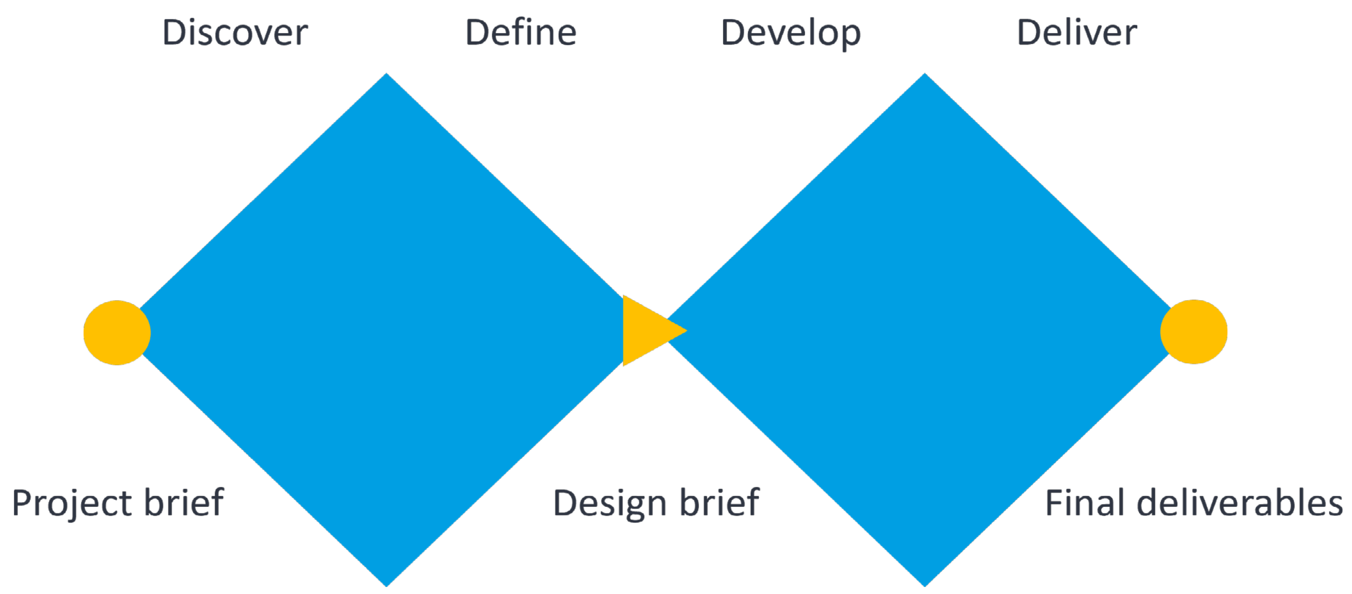
1.4.2 Approach

To ensure that the envisioned framework meets the needs and expectations of the supplier and buyer, a selection of supplier employees and contacts of customers will be involved in the design process. This design approach is called participatory design, which combines the expertise of the graduate student and the situated expertise of the stakeholders who will be affected by the change (Sanders & Stappers, 2012). The framework is thus built on the stakeholders' own experiences to ensure a usable solution.

The design approach to answering the assignment's goal is structured based on the double diamond model of the Design Council (2019), as is commonly used at the Faculty of Industrial Design Engineering of the Delft University of Technology. This graduation thesis is structured based on the phases; discover, define, develop and deliver. It can also be recognised in the chapters of this thesis.

The design process represents divergent and convergent thinking to explore and achieve focus. This iterative process contains multiple loops to validate design concepts.

- **Discover:** In the discovery phase, the context (e.g. customer orientation, dyads, Pezy Group, stakeholders,) of the assignment is analysed and explored by literature review, interviews, surveys and a customer journey. As the segment about the change project indicated, organisational design is about people. Design is about people. Therefore, a holistic approach is taken and various stakeholders will be involved in the analysis to understand their perspective and needs better.
- **Define:** In the define phase, the discovery phase insights are translated and converged to define better the challenge this assignment aims to improve.
- **Develop:** The second diamond starts with designing a conceptual framework to enhance customer orientation. This concept answers the assignment, the better-defined problem, design goals and takes into account the stakeholder needs.
- **Deliver:** The concept designed in the previous phase is validated and iterated based on the received feedback. Finally, the deliverables are finished, and this thesis is concluded with advice on how to progress the assignment.



Double diamond approach based on the Design Council (2019)

1.4.3 Deliverables

The approach will result in three main deliverables which contribute to forming an answer to the goal of the assignment:

- A solution will be developed to inform and guide organisations on how to enhance the customer orientation of their process. The envisioned solution will be further determined, defined and is directed to one selected opportunity area. The solution to enhance customer orientation will be presented in the format of a framework consisting of archetypes which are based on the assignment discussed in this thesis.
- The solution for the selected opportunity area will be translated in an archetype specific customer journey which is part of the framework.
- A suggestion is made on how to implement the proposed solution. This will be achieved through a roadmap which describes how to implement the framework.

Finally, a conclusion and discussion are written on how Pezy Group can enhance customer orientation, generalized conclusions for the industry and suggestions for further research. Recommendations are given to Pezy Group in the form of managerial implications.

1.4.4 Scope

To answer the goal of the assignment within a manageable timeframe, a scope is set in advance. The scope is determined by the case study, the Pezy Group organisation. More specifically, the scope is restricted to the Pezy Group Innovation Accelerators entity in the Netherlands.

The challenges, as explained earlier, mainly involves a specific part of Pezy Group's primary process. Namely, the conversion phase in which the development request of the buyer is translated into a proposal for execution. The challenges described by the management team occur mainly in this phase during the internal and external interactions, the establishment of relationships before execution of the development request. The challenges in the process will be analysed through an organisational design perspective. At the beginning of the analysis, this includes the functions, structure, and process. However, the main focus of this thesis will be on the process, since the customer journey, a process, will be the backbone of the framework. The to be designed organisational framework for enhancing customer orientation in a process excludes functions and structures. It is expected that the most impact can be generated when the framework focuses on the major business model of Pezy Group, which is product development as a service. The proposals developed for the buyers' request will result in assignments or projects executed by Pezy Group. The secondment and production business models are excluded because these are subordinate compared to the revenue of the product development service.

This thesis aims to enhance the customer orientation in the conversion phase of Pezy Group; all other phases are initially excluded. Personal details of the internal participants, the product developers, such as the specialisations or competencies are not taken into account. The involved buyers in this thesis will not be chosen based on their positioning in the target domains of Pezy Group. The target domains are developed to give marketing and commerce a specific focus on attracting and acquiring new buyers. Albeit the target domains are of strategic importance, it is believed that all (potential) buyers can provide valuable insights for this assignment. The external participants will be chosen based on their availability and whether they represent different perspectives of the customer base.

The target group of this thesis will be further determined in the discovery phase. However, the presented challenges indicate that the employees of the commercial and operational departments and the buyers they interact with will most likely form the core target group of this assignment. From the perspective of Pezy Group, as a supplier, it is expected that commerce people and lead product development require the most help in becoming more customer-oriented.

This thesis is focused on designing a framework that enhances and implements customer orientation. To be more specific the conversion phase of Pezy Group. This framework may support customer orientation. As described in the deliverables, a suggestion, in the form of a roadmap, is made on implementing this framework. However, the framework is not designed explicitly for implementation.

In this discovery phase, the context of the assignment will be explored and analysed to understand the challenge and to know what knowledge is needed. In the next chapter, the literature will be reviewed to understand the topic and to discover insights which may support the design of a framework. Thereafter, the organisational context and current customer journey of Pezy Group will be analysed, which can be placed into perspective based on the literature review. Internal and external participants will be involved when the customer journey is analysed and created. Thereafter, before the definition of the design goal in the define phase, the insights will be structured.

2 Literature review.

To create a framework that enhances the customer orientation in the conversion phase of a product development agency, it is essential to understand the subject. Therefore, this review is both thematic and theoretical, aiming to understand better, corroborate previous findings, and find information that might contribute to the framework. Topics discussed in this literature review are; (1) the importance of buyer-supplier relationships. (2) the perspective of the buyer, including SRM, the selecting procedure and purchasing strategies. (3) the perspective of the supplier, including CRM and their customer orientation. (4) Finally, the management of buyer-supplier relationships will be discussed. These topics are selected because they capture the thesis'scope of customer orientation in buyer-supplier dyads.

2.1 The importance of relationships

2.1.1 Motivation for partnering up

In today's business environment, organisations are no longer developing innovations alone (Bragg & Kumar, 2003). In this thesis, innovation is about generating and exploiting products, sometimes processes, which enable services and business practices.

Balachandran & Hernandez (2018) identified two major trends organisations are currently facing: technology developments that are getting increasingly complex and require partners and R&D alliances. On the other hand, technology, knowledge, and markets are more globalised, stimulating the need for domestic and international partnerships. Concluding, organisations constantly align their operations with the changing environment (Al-Haddad & Kotnour, 2015). Continuing with these two trends, products are getting more modular, and knowledge is scattered across organisations (Baldwin and Clark, 2000). Organisations that do not seek complementary external resources and knowledge show a lower capability for realising innovations (Gemünden et al., 1992). Consequently, organisations have recognised the need to collaborate with other organisations formally and informally (Fischer and Varga 2002).

Pittaway et al. (2004) indicate how the focus of innovation is shifting towards the network an organisation is placed in, rather than solely innovating in its organisation with its people. This networking behaviour is proven to stimulate innovation output and competitiveness in various industries, such as the service and manufacturing industries. Pittaway et al. (2004) mention the benefits of entering long term informal and formal knowledge exchange relationships. Among others, the benefits are; risk sharing, access to new markets and technologies, reducing time to market, combining complementary skills, safeguarding property rights and obtaining access to external knowledge.

2.1.2 Buyer-supplier relationship

Das & Teng (2000) describe how competence demands stimulate collaboration, knowledge sharing and how an organisation's knowledge and competencies determine the attractiveness for collaboration. Due to the difficulty of accessing knowledge and competencies, relationships between organisations are formed in market transactions (Baum et al., 2010). Thus Das and Teng (2000) conclude that these relationships are based on complementary knowledge. Or in other words, by cooperating and realising synergies with complementary organisations, value can be created which otherwise could not be created independently (Zajac & Olsen, 1993).

These relationships between organisations that are formed in market transactions can be called buyer-supplier relationships. The buyer needs a certain product, and the supplier can fulfil this need. Research (Dwyer et al., 1987; Powers and Reagan, 2007) note that a buyer-supplier relationship is in constant flux, and the process of building and maintaining a relationship takes a lot of time and effort. From the literature review it becomes apparent that buyer-supplier relationships, or dyads , are described from a buyer's perspective. Establishing such a dyadic relationship is explained by Powers and Reagan (2007) in a five-step approach.

The steps are explained from a buyer's point of view:

- **Step 1 – Partner selection:** The appropriate potential supplier is identified, and their quality is assessed.
- **Step 2 – Defining purpose:** A common understanding of the purpose of the relationship between buyer and supplier is defined and formalised to achieve legitimacy between and in the organisations.
- **Step 3 – Setting relationship boundaries:** Both organisations determine to what extent each organisation will penetrate the other organisation and the degree of collaboration—defining the level of performance satisfaction and the commitment to the collaboration.
- **Step 4 – Creating value:** The relationship is in effect, meaning that the organisations are in synergy and both gain value in the form of technology, market access, information, knowledge or monetary benefits.

- **Step 5 – Relationship maintenance:** When the previous steps have been developed successfully, effort must be invested to maintain and ensure the continuation of the stability of the relationship.

However, the large body of literature has multiple examples of stages in relationship development and the variables influencing the relationship's success. To better understand the buyer, how they manage and select suppliers, their perspective must be further investigated in this literature review.

2.2 Buyer perspective

As discussed in the introduction of this literature review, the need for a buyer to partner up with a supplier has become apparent. To be an innovative and competitive organisation, complementary knowledge and competencies must be attained, and thus a supplier is essential. The buyer perspective provides insights into how a buyer manages their suppliers.

2.2.1 Supplier Relationship Management

To ensure the most value of the relationship with the supplier, the buyer must actively manage them. Managing different types of supplier relationships is called supplier relationship management (SRM). SRM is the buyer's process of engaging in establishing, maintaining and dissolving relationships with its suppliers (Lambert & Schwieterman, 2012). In contrast with customer relationship management (CRM), which will be discussed in the supplier section, in which the buyer is the customer, SRM's primary task, according to research (Institute of management and administration, 2002; Bragg and Kumar, 2003) is to optimise and reduce the existing portfolio of suppliers.

Within SRM, there are out-and in-suppliers. Out-suppliers are suppliers who do not yet have a relationship with the buyer but are being scouted, piloted and evaluated before integrating into the buyer's supplier portfolio (Gadde & Snehota, 2000). In-suppliers are active suppliers of which the relationship must be built and maintained. However, Gadde & Snehota (2000) notes suppliers enhance the relationship on different levels of value and thus require another treatment. Value can be expressed in a multitude of ways, such as; monetary, knowledge, convenience, etc.

In SRM, the Supplier relationship lifecycle showcases the two supplier statuses (in and out) and the required management (Mgt.) activities (Fig.2). The management activities of set-up, development, contract and disturbance management are similar to establishing buyer-supplier relationships as described by Powers and Reagan (2007). As shown in the figure, the life cycle and management activities change over time and depend on the relationship status.

Jap and Genasan (2000) explain that the specific investments in the set-up phase, or the relationship's establishment, are a strong signal of commitment. These specific investments are characteristics of cooperation and regard the exchange of information and the flexible adjustment of activities by both organisations. However, these investments of setting up an infrastructure for collaboration and the lower mutual trust in the beginning, exceed the expenses in the future. After the initialisation and socialisation, mutual trust can grow since an increased sense of certainty is created. Jap (1999) adds that trust is a requirement for sharing ideas, information and clarifying challenges and goals in the relationship.

Dependent if the supplier is an in- or out-supplier, the relationship management activities executed by the buyer varies. When the buyer is unfamiliar with the supplier, initialisation and socialisation are essential in setting up the relationship. When this set-up phase or pilot with an out-supplier does not meet the buyer's expectations, it is time to select another supplier. However, when the buyer is familiar with the supplier, it can focus on managing the development and growth of the relationship with its supplier and discuss contract details for numerous collaborations. Due to the various reasons, mainly caused by the everchanging contexts of businesses, the relationship might become too saturated and redundant. Finally, the relation degenerates at the end of the relationship due to contract agreements, the fulfilled need for the supplier's value or the buyer's dissatisfaction. The buyer can choose to abstinence the supplier or manage the disturbances in the relationship. When the relationship concludes, the buyer manages the dissolution and disintegration of the ties connecting buyer and supplier.

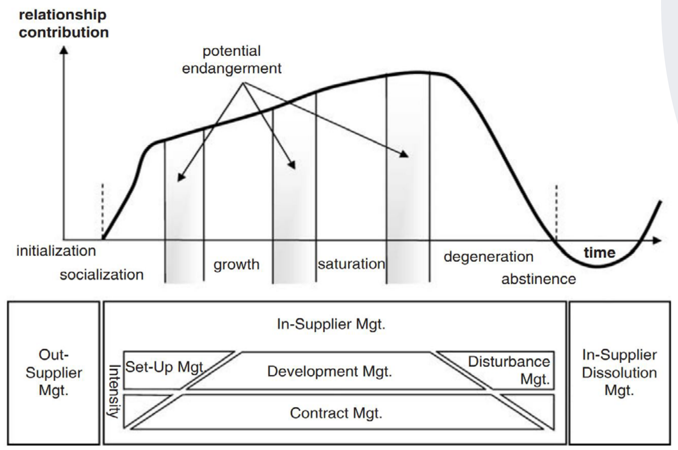


Fig.2 SRM lifecycle and management (Moeller et al., 2006)

2.2.2 Buyer selecting supplier

From the buyer's perspective, it can be concluded that selecting the right supplier is increasingly essential. In the set-up phase of Fig.2, the buyer selects its supplier. Scouting and selecting suppliers correspond with the first step of establishing a buyer-supplier relationship as described by Powers & Reagan (2007). Bowen et al. (1989) describe the activities in this step as how both parties make trade-offs about control and autonomy in return for the assurance of equitable exchange and long term risk reduction. However, not all suppliers are the same and do not contribute equally to the buyer's profitability.

The trade-off in the conversion phase includes which and how the complementing knowledge of the supplier is applied to develop the buyer's request. This knowledge gap is explained in another research (Baum et al., 2010) in which they explore in depth and explain how the selection is based on the structural holes. A structural hole is a gap between organisations that can be filled with complementary knowledge to learn and innovate. However, supplier selection can also be based on structurally embedded exchange (Granovetter, 1985), which assumes that by existing relationships, suppliers can be selected, for which low search effort and costs are expected. Or on the other hand, selection based on social capital, which relies on past and third-party ties (Gulati and Gargiulo, 1999), meaning that repetition or referrals increases the familiarity of the expected benefits and leads to trust in the collaboration (Gulatie, 1995).

2.2.3 Purchasing strategy

According to Moeller et al. (2006), the importance of purchasing has increased its influence over the years throughout organisations. Purchasing is strategically important since it functions as the gateway between external suppliers and the buyer's internal organisation. The relation between buyer and supplier has shifted from an antagonistic transaction-oriented to a relationship-oriented perspective of cooperation (Kalwani & Narayandas, 1995; Moeller et al., 2006). In other words, the antagonistic relationship is based on the arm-length model of purchasing for the short term benefit (extracting the best out of supplier relationship). Plenty of suppliers compete and have a weak bargaining position in the antagonistic transaction-oriented cooperation. However, there is a shift to the long term strategic purchasing perspective in which more effectively superior value can be created since fewer suppliers closely cooperate with the buyer (Bensaou, 1999). The latter is increasingly getting more interesting since it is harder for buyers to remain updated with various developments. From a buyer's point of view, it is important to have a supplier portfolio to deal with (global) uncertainties and risks to ensure the long-term availability of certain competencies (Park et al., 2010).

Regarding this thesis, this competence is supplied by product development agencies that contribute to product development and innovation. To better understand the buyer, it is essential that the supplier knows how the buyer perceives them.

Kraljic (1983) introduced how a buyer should manage suppliers to deal with the uncertainties and risks. He suggests that organisations should focus on supply management as a purchasing strategy rather than monitoring market developments and using purchasing as an operating function. Research (Williams & Attaway, 1996; Chandra and Kumar,2000) explain two types of purchasing strategies; (1) a competitive approach which is based on low cost due to competitive suppliers and a (2) cooperative approach which is based on the long-term goal of creating value together. These two purchasing strategies are similar to the antagonistic transaction-oriented and relationship-oriented perspectives of cooperation described by Moeller et al. (2006).

Kraljic matrix

Kraljic (1983) captures both competitive and cooperative suppliers in a supply strategy model (Fig.3) depending on two factors.

The y-axis represents the factor of the importance of purchasing: the value which the supplier adds and the impact it has on the buyer's profit. For instance, the volume purchased, the total costs, or the impact on quality or growth. In the case of this thesis, the product is the product development service in the form of assignments and projects. The second factor located on the x-axis represents the complexity of the supply market and thus the supply risk. The conditions of the supply market are influenced by; technological developments, entry barriers, availability, number of suppliers, competitive demand, logistics risks, and substitution possibilities.

This Kraljic matrix is meant to be assessed by the buyer organisation to determine and select the type of strategy required to exploit the supplier and reduce its potential risks (Kraljic, 1983). The Kraljic matrix provides this thesis with insights on how the buyer perceives suppliers. The supplier can use these buyer expectations in their interactions. Park et al. (2010) further explain how the suppliers can be classified to determine the strategy. When the supply market has a high complexity, the buyer seeks participating suppliers. Participating suppliers require a more relationship-oriented strategy. When the supply market has low complexity, the competitivity is high, and the buyer has a more powerful negotiating position to enforce cost-effective suppliers. The Kraljic matrix (1983) contains four categories of the purchased product from the supplier. The strategic items (high importance, high supply risk), bottleneck items (low importance, high supply risk), leverage items (high importance, low supply risk) and non-critical or routine items (low importance, low supply risk).

2.2.4 Formalizing agreement with a supplier

The SRM team of the buyer identifies supplier segments that are critical for the organisation's success and strategy. Selecting a fitting supplier from their network is essential for delivering value and creating a profitable business. The supplier influences the product quality and access to new developments and insights for the buyer (Lambert & Schwieterman, 2012).

Inter-organisational relationships are organised via contracts which describe in high detail the minimum standards, tasks and roles of the required performance (Smolders, 2019). Lambert & Schwieterman (2012) explain this contract as a mutual beneficial product and service agreement (PSA) which is made to ensure the outcome. When a supplier is involved in joint research and development with the buyer but also with competitors of the buyer, the contract must protect the buyers generated intellectual property (Lambert & Schwieterman, 2012). Concluding, a PSA is a written document that formalises the activities and defines performance indicators and agreements regarding intellectual property protection and monetary investments.

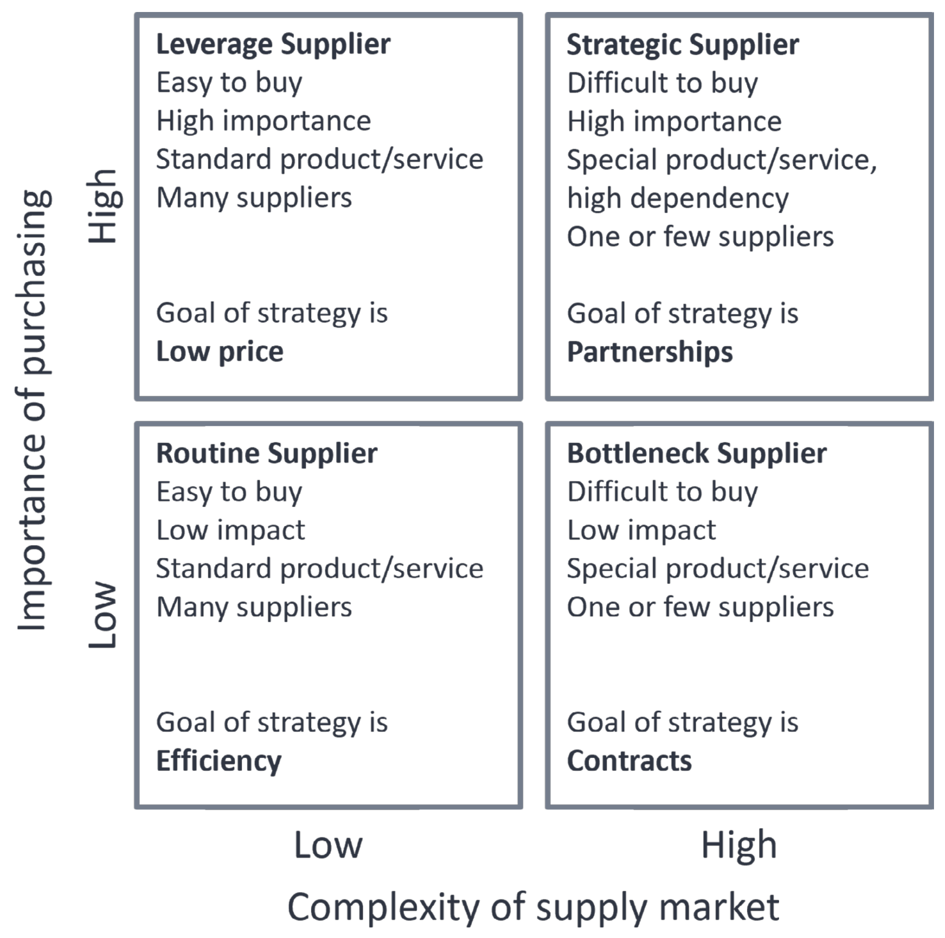


Fig.3 Supplier Purchasing Strategy matrix adapted from Kraljic (1983)

2.3 Supplier perspective

In this thesis, Pezy Group is the supplier in the supplier-buyer relationship. To enhance the customer orientation of Pezy Group, the buyer perspective was discussed in the previous paragraph. To attain a common understanding of the suppliers role, the literature regarding this topic is reviewed with a specific focus on customer orientation in this paragraph.

It is more important for suppliers to develop long-term profitable customer relationships now that there is more awareness of service quality and customers are more in charge of the relationship (Curry & Kkolou, 2004). The customers are, in this case, the buyers of Pezy Group's services. The research of Parasuraman et al. (1985) acknowledges that understanding and controlling the quality of a service is complex. Brannback (1999) explains how services are heterogeneous, meaning that the service's quality depends on employee satisfaction and that there is no guarantee that the promoted service matches the actual outcome. Brannback (1999) continues to explain that the perceived value of the service in a buyer-supplier relationship is the result of the interaction between the service providers personnel and the customer.

The integration of suppliers in the innovation process leads to breaking innovations in new product development (Pittaway et al., 2004). In their literature review, Pittaway et al. (2004) describe how the relationships and interactions with suppliers are necessary arrangements that affect innovation performance and productivity. These relationships can be managed if there is a commitment to collaborate and invest in R&D.

2.3.1 Customer Relationship Management

Aligning the supplier's activities with the customer needs is customer relationship management (CRM) (Curry & Kkolou, 2004; Hong-kit Yim et al., 2014). CRM represent the needs of the customer and thereby enables a better way of conducting business. The CRM process provides a structure to develop and maintain (customer-oriented) relationships with the customers (Lambert & Schwieterman, 2012).

As mentioned earlier, there is an obvious contrast between SRM and CRM. The supplier's aim with CRM is to increase the number of profitable customers (Choy et al., 2003) contrasting SRM's aim to limit the number of suppliers. The customer relationship management pyramid of Curry and Curry (2000) provides a good metaphor (Fig.4). Santema & Reunis (2003) explain that twenty per cent of the customer base of the pyramid contributes to eighty per cent of the profit. This distribution is also known as the Pareto principle, which is also present in at Pezy Group. However, focusing solely on acquiring customers at the top twenty per cent (the pyramid's best, big and medium) seems unrealistic. Research (Blattberg and Deigthon, 1996; Buttle, 1996) emphasise this by indicating that acquiring new customer exceed the costs of maintaining customers. Consequently, making customer retainment through CRM more efficient than focusing only on acquisition.

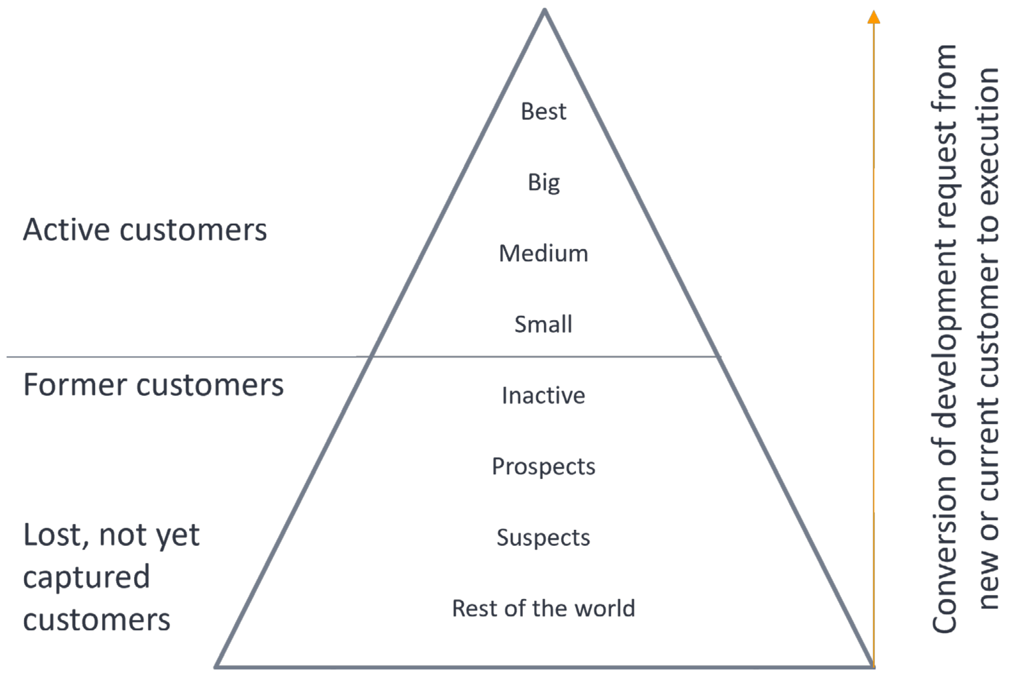


Fig.4 CRM pyramid adapted from Curry & Curry (2000)

The relationship between the customer and supplier is subject to a lifecycle. Like the SRM lifecycle, the customer relationship lifecycle (Fig.5) has a beginning and a growth, maturity and decline stage (Zentes et al., 2007). However, Zentes et al. (2007) claim that not all stages have to occur. In the beginning, plenty of effort is required on customer acquisition. To retain a customer and exploit the sales potential, the relationship must be strengthened. Finally, the customers at risk, in which the relationship is declining, an attempt is made to recover the customer. Zentes et al. (2007) claim that lost customers can be reactivated.

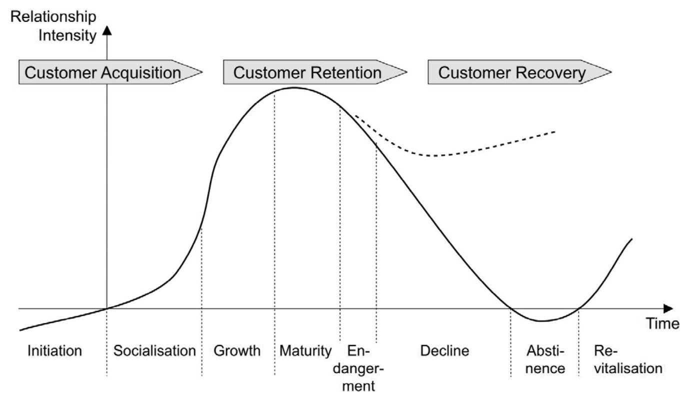


Fig.5 CRM lifecycle and management (Bruhn, 2015)

"CRM is about being customer-centric"

The literature identifies two streams of CRM. One stream defines CRM as the strategy to integrate internal processes, functions and external networks to create and deliver value to the target customers for a profit, grounded on in-depth customer information enabled by information technology (Buttle, 2004). CRM, in this case, is characterised by the information technology infrastructure which the customer-facing personal apply for marketing, sales and other services. Meanwhile, Greenberg (2010) emphasises that CRM is not driven by technology but supported by it to implement a customer-centric strategy. This means that the organisation which is able to manage the value chain from a customer's point of view is willing to continuously learn from the customer and make organisational changes accordingly to ensure that the customer is at the centre of its business (Piller et al., 2010). Curry & Kkolou (2004) describe how being customer-centric enables the identification of opportunities with customers and inspires employees to focus their efforts on a common goal. Research explains (Dorsch et al., 2001; Lambert & Schwieterman, 2012) how CRM can identify and target key customers by the supplier's strategic leadership team. By segmenting the customers based on the type of interaction, customer needs & values and customer loyalty can be enhanced by providing customized products and services (e.g. PSA) developed by a cross-functional team (Lambert & Schwieterman, 2012). Lambert and Schwieterman (2012) indicate that the CRM process also involves administrating product service agreements (PSA). Hong-Kit Yim et al. (2001) explain how customer-facing employees leverage CRM to enhance the buyer-supplier relationship and improve sales forecasting and lead management.

2.3.2 Customer orientation

According to Brannback (1999), customer orientation is not merely managerial jargon. The features of customer orientation are characterised by the belief to put the customer's interest first, the ability of the supplier to generate and apply knowledge about customers and competitors and finally, the application of resources to create superior value for the customer (Kohli & Jaworski, 1990; Narver & Slater, 1990; Piller et al., 2010). Brannback concludes that customer orientation is more than a marketing concept but should be at the core of business success and should be internalised by everyone. Brady & Cronin (2001) indicate that customer orientation is positively associated with evaluating the quality of service provided to the customer. Meaning that it is related to the perceived or experienced quality of the performance of the organisation's employees, the physical good provided to the customer, and the firm's physical environment.
Pezy Group being a commercial organisation, want to innovate and satisfy its customers at a profit. Drucker (1954) emphasises this by saying that it is the only reason for a business to be in business. Especially for service organisations such as Pezy Group, business-to-business marketing is therefore relevant, particularly in studying buyer and supplier relationships, also known as relationship marketing (Brannback, 1999). Piller et al. (2010) explain that managing these buyer-supplier relationships in a specific market segment must be assessed individually instead of assessing their profit contribution as a whole.

2.3.3 Aspects of customer orientation in buyer-supplier relationships

Building on the buyer-supplier perspective, Jeong & Hong (2007) see customer orientation as a critical aspect of supply chain management. According to them, the supply chain is customer-oriented when in collaboration with partners, the needs are recognised and meeting these needs are prioritised. They see customer orientation as the combination of organisational culture, managers' and employees' commitment to customers, and formal and informal managerial desires to fulfil customers need through the entire supply chain.
To have effective customer orientation in the supply chain, organisations must invest in network culture and develop partnerships. As mentioned prior, this graduation thesis focuses on a single buyer-supplier dyad, partnerships. Pezy Group, is a supplier in the supply chain of the buyer. Although the supply market will be considered, the framework for customer orientation enhancement are not intended for extensive networks.

Jeong & Hong (2007) have identified three key aspects of customer orientation for partnerships in a supply chain:

- **Customer-closeness:** is the organisational and individual commitment to be in contact with customers and to perceive their changing needs over time. Jeong & Hong (2007) describe this as the readiness of the supplier's employees to remain in contact and effectively communicate and understand the customer needs.
- **Customer-flexible:** is the awareness and intent of firms to respond to changing customer expectations. According to Jeong & Hong (2007), the supplier should assess which performance level is required according to the customer's needs.
- **Customer-accessible:** is an operational and service delivery system that allows customers to contact and have easy access to information about the buyer and supply chain that is important for their needs. The explanation of Jeong & Hong (2007) regarding customer-accessibility is directly relatable with the CRM definition of Buttle (2004). An interaction infrastructure, enabled by information technology such as IT and websites, to create and deliver value.

2.3.4 Implementation of customer orientation

Organisations are customer-orientated when they show strong customer closeness, customer flexibility and customer accessibility. Customer orientation is a phenomenon from the service industry and is about the interaction between external and internal customers (employees) (Brannback, 1999). Brannback connects this with competence development of customer orientation. Jeong & Hong (2007) mention that inter-organisational integration is important for customer orientation in a supply chain. They conclude that it is therefore important to invest in network culture development and other intangible partnership relationships. Ragatz et al. (1997) emphasise that the inclusion of the supplier in the buyer's development process and the team is the largest differentiator in reaching successful innovations.

There are two requirements for the implementation and performance of inter-organisational customer orientation in a supply chain; information technology infrastructure and a partner infrastructure. (Fearne, 1998; Prasad and Sounderpandian, 2003). According to Kumar (2001), the IT infrastructure (customer-accessible) is used for communication, resource planning and a relationship management tool. Implementing these infrastructures need to correspond with the CRM of the supplier. Day (1998) emphasises that the conditions of CRM's, or the to be implemented customer orientation, success are not determined by first-class technology and business systems but by the skills in understanding, satisfying and retaining customers. Thus Brendler (2001) rightfully claims that the people determine how customer-centric an organisation is, not the CRM systems. Brendler (2001) describes how CRM initiatives succeed by confronting the employees' concerns and how resistance to a change in working stimulates new ideas and solutions. Therefore the stakeholders, internally and externally, will be involved in analysing Pezy Group and throughout the rest of this thesis.

The IT infrastructure is present at Pezy Group and might also require optimise, this thesis will focus on the latter – partnership infrastructure. The scope of this thesis is aimed at improving the customer orientation within the so said partnership infrastructure during the conversion phase. The reason is because this infrastructure can be described as the establishing buyer-supplier relationships.

2.4 Managing relationships

Both the literature of buyer and supplier perspective s are reviewed. This paragraph will review how the relationship between both are being managed. The employees of the supplier are involved in buyer-supplier relationship management. Managing a buyer-supplier relationship includes boundary spanning representatives of both organisations (e.g. sales, procurement, project manager) responsible for achieving a particular value (Bensaou, 1999).

The last step of establishing buyer-supplier relationships from a buyer perspective, as Powers and Reagan (2007) described, is to maintain the existing relationship. The relationships in this phase can be managed by the four identified relationship types described by Bensaou (1999). According to Bensaou's research in the automotive industry, a successful supply chain between buyer and supplier require a portfolio of relationships for different products, services and conditions. Bensaou's matrix (Fig.6) is based on the commitment of the organisations.

Pezy Group and its context of product development can be plotted in this matrix.

- **The vertical axis (buyer):** The customer's tangible specific investments are focused on industrialisation, and the intangible specific investments focus on learning from and implementing the supplier's business.
- **The horizontal axis (supplier):** The supplier's tangible specific investments are focused on creating proof of concepts (tooling/equipment/models/prototypes). The intangible specific investments regard the development and application of competencies and personnel, as is the collaboration between engineers and the development of an information-sharing infrastructure between buyer and supplier.

2.4.1 Type of buyer-supplier relationships

The Bensaou buyer-supplier relationship matrix is based on research in the automotive industry. However, some have projected it on other industrial sectors such as semi-conductor and construction. The Bensaou matrix contains elements which are highly representative (product characteristics) for the Dutch product development industry. Because of this similarity the four relationships are explained:

- **Captive buyer relationship:** High buyer-specific investment and low supplier-specific investments. Bensaou explains how this relationship is asymmetric as the buyer does not have a choice, and the supplier is free to switch customers.
- **Captive supplier relationship:** Low buyer-specific investment and high supplier-specific investment. Bensaou describes how the supplier invests disproportionally to win the business with the buyer.
- **Market exchange relationship:** Low buyer-specific investment and low supplier-specific investment. During this relationship, neither organisation invest in developing assets to improve the relationship with each other. Both parties are free to shift partners without too much organisational damage.
- **Strategic relationship:** High buyer-specific investment and high supplier-specific investment. Both parties invest highly to develop assets that enhance the partnership relation.

However, Bensaou notes that these relationship types are influenced by contextual factors such as; the characteristics of the product exchanged and its technology, the complexity/availability of the supplier's capability and the level of competitiveness of the supplier market. It appears that these contextual factors are similar to the characteristics which form the basis of the Kraljic (1983) matrix as described earlier.

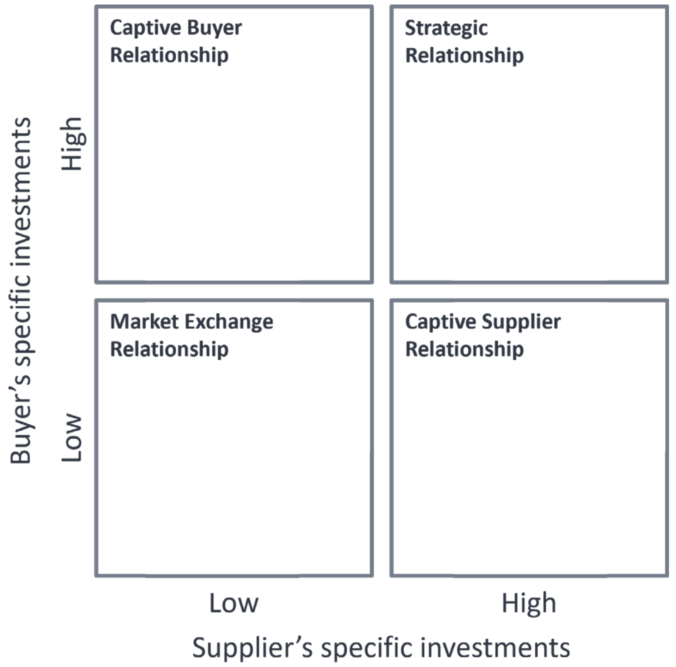


Fig.6 Buyer-supplier management matrix adapted from Bensaou (1999)

2.4.2 Matching expectations to establish trust

Bensaou's (1999) research adds three types of managerial characteristics to describe further the profile that contributes to the relationship's contextual factors. These are regarding the information sharing, the boundary-spanning representatives and the climate and process of the relationship.

The research of Storey et al. (2005) indicates that these factors should be present, but that success is not only determined by it. Storey et al. (2005) describe how buyer-supplier relationships fail even though the need for the buyer-supplier relation is clear, technical solutions and resources are available, and a clear proposition is in place which describes the mutual advantages. Story et al. (2005) conclude that business to business relationships are built on an operational level by representatives who engage in intra- and inter-organisational discussions regarding the collaboration and make a trade-off regarding reward and risks (Ragatz et al., 1997; Sheridan, 1998; Storey et al., 2005). Spekman et al. (1998) explain how trust and commitment are essential in building long-term relationships. Trust can be gained or lost on an individual or inter-organisational level. Smolders (2019) indicates how trusts established on a personal level has a bigger change than solving issues on an intern-organisational relationship level. The notion that these inter-personal relationships are vulnerable to changes is built on the fact that the variables of trust, mutual understanding and commitment (Bensaou, 1999) influence the relationship (Morgan & Hunt, 1994; Storey et al., 2005). This graduation thesis excludes the inter-personal relationships and focuses on enhancing the customer orientation of the supplier to contribute positively to the inter-organisational relationship between buyers and suppliers. Because a buyer-supplier relationship is not limited to one boundary spanning contact. Inter-organisational trust means that both parties have expectations that the other will fulfil its obligations, act predictably and showcase goodwill when opportunities arise to be opportunistic (Davis, 2016). Davis (2016) describe how inter-organisational trust can be lost if a party showcases or perceives opportunistic behaviour.

Harryson (1997) adds that, besides communication, the nature of collaborative projects determine the intensity of buyer-supplier relationships. Assumed is that low-risk projects require less integration and thus a less intensive relationship than complex projects. As previously mentioned, the inclusion of the supplier in the buyer's development process is the most significant differentiator in reaching successful innovations (Ragatz et al., 1997). When a strong collaborative relationship is achieved, the buyer will invest more in R&D when there is an infrastructure with the supplier (Perez, Perez, and Sanches, 2002).

With the high variations between organisations, one way of being customer-oriented in establishing and maintaining relationships for collaboration would not be suitable for all situations as relationships are dependent on multiple factors and variables. It is therefore important for suppliers to understand their buyers before relationships and infrastructures are established.

2.5 Conclusion literature review

From the literature review, it becomes apparent that most of the literary body regarding buyer-supplier dyads is approached from the buyer's perspective. The goal of thesis is to enhance customer orientation of the supplier in the interaction of buyer-supplier dyads. Since the supplier perspective is underexposed in these relationships, it will form the focus of this thesis.

To be customer-oriented as a supplier, it is important to understand the buyer and complement each other. To be complementary, the expectations must be known. An important element is the intended relationship (transactional or relational) according to the buyer, which is based on the purchasing strategy influenced by the supply market. How much a supplier may know of the buyer is determined by the stage of the relationship lifecycle. It is important to note that the supplier should focus on acquiring new customers, finding new customers at the top of the pyramid and maintaining existing customers. The envisioned framework should support the supplier in identifying and acting upon the different types of customers. Another important element is the buyer's goal and the type of project they want to initiate with the supplier.

According to the research, being customer-centric means that the supplier is focused on involving stakeholders to better identify opportunities to align expectations in the relationship. The same accounts for how the deliverables of this thesis will be achieved. In alignment with the assignment, a framework must be designed to enhance and implement the customer orientation of the supplier by better understanding the buyer-supplier relationship. Therefore, the envisioned framework will include profiles of buyer interactions.

In concluding this literature review, it becomes apparent that an organisation must understand their different customers and interactions. By understanding the need and expectations of the buyer during the interactions of the conversion, the supplier can be complementary. It is therefore decided to analyse the current customer journey of Pezy Group. A customer journey is a method to gain insights into all the stages and interactions the stakeholders' experience.

3 Model inventorisation.

This chapter will provide an overview and explanation of potentially relevant literary models. To design a framework for suppliers that enhances the customer orientation in buyer-supplier dyads which can be implemented, possible literary models are reviewed. The conceptual framework that will be designed, will be built on the knowledge that other models provide to ensure a solid foundation for the addition this thesis aims to contribute. As explained in the literature review it is important to understand the other party in buyer-supplier relationships; their need, expectations and values during the interactions. In the define phase literary models will be selected which fit the opportunity areas and design brief.

From the literature review, multiple models are identified which try to capture a part of buyer-supplier interactions and enrich the understanding of the other party in the dyad. Before the customer journey of the current situation of Pezy Group is made, it is important to be able to place the expected findings in one of the inventorised literary models. A selection of the inventoried models is shortly described.

Buyer perspective:

1. **Managing supplier portfolio matrix** (Moeller et al., 2006): This matrix is used to evaluate in-suppliers in relation to the specific investments to the relationship and the strategic importance the supplier provides. The model recognizes four types of suppliers (potential value enhancer, real value enhancer, underperformer and the value contributor) and explains how to manage them. This model is used to justify the investments, which is dependent on the supplier's strategic importance.
2. **Supplier Purchasing Strategy matrix** (Kraljic, 1983): As described in the literature review, the Kraljic matrix enables buyer organisations to assess and determine the type of purchasing strategy of suppliers. This model includes the supply market context (cooperative and competitive) and the importance of purchasing (value and impact of product or service). As a result, the goal and strategy of the buyer for the interaction become apparent. Four types of suppliers and thus strategies are described (Leverage, Strategic, Routine, Bottleneck).
3. **Buyer-supplier management matrix** (Bensaou, 1999): As described in the literature review, this model is meant to support buyers with portfolio management of buyer-supplier relationships. Bensaou's matrix is based on the commitment of both organisations expressed in specific investments. This results in four buyer-supplier relationships (captive buyer, strategic partnership, market exchange, captive supplier), their contextual factors, and how they can manage these relationships.

Supplier perspective:

4. **The organisational differences matrix** (Lavie et al., 2012): This model integrates organisational culture and routines to present relational mechanisms in alliances. This model aims to present latent organisational differences to acknowledge and overcome the negative consequences of alliances by mediating the relational mechanisms.
5. **Customer value matrix** (Peppers & Rogers, 2011): This matrix places identified and ranked customers into five value categories (most growable, super growth, low maintenance, most valuable and below zero customers) based on the actual value and the unrealised potential value customers generate. Based on the value, the organisation can develop a predictive plan for dealing with the customer.
6. **Lifetime segmentation matrix** (Kumar & Reinartz, 2006): This segmentation method helps organisations to identify homogenous customer bases which share behaviour and attitudes. Per segment, the profitability characteristics can be estimated and consequently help in making decisions. This matrix assumes a positive lifetime-profitability relationship, but the costs of serving might influence the segmentation.
7. **SERVQUAL model** (Parasuraman et al.,1985): This model help supply organisations to identify which gap between buyer and supplier influences perceived service quality. The model captures consumer perceptions of a service along several dimensions that are believed to represent service quality. By addressing the explained factors, these gaps can be bridged to be customer-oriented.

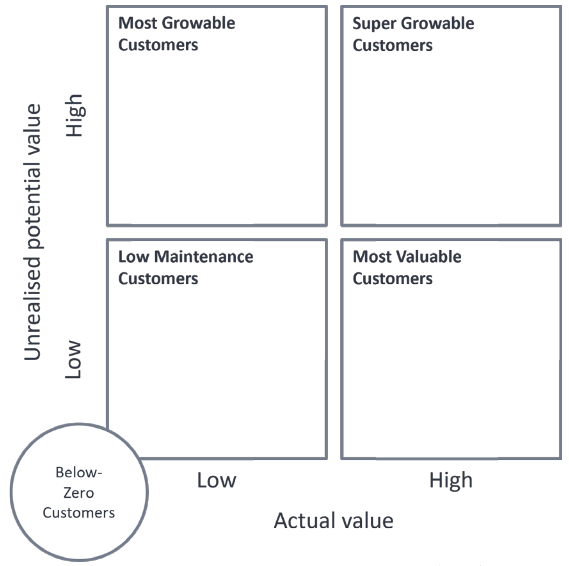
Visualisations of the literary models, except for numbers two and three, can be found on the next page.

Buyer perspective:

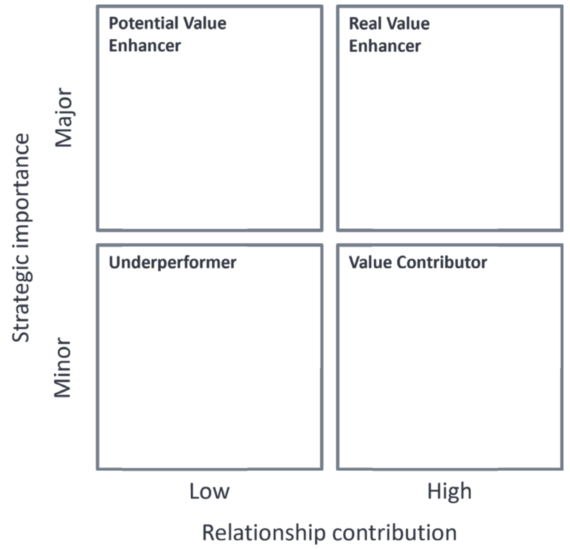
1. Managing supplier portfolio matrix (Moeller et al., 2006)
2. Supplier Purchasing Strategy matrix (Kraljic, 1983)
   See page 20, Fig.3.
3. Buyer-supplier management matrix (Bensaou, 1999)
   See page 24, Fig.6.

Supplier perspective:

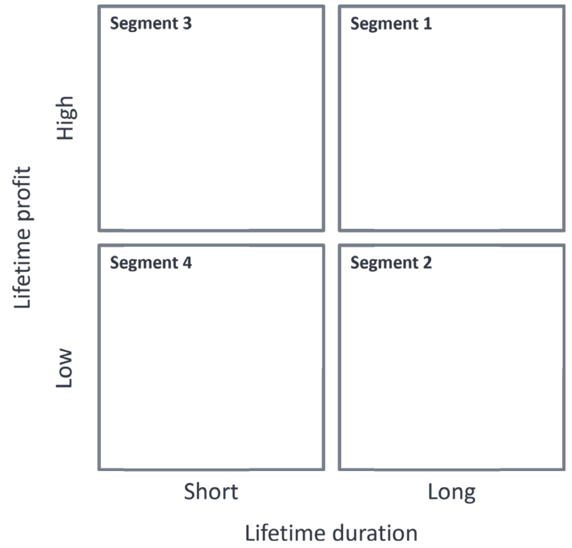
4. The organisational differences matrix (Lavie et al., 2012)
5. Customer value matrix (Peppers & Rogers, 2011)
6. Lifetime segmentation matrix (Kumar & Reinartz, 2006)
7. SERVQUAL model (Parasuraman et al.,1985)



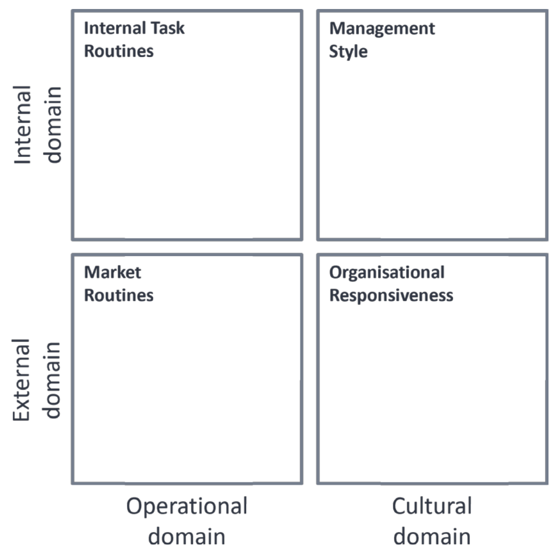
5. Customer value matrix adapted from Peppers & Rogers (2011)



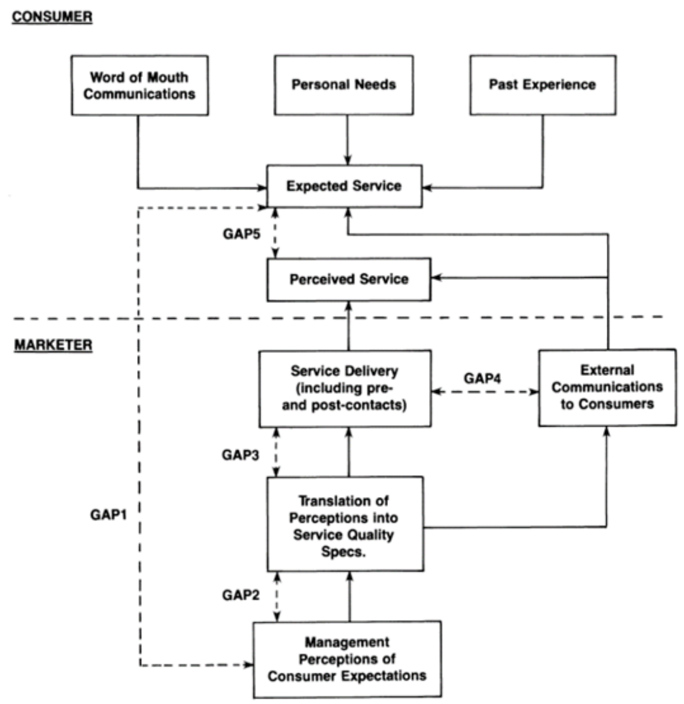
1. Managing supplier portfolio matrix adapted from Moeller et al. (2006)



6. Lifetime segmentation matrix adapted from Kumar & Reinartz (2006)



4. The organisational differences matrix adapted from Lavie et al. (2012)



7. SERVQUAL model (Parasuraman et al.,1985)

4 Organisation context.

This part of the thesis will start with analysing the organisational design elements of Pezy Group. To design and finally implement a framework, the organisation needs to be redesigned. This can be achieved by changing and integrating functions, structures and processes (Worren, 2021). Hence, first the function descriptions, organisational structure and the primary process will be analysed. The conclusions made in this primary research will be plotted on a SWOT-matrix to narrow the opportunity areas that will be discussed in the define phase.

4.1 Functions

From an organisational design perspective, the involved internal stakeholders are analysed. The internal documents regarding function descriptions and the job matrix are analysed on interactions with external parties such as partners and buyers. In addition, it is interesting whether it is expected of specific functions that they are "customer-oriented". Based on this analysis, more insights about the stakeholders' customer orientation in the general primary process are attained. The conversion phase, which is part of the primary process of Pezy Group, and the involved internal stakeholders will be discussed later.

From the function analysis, it becomes clear that plenty of function variations are caused by history, experience, and personal preferences. The following roles and teams are explained and used in this analysis to simplify the numerous different titles. This analysis aims to understand better the involved internal stakeholders and what is expected of their roles. Despite this being only a theoretical check, it does not mean this is the case in reality.

- **MT:** The management team (MT) consists of the CEO responsible for commerce, the managing director of operations and finance, and the managing director of organisation development. This team develops and manages the organisation towards its strategic ambitions. They have high-level interactions with key accounts, potential buyers, partners and suppliers.
- **OMT:** The operational management team (OMT) consists of the group leaders, business development manager, account director, and senior project manager. This team is responsible for resource allocation, supervision of ongoing projects, and managing day-to-day activities. Everyone, except for the senior project manager is account responsible for some accounts.
- **AR:** The account responsible (AR), is as the name suggests, commercially responsible for managing the relationship of a set of buyers and handling their requests. Members of this group are part of the commercial department (business developers, account managers) and the group leaders, who are responsible for their own contacts, and the resource allocation (OMT). The business developers are responsible for identifying and establishing relationships with new buyers, contrary to the account managers who manage existing relationships with customers.
- **OS:** The operational support (OS) is someone from the operation which supports the account responsible by providing input to develop relationships with buyers and make proposals and project plans. The naming is based on their role during the conversion phase. The members of this group are the backbone of Pezy Group. They are the product developers (e.g. lead/senior designers or engineers, consultants, specialists, project leads and managers) with a specific role or expertise whereby they can help in consultative selling by assessing the buyer, interpreting the request and providing suiting input for a proposal.

4.1.1 Observation

The function description of all operational support mention, besides their primary responsibilities, the following: ***"It is expected that the colleague must have a customer-oriented and commercial attitude. Besides, they must gain the buyer's trust when they interact or are part of a buyer meeting. The communication and interaction is expected to reflect Pezy Group and all its competencies, rather than just their expertise. In addition, it is expected that one must develop and maintain their network. In conclusion, it is expected that everyone follows market and technology trends which are relevant for buyers and which are then proactively communicated with colleagues."***

The main insight is that the organisation expects that the operational employees are customer-oriented. However, what customer orientation means is undefined. In addition, after inquiring with the MT, it becomes apparent that customer orientation is currently not monitored or discussed in yearly evaluation meetings with operational employees, which means that the people who provide commercial support are not educated or receive guidance on this topic.

4.2 Structure

By analysing the organisational structure, also known as an organogram, the division between account responsible and operational support becomes evident (Fig.7).

The analysis of the organisation structure gives insight in how many employees of the organisation are involved in the conversion phase. Up to this point it is unclear how many employees are either supporting in the conversion phase, and how many are responsible for the account. In addition, the figure does not include all departments and only provides a simplified visual overview of the structure and how formal communication occur.

4.2.1 Conclusion

It turns out, from a short survey and in correspondence with management, that a total of 45% of the Pezy Group employees are regularly involved in the conversion phase, and thus customer-facing. The total percentages that are involved in the conversion phase, excludes the Pezy Group management team in its research because the focus lies on the employees in the organisation. More than 70% of the organisation focuses on generating value through one of the product development services Pezy Group offer. Over 30% of the operation act as operational support for the account responsible and thus interact with the customer at some point. About 13% of the organisation are account responsible and responsible for managing the buyer's development request through the conversion phase.

According to the management team, the number of operational employees involved in the conversion phase exceeded the expectations. As mentioned in the function description, it is essential to note that the operational support does not receive any guidance on being customer-oriented. The customer orientation framework will impact more people at Pezy Group than previously expected. Brannback (1999) describes the paradox that can also be found in Pezy Group. Those who hold positions in R&D are far away from the front desk or the customer-facing position but have quite often interaction with the end-customer. However, these people are not trained to interact with customers and are done based on their intuition. Based on personal qualities, the interaction quality varies. Therefore everyone in an organisation should be trained in customer orientation.

It becomes apparent that operational support has become increasingly involved in managing customer relationships besides the salespeople. As is determined about 45% of the Pezy Group employees are involved with the customer in the conversion phase. It is important that more people who leverage the CRM platform within Pezy Group become familiar with customer orientation, since Hong-Kit Yim et al. (2001) claim that this improves sales forecasting and lead management.

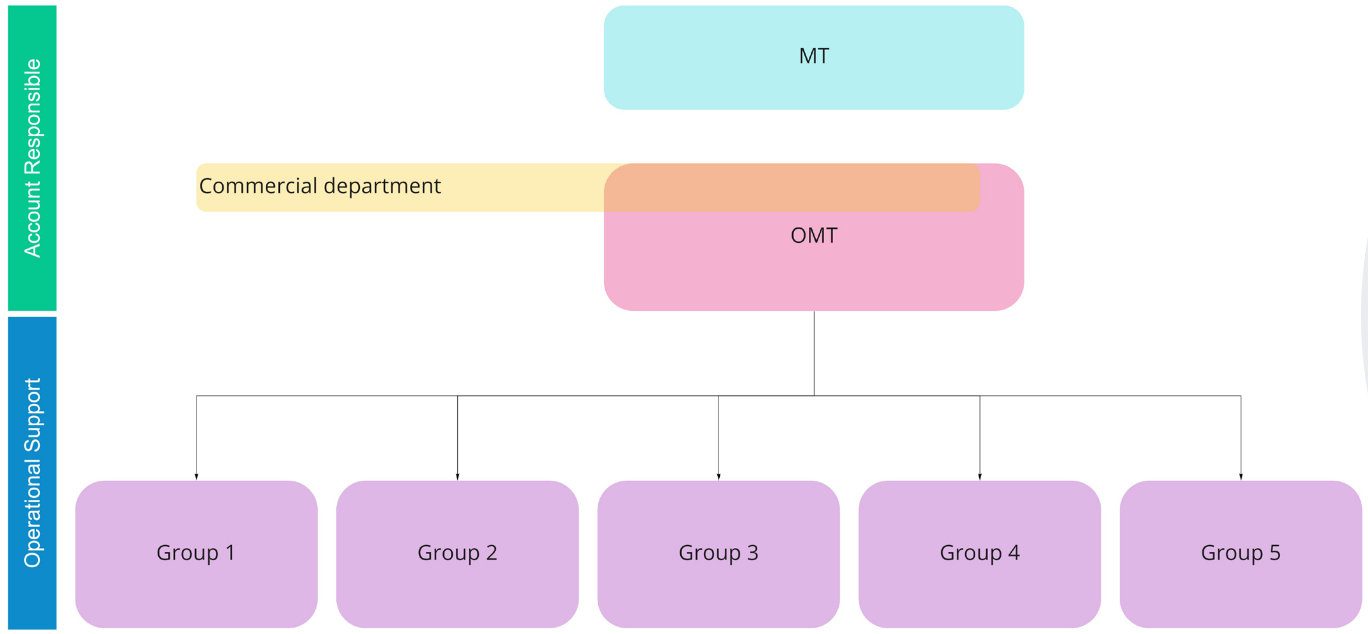


Fig.7 Simplified visualisation organogram Pezy Group (2021)

4.3 Process

The primary process of Pezy Group captures the scope of this graduation project. The definition of the primary process of Pezy Group is explained as the core process for the main business model of executing product development projects. The primary process describes the essential activities internal stakeholders have to perform to achieve the objective of successfully fulfilling a project.

The business development manager indicates that much effort made the commercial department more professional over the last four years. To provide the organisation with an overview and thus a common understanding, the primary process has been shared (Fig.8, appendix C-5.1). The primary process gives an overview of the main process, necessary actions, decisions, and involved departments. Icons indicate which documents are available to function as a template or checklist. It is expected that by analysing the primary process, opportunities for improving the customer orientation in the conversion phase will arise.

The primary process include the generation, conversion, execution and evaluation phases. This graduation project focuses on enhancing customer orientation within the conversion phase. However, the generation phase will be included in this analysis since the customer identifies potential partners before contact is made in the conversion phase. Recalling how to establish buyer-supplier relationships as described by Powers and Reagan (2007), show how step one (partner selection), two (defining purpose) and three (setting relationship boundaries) are similar to the generation and conversion phase of the Pezy Group primary process. In which the conversion phase focuses on translating the buyer's development request in a proposal which defines the discussed purpose and boundaries of the intended buyer-supplier relationship. The execution and evaluation phase will not be discussed, since the creation of value in the buyer-supplier relationship and the maintenance of buyer-supplier relationships (step four and five of Powers and Reagan (2007)) are out of scope.

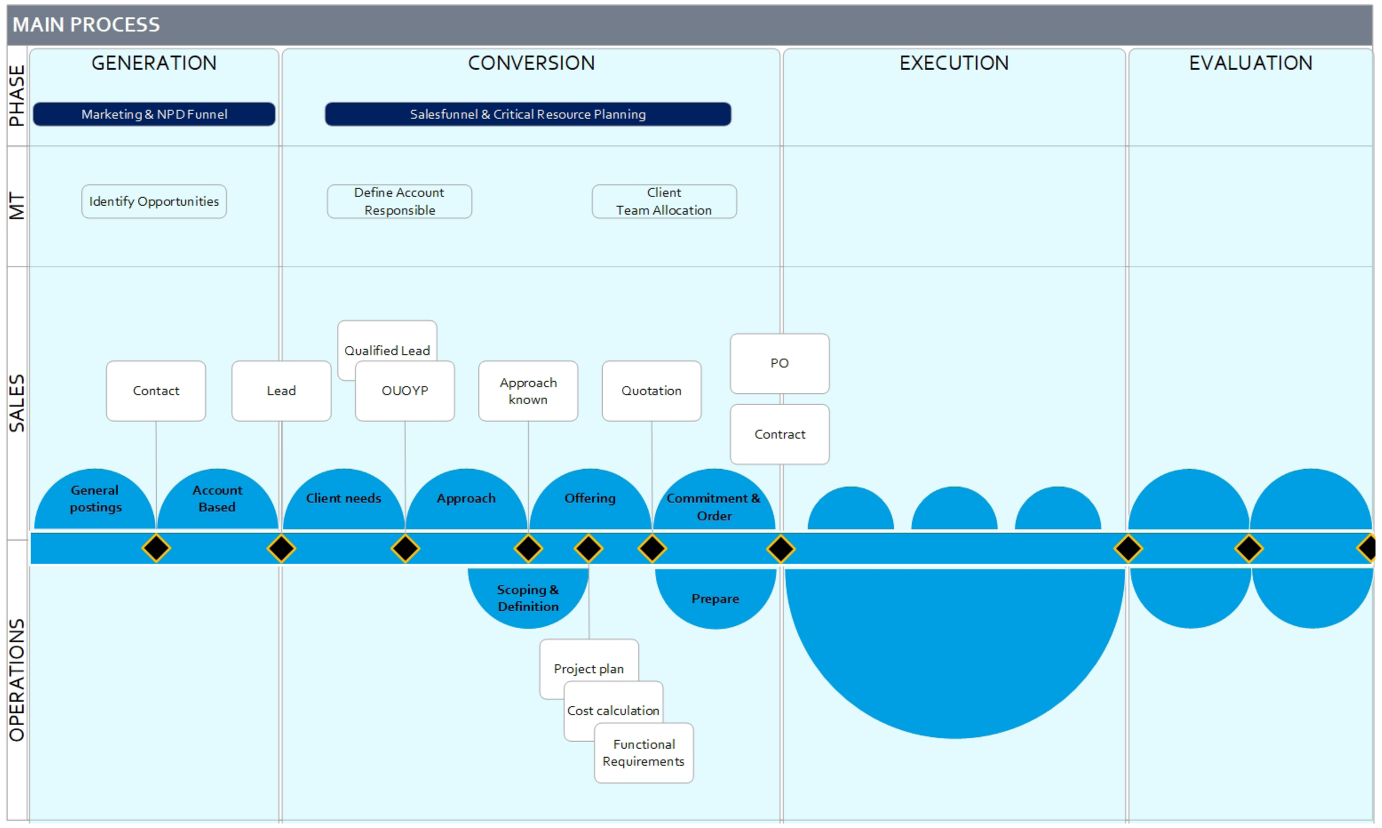


Fig.8 Primary process Pezy Group (2021)

4.3.1 Generation phase explained

In the generation phase, the commercial department already has contact with a (potential) buyer before the conversion phase. This starting phase is called generation since the supplier tries to generate attention and interest through marketing and sales activities to attract development opportunities. However, before the conversion phase, the potential buyer is defining its request and scouting for possible solutions to answer its request. They are not generating interest but are generating a development request which requires a partner. Therefore the generation phase will be included in the scope.

Once a potential buyer contacts the supplier, the supplier will validate the buyer before the request is labelled (e.g. suspect, prospect, lead, qualified lead, commitment, order). If it is an existing buyer, the request will be managed by the assigned account responsible. Such as an account manager. business developers manage new buyers. Pezy Group unconsciously recognises its own out or in-supplier status by labelling a buyer as a new, lost or existing (active) customer. This is in accordance with Gadde & Snehota's (2000) note that a supplier needs to realise its status to be customer-oriented because it is assumed that the interaction varies between new or existing customers.

Current buyer definition

The primary process defines the buyers as is explained in the strategic document of Pezy Group. The sales process stretched over the entire primary process, dividing customers into to the following categories:

- **Key accounts:** Customers with a yearly turnover of 2*XX K euro or more
- **Large accounts:** Large accounts with a yearly turnover of 1*XX K euro or more
- **Accounts:** Recurring smaller accounts with a yearly turnover below 1*XX K euro
- **Other accounts:** Non-recurring accounts below 1*XX K euro

Key and large accounts are managed by account responsibles from the commercial department (e.g. key account manager, business developer). The other "regular" accounts are managed by account responsibles from the OMT, namely group leaders.

The ambition of Pezy Group is to increase the number of large and key accounts and their turnover. Pezy Group wants to be more involved in the product and development roadmaps of the accounts in the selected target domains. The strategy notes that structural relationships with customers need to be established based on their business and markets knowledge. Pezy Group expressed the desire to form client teams for customers with a key account manager to achieve this ambition. The envisioned buyer team consists of an account manager, Group leader and senior operational employees.

In this case, the supplier's employees, the account responsible of Pezy Group, manage the customer and their PSAs (product service agreements, also known as contracts or proposals) using a CRM platform. The main tasks of the account responsible are to intervene on behalf of the customer to prevent conflicts and ensure that promises are being met.

4.3.2 Conversion phase explained

After the initial contact with the potential customer, the customer is given a lead status and the account responsible is assigned to validate the lead. As so the conversion phase will commence.

The strategic document (2021) of Pezy Group explains the conversion phase as follows:

"Once a lead has been qualified, it should be converted into an order. A lead engineer (operational support, OS) will work with the account responsible (AR) to understand the customer requirements and possible solutions. This process can be supported on an individual basis by a project manager to assess risks and constraints and a group leader for resourcing."

As shown in Fig.8, the conversion phase is part of the primary process of Pezy Group. In this phase, the lead is validated, the buyer's needs are discussed, and an approach is determined based on the understanding of the buyer's development request. Based on this approach and the deliverables, an offering is made. After a moment of consideration, the buyer will indicate if they agree with the proposal before the execution of the project will take place. The description of Bowen et al. (1989) explain the conversion phase as how the buyer and supplier try to reach an agreement on the collaboration in which the goal is to generate value, and increasing the profitability of both organisations in their relationship.

The involved functions and stakeholders are; (1) the contact of the buyer with their development request, (2) the account responsible for managing the buyer and their request, (3) the operational support providing input and determining the development approach and on the side-line (4) the group leaders checking the resource allocation and planning.

The structure chosen in the process is that the account responsible is responsible for managing the relationship with the buyer and translating its development request to a fitting commercial proposal. Through the group leaders, the account responsible can attain support from the operation. However, in some cases the group leader is also the account responsible. The operational support is involved or briefed by the account responsible. Together the approach for execution is developed, and a calculation is made. The account responsible can check the proposal with its peers before sending it to the buyer. The account responsible makes sure everything is processed right into the CRM platform.

Lead validation
Validating the lead is done by the account responsible. First, the entity is checked whether it exists, fit with the ethical standpoint of Pezy Group, fit with the target domains, has reliability regarding finance and credit, and whether it provides an opportunity for Pezy Group to apply and grow its knowledge and network reputation, relation or turnover.

In the conversion phase, there are templates available for making a proposal. Nevertheless, before a proposal can be made, the approach for realising the development request must be determined. A checklist is made to support deciding on a specific approach. Then it is decided which of the three business models of Pezy Group is used; interim professionals, assignments/projects, production. In some cases, an opportunity presents itself to participate in a venture. In that case, the primary process is abandoned, and the management team will pick the opportunity up from there. Furthermore, per approach, the required stakeholders are marked. This checklist helps the account responsible realise who is accountable for deliverables, the size of the development request, the complexity of development, and shared business interest.

The Stacey matrix (Fig.9) is used to estimate the complexity of the development request, often in consultation of the operational support. A first indication of the approach, divided into a few development phases, can be determined based on the complexity. The development request is checked on the certainty of the required technology and knowledge to apply (X-axis) and the complexity of the project implementation regarding the intensity of collaboration and management of stakeholders (Y-axis). The Stacey matrix indicates that customers are differentiated by their development request, the complexity to execute and thus the type of assignment or project that will be proposed and eventually executed. Concluding that the proposal and intended interaction between buyer and supplier varies based on the outcome of the Stacey matrix.

Understanding request
Until before, the checklist, and thus the approach of the buyer's request, was based on the conversation the account responsible had with the buyer to collect further information. A new document has been recently introduced to improve the handover during the interaction; the Our Understanding Of Your Problem (OUYOP). This document has been introduced to better understand the buyers' requests and give a complete briefing to the operational support. The OUOYP is filled in by account responsible and operational support. After that, the document is sent to the buyer to validate the request and understanding of Pezy Group. Based on the feedback, this document forms the input and base to develop a proposal. The OUOYP is the first initiative to improve the internal handover between the commercial and operation departments. The OUOYP supports the operational support who are asked to help with consultative selling, provide input and help propose. This document will be taken into account in further analysing the current situation of the conversion phase.

Infrastructure
The Pezy Group organisation uses a software process platform to manage human resources (HRM), customer relationships (CRM/sales) and other business processes such as project management and financing. This digital platform for small and medium-sized businesses is translating the just discussed primary process to a more detailed digital version. The IT-infrastructure as explained by Kumar (2001) manages the buyer contacts, the status of a (potential) development request or project and their related stakeholders and hours can be managed. In addition, a separate platform is available for communication and in-depth project/content work (e.g. sharing digital files). Currently multiple projects are ongoing to optimise these IT-systems.

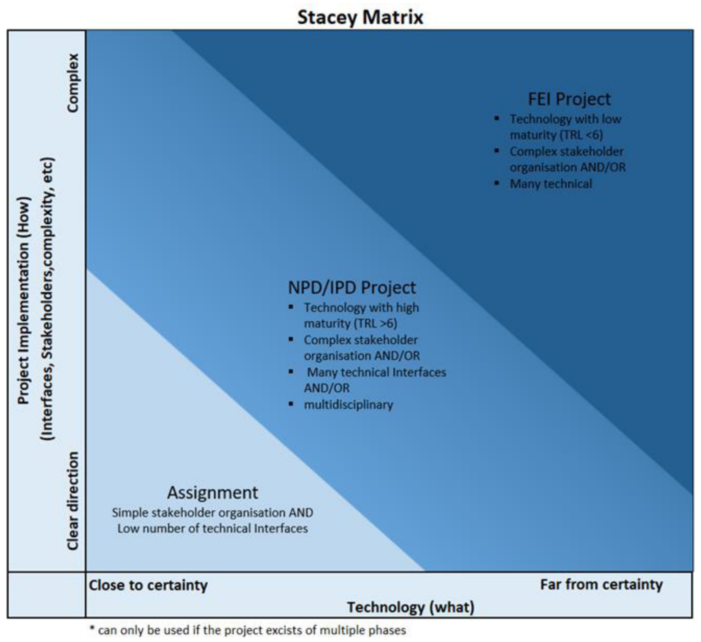


Fig.9 Stacey matrix by Pezy Group (2021)

4.3.3 Conclusion of process
Once the buyer, lead, and product development request have been validated, Pezy Group can finally develop a proposal for the buyer's development request. The proposal or also known as the product-service agreement (PSA), includes; a short description of the project brief, the motivation for the development request, the development approach determined via the Stacey matrix, a summary of the activities, a description of the deliverables, a planning and a calculated estimation of the investments and other agreements (e.g. IP).

However, before a proposal and possible commitment for execution is achieved, it becomes visible that the primary process does not include the buyer. By analysing the primary process of Pezy Group, the scope will include the generation and conversion phase because it captures the beginning of the buyer-supplier relationship establishment. Pezy Group has identified and segmented customers and target domains. However, the buyer definition of Pezy Group implies a limited understanding of its buyers. The buyer is only defined based on monetary value and the account responsible for managing the relationship. Their absence in the primary process strengthens this perspective. This commercial and inside-out perspective on consumers does presumably not contribute to customer orientation. The literature review (Dorsch et al., 2001; Lambert & Schwieterman, 2012) emphasises how customer relationship management can be further reinforced through better customer identification. Identifying the customer proficiently will help the responsible manage customer relationships and guide customers through the conversion phase accordingly. Most interactions between the buyer and supplier occur between the buyer's contact, the account responsible and the operational support. This graduation research will focus on these three stakeholders. The group leaders will be included because of their account responsible role, thereby excluding their planning and resource allocation activities, albeit this is important.

The current primary process applies mainly applies one approach for all customers. As explained in the literature review, this process focuses on customer-closeness (Jeong & Hong, 2007), which aims to remain in contact and understand the customers' needs during the interaction. However, this presents the opportunity to increase the customer flexibility of the process. This focuses on the awareness and intent of the organisation to assess and comply with the customer's expectations. The customer-accessible aspect is neglected since this focus on an IT and CRM system is out of scope. The digital CRM platform monitors a lead's progress, shares buyer's information and critical remarks or meeting notes. In addition, it can be noted that certain buyer information is indeed managed on the digital platform. It can be concluded that a CRM platform and sales process are in place. However, according to the primary process, the feedback regarding Pezy Group's performance from the buyers perspective during the interactions or after a possible execution is not captured or monitored. Thereby a complete understanding of the buyer's needs and expectations is missed. The graduation research will not optimise the digital IT infrastructure because the CRM platform is present and being worked on. Although this platform is important in supporting the conversion phase, the IT platform does not interact directly with customers and will be therefore left out of scope. Note that there is a difference between the supplier's internal IT infrastructure (Kumar, 2001) and the partner infrastructure to share information and knowledge for collaboration between buyer and supplier (Fearne, 1998; Prasad and Sounderpandian, 2003). The latter mentioned infrastructure could enhance customer orientation in buyer-supplier dyads.

The research will seek a solution to enhance customer orientation in the buyer-supplier relationship and interactions. An opportunity area in the primary process of Pezy Group will be determined through the customer journey.

5 Customer journey.

The literature review concludes that for an organisation to be customer-oriented, it must understand its different customers. By understanding the need and expectations of the buyer, the supplier can be complementary in the interactions and improve the experienced service quality. To gain further insights into customer orientation during these interactions, a customer journey is made based on the primary process of Pezy Group. According to the Dutch Design Guide (Van Boeijen et al., 2014), a customer journey is a way to find out what is lacking. Analysing the customer journey aims to attain insights into the interactions, barriers, and goals of both buyers and the Pezy Group employees. Thereby the elements of customer orientation will be discovered. Another goal is to validate the suggested challenges of the management team and possibly identify other improvement opportunities. Defining the challenges of the process more precisely will indicate where to optimise the organisation's process. This will result in a clearer scope and more focus in this thesis.

The customer journey of the current situation is built on top of the primary process. In this way, the employees of the supply organisation can easily recognise themselves and identify the customer and their interactions. This customer journey will not repeat the findings and insights discussed before in the primary process analysis. The customer needs and interactions with a supplier such as Pezy Group start before the conversion phase. To better understand the customer and context, both the generation and conversion phase will be included in the scope of the customer journey. The customer journey is created by the approach as described by Van Boeijen et al. (2014). First, the users, both internal and external, of the customer journey are determined. After that, an initial customer journey is designed based on the primary process (Fig.10). Finally, questions regarding the goals, needs and experiences during the customer journey activities and interactions are plotted. These questions are then translated to interview and survey questions for the selected participants. By analysing their answers, the customer journey is analysed and validated. It is expected to identify the important variables contributing to the experienced customer orientation and learn more about the buyer's perspective and the supplier's organisational challenges.

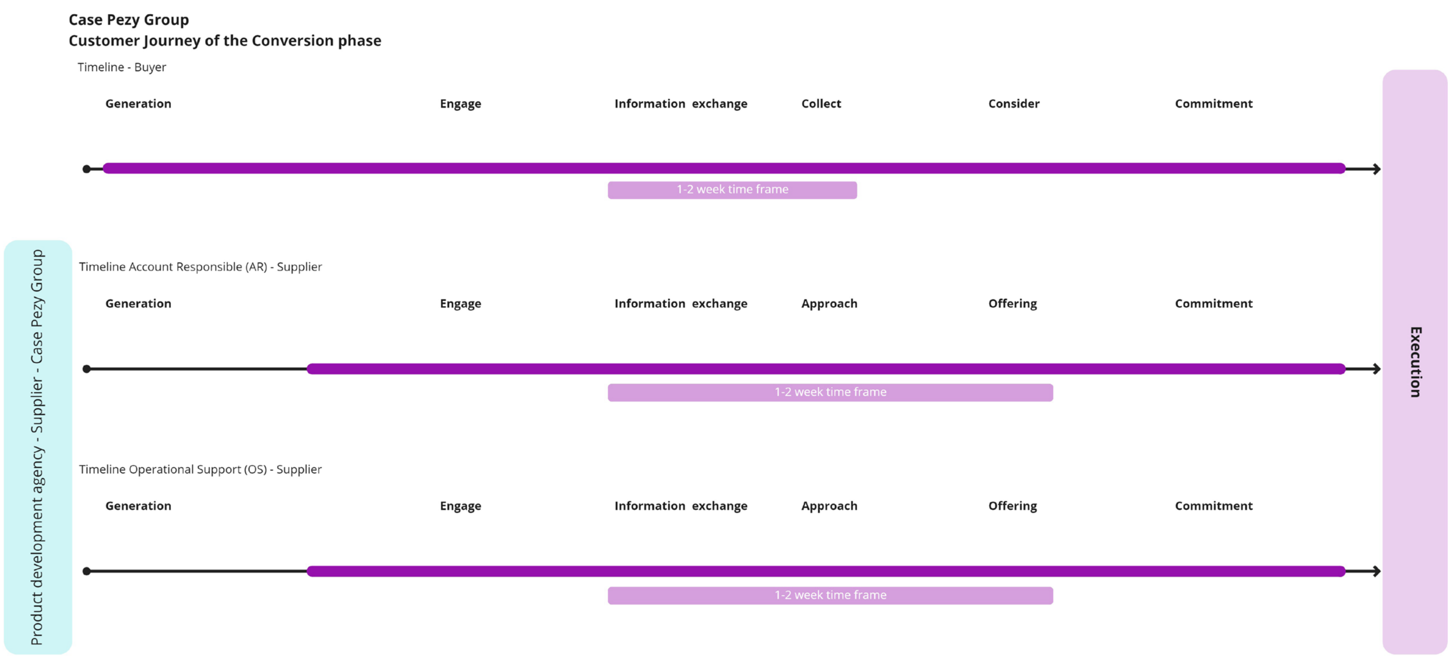


Fig.10 Initial customer journey of current situation

5.1 Stakeholders of customer journey

This graduation research will involve multiple stakeholders. This section will explain the participants of developing this customer journey and who represents the stakeholders. The perspective of internal and external participants will be processed and included in fulfilling the assignment of this thesis.

The buyers, or external participants, are involved by qualitative research (semi-structured interviews) to receive rich details regarding their experience and expectations of the customer journey. These insights will later be used to identify differences between the buyers. To enhance the customer orientation in buyer-supplier relationships from the perspective of the supplier, the internal organisation is analysed regarding the customer journey. The account responsible and operational support of Pezy Group play an important role in the customer journey of the buyer. Together they determine the quality of the service experienced in the conversion phase. Quantitative research (surveys) will indicate where the opportunities for improvement lies within this process. The approach and how the insights are gathered can be found in appendix 2.1 & 2.2.

Each company has a different culture; however, the assumption is that all companies based in the Netherlands share similar values and perspectives regarding the customer journey they experience. The assumption is made that the nationality of the customer contact or Pezy Group employee is not relevant for the customer journey, the interaction & relationship between the customer and Pezy Group since they represent their organisation.

Buyers - External

In this research, the main focus will be on (potential) customers for which Pezy Group does product development. The focus is on this business model is determined by the primary process on which the customer journey will be based. The primary process, as explained, conveys the core service. The core service of Pezy Group is the service of product development by executing projects and assignments. Thereby this research aims to attain a broad and detailed understanding of the Pezy Group customer journey. The customers are selected based on the purposeful, qualitative sampling method. Keeping in mind time constraints and resources, the research sample will be limited to the network of the Pezy Group organisation. This selection is based on the customer's need for the supplier's core service and three identified relationship statuses'. It is expected that differentiating the customer based on the relationship status will indicate how the expectation of customer orientation varies. These three types of relationships broadly follow the customer pyramid of Curry and Curry (2000): active, former and lost or not yet captured customers. Thereby following the advice of Blattberg and Deigthon (1996), and thus the input will not only be derived from the best or newly acquired customers at the top of the pyramid.

All external participants should reflect the majority of Pezy Group's buyer base. Therefore, the participants have an R&D department with a focus on the development of products and components. No distinction is made between the participant selection of the customer's organisation size or experience (start-up vs. established multinational). The selection criterion of organisation size or experience is not included due to the limited number of customers available for participation.

Four buyer contacts (n=4, number of participants) of Pezy Group were found that represent the customer base. Semi-structured interviews (appendix 3) with the four contacts were executed to gather insights. These insights will be used to find differences between the relationship types and to create grounded theories which explain the experienced customer journey and customer orientation. The customer journey is analysed through the perspective of the following three relationship types (derived from the customer pyramid of Curry & Curry (2000)):

- **Active customer** (n=2): The active customer Pezy Group has frequently collaborated with for at least the last three years. Per year, more than X Euros was invested in product development. These types of customers are selected because they reflect the intended relation (frequent collaboration) and profitability. The goal of Pezy Group is to bring more customers to this level. The selected active customers include one large (revenue + 2*X Euros) and one key account (revenue + 10*X Euros) of Pezy Group.
- **Former customer** (n=1): The former customer is an inactive customer with which Pezy Group does not frequently collaborate. There has not been any collaboration over the last three years, but there is still frequent contact through the account manager.
- **Lost customer** (n=1): The customer who is lost or "not yet captured" is similar to the former customer, but Pezy Group and this customer have never collaborated. These customers follow the conversion phase, interact with the business developer, but it does not result in cooperation in the execution phase.

Supplier - Internal

On the other side of the customer journey, the Pezy Group employees interact with the customers. In alignment with organisation design, the perspective of these internal stakeholders involved in the conversion phase is included (n=30, number of participants). This is important since organisation design is fundamentally about the people who fulfil their role in the organisation's process (Worren, 2021). As Brendler (2001) explains the people determine how customer-centric an organisation is. The assignment is formed to enhance the customer orientation of the organisation and to solve organisational challenges to improve the service quality. Therefore the essential internal perspective of the supplier's employees is analysed to determine how the organisation can be customer-oriented in buyer-supplier relationships.

The account responsible and operational support are selected by random, quantitative sampling. The representative sampling of the organisation is based on the division of roles as indicated by the structure analysis. Eight account responsible and 22 operational support employees are determined as representative individuals and asked to provide their perspectives and insights. The account responsible and operational support receive different surveys tailored to their role as described in the function analysis. The goal is to identify the operational challenges from both internal perspectives, which form barriers in the customer orientation. The response rate is respectfully 62,5% and 63.6%. By this approach, a generalised understanding of the internal situation at Pezy Group can be attained.

5.2 Insights from customer journey

5.2.1 External insights

The buyer contacts are interviewed, which results in general insights of the conversion phase (appendix 2.3.1). Based on the relationship type of the interviewed buyers, a first description can be made which differentiates them. Insight per specific relationship type and how Pezy Group manages them:

- **Active customer:** The active customer spreads their risks of purchasing between a set pool of suppliers. Even though they try to establish and maintain strong relationships, it is not exclusive. The complementary knowledge and competencies established over the years through the experience of collaboration are important and determine the customers' expectations. The customer has informal ways to contact existing suppliers to prematurely check the possibilities to solve their development requests. However, they first try options to solve the issue internally before a briefing for suppliers is developed. The buyer and supplier create the supplier's proposal iteratively to ensure a feasible and manageable project that mitigates development risks. The active buyer appreciates an assertive and proactive attitude, which challenges them in the development but within the project's scope. The active customer wants to be ensured that the supplier invests in themselves to remain relevant for the future.
- **Former customer:** The former customer does not vary between suppliers often but maintains contact with the supplier other parties to switch to in the case of unsatisfaction or limitations of the current supplier. They mainly know a supplier for one competency and find it hard to try unfamiliar activities with the supplier. However, the former customer is open to other ways of cooperating on development.
- **Lost customer:** The lost customer did not experience a positive journey. The lost customer did not want to focus on development but on development for manufacturing. Therefore the cost-price of the product which must be developed is important. However, the lost customer did not want to invest in all the development activities the supplier normally applies. The buyer is mainly familiar with purchasing parts and not services, and as a result, expects a quick estimation of the required investment and run time. A misunderstanding resulted in a proposal that did not meet the expectations. The development approach from the supplier translated in the proposal cannot meet the buyer's expectations. Too many aspects of the development were uncertain, and therefore giving a quick estimation felt too risky for the supplier.

The insights from the external participants based on their relationship status give insufficient detail of their needs and expectations. However, the importance of the established infrastructure, the history of the relationship, and the development request's importance become apparent. Other characteristics and variables must be investigated to understand the different types of buyers and their interaction expectations. Consequently, it is expected that the supply organisation can enhance its customer orientation by aligning and understanding the buyer and supplier.

5.2.2 Outcome of interviews

The interviews with the external participants were transcribed. From the transcripts (appendix C-2), a coding exercise results in three grounded theories. These grounded theories (appendix 2.3.2) describe a generalised phenomenon that the interviewed customers experience during the journey of the conversion phase.

Motivation for a supplier

By understanding the need or motivation of the development request, the intended goal of the developed outcome and the reason for needing a supplier enables a supplier to adequately create a PSA with a development approach that meets the buyer's expectations regarding the offered service. This is confirmed in the grounded theory "Causations of needing a product development partner".

Elements that must meet buyer's expectations of a supplier

The findings in the grounded theory of "Contributes of building a long-term relationship & the expectations of a trusted partner" " show a correlation with Brannback's (1999) statement that the perceived value of the service, translated in a proposal, is based on a positive interaction that meets the customer's expectations before a relationship can be established. The customer's positive interaction with a supplier in the conversion phase contributes to the inter-organisational trust and all other variables of building a lasting relationship. For a supplier to be customer-oriented, their service and interactions must meet the customers' expectations of a partner. However, every customer is different and has other expectations. The external participants were asked to answer as representatives of the organisation.

However, the grounded theory of "Contributes of building a long-term relationship & the expectations of a trusted partner" confirms how positive contact with the supplier on an inter-personal level contributes to trust when it meets their expectations. Jap (1999) adds that trust is a requirement for sharing ideas, information and clarifying challenges and goals in the relationship. The grounded theory showcase similarities with the conclusion of Brady & Cronin (2001). Brady & Cronin (2001) explain how the positive perceptions of the service, or the supplier's expectations being met, are influenced by the supplier's employees and how they interact. The positive perceptions of the supplier's service, having a strong customer orientation, consequently indirectly improve an exchange's satisfaction and value.

The grounded theory proposes several variables that contribute to a positive interaction. Not all customers have the same expectations regarding the interaction during the conversion phase and service.

Deciding on supplier

The grounded theory of "aspects that influence decision making regarding a development partner" show that the expectations of a trusted partner are influenced by the complementing disciplines, the structural hole, which in turn affect the buyer in deciding on a partner. According to the grounded theory, previous experiences, the repetition between both parties influences the decision of a product development partner. This seems to align with the structurally embedded exchange (Granovetter, 1985) and social capital (Gulati and Gargiulo, 1999), as discussed in the literature review. The buyer selects a supplier with their internal stakeholders based on a trade-off of all these variables. Therefore, it can be concluded that a supplier should know how to be complementary and realise the background & status of the buyer-supplier relationship. A distinction should be made between new and existing customers.

5.2.3 Internal insights

The survey results (appendix C-3.2-3) from the internal participants of Pezy Group show similarities and contradictions between the account responsible (AR) and operational support (OS). These topics will be discussed in this segment. More Pezy Group specific insights, like the differences between location or the role of business developer and group leader, from the account responsible and operational are discussed in appendix 2.3.3.

Clear understanding for making the right proposal

Both the account responsible and operational support confirm a need to better understand the customer's development request's motive. For all involved, it is appreciated when the request and goal are clearly formulated.

The employees involved in the conversion phase indicate how making a suiting proposal for the buyer is always custom. However, they indicate that standardised commercial documents or guidelines would help them. Standardised documents could save them a lot of effort, which goes into making a proposal.

Especially the operational support, but also some account responsible, indicate how Pezy Group should invest in making a detailed proposal—investing in pre-research to understand the development request.

However, on the other side, mainly the account responsible indicates that the effort in making a proposal and the scope of this proposal should not be out of proportions before there is a commitment from the buyer. In addition, making a proposal bigger than the initial request might scare off the customer.

The right introductions

The account responsible and operational support address the essence of frequent contact with the customer to keep them updated and informed. Continuity of the people introduced to the customer during the conversion and execution phase, if the capacity planning allows it, is vital in building a relationship and managing customer-specific knowledge. However, In the answers of the participants are also some contradictions.

For instance, the account responsible want that the resource allocation, the availability of a product developer for support in the conversion or execution phase, is immediately evident. On the other hand, they do not want to introduce the wrong people to the buyer. The wrong person meaning a product developer who cannot or will not be involved in any customer related activities after the initial meeting.

6 SWOT-matrix.

In this chapter, the created and analysed customer journey of the current situation is used to make a SWOT-analysis. The insights from the interviews and surveys previously mentioned, result in an overview of identified challenges which are opportunities to enhance the customer orientation of the supply organisation in the conversion phase.

To make this complex customer journey more understandable, an overview is made of each stakeholder and the main phases they go through (Fig.11). The dark purple line on top of the timeline indicates when the involvement of a stakeholder starts. Every main stakeholder received its own timeline; the customer, account responsible and operational support.

The light purple boxes indicate challenge clusters which are both mentioned by the internal and external participants. These challenge clusters are the result of analysing the mentioned challenges and visualising them in the primary process (C-5.3). The details of the challenge clusters are further explained in appendix C-4.1. Besides the formal primary process of Pezy Group and its challenges, the informal interactions are captured. Informal interaction smoothens the process by aligning and validating specific topics not included in the primary process. In another version of this customer journey, the involved stakeholders, their actions and these informal interactions are included. These customer journeys, the notes and remarks can be found in the appendix (C-5.4)

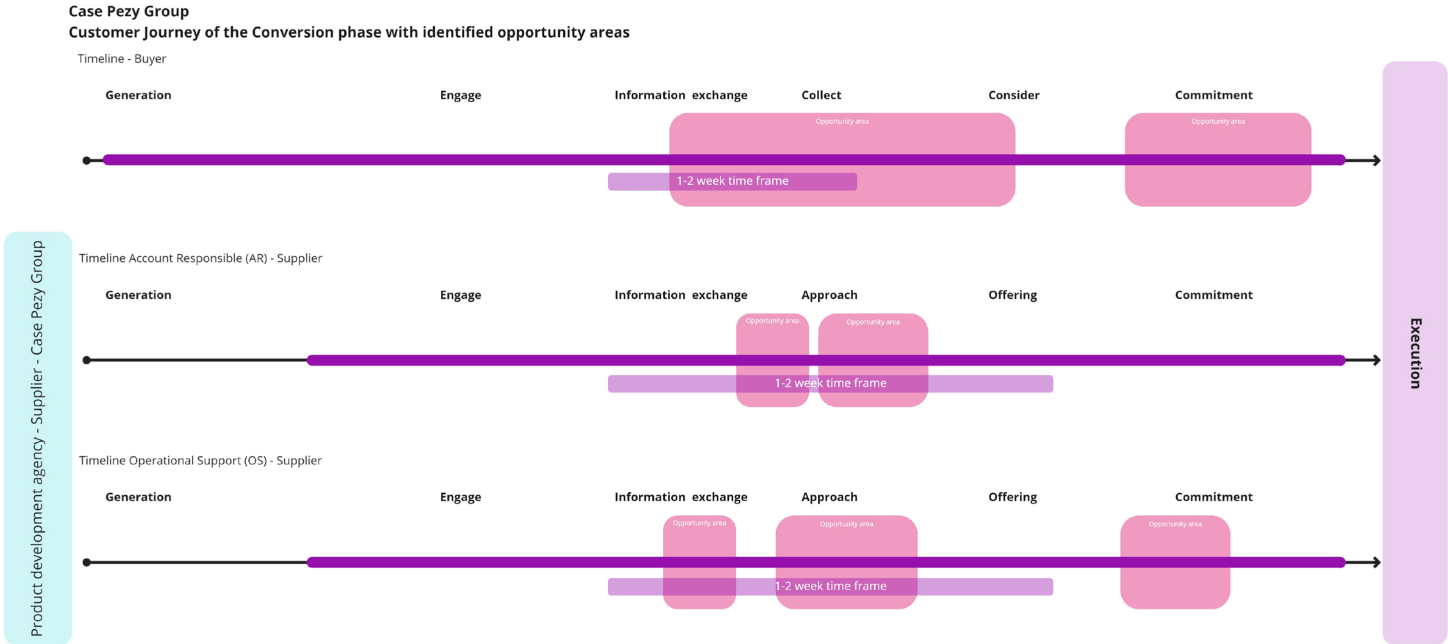


Fig.11 Current customer journey with opportunity areas

The insights, including the challenges, discovered in this phase are summarised in a SWOT-matrix. The SWOT-matrix is used to structure and analyse the gathered information (Van Boeijen et al., 2014). A more detailed version of the matrix can be found in appendix 4.

The identified challenge clusters combine the internal (supplier) and external (buyer) challenges that show resemblance. The SWOT-matrix does this by the weaknesses & strengths (internal) and threats & opportunities (external). They are listed differently (1,2,3 vs. A,B,C) because it is needed to distinguish them for the search areas in the next chapter.

As mentioned in the introduction, Pezy Group's strategy describes the direction of enhancing customer orientation but does not yet know what and where the intended organisational improvement opportunity lies. From the discover phase it becomes apparent that customer orientation is the organisation's ability to prioritise the customers' needs by understanding and recognising the changing expectations in different contexts. The lack of customer orientation becomes especially apparent in the internal handover and development of the proposal that must meet the buyer's expectations. This is in accordance with the challenge cluster A, aligning expectations by understanding buyers, as identified in appendix C-4.2.

Strengths

1. Ability to distinguish new and existing customers and thereby their own role as in or out supplier.
2. Infrastructure is in place; CRM platform, IT system, secondary processes and supporting documents.
3. Having complementary knowledge and competencies buyers are looking for.
4. Accessible through informal relationships with existing customers.
5. Buyers indicate to have had a positive experience overall.
6. The conversion phase, including determining the development approach and involving operations, is especially effective for group leaders and their customers.

Weaknesses

1. Expect organisation to be customer oriented, but do not have a clear understanding of what customer orientation is in the interaction with buyers during the conversion phase.
2. Underestimated the number of customWer-facing employees who do not receive any guidance, support or evaluation whilst it is expected that they are customer-oriented.
3. A limited understanding of the various buyer types.
4. Do not always elaborate on the motivation or goal of the development request, resulting in a misaligned proposal.
5. Not keeping the buyer informed and updated during the conversion phase.
6. Insufficient internal briefing and handovers with regard to the development of the proposal.
7. The final proposal is not always backed by the operation because the edits of the account responsible decreases the feasibility of the project.
8. Unclear how to involve the operational support in the conversion phase and possible continuity in execution.

Opportunities

A. Buyers continue to require complementary knowledge and competencies of suppliers.
B. Buyers have too many development request and initiatives to process or get internally funded.
C. Need for solutions to make the process more effective, less time consuming.
D. Customer journey: Buyers appreciate the continuity of contacts of the supplier in the interactions. Thereby customer specific knowledge can be applied to ensure an efficient joint execution of the development request.

Threats

A. No relationship with suppliers is exclusive for active buyers.
B. Buyers expect the suppliers to invest in their competencies to remain relevant.
C. Buyers know what they are looking for in a supplier, but find it hard to express.
D. Buyers have changing and variable expectations regarding the details of the expected proposal of the supplier.
E. The briefing of the development request from the buyer is not always clear and requires iterations whilst in competition.
F. The buyer expects a proactive attitude in the interactions with the supplier.
G. The contact of the buyer needs to consider internal. stakeholders and the politics in the buyer's organisation.

In the define phase, the gathered insights from the discovery phase are converged to better define the challenge this research aims to solve. The design brief will explain the decision for the goal of the intended solution, which is believed to achieve the most impact for enhancing the customer orientation.

7 Themes.

Using the search area method of Buijs (2012), the insights from the SWOT-matrix are plotted to identify a theme in which a promising answer lies for the assignment of this graduation thesis.

The assignment aims to enhance and implement the customer orientation of the supplier organisation in buyer-supplier dyads, thereby improving the service quality. Consequently, the opportunity area looks for organisational challenges that can be improved and answers to the threats the buyers have indicated. The x-axis represents the discovered weakness, or challenges, of Pezy Group that can be improved. The y-axis represents the threats the environment causes on the customer orientation. In this case many items relate to the expectations of the buyer. The detailed search areas can be found in the appendix 5.

		Internal challenges (weakness)							
External threats		1	2	3	4	5	6	7	8
	A	x	x	x		x		x	x
	B	x	x	x	x				
	C			x	x	x		x	
	D		x	x	x		x	x	
	E			x	x	x	x		
	F	x	x		x	x			
	G			x					

The selected search areas or themes focus on understanding the expectations, motivation and goal of the buyer and their intended interaction with the supplier. In order to enhance and implement customer orientation in buyer-supplier dyads, it is important to understand the buyer. This is also required before addressing the other search areas. It is expected by increasing the understanding of the supply organisation with regard to the buyer and interaction that the service quality will improve consequently. Thereby indirectly contributing to the business growth and the long-term strategy of Pezy Group.

The opportunity area is similar to the discovered challenge cluster A (C-4.2) and is in accordance with the earlier identified opportunity to increase the customer flexibility of the organisation's process (4.3.3). This focuses on the awareness and intent of the organisation to assess and comply with the customer's expectations.

Further research with regard to the selected search area is focused on understanding the buyer and the interaction. From a design perspective, a suiting method to understand the customers and their values and needs is that of archetypes. The theme or archetypes will be further defined in the next chapter.

8 Defining archetypes.

To better understand the buyer's behaviour, values, needs and the interaction the supplier has with them, a persona can be made. A persona, or archetype, is a generalised representation of the intended users (Van Boeijen et al., 2014). The intended users are the buyers who experience the customer orientation the supplier conveys in the interactions. The archetypes will help the supplier to understand and be aware of the different customers. Thus the archetypes will be the starting point or base of the envisioned framework. First, information and insights of the intended user and interaction are gathered. The insights from the survey and interviews with the external participants are combined with the rich information of available literary models. Next, the characteristics that are most relevant to the assignment are selected. Based on the defined archetypes a design brief is formed on how to be customer-oriented.

8.1 The foundation

As a starting point for developing archetypes the rich amount information provided by the literature is consulted. The models discussed in chapter 3 are reviewed to determine which will be included to be part of the foundation of the archetypes.

1. Managing supplier portfolio matrix (Moeller et al., 2006);
2. Supply strategy matrix (Kraljic, 1983);
3. Buyer-supplier management matrix (Bensaou, 1999);
4. The organisational differences matrix (Lavie et al., 2012);
5. Customer value matrix (Peppers & Rogers, 2011);
6. Lifetime segmentation matrix (Kumar & Reinartz, 2006);
7. SERVQUAL model (Parasuraman et al.,1985).

Selection criteria

The search area of archetypes specifically focusses on understanding the buyer and the intended interaction, so that the supplier knows how to be customer-oriented for them. This is the starting point of including a few of the seven literary models. A key criteria for selecting the literary models to base the archetypes on must include detailed characteristics and insights regarding the buyer, their needs and how they perceive the supplier in interactions. Another criteria is that the literary model must be linked to conversion phase, thus related to purchasing and establishing relationships on an organisational level.

Decision on foundation

The first two models serve buyers to manage better, purchase and control their suppliers. Models three and four focus on the buyer-supplier dyad, how to manage them or overcome differences. The models five and six are meant for suppliers to support sales in determining which customers to focus on to reach goals or increase profitability. The final model indicates gaps for the supplier to increase its service. The intended archetypes requires models that provide more insights into the characteristics of the buyer or the buyer-supplier interactions. All presented models try to define or better understand the other party to manage them in collaborations.

In order to understand the perspective of the buyer and what their expectations of the supplier are, it is decided to include the characteristics of the Kraljic matrix in the archetypes. The Kraljic matrix provides lots of insights for the supplier, or in this case Pezy Group. The Kraljic matrix provides detail of the buyer's attitude towards the importance of purchasing and their consideration of the supply market. As discussed in the literature review, to be customer-oriented and offer proposals that meet the expectations, the supplier must understand the context of the development request and the supply market. Because the supply market influences the purchasing strategy of the buyer, it thus influences the buyer's expectations. The model of Managing supplier portfolio is excluded from the archetypes because it is based on only existing suppliers and how they contribute to the buyer. This model does not present more insights to better understand the perspective of the buyer and their context.

The characteristics described by Bensaou's buyer-supplier relationship management matrix is included in the archetypes. This model shows similarities with the Kraljic matrix but dives more profoundly into the dyad relationship, the relationships' investments, and takes the contextual factors into account. The organisational differences matrix is excluded because the themes of culture and trust, albeit being important for customer orientation, are out of scope. These topics focus too much on interpersonal or personal attributes, since culture is group behaviour. The graduation thesis focuses on enhancing the customer orientation of a supplier organisation's process. More specific, the customer orientation in the conversion phase of the primary process of Pezy Group. This process involves the customer journey, thus a process and not the organisation's culture.

Models five and six are CRM models that segment the current customers better, based on their added monetary value. These models have an inwards perspective, do not take into account new customers and do not include details regarding the relationship or the buyer. This graduation research aims to contribute to the buyer-supplier relationship literature instead of CRM. However the intended archetypes contribute to customer identification, and might contribute to CRM. Nevertheless, these buyer-interaction archetypes will not be solely based on monetary value the relationship possesses. Hence, none of these two models will be included.

The final model does not describe clear characteristics of the buyer and their perspective regarding the intended relationship. However, the model does provide insights regarding the service process and interactions in buyer-supplier dyads. Therefore, this model will be used to indicate the scope of the buyer-interaction archetypes.

In conclusion, the literary models of Kraljic and Bensaou, two and three, are selected to form the basis of the buyer-interaction archetypes. Thereby excluding the involvement of models one, four, five, six and seven.

8.2 Scope of buyer-interaction archetypes

Through the literature review the envisioned archetypes which will form the base of the framework can be further scoped. The identified organisational challenges and aim of the assignment to improve the service quality, show remarkable similarity with the service quality model (SERVQUAL) of Parasuraman et al. (1985). The service quality model (Fig.12) indicates four gaps in organisations that influence the consumer's perceived service quality. Gap two shows resemblance with the validated challenges identified by Pezy Group's management and customer journey analysis. The envisioned archetypes will be developed specifically for application in gap two. Gap two describes the difference between perceptions of the consumer's expectations and the supplier's service quality specifications. It is expected that understanding the buyer-interaction better contributes to identifying and aligning with the customers' expectations.

Zeithaml et al. (1988) indicate that various factors cause the misalignments of the service supplier's attempt to match the buyer's expectations. However, it is proposed that the management commitment to service quality, goal setting, task standardisation, and feasibility perception influence this misalignment gap (Zeithaml et al., 1988) and can reduce the organisational tensions.

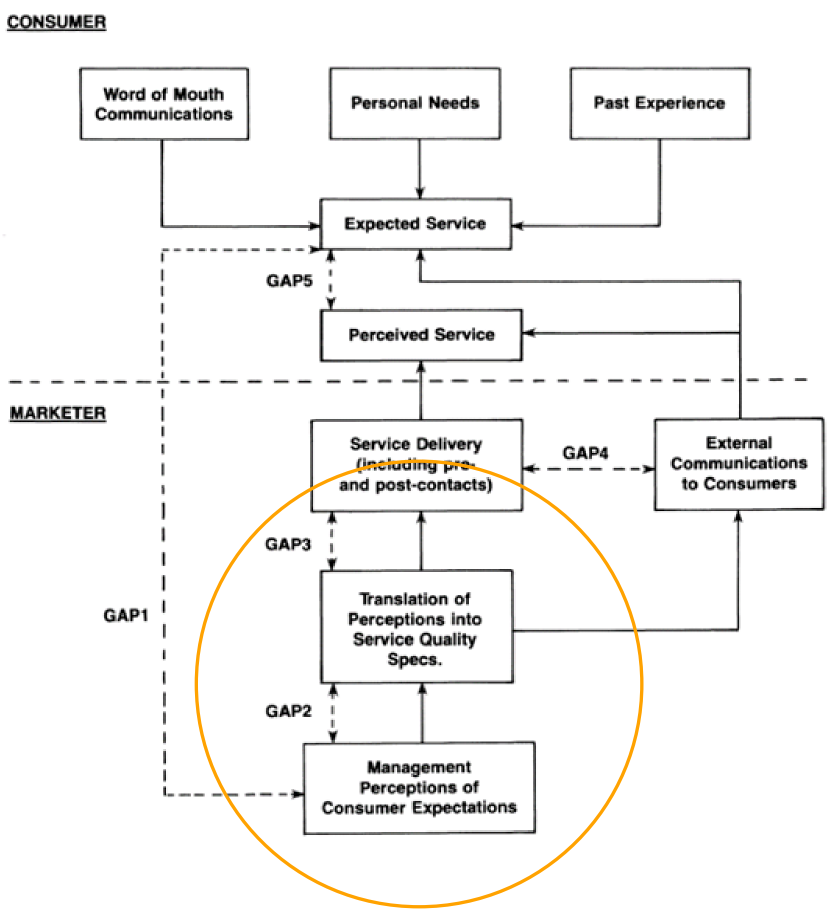


Fig.12 Scope of archetypes in gap 2 of Servqual model (Parasuraman et al.,1985)

8.3 Synthesise literary models

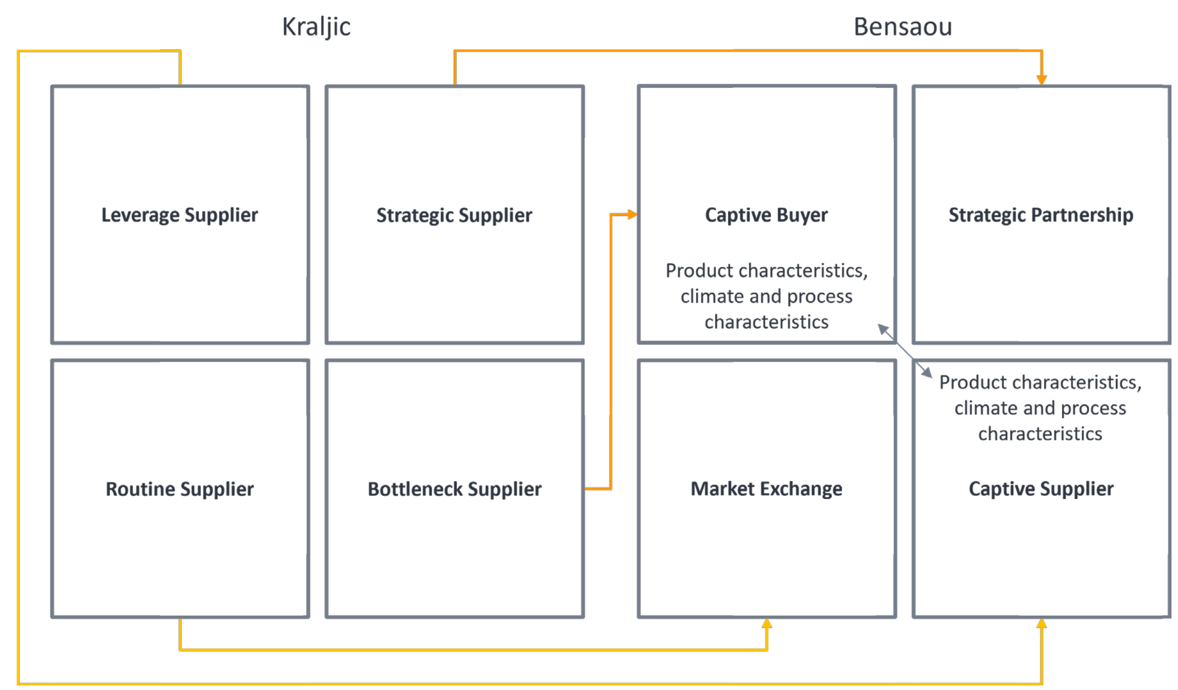
Inspired by Santema and Reunis (2003), whom note that the supplier and buyer perspective coincide in dyads, the SRM Kraljic matrix and buyer-supplier portfolio management model of Bensaou are combined to give insights of the buyer interaction for the archetypes. Not only provide these models detailed information about the buyer and the interaction for the archetypes, is also supports in determining and segmenting the archetypes in a matrix. First, the profiles of the two literary models and the external participants of this research will be matched. Secondly, the process of selecting characteristics and creating the final characteristics of the buyer-interaction archetypes will be explained.

Matching the profiles

As a starting point, archetypes are made with the Kraljic Matrix (1983) to determine customer orientation per buyer type, which means that the buyer's required product characteristics in the supply market are leading in determining archetypes in the conversion phase. The type of product, or a service, and the supply risk determine the purchasing strategy and thus the intended relation. The external participants from the customer journey analysis are plotted on the Kraljic matrix to understand the model and the perspective of these buyers in relation to Pezy Group. This exercise requires first that Pezy Group reflects and validates their role in the purchasing strategy of the buyer before the participants are linked to a strategy they perform. This validation of Pezy Group's role and the buyer's strategy is achieved in collaboration with members of the management team and the sales managers of Pezy Group.

The buyer-supplier relationships described by Bensaou (1999) include and resemble the type of supplier purchasing strategies described by Kraljic. However, the Bensaou buyer-supplier relationships and contextual profiles result from a study regarding the automotive industry in the USA and Japan. However, in consultation with the business development manager of Pezy Group it becomes apparent that in the Dutch product development industry the product characteristics of Bensaou should be switched between the captive buyer and captive supplier.

Applying the insights gathered from the survey and interviews, the plotted participants or Kraljic's type of supplier purchasing strategies can be matched (Fig.13). The Benasou matrix now complies with the context of product development services in the Netherlands, and thus the scope of this research.



Kraljic	Bensaou	External Participants	Buyer-interaction Archetypes
Routine	Market Exchange	Participant C (former)	1
Leverage	Captive Supplier	Participant A (Lost)	2
Bottleneck	Captive Buyer	Participant D (Key)	3
Strategic	Strategic Partnership	Participant B (Large)	4

Fig.13 Matching the profiles

8.3.1 Buyer-interaction archetype characteristics

The goal of the buyer-interaction archetypes is to better understand what customer orientation means for these relationships in order to adapt supplier's conversion phase customer journey and organisation. The designed archetypes are founded on the characteristics and elements of the selected literary models of Kraljic and Bensaou. Thereafter the characteristics and thus the archetypes will be enriched by the Pezy Group specific insights which are collected during the discover phase. The buyer-interaction archetypes will form the base for the framework (Fig.14).

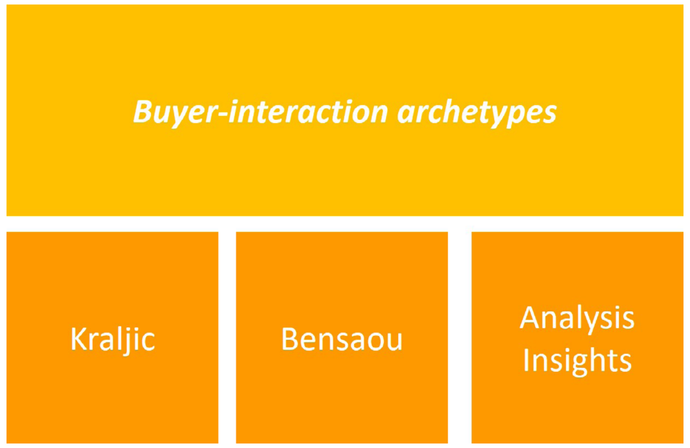


Fig.14 Foundation of the buyer-interaction archetypes

The buyer's characteristics and the supplier's interaction with them are determined in the archetypes, which is in line with the development of a persona (Van Boeijen et al., 2014). These characteristics help understand the partner. As Lavie et al. (2012) indicate, the representatives of a supplier should invest in learning about their partners or buyers, not only from a business standpoint (the development request) but also from an organisational perspective (e.g. motivation, buyer organisation decision making, politics).

Defining characteristics

This section will explain which elements of the Kraljic and Bensaou models are or aren't included in the final archetypes. The characteristics are chosen based on their description of the buyer, interaction, and providing necessary background information for the supplier to be customer-oriented. By selecting and combining the characteristics of Kraljic, Bensaou and the insights from this thesis the archetypes will include characteristics which best describe the archetype for the research's context.

Kraljic: The Kraljic matrix consists of the x-axis, the complexity of the supply market, and the y-axis, the importance of purchasing. The complexity of the supply market determines the purchase strategy and thus the intended interaction of the buyer. Therefore, this research will adopt this axis but describe it as transactional or relational interaction since this aligns with the graduation assignment. The y-axis that describes the importance of the purchase is, in the case of this research, based on the goal of the development request. The goal of the development is to generate value in different ways. The x and y-axis will be further explained later on. The characteristic of procurement focus describes the importance of the purchased product. However, Pezy Group's product is the product development service and is thus determined by the "goal" and "development complexity". The procurement focus is described as the "goal" of the intended interaction. The key performance criteria described by Kraljic is included in the buyer's purchasing "goal". This is the main goal of the buyer towards the supplier. The decision authority characteristic describes whether a decision is made central or decentral. These insights will be included in the "contact" characteristic, representing the stakeholders in the interaction.

The time horizon of working on the development request is determined by the request's complexity and the intended interaction type. As explained by Kraljic, the time horizon is included in the x-axis of the transactional or relational interaction. Through this research and in consultation with the experienced business manager, a correlation is found. The typical source characteristic is excluded since it describes whether the supplier should be local or global. However, in the case of a service supplier, whether the source is local or global does not seem relevant. On the other hand, the supply characteristic is included by the description of the x-axis. The supply characteristic of Kraljic describe the complexity of the supply market in abundance or scarcity, or as this research interprets, the number of competitors for the development request. The items purchased characteristic is included because Kraljic describes types of products. This research is scoped on a single business model, product development in projects and assignments, and thus includes only one type of product. However, the actions within this product are determined by the focus of the development request. Therefore the items purchased will be related to the "development complexity" characteristic.

Bensaou: The Bensaou axis of the buyer and supplier-specific investments into the relationship are selected to describe the "investments" in the infrastructure between both parties to share and create knowledge. In addition, the "investments" also combine the similar Bensaou characteristic of information sharing mechanisms and the process characteristics that enable the integration between buyer and supplier. The type of information shared and the way of interacting will be explained in the characteristic "Information exchange". As mentioned before, the characteristics of Bensaou are similar to Kraljic. The product characteristics are therefore combined in the "development complexity" description. The market characteristics show similarities with the aforementioned transactional and relational interaction, which will also be explained in the y-axis. The Bensaou characteristic of supplier characteristics, which explain the role of Pezy Group, in this case, is determined by the focus of the development request and the required product characteristics. Therefore this is included in the "relationship climate" because it describes the power balance of the buyer and supplier. The "relationship climate" characteristics are further described based on Bensaou's climate characteristic. The Boundary spanner's task characteristics of Bensaou describe the actions of the "contact" in the interaction. This will be further explained in the characteristic "Boundary spanning interaction."

Analysis insights: From the organisational context analysis, it becomes apparent that being complementary is important for customer orientation in buyer-supplier relationships. Therefore, the "competence level" of the buyer is included as a characteristic of the archetypes. The characteristic "development complexity" is supported by the description of Kraljic and Bensaou. The analysis emphasise the importance of this characteristic, as the current process of the Pezy Group applies the Stacey matrix to determine the development complexity. Based on the complexity a suiting proposal can be made which presumes a certain interaction. Therefore the characteristic "development complexity" is important because the project and type of interaction is determined by it. Based on the "Goal" of the buyer's purchase strategy and development request, a proposal must be developed as an outcome of the conversion phase. The characteristic "requested proposal" explains the expectation of the buyer regarding the PSA.

Characteristics of buyer-interaction archetypes

The chosen characteristics are representative of the buyer-interactions and most relevant for this project. These characteristics are described based on the buyer insights gathered from the external participants in the discovery phase. It is important to mention that these insights are gathered in the context and scope of this graduation thesis, which means that the buyer insights are specific to the Dutch product development service. Furthermore, the selected literary models' managerial characteristics and contextual factors are used as inspiration and a base for developing the archetype's characteristics.

After receiving feedback on the developed characteristics and their description from the members of the management team and the sales managers of Pezy Group, the archetypes can be developed.

The following characterises will describe the archetypes:

- **Goal:** The archetype first explains the goal of the interaction the buyer has with the supplier. The type of supplier and purchasing strategy is described. The purchasing strategy indicates the supply market and whether the intended relationship is focused on the transaction (cooperation) or relation (collaboration).
- **Competence level:** The competence level of the buyer, with regards to their familiarity with product development, is discussed. Whether it is part of their core business or not. For the supplier, it is important to know what the buyer's experience of product development is to be complementary and customer-oriented.
- **Development complexity:** The development complexity is about the strategic importance of the purchase, in this case, the service for product development and their impact or value for the buyer, and the complexity of the development request (e.g. Stacey-matrix). The assumption is made that strategic high importance purchases are more complex to develop than low importance projects. Thereby indications can be given whether new knowledge is developed and what type of projects will most likely be offered.
- **Requested proposal:** This characteristic explains the expectations of the buyer concerning the proposal. Some guidelines are given on how to offer a complementing proposal for this archetype.
- **Investments:** The investments both parties make in the relationship are explained in this characteristic. The closeness of the relationship becomes apparent based on the intended or realised investments. Investments can be made to establish an infrastructure or understanding about the coordination of development or information & knowledge exchange. The involvement in knowledge exchange is also an indicator of whether IP will be most likely be generated. IP relates again back to the complexity of the development.
- **Contact:** From this research is apparent that interpersonal relationships are important for customer orientation. Despite that interpersonal relationships are out of scope, a description of this archetype buyer's most likely contact person is given. The organisational level this contact operates at is suggested, including their function, main activity, and type of company they work for. The type of buyer contact or stakeholder in the conversion phase often indicates the type of organisation they work for.
- **Information exchange:** The type of information during the conversion phase is explained. This contributes to recognising and identifying the buyer and their interaction archetype. The intensity of contact moments and the richness of the shared information is explained.
- **Boundary spanning interaction:** The behaviour of the representatives of both buyer and supplier is explained. The frequency of contact, way of communicating and type of collaboration in the relationship is further discussed.
- **Relationship climate:** The relationship climate is a continuation of describing whether a relationship is tense or not. It explains how the interactions are and how much the parties are involved with each other.

8.3.2 Segmentation of buyer-interaction archetypes

By matching the profiles of the literary models, four archetypes can be derived from this exercise. By making nuanced changes on the buyer-supplier relationships of Bensaou, archetypes of buyer interactions can be described, which are common in the market of product development services in the Netherlands. After multiple iterations, axes are identified to create a matrix that conveys the four buyer-interaction archetypes. The Kraljic matrix has influenced and inspired the creation of this buyer-interaction matrix consisting of four segments. The buyer-interaction archetype characteristics discussed previously will later be placed in the segments to create the buyer-interaction archetypes (Fig.15).

X-axis: The X-axis represent the type of interaction initiated by the buyer for the conversion phase and is thus also intended for the execution phase. The interaction has either a transactional or relational focus or goal, inspired by Kalwani & Narayandas (1995) and Moeller et al. (2006). From the literature review, the conclusion can be made that the purchasing strategy of the buyer determines the initial interaction or relationship with the supplier. This axis is chosen because the strategy and adjoined interaction determine many other characteristics and are essential to take into account when developing a proposal for a buyer.

The transactional interaction is based on the arm-length model of purchasing. The aim is to have short or midterm cooperation. The transactional interaction indicates that there are plenty of competitors in the supply market. The buyer often applies a multi-source strategy and includes multiple suppliers for the same services (Jap and Ganesan, 2000). Thereby the buyer can mitigate risks. The word cooperation is carefully chosen because the relationship between buyer and supplier is not close. There is a distance between both parties, limited interaction and a clear division of ownership. The supplier has a supporting, cooperating role which contributes to clear, low complexity and manageable projects. The products in these projects are based on mature knowledge and technology. This is an indicator that the supplier will not work on a high importance strategic project.

The relational interaction has a long-term strategy aimed at creating value through a well-established relationship. Buyer and supplier collaborate, which means that they work on the same project at the same time and thus have plenty of interactions. People, knowledge and activities are easier shared between partners because both parties have invested in establishing a more advanced and integrated infrastructure. There is a division of responsibilities but a more shared goal. The relational interaction indicates that the service the supplier offers is hard to come by service,

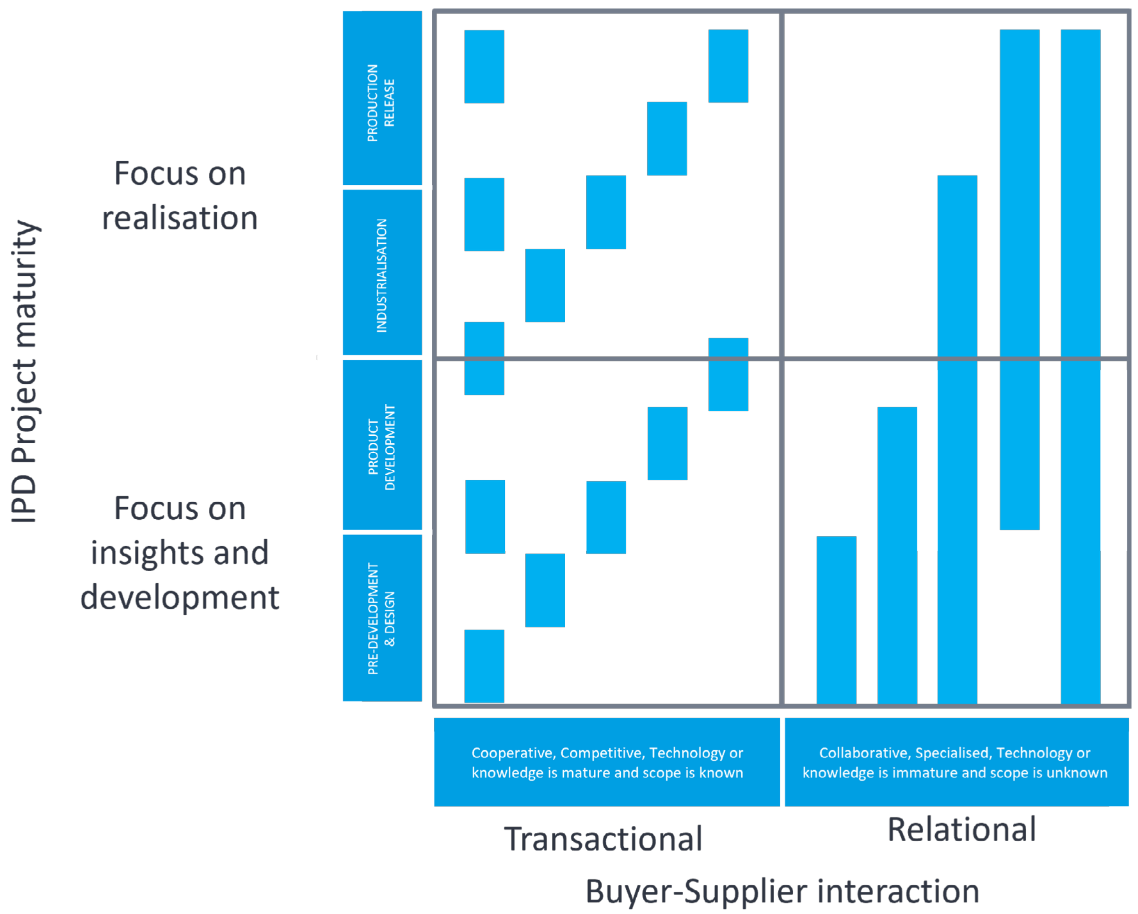


Fig.15 Segmentation of the buyer-interaction archetypes; expressed in the type of projects and intended interaction. The blocks represent the relationships and their lifetime within the project, as an example.

which not many suppliers can offer. The buyer does not apply a multi-source purchasing strategy. In addition, the products worked on during these interactions are often based on unknown knowledge or technology. This is an indicator that the supplier will most likely work on more complex and important projects.

Y-axis: Harryson (1997) explains how the nature of projects determine the intensity of buyer-supplier relationships. The Y-axis expresses the maturity of the development request or project in integrated product development (IPD) phases. The IPD phases are derived from Pezy Group's process within this selected business model.

The project's maturity determines and embodies a different goal for the development. The buyer's goal for development could either be focussed on finalising the product design for manufacturing (realisation) or gathering new valuable insights or the execution of complex development activities such as specific specialisations. The project's maturity and goal is an important factor in the conversion phase because it determines the expectations regarding the proposal to be developed.

According to Pittaway et al. (2004), the type of innovation developed is related to the type of organisation that is involved in the relationship. Incremental innovations rely on customers as their innovation partners, whereas products for a new market are developed with suppliers and consultants. From the analysis in this graduation research, it becomes apparent that the buyer interactions that focus on realisation in cooperation with the supplier are based on incremental innovations that rely on their customers' insights. This often results in transactional interactions and short-term projects (see the short blocks in the matrix). On the other hand, buyer organisations that focus on development and gathering new insights often develop products for new markets in collaboration with the supplier. Therefore a more relational interaction is required and results in long term projects (see the long blocks in the matrix).

Complementary Competencies

Based on the customer journey analysis and sessions with the different external participants, it becomes apparent that the development complexity and competence level are also important to consider when making a proposal. The complexity of the development request is determined by the product and can be redirected to the intended interaction explained in the X-axis. When the development request is based on mature technology, there are few risks, a clear scope, and the project is not complex; the purchasing will most likely be transactional. However, the oppositive is true for the relational interaction, in which more unknown unknowns are present, new knowledge and possible IP is generated.

The competence level indicates how familiar the buyer is with product development. In Pezy Group's case, buyer organisations that do not have the same competencies as the supplier are often more focused on the realisation of the product when approaching a product development agency. The buyer either generates their value and adds this to the product, for example, software, electronics or a patented solution. Or product development is not at the core of the buyer's business. They could focus on researching a specific solution or making the solution a commercial success. Organisations with an R&D department or similar competencies often seek a supplier that can support and provide convenience in development or gather and develop new complex solutions. Product development and gathering insights for development can occur in co-creation between the buyer and supplier. Co-creation is enabled by cross-functional buyer-supplier relationships, which increase joint profitability. The potential to co-create can be used to determine which relationship to strengthen (Lambert &Schwieterman, 2012). When the competencies of organisations are complementary, they will become similar over time as they interact and learn from each other. Once a buyer and supplier are too similar, the relationship will become unattractive because the knowledge overlaps too much (Baum et al., 2010). However, the opposite is also true. Being too dissimilar will result in misalignment because the parties find it hard to understand and learn from one another (Baum et al., 2010). Nevertheless, Zollo et al. (2002) say that similarity is vital for the fit between the buyer and supplier and thus the alliance success. Establishing similar organisational routines are not easily changed because they are path-dependent. So it is important to identify and recognise the organisation's differences in the buyer-supplier interactions. Discussing the different expectations of the intended interaction and project goal upfront will lead to reconciliation because both parties can be aligned before execution commences (Zollo et al., 2002). The defined archetype matrix will contribute to this mutual understanding.

8.3.3 Enriching buyer-interaction archetypes

Based on the segmentation in the matrix as discussed in the previous section it can be concluded that four buyer-interaction archetypes can be formed. In order to enrich the archetypes and to differentiate the customers, the participatory design technique of brainstorm sessions were held on the digital Miro platform (Fig.16) to find a way to enhance customer orientation for the buyers and possibilities to potentially enhance the relationship. The goal of the brainstorm sessions is to learn more about the archetype characteristics and to generate ideas on how to enhance customer orientation per archetype.

The three types of participants, which are also used in developing and analysing the current customer journey, are called upon again:

- **External participants:**
  Buyers (n=3; active, former and lost customer), individual session lasted 45 minutes
- **Internal participants:**
  Account responsible (n=2), group session lasted 90 minutes
  Operational support (n=2), group session lasted 90 minutes

The participants did not receive any preparatory instructions or information before the brainstorm sessions. The brainstorm session follows the method explained by Van Boeijen et al. (2014). The session started with an introduction of this graduation research goal and how the brainstorm will be executed.

First, the participants were asked to make a mindmap about customer orientation to break the ice, stimulate creative thinking, structure thoughts, and make them aware of the topic. They were allowed to write down all ideas, solutions, assumptions, biases and challenges. Secondly, the external participants were asked to reflect on their purchasing strategy towards Pezy Group. The Kraljic matrix is shortly explained, and together the buyer organisation is placed in the purchase strategy model. This is done to frame the ideas and answers of the buyer in the right purchasing strategy. The Kraljic matrix was chosen because of its importance in the to be finalised archetypes. In addition, this matrix is easy to explain within the timeframe of the sessions and to have meaningful informal discussions on what customer orientation is for the participant in relation to their perspective of the supplier. Because the external participants placed themselves in the Kraljic matrix, they could also be labelled as one of the identified segments or to be developed archetypes. The relevant segment and adjoined characteristics were then explained. The insights from the participants were then used to further detail the archetype characteristics. With the internal participants, more time was available. The topic of customer orientation was investigated further. After explaining the Kraljic matrix, the participants were asked how to be "customer-oriented" for this type of buyer who wields this specific purchasing strategy. The participants received an explementary scenario per strategy in which Pezy Group fulfilled the supplier role.

The notes of the valuable informal discussions were clustered and analysed. Resulting in enriched characteristics of the archetypes. Especially shared ideas on how to be customer-oriented per the Kraljic matrix segments were added to another version of the designed buyer interaction archetype matrix – the customer orientation principles.

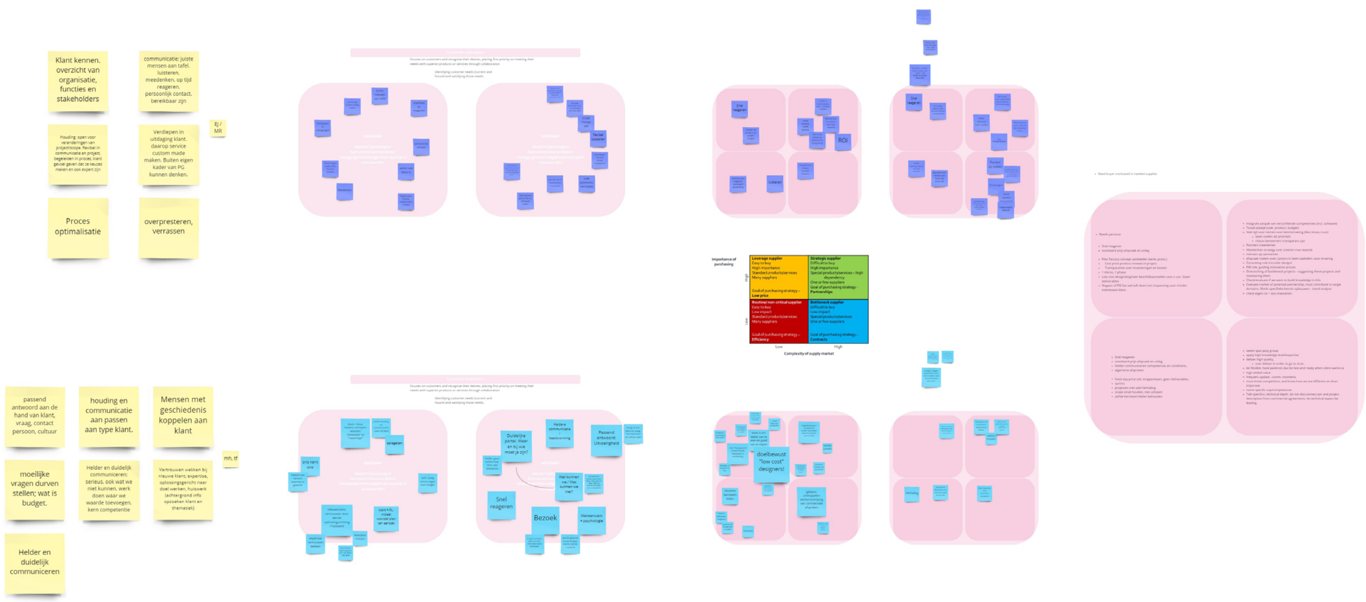


Fig.16 Impression of the archetype brainstorm-sessions via Miro

8.4 Buyer-interaction archetype matrix

Four buyer-interaction archetypes are defined through the segmentation when the previously discussed and enriched characteristics are applied to axis of project maturity and the intended buyer-supplier interaction.

- **Archetype 1** is based on a transactional buyer-supplier interaction, initiated by the buyer, and the development request is focused on executing developing activities or gathering unique insights for development. This archetype is called Structured Sophie.
- **Archetype 2** is based on a transactional buyer-supplier interaction and the development is focussed on realisation in a cost-effective manner. This archetype is called Pragmatic Pete.
- **Archetype 3** is based on a relational buyer-supplier interaction and is focussed on realising the product development request in a joint effort to acquire mutual benefits. order. This archetype is called Equal Emily.
- **Archetype 4** is based on a relational buyer-supplier interaction and is focussed on highly specialised development activities and gathering insights for solving complex challenges. This archetype is called Contract Chris.

Together with the axis and characteristics, the buyer-interaction archetype matrix is created (Fig.17). Taking the first letter of every archetype creates the SPEC buyer-interaction archetypes.

As described, the archetype matrix is the result of combining the selected literary models of Kraljic and Bensaou and is tailored to the context of Pezy Group by including the insights of the research's participants. The archetypes are the result of multiple iterations after meetings with internal and external stakeholders to discuss the characteristics. The archetype matrix enables the supplier to identify the four discovered buyer-interaction archetypes. With the matrix the supplier is able to differentiate the customer experience based on the archetype's specific values and needs with regard to their intended relationship and development goal.

The X-axis represents the intended buyer-supplier interaction or relationship. The interaction can be either transactional or relational focused. Transactional meaning that the buyer-interaction is intended for a short-term cooperation of the product development service which include a clear scope and little risk because it is based on mature technology. The transactional interaction, is influenced by many competitors in the supply market. The relational buyer interaction is intended on building an infrastructure between the parties to exchange complementing value. The relational interaction aims to build lasting relationships in which the supplier provides hard to come by services often for the development of complex and high risk projects.
The y-axis represents the maturity of the project, which is the phase the developed product is in. The project phase can either have a focus on realisation or a focus on development & gathering insights. Realisation aims to design products for manufacturing and production. The focus of development is targeted to executing design activities whereas gathering insights is targeted to learning through design methodologies such as prototyping and testing.

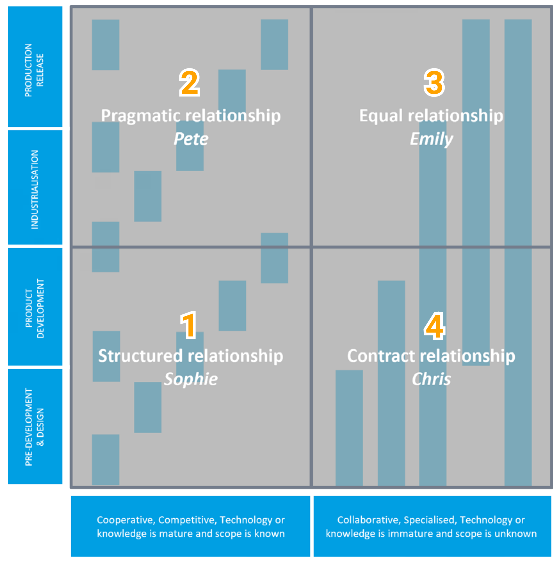


Fig.17 SPEC buyer-interaction arcetype matrix

8.4.1 Validating buyer-interaction archetype matrix

The archetypes are validated by a small sample group of seven various buyer contacts of Pezy Group. Google forms collected the survey answers of the buyer organisations. The goal is to gather more insights into the contact, their role, their experience with purchasing from a service supplier and to gather feedback on whether the created archetypes are sound. The archetype matrix is first explained. Then, the participant can select one archetype from the matrix that best describes the current buyer interaction. After that, the participant may select one or two archetypes to indicate whether the buyer organisation is fluid and is a combination of multiple archetypes. The reason for this question is the risen suspicion that the type of project and goal is a strong variable that influences the relationship. The same buyer organisation and contact might have changing expectations regarding the interaction and the customer orientation based on the product development request. Finally, the participants are provided with the option to give any feedback, comments or tips to further enhance the matrix or customer orientations for their archetype.

The results indicate that the archetypes are accurate descriptions. The interaction the buyer intents to have with the supplier is indeed depended on the focus of the development request. However, the focus shifts depending on the phase or changing scope of the project. The detailed survey results can be found in the appendix (C-3.4).

8.5 SPEC buyer-interaction archetype matrix

The finalised buyer-interaction archetypes are presented in this simplified visual matrix (Fig.18). A short summary is provided per archetype.

The appendix (6.1-2) provides a summary and explains the characterises in more detail per buyer-interaction archetype.

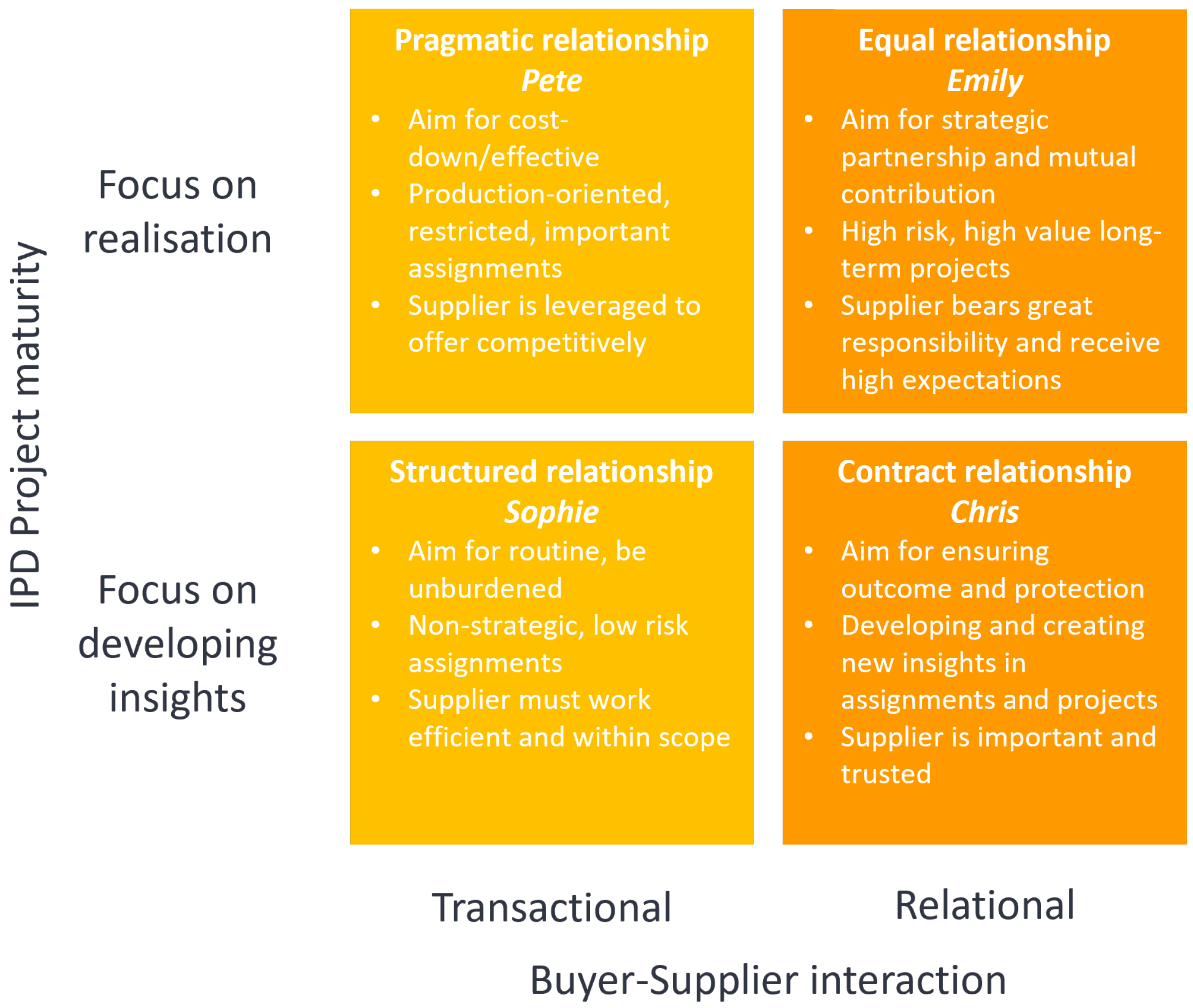


Fig.18 Summary of SPEC buyer-archetypes in matrix

9 Opportunity area.

The result of defining the byer-interaction archetypes result in four opportunity areas which can be further explored. As Lambert & Schwieterman (2012) indicates, customers can be segmented by the type of interaction, customer needs and values. Thereby customer loyalty can be enhanced to provide customised products and services to the segmented customer base. For each archetype a framework can be designed which enhances and implements customer orientation for the supplier organisation in buyer-supplier dyads. Due to the time restriction of this graduation research only one archetype will be selected to continue with.

9.1 Defining framework

Pezy Group, a commercial organisation, the framework's goal is to increase service quality and to support the conversion phase related activities that may increase the degree of profitability indirectly. As the introduction indicated, not trying to understand and meet customers' expectations result in additional costs and effort (Brook, 2021). Since Pezy Group is changing and growing, the need and importance of understanding the customer have become more noticeable. As Pelham (2000) indicates, being customer-oriented is related to organisational growth, and understanding the customer needs are therefore essential determents of the performance. The envisioned framework is not only to support commerce. As Buttle (1996) describes, the acquisition of new customers is stressed too much in CRM literature instead of bonding with customers. The envisioned archetype specific framework could be seen as a possible support for CRM. A support to better understand interactions, the buyer-supplier context and the customer's needs rather than solely focusing on whether buyers are new or existing customers. Organisations should be organised around CRM and customer orientation (Brannback, 1999). When there is a company-wide understanding of the customer relationships, the customer-facing employees are better equipped, enabled and motivated to establish long buyer-supplier relationships by offering proposals (PSA) that meet the buyer's expectations (Hong-kit Yim et al., 2001).

The framework is a structure to guide the supply organisation in becoming customer-oriented for a certain archetype. The set of buyer-interaction characteristics and customer orientation principles result in actions that enable an enhanced customer orientation of the organisation. The envisioned framework consists of three parts (Fig.19) to fulfil the assignment of this graduation thesis; (1) A single SPEC buyer-interaction archetype of the matrix functions as starting point for which an (2) archetype specific customer journey and (3) an implementation roadmap will be designed.

The previously discussed four archetypes increases the supplier's understanding of the different buyer-interactions and adjoined expectations. Thereby the supply organisation can know what the differences between the organisations are and how to cope with them in order to be complementary and thus customer-oriented. Lavie et al. (2012), found that acknowledging organisational differences can reduce the negative implications of these differences without sharing how the organisations actually cope with them. The buyer-interaction archetypes aim to reconcile the differences before the buyer-and supplier cooperate or collaborate in the execution phase. The buyer-interaction archetypes enable the supplier to understand the buyer better, can be used to discuss organisational differences and thereby contributing to aligning the proposal with the buyer's expectations.

Fig.19 Envisioned framework; every archetype requires a specific customer journey and roadmap

The framework proposes a specific customer journey per buyer-interaction archetype which aims to enhance the customer orientation in the organisation's process. The archetypes and supply organisation's process are context dependent. The conclusion can be made that every archetype expects another service for aligning the buyer and supplier, and thus requires another customer journey to experience customer orientation. One process of a customer-oriented conversion phase for all buyer-interaction archetypes is not possible. The archetype specific customer journey specifies how the process of the organisation, the conversion phase of Pezy Group, can be optimised in order to enhance the customer orientation in buyer-supplier dyads. The specific customer journey, or alliance specific routine as Zollo et al. (2002) describe it, bridge the differences. The supplier organisation is advised to adjust their organisational routines based on the intended relationship or interaction.

The decision for including a customer journey in the archetype specific frameworks originates from the initial customer journey analysis. Since this graduation thesis aims to optimise the conversion phase, part of the analysed primary process of Pezy Group to address the organisational challenges this method is chosen. In addition, a customer journey depicts the buyer-supplier relationship and interactions so that the specifically designed changes for the to be selected archetype will become clear.

Finally, the last part focuses on implementing the organisational changes of the archetype specific customer journey. Actions are plotted on a time-line to present a possible approach of introducing the archetypes and implementing the framework consisting of the specific customer journeys. The commonly used approach for communicating the implementation of a designed change is the roadmap. A roadmap will be designed to demonstrate how the framework can be implemented in the organisation of the supplier.

9.2 Selecting specific framework

9.2.1 Rationale of selecting archetype

The decision for selecting an archetype for which the specific framework will be designed is based on the following rationale.

The Sophie archetype corresponds with the Kraljic's non-critical and Bensaou's market exchange profiles, indicating that these segments offer the opportunity to purchase based on standardised products. Standardised products and adjoined proposals can therefore increase the efficiency the archetype is after. The products are the product development service in this case. This is possible because the development is based on mature technologies, little innovation, with low risks and uncertainties. Therefore a clear scope can be maintained and offered in the PSA. Lambert & Schwieterman (2012) describe how these non-critical and leverage items (Sophie & Pete archetype; Market exchange and Captive supplier) do not require cross-functional teams to interact between the buyer and supplier. They suggest that the buyer select the supplier based on price and service. Although these two aspects are important, this graduation research points out that according to the developed customer orientation principles for routine customers (conversion and after that execution), it is important to offer efficiency through a continuity of the involved supplier employees. This graduation thesis tends to suggest that a cross-functional team or small buyer team of the supplier can enhance the customer orientation for the Sophie archetype. In the description of the Sophie archetype, the continuity of involved people enables efficient communication by an approachable contact and a more effective way of working since the introduction is not required anymore. It is decided to continue to design a solution in which the supply organisation can be customer-oriented for the Sophie archetype. Especially because it challenges the finding from literature.

The buyer-interaction archetypes are applied to the sales data of Pezy Group. In the appendix (C-6) the findings with regard to the current situation of existing customers are analysed. In addition, the Sophie buyer-interaction archetype has development requests which focuses on the development and insights. Contrary to the focus on realisation, the focus on product development complies with the strategy of Pezy Group to attract more projects and assignments from these types of customers. The management team indicates, and the data insights confirm, that the primary process is best designed for Chris archetype. Therefore they would like to know how the conversion phase can be more customer-oriented for the Sophie archetype.

In conclusion, a customer orientation framework will be specifically designed for the Sophie archetype. The design brief will further determine the to be developed archetype specific framework.

9.2.2 Archetype Structured Sophie

To ensure that the four archetypes are sound the characteristics and customer orientation principles were further discussed in the previously discussed brainstorm session. The business development manager and account director provided valuable insights to describe the archetypes in more detail. Archetype Sophie is selected to further develop the specific customer orientation framework for.

A short summary of Sophie is described below.

Characteristics Structured Sophie

- **Goal:** Efficiency in development through routine. Short-term collaboration.
- **Need:** Wants to be unburdened because of lack of competence, resources, or new insights.
- **Competence level:** Familiar with product development.
- **Development complexity:** non-strategic assignments, with well-known technologies and existing knowledge.
- **Requested proposal:** Clear scope, Low risk activities, fixed price.
- **Relationship Investments:** Little investment in future plans and improvement of relationship. No IP is developed.
- **Contact:** Operational contact, involved in the project on a product level. E.g., lead engineer, project manager at an SME.
- **Information exchange:** Formally the minimum amount of narrow information. Informally high quantity of contextual information because of familiarity.
- **Boundary spanning interaction:** Not interdependent of supplier. Work separately on development requests.
- **Relationship climate:** Positive interaction and reputation with same contacts. No early-stage involvement, so no close collaboration.

A more detailed description of Sophie and the other three archetypes can be found in the appendix (6.1 and 6.2).

Customer orientation principles Structured Sophie

Through the brainstorm session the principles of being customer-oriented for the archetypes can be established. Understandably all archetypes want their expectations to be managed accordingly and to have transparent and quick interactions. For each archetype, the key customer orientation principles are displayed on which to focus. The customer orientation principles of Structured Sophie will be explained in the following part. The principles regarding the other archetypes can be found in the appendix (6.3)

Sophie requires structure and convenience. To establish efficiency for convenience, a routine interaction is required, focusing on a straightforward transaction or market exchange. Many other suppliers in the supply market compete to support the buyer in their low risk, clear scope development request. The cooperative relationship for achieving the development goal is based on short-term projects which must be offered in a structured way without any unclarities.

To be customer-oriented for Sophie means:

- Being completely unburdened by well-defined and structured proposal and project approach.
- Clear expectations of deliverables and characteristics.
- Proposal is offered at a fixed price.
- Clear agreements build on previous experiences.
- Continuity of involved supplier employees to enable:
    - Efficient communication by approachable contact;
    - An effective way of working because introductions are not required.
- Early prediction regarding scope management, knowing when the project is finished and whether an additional project is required to achieve the intended goal.

10 Design brief.

In this design brief, based on Roozenburg & Eekels (1995), the problem definition, opportunities and goals are summarised, functioning as the starting point for the development phase, starting in the following chapter.
To recall the assignment as described in the introduction of this graduation thesis:

"Design a framework to enhance and implement customer orientation in buyer-supplier dyads."

At the end of the define phase it is possible to frame the design goal better. This design brief will further describe the focus in order to fulfil the assignment. Thus, the scope of the contribution of this graduation thesis to the enhancement and implementation of customer orientation.

10.1 Problem definition

The problem owners, the management of Pezy Group, are currently dissatisfied with the current conversion phase of their primary process. As analysed, the current situation presents and confirms the challenges indicated by the management.

The following challenges are prioritised to solve in order to enhance the customer orientation:

- The buyer receives proposals that do not meet their expectations (goal or motivation) or wait too long for a reply.
- The account responsible does not fully understand the motivation and context of the buyer's development request. Consequently, the account responsible applies an ad hoc approach to develop a proposal every time. The account responsible is unable to brief the operational support correctly because of the limited understanding of the customer, or the information gets lost in translation. As a result, it requires a lot of effort from the account responsible for developing a proposal together with operations, hence the misaligned proposal for the buyer and long lead time.
- The operational support is asked to create a feasible proposal based on limited information input from the account responsible. In addition, the operational support is often not involved in meetings with the buyer and does not receive feedback on provided input for the proposal.

These challenges revolve around the internal and external misalignment of expectations. The SWOT-matrix identifies the challenge of understanding the buyer and their expectations of the supplier and interaction. The theme of understanding is further defined by archetypes. The Sophie archetype is selected to design a framework for enhancing and implementing customer orientation, thereby addressing the aforementioned organisational challenges.

10.2 Opportunity in literature

From the literature review, it becomes apparent that the buyer-supplier relationship literature is mostly described from the buyer's perspective. The buyer applies purchasing strategies to reduce costs and exploit suppliers (Kraljic, 1983). An opportunity arises to research buyer-supplier relationships from the supplier's perspective, which try to increase the number of profitable customers (Choy et al., 2003), by acquiring new customers or more efficiently by retaining customers (Blattberg and Deigthon, 1996; Buttle, 1996).

The literature review explains how it is important for suppliers to develop and manage long-term profitable customer relationships (Curry & Kkolou, 2004; Lambert & Schwieterman, 2012) to deliver the requested service. The literature review makes it clear that being customer-oriented, putting the customer interest first and applying the customer knowledge correctly results in superior value created in the service and thus strong relationships (Kohli & Jaworski, 1990; Narver & Slater, 1990; Piller et al., 2010). Lavie et al. (2012) further describe the literature gap of how to bridge organisational differences and the need for an approach on how to achieve inter-organisational alignment. Especially gap two, as described by the SERVQUAL model of Parasuraman et al. (1985). Gap two describes the difference, or misalignment, between the perception of the consumer's expectations and the supplier's service quality specifications, which are noted in the developed PSA.

This graduation research sees an opportunity to enhance the customer orientation of suppliers in buyer-supplier relationships by improving the understanding of their customers, thus of the buyer's perspective. Buyer-interaction archetype Sophie is selected to design a framework for. The envisioned framework will contribute to understanding what customer orientation for this archetype means and how to comply with this as a supplier organisation. The knowledge about a customer, customer understanding, is about understanding and recognising the changing needs depending on the context. Knowing the changing customer's needs is also known as customer closeness, as Jeong & Hong (2007) described. Applying customer knowledge correctly results in aligning the supplier activities with the customer needs, also known as CRM (Hong-kit Yim et al., 2014).

10.3 Design goals

The main goal of this graduation thesis is to enhance and implement customer orientation in buyer-supplier dyads. However, the goal of the graduation thesis can be split into practical and academic goals.

- Pezy Group desires a situation that includes a more efficient conversion phase in the primary process and improves service quality by enhancing customer orientation in buyer-supplier interactions.
- The academic contribution aims to design a framework to enhance customer orientation of service suppliers by improving their understanding of buyer-supplier interactions. Thereby contributing to the literature of buyer-supplier relationships, customer orientation, sales, and organisation design

From the defined SPEC buyer-interaction archetype matrix it can be concluded that each archetype has different expectations and intentions. Customer orientation for each individual archetype is different and thus requires an archetype specific framework (Fig.20), consisting of a customer journey and implementation roadmap specifically designed for them.

The following "How might we"-questions determines the design goal of the envisioned framework for the selected Sophie archetype:

- How might we, as a supplier organisation, improve the alignment of the buyer's expectations and needs with regard to proposal development for a Sophie buyer-interaction archetype in the customer journey of the conversion phase?
- How might we, as a supplier organisation, implement the proposed changes of the archetype specific conversion phase customer journey?

This graduation thesis hypothesises that the proposed customer orientation framework, determined by the archetype specific customer journey, will enhance customer orientation of the supplier in buyer-supplier dyads towards the intended customer.

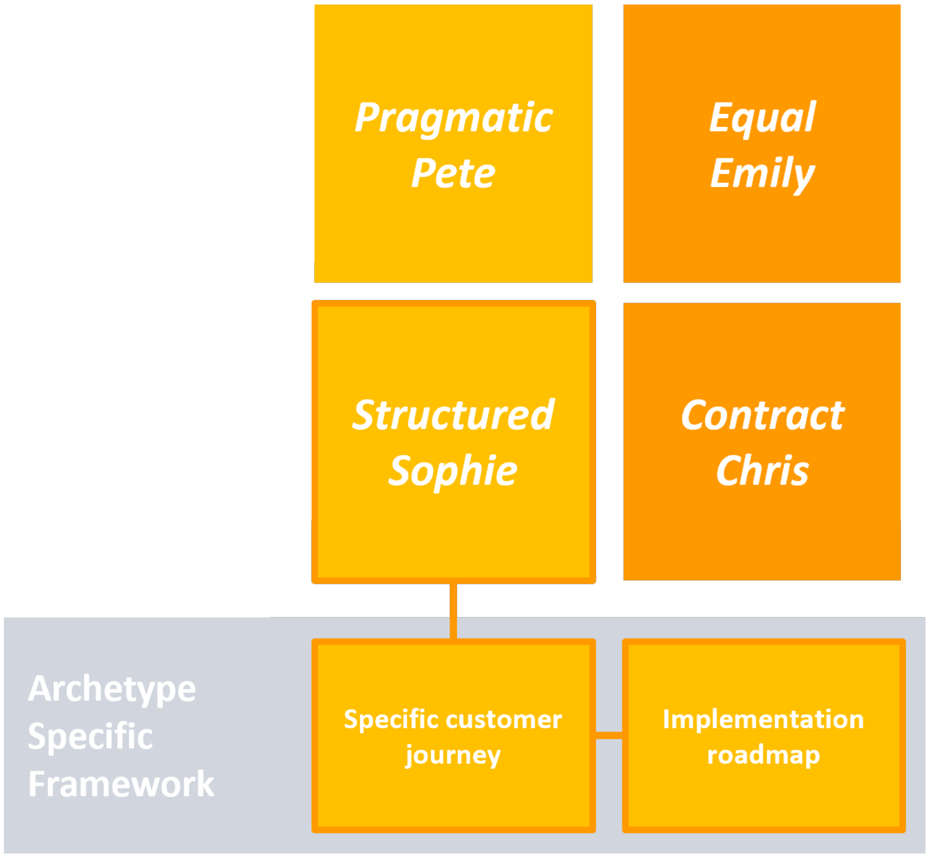


Fig.20 Archetype specific framework for Structured Sophie

In the development phase, the goal of the design brief will be developed. In the previous phase, the buyer-interaction archetype concept of Sophie is selected to continue with. This envisioned framework of a specific customer journey for the Sophie archetype must enhance the customer orientation of the supply organisation. This development phase (Fig. 21) will describe the process of creating the customer journey and the adjoined roadmap for implementation.

The Sophie buyer-interaction archetype is used as a starting point for ideating on overcoming Pezy Group's organisational challenges and designing a customer-oriented customer journey of the conversion phase. In the future, the same development process must be followed to complete the archetype specific framework for the other buyer-interaction archetypes.

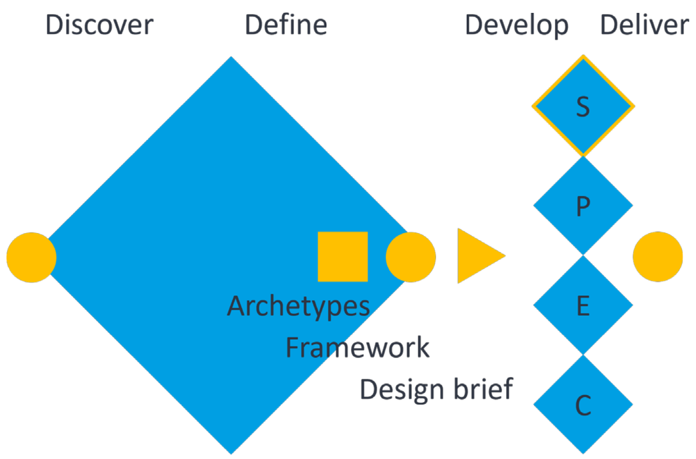


Fig.21 Double diamond approach specific for archetype Sophie adapted from The Design Counsil(2019)

11 Ideation.

As depicted in image.2, a brainstorm session was organised to generate ideas on addressing the organisational challenges. During the brainstorm session, the organisational challenges of Pezy Group are presented in the scope of gap two of the SERVQUAL model. The same participants are involved, as is explained in 8.3.3, in the enriching session of the archetypes. The participants included that stakeholders of buyer contact, the supplier's account responsibles and the operational support. Via the Miro platform, the relevant customer journey timeline of the conversion phase is presented with the identified challenges. The challenges were described as problem statements to validate if the participants recognised these.

Finally, the participant-specific "How could you…?" questions were introduced before brainstorming five minutes on each topic; aligning expectations and needs, understanding buyers, understanding colleagues, sharing information and communication.

The ideas regarding the "How could you…?" questions were clustered and evaluated using the C-box technique (appendix 8). The C-box matrix categorises and evaluates ideas based on their innovativeness and feasibility (Van Boeijen et al., 2014). Some of these ideas and suggestions were considered whilst designing the archetype specific customer journey.

Img.2 Brainstorm session with internal participants

11.1 Concluding ideas

From the ideation sessions, an overview is given in Fig.22. It becomes most apparent what the internal and external do not want in the conversion phase.

External: About aligning the expectations and needs, the ideas mainly focused on what the proposal should include, like fixed pricing, gateway phases and a transparent calculation, with multiple options for the approach. In addition, the way of communicating is important. Obvious ideas of rules of conduct were shared, for instance, honouring existing commitments, regular updates regarding (scope) changes, timing, and being open and honest.

Concerning the exchange of information, the external participants indicate that an IT platform for sharing documents or communicating the progress of the conversion phase is not required. The establishment of personal relationships is especially emphasised. Ideas on stimulating this include the continuity of previously involved contacts and quick, direct and regular contact moments just via phone or mail. To convince the stakeholders of the buyer's, other collaboration ideas such as joint ventures and pilots can always be suggested. However, it is more important to showcase the complementary competencies, and possibilities with argumentation.

Internal: To better align and understand all involved, the internal participants mention that sparring sessions for scoping would be beneficial. Other creative and innovative ideas like roleplaying the buyer and supplier or extensive pre-investigations of the buyer's development request were excluded by the c-box because it increases the conversion phase's lead time and is thus not feasible. However, it is important to know the background and context (e.g. application area, market), the developed archetypes try to form the base of this idea. The customer-specific background information should be captured on the CRM platform.

Regarding the information exchange, the internal participants indicated it would be an improvement if everyone knew which clients and projects were currently running. The idea of an online CRM dashboard per client, their background and the information of which colleagues have worked for this buyer should also improve the resource allocation. But most mentioned ideas revolved around hands-on, pragmatic and short meetings in which information is shared an approach is determined.

The ideas generated in the brainstorm sessions go mainly into detail of how to communicate and the structure of the proposal. The scope of this assignment excluded solutions for a CRM or IT platform. Nevertheless, this session is aimed at finding ideas to improve the process. A key idea is to enhance the establishment of the relationship by stimulating the continuity of the involved contact, giving more responsibility to the internal stakeholders and limiting the number of handovers between involved internal colleagues.

Fig.22 Impression of the customer journey brainstorm-sessions via Miro

12 Concept journey.

Santema & Reunis (2003) indicate how sales organisations should create and manage different interfaces for different customer types, just as buyers do with different purchasing processes. The envisioned framework aims to add value to the literature of buyer-supplier interactions from the supplier's perspective. The customer enhancing framework proposes that each buyer interaction archetype requires a tailored customer journey to their expectations to be customer-oriented. This segment will explain how the concept of the archetype specific customer journey is developed.

The ideas generated in the brainstorm sessions, which aim to solve the organisational challenges in the conversion phase, were gathered in the C-box.

The most promising ideas (feasible and innovative) were taken into account. Before the concept of the Sophie archetype specific customer journey is created, the ideas were applied to the factors mentioned by Zeithaml et al. (1988). These factors indicate what causes the misalignments of the service supplier's attempt to match the buyer's expectations and consequently influences the service quality. When the constructs of Zeithaml et al. (1988) are roughly applied to the case of Pezy Group, some linkages can be made with the identified challenges. The constructs grasp the tensions within the organisation well. In this thesis, the constructs are interpreted and used as ideation for providing solutions to overcome gap two of the SERVQUAL model in the case of Pezy Group.

- **The management commitment to service quality:** The focus of the buyers' management should be beyond short-term profit, cost reduction and a product-based approach. Pezy Group must discover and understand what is essential for the buyer. In some cases, the buyer might be persuaded to create value for the long term by applying a user-based approach. Thereby the buyer can, in turn, better serve its customers.
- **Goal setting:** A mutual agreement must be made regarding how quality is defined. Requirements can help in ensuring a certain outcome of the service. In the case of Pezy Group, proposals, a type of contract, is made to create a mutual understanding of how and what will be delivered as the result of the service.
- **Task standardisation:** For specific routine jobs and tasks, operations can be standardised using technology. Pezy Group can reduce the effort of its employees who are involved in the conversion phase by standardising certain operations. An example would be to standardise proposals for specific customers and requests.
- **The perception of feasibility:** The customer-facing people should make a realistic indication of whether the customer's expectations can be met. Meeting the expectations is based on the involved capabilities of the organisation that can meet the agreed-upon specifications. An idea would be to involve the operational employees of Pezy Group in an earlier stage to ensure the feasibility and expectations regarding the proposal. In addition, involving the operational employees earlier and giving them more responsibilities limits the handovers in the process, thereby reducing the lead time and preventing misconceptions.

Creating a specific customer journey starts with determining a customer base (Van Boeijen et al., 2014). The previously developed buyer-interaction archetype matrix in the define phase, provide a clear description of the selected customer base of Sophie archetypes by a multitude of characteristics. The insights from the selected archetype and the generated ideas in relation to the factors of Zeithaml et al. (1988) will be projected on the current customer journey. By also applying the customer orientation principles of archetype Sophie, which corresponds with the characteristics of this archetype, to the current customer journey many actions could be simplified or redesigned. Some actions could be deleted in order to keep the process efficient for the Sophie-interaction. Other actions are moved to the end to ensure a smoother process. This process is depicted in Fig.23.

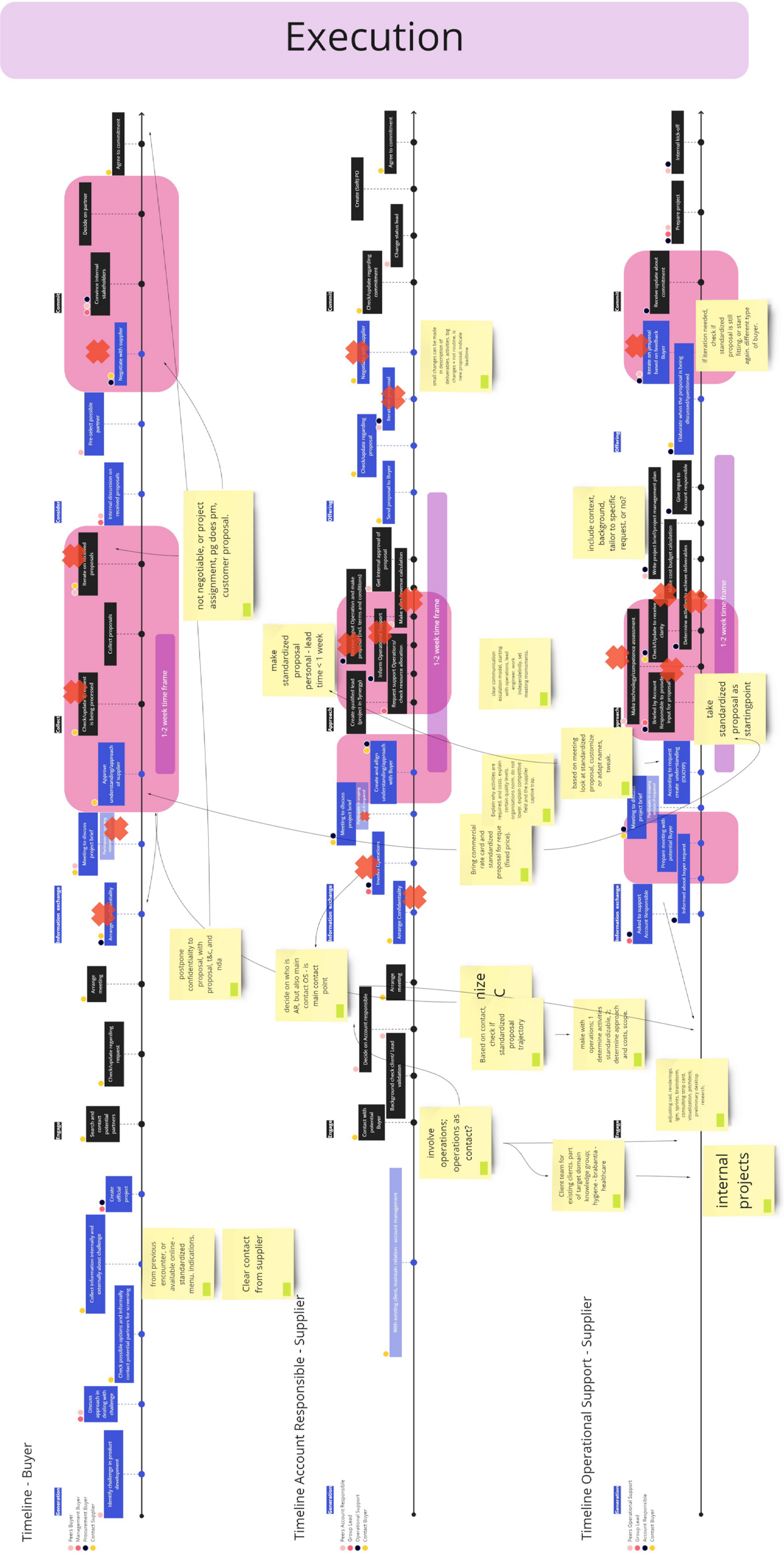


Fig.23 Process of redesigning the current customer journey for archetype Sophie

12.1 Concept specific customer journey

The concept specific customer journey (Fig.24, appendix 9.1) for the Sophie archetype aims for efficiency in the relationship and interactions. The characteristics describe that the development request have low risks and a clear scope for the short-term transactional interaction with the Sophie archetype. Therefore the idea of standardised proposals, which must be developed, is feasible and included in the concept to make the lead time of the conversion phase faster.

Consequently, an important change is now possible for these kind of buyer-interactions; the operational support employees can be empowered to establish direct inter-personal relationships with the buyer contact. These routine buyers can be managed by the operational support in which the standardised proposals enables them to give quick estimations, make fast and sound quotations, and establish efficient relationships based on familiarity. Less validation with the buyer and internal handovers are required which reduce misconceptions and increase feasibility of the proposal. In addition, the account responsible is there to support and guide the operational support. This set-up is possible with existing buyers. However, with new buyers the account responsible is in the lead and, when the Sophie archetype is identified, will introduce the operational support in an early state which will then become the buyer's main contact.

The standard proposals for these type of projects ensure clarity regarding activities, planning and the deliverables. The standardised proposals should offer some room to personalise the quotations and include buyer-specific detail. This structured approach results in a clear proposal which limits the margin of negotiation. The concept of this customer journey showcases the professionalism and experience of the supplier and thereby contributes to the trust the buyer perceives.
Activities such as the arrangement of an NDA, with permission of the buyer, can be moved to the end of the conversion phase. To know all the details of routine, short term, low risk, clear scope projects is not required up until execution. However, when buyers insist on an NDA this is still possible.

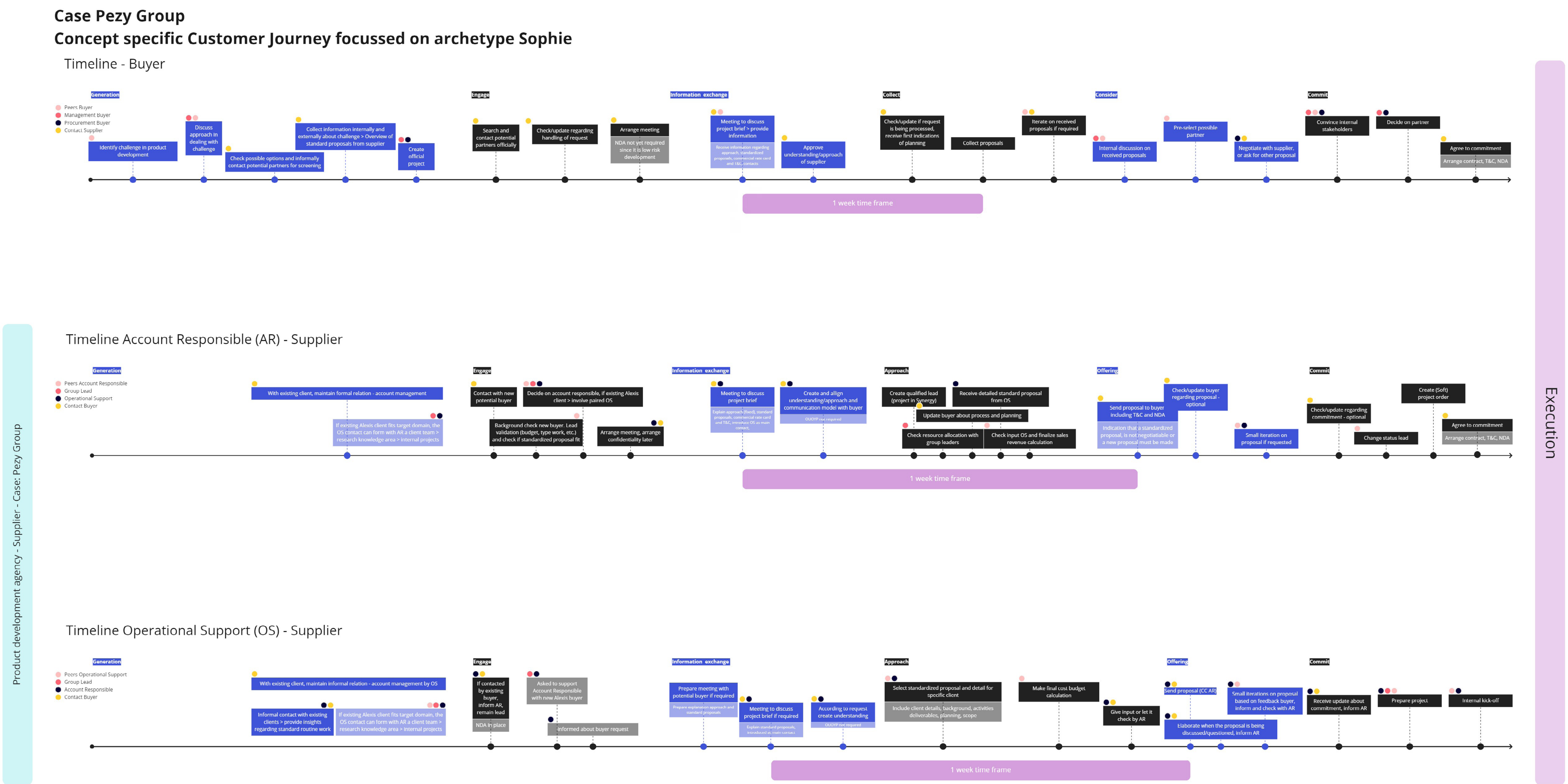


Fig.24 Concept of the specific customer journey for archetype Sophie in the context of the Pezy Group

13 Validating concept.

According to Kellen (2002), strategic outcomes of CRM implementation, such as the archetype specific customer journey, should be measured from the customer's perspective. To optimise the design framework, the archetype specific customer journey will be validated with the internal and external participants.

Not only will this exercise validate the newly designed concept of the Sophie specific customer journey, but also the selected buyer-interaction archetype.

Three types of stakeholders participated in the evaluation session: (all familiar with Pezy Group and their current conversion phase process).

- **External participants:** Buyers who fit the selected archetype (n=4), individual session lasted 60 minutes
- **Internal participants:**
  - Account responsible (n=4), individual session lasted 60 minutes
  - Operational support (n=4), individual session lasted 60 minutes

The session started by presenting the four buyer-interaction archetypes. Then the selected archetype of Sophie was discussed in more detail. The characteristics and principles to be customer-oriented were explained and discussed to receive any confirmation or feedback. After that, the procedure of the evaluation sessions was explained. The goal is to evaluate the designed concept of the archetype specific customer journey with stakeholders.

A scenario is described in which the selected archetype, or buyer, is searching for a certain interaction based on the purchasing strategy and has a predefined project with a certain focus. For instance the need for a some first ideas achieved by a design sprint of two weeks. This project has low risks, a clear scope for which will be ideated, clear deliverables (ideas, concept sketches) and is achieved within a short-term and manageable timeframe.

The participant is asked to fulfil their natural role when the future scenario of their perceived customer journey is presented. The facilitator, or in this case the graduation student, represents the other two stakeholders (either the buyer, account responsible or operational support). The goals of the other participants are shortly explained to the participant. By doing this brief simulation, the intended interaction is evaluated and further determined.

Thereafter the facilitator goes through the relevant stakeholder timeline of the customer journey and explains the activities chronologically, supporting tools, involved stakeholders and the interactions with them. During the presentation of the future scenario, the participant is free to provide comments, remarks, make suggestions, share ideas or ask questions. The facilitator continuously checks the opinion of the participant. Finally, the archetype specific customer journey timeline of the stakeholder is evaluated in a short form of multiple Likert scales.

The designed Likert scale evaluates the concept customer journey based on the expected experience of the conversion phase in comparison with the current customer journey. Per aspect the participant had to indicate and explain why the concept was an improvement, unaffected or worsened. An impression of the validation sessions is depicted in Fig.25.

The aspects for the external participants are; the overall process, the lead time of the process, expected clarity regarding communication between buyer-supplier, the supplier's customer orientation, the established trust of the supplier based on the conversion phase, the accessibility of the supplier organisation, the alignment of expectations regarding the proposal and development request.

The aspects for the internal participants, divided in account responsible and operational support, are; the overall process, the lead time of the process, expected clarity regarding communication internally, ratio effort of role and function, the division of activities and responsibilities, the supplier's customer orientation.

13.1 Lessons learned

From the evaluation forms (appendix 9.2) it can be concluded that in general (11/12) the concept customer journey specifically designed for the Sophie buyer-interaction is more customer-oriented. It is expected by the participants that the set-up of the concept conversion phase enables the creation of a proposal which meets the expectations of the buyer in case of the Sophie buyer-interaction.

External participants - Buyer

The buyer indicates that establishing a relationship with the operational employee feels logical . Before, in some cases it felt as a wasted investment to inform the account responsible instead of the operational employee who might execute the development request. The buyer indicates that the personal relationship and familiarity of the context and background is important for the established trust and thus the decision making of selecting a supplier. However, the buyer indicates that is unclear who to contact with which contact and how to escalate.

Internal participants - Supplier – account responsible

The account responsible indicate that they are glad and happy to trust some account management activities to the operation. In case of the Sophie buyer-interaction archetype the operation can manage the accounts which allows the account responsible to spent time on other types of clients and buyer-interactions. However, some form of overview regarding the sales opportunities must be present for the commerce department to make sales prognoses.

The evaluation of the concept by the account responsible explain that not all employees have rights to sign a contract. The account responsible indicate that they want to guide and support the operational employees, under the condition that they do a final check and sign the proposal for proxy reasons, before the operation shares the documents with the buyer.

In addition, the account responsibles indicate that, as per the concept, the activity of checking the resource allocation and planning with the group leaders slows down the conversion phase. Once the operational employee receives more responsibilities for their account, they should also check their resource allocation and planning for the to be developed proposal.

Internal participants - Supplier – operational support

The operational support indicates that by this concept they feel that they are allowed to be in charge of customer relationships again. Provided that there is time available to manage accounts and their development requests. From their perspective, establishing a relationship on a product level is the way to go. Some say that managing the client relationship has always been part of their function, whether other operational support employees indicate that they prefer the account responsible being in charge of the relationship and proposal development. It can therefore be concluded that this role should fit the personal preferences and capabilities of the employee.

An important note all indicate is the need for guidance and support on the commercial aspects of managing an account and possible escalations, guiding the buyer through the conversion phase and the development of the proposal.

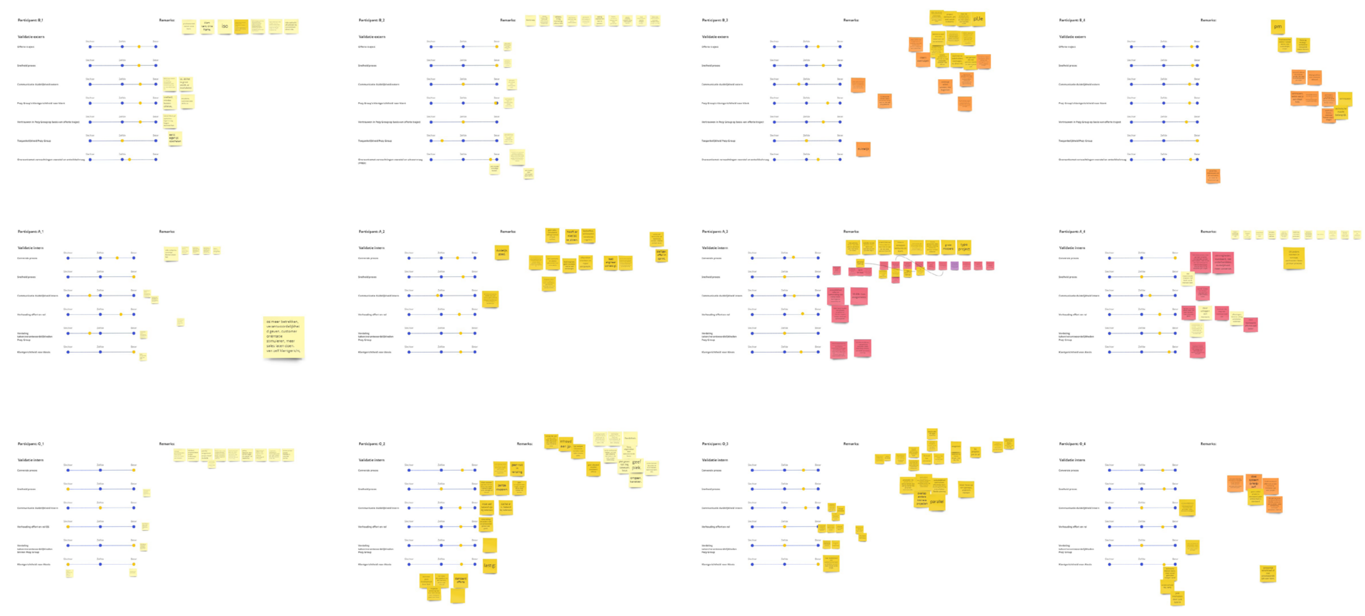


Fig.25 Impression of the final step of the validation session, the evaluation with Likert scales

In this deliver phase, the result of this graduation thesis is presented. The developed deliverables for the assignment and design goal are explained. Finally, this graduation thesis is concluded with final remarks, advice and suggestions for future research.

In the define phase, the contours of the framework were presented based on the created archetypes. The SPEC buyer-interaction archetypes are segmented and presented in a matrix. The archetype specific framework indicates how supply organisations should organise and implement their process tailored to an archetype. Doing so enables the organisation to be customer-oriented in the interactions during the conversion phase. This proposed structure and framework (Fig.26) is unique in the context of the product development service industry in the Netherlands.

In the development phase, a concept of the specific customer journey was designed for the selected archetype, Sophie. The deliver phase will present the proposed specific customer journey and the implementation roadmap. Both elements are part of the framework specifically designed for enhancing and implementing customer orientation in a supply organisation for the Sophie buyer-interaction archetype.

This graduation thesis results in delivering a buyer-interaction archetype specific framework consisting of a customer journey and implementation roadmap. Thereby enhancing the customer orientation in buyer-supplier dyads. This framework can be applied in the process of determining and establishing relationships. The buyer's expectations are managed internally and externally, and their request is translated into a proposed contract of the intended relationship. With this customer orientation framework, the internal process of the supplier is optimised because communication and alignment are based on a better understanding of the buyer's expectations, as described in the archetypes. In addition, the proposal (or PSA) can be better aligned to the buyer's needs. Therefore a quicker lead-time can be achieved. The expected result for the supplier is that this framework supports the identification of the buyer-archetype, adjoined customer orientation principles and thus the conversion phase-related activities, which may contribute to the profitability. Consequently, it is expected that the service quality experienced by the buyer will improve, and the buyer-supplier relationship will strengthen.

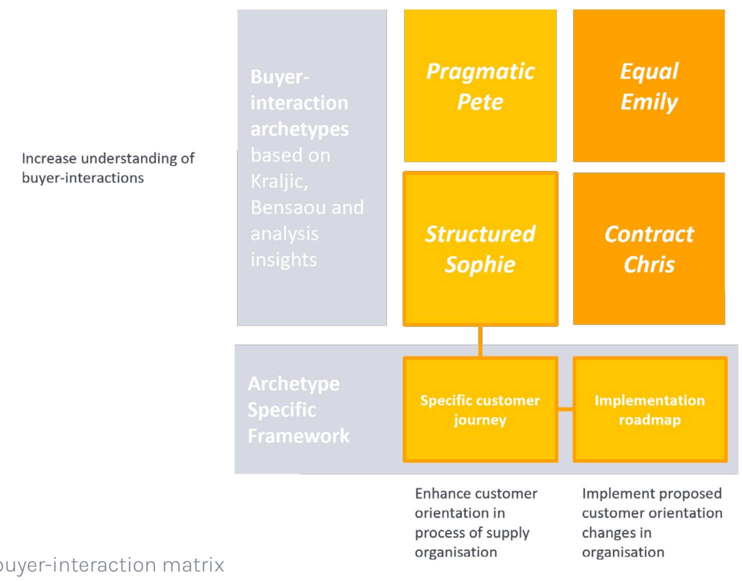


Fig.26 The archetype specific framework based on the SPEC buyer-interaction matrix

14 Sophie's journey.

For the outcome of this thesis to be more concrete, the first framework element of the Sophie specific customer journey is applied to Pezy Group. For supply organisations such as Pezy Group to have a customer-oriented conversion phase process the customer journey is explained in this chapter.

14.1 Archetype specific journey explained

The redesigned customer journey for archetype Sophie is finalised after one design iteration by validation with the internal and external participants. The lessons learned in the development phase have been applied to this customer journey. One design iteration is sufficient for this archetype to ensure a robustly designed outcome. However, it is uncertain if this would be the case for detailing the other archetypes. The customer journey specified for the Sophie archetype, see the overview in Fig.27 or the detailed version in appendix 10.1, is based on the current and previously designed customer journey. A summary is given about the conversion phase actions, however, the roles, activities and responsibilities will be further explained in this chapter (14.1.1-3).

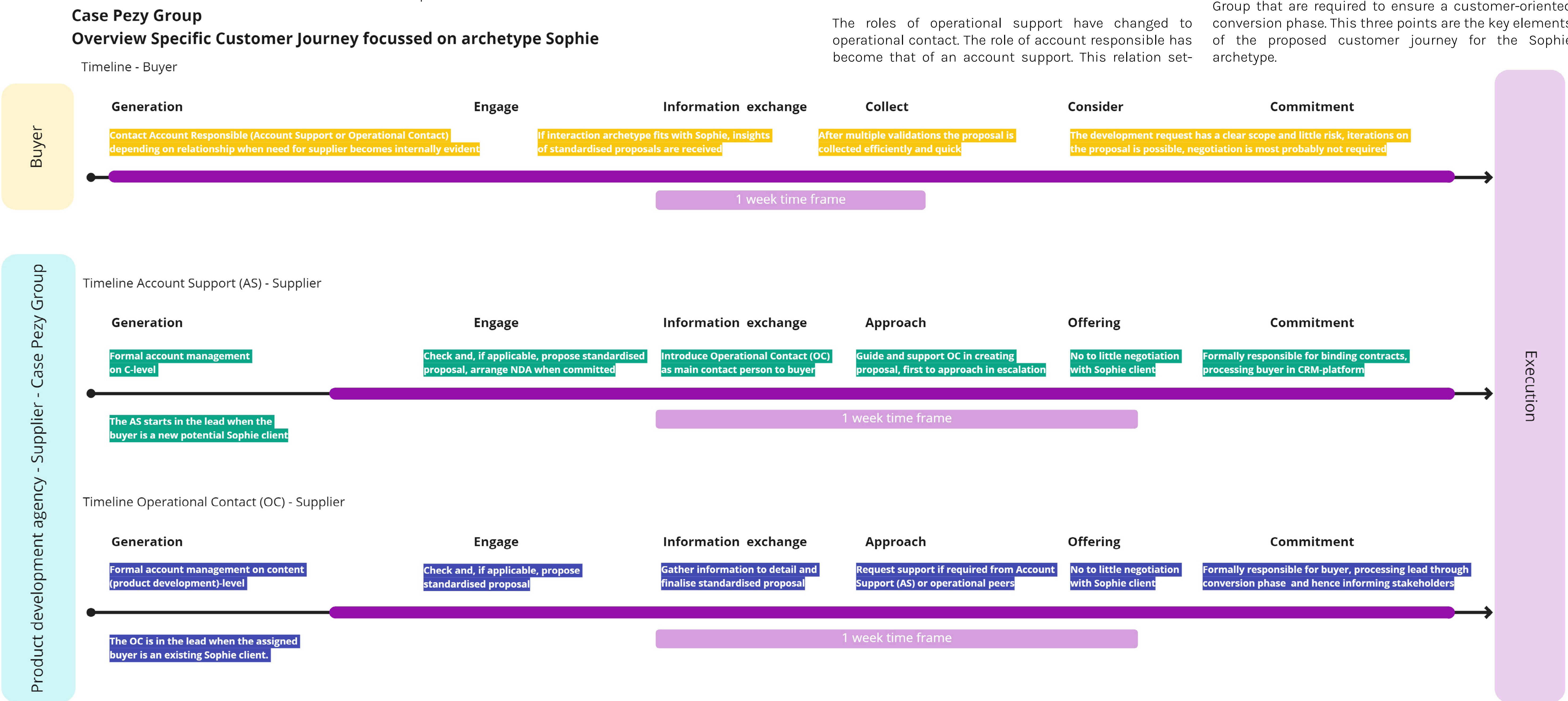


Fig.27 Summarised customer journey for Structured Sophie buyer-interaction archetype

The buyer starts in the generation phase, preparing the development request and scouting potential suppliers. In the engagement phase, the first contact is made with the supplier. The supplier identifies the buyer-interaction archetype, in this case, Sophie. This phase is followed up by the information exchange regarding the buyer, supplier and request. After that, the supplier will determine the approach and make an offer. The buyer will then collect the proposals from multiple parties. The proposals are then considered and a commitment is given to the supplier with the best fit, which meet the expectations the best. The phases of this customer journey remain the same, however, the details regarding roles and activities have changed for the validated archetype Sophie. The designed solution aligns with the customer orientation principles and characteristics of Sophie as described in appendix 6.3.

The roles of operational support have changed to operational contact. The role of account responsible has become that of an account support. This relation set-up ensures that the buyer-interaction goal of efficiency through routine, and thus familiarity of the contacts, is achieved, following the limited information exchange and interactions as described in the characteristics. The relationship for Sophie buyer-interactions is focussed on routine and efficiency, which aligns with the expected competence level and development complexity of the buyer. To create more clarity, a communication and escalation model is created. To enable the desired customer orientation, standardised proposals are created to support the operational contact and unburden the buyer. These standardised proposals offer an almost non-negotiable clear offer, with a clear scope and a fixed price. This contributes to establishing clear expectations regarding deliverables and activities.

The following three points are advised changes for Pezy Group that are required to ensure a customer-oriented conversion phase. This three points are the key elements of the proposed customer journey for the Sophie archetype.

14.1.1 Role change for improved interaction

To optimise the interaction and make the whole process more efficient, this thesis advises Pezy Group to empower operational support to become the main contact for the buyer. The operational support is the most customer-facing employees of Pezy Group, but are not currently empowered to establish buyer-supplier relationships. This customer journey allows this. From now on, the operational support is not supporting but is in the lead. They are called operational contact from now on. The operational contact is responsible for the formal contact, account management, and the proposal's development. Meaning that the operational contact will have meetings with the buyer, check the planning with the group leaders and send the proposal. By doing this, the operational contact will be better involved, have direct input to understand the request, and the proposal will be more feasible.

But most importantly, the operational contact establishes a closer relationship with the buyer on the content level of the product development request, which is based on knowledge and experience rather than a relationship on a sales and contract level. Operational contacts such as lead engineers will be assigned to existing Sophie archetype customers. The operational contact must be connected with buyers of which they already have a fit, such as relational history, type of development or application knowledge.

This change of roles enables buyers to invest directly in the interpersonal relationship with the supplier's employees, who will also execute their "routine" development requests, ensuring a more efficient project kick-off and collaboration. The buyer will interact with the same contact, ensuring consistency for more efficient cooperation, and without the in-between handover of the account responsible. This makes the interaction more cost-effective since less time is lost in internal alignment. The external participants, which fit the Sophie archetype, indicate that the proposed relationship set-up will contribute to a more customer-oriented customer journey, enhancing the experienced conversion phase process.

The account responsible is responsible for the lead and Sophie customer on the CRM platform to make sales prognoses and is the proxy for all proposals and contracts. In addition, the account responsible is still involved with existing customers on a c-level when opportunities present themselves on this level or when the operational contact escalates—the account responsible functions mainly as a support for the operational contact. Therefore the account responsible will be called account support. The operational contact can always ask questions, check and spar with the account support. However, with new Sophie customers, the account support starts as the lead contact. The reason is that commercial validation steps require a commercial perspective or background.

It is advised not to burden the operational contact too much with these activities besides their main activities. However, once the buyer is validated and identified as Sophie, the account support will hand over the contact to the operational contact during the introductory meeting with the buyer.

For instance, the sales employees are unburdened and can focus on the more challenging and high-potential Chris archetypes. They no longer serve as a hatch between the buyer and the operation, which was certainly the case with the type of development request from the Sophie archetype.

The operational contacts, consisting of lead and senior developers, are expected to manage low risk, clear scope, and short-term projects. This customer journey involves them in an earlier stage to be responsible for the account and development of the proposal they might execute. Thereby enabling the operational contact to be in charge of the buyer-supplier relationship on a product development level, as is in accordance with their function description. However, it is important to form a small buyer team for certain Sophie buyer-interaction archetype accounts to facilitate and empower this proposed role change. This small buyer team consists of the operational contact and the account support.

14.1.2 Communication and escalation model

A communication and escalation model (Fig.28, appendix 10.1.1) for Pezy Group is introduced and added to the archetype specific customer journey process to further support the proposed role division of the operational contact and account support. This model will create clarity between the buyer and supplier regarding who to contact and how & when to escalate when the operational contact or buyer cannot resolve any potential issues. The communication and escalation model also captures the division of responsibilities between the operational contact and account support role.

The buyer contact and operational contact have direct contact. The majority of the relationship management and communication occurs between these two stakeholders. However, the operational contact ensures that the account support is in the loop. The account support maintains an overview for sales prognosis and identifies business opportunities on a more abstract level, such as the c-level. The operational contact can always receive support, advice or guidance from the account responsible, who will also check the proposal before sending it. This is required because of the proxy agreements within Pezy Group. Once there is an issue, the operational contact or buyer contact can escalate first to the account support of the supply organisation. The buyer contact can also escalate within their own organisation. Once the issue cannot be resolved, escalation continues to move up on the managerial ladder until there is a solution.

Case Pezy Group
Communication and escalation model between Supplier and Buyer archetype Sophie

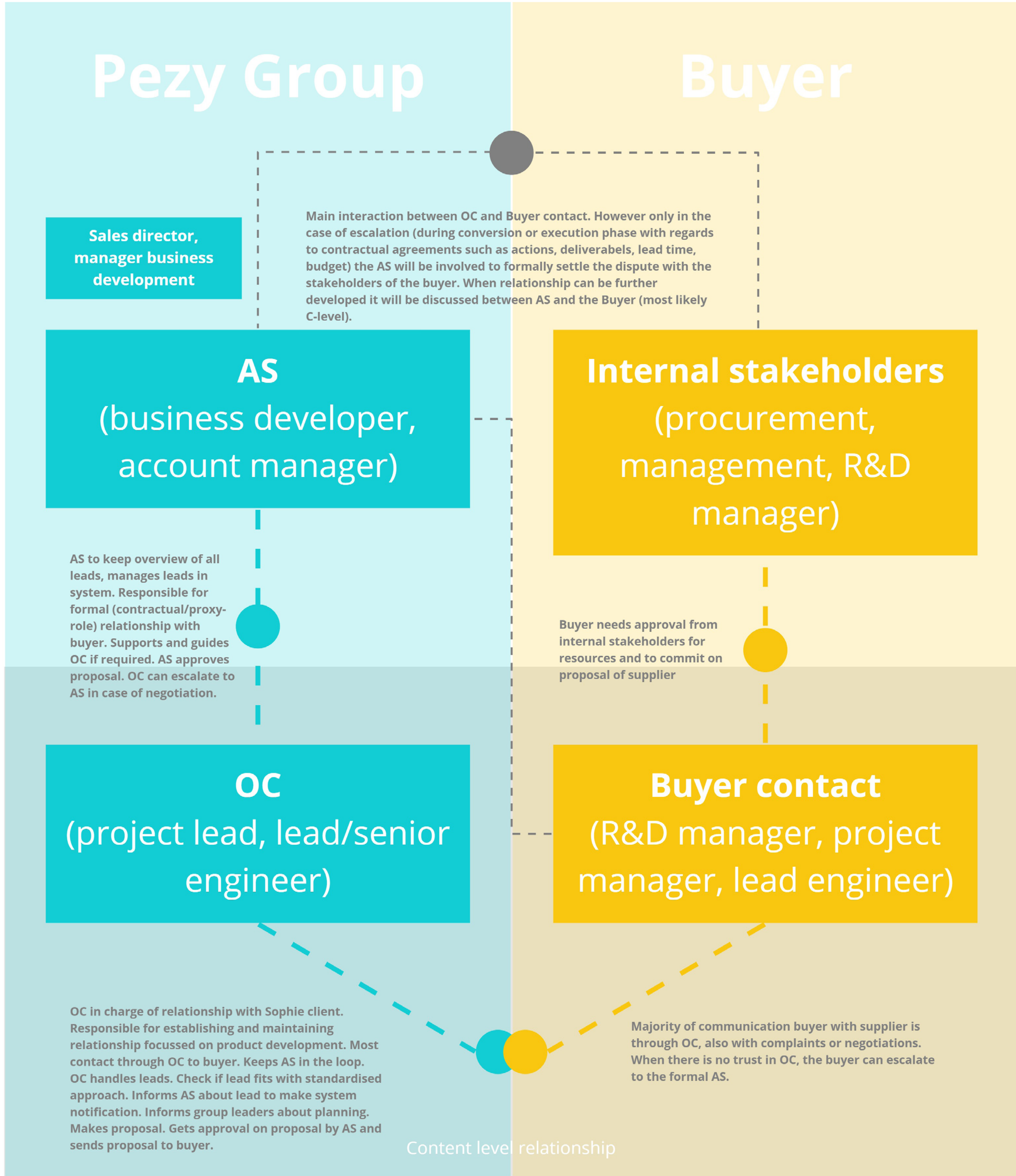


Fig.28 Communication and escalation model

14.1.3 Standardisation of proposals

Piller et al. (2010) describe that the buyers receive either standardised or customised proposals for an organisation to be customer-centric and competitive. Pezy Group applies an ad hoc approach in which every proposal was highly customised. Standardised proposals must be introduced to ensure that the operational contact can fulfil their new proposed role. The development request of the buyer is based on routine, including a clear scope, short runtime and little risk. These characteristics enable standardisation. Examples would be design sprints of a limited time, scoping or brainstorm sessions, render assignments, specific CAD activities such as FEM analysis, desk research, creating a presentation etc. Pezy Group must develop standardised proposals in collaboration between the operational and sales employees. Once the standard proposals are in place, the operational contact only has to slightly modify or personalise them to fit the buyer's expectations. For instance, the buyer name, motivation of development request, and context-specific description of activities and delivers must be noted.

The supplier can take a stronger position in the conversion phase and competitive supply market through these standardised proposals. The supplier can indicate to the buyer that there will be no to limited negotiations with these low risk, clear scope projects because these types of proposals are based on experience and knowledge achieved in a history of executing these routine activities. Because of these manageable activities, it is advised to postpone the establishment of NDA's between both parties after commitment since the development request does not require the sharing of confidential information. However, once the customer insists on an NDA before any commitment, the supplier must obey.

As strengthened by the findings of Kraljic and Bensaou, the Sophie archetype is suitable for standardised products or services. The framework of this graduation research believes that customer orientation is possible by standardisation, contradicting the claim of Hong-kit Yim et al. (2001) to some degree. Standardised proposals are possible when the buyer and their expectations are understood well, predefined modules or proposals are made, and there is some room for the supplier to personalise it, just as Peppers and Rogers (2004) describe. An empowered representative should, according to Williams & Attaway (1996), be able to vary the product offering to achieve a mutual goal in the buyer-supplier relationship. However, this requires a supportive environment or culture, which stimulates creativity. A creative representative should be proactive and is, therefore, able to create tailor-made offerings to the precise needs of the buyer. The designed customer journey creates this supportive and creative environment for the operational contact who will develop a feasible offering, with guidance of the account support to ensure a commercial viable contract. Clear, standardised proposals manage the expectations of the Sophie archetype as is described in the customer orientation principles. The operational contract finalises the standardised proposal and is checked by the account support before sending the proposal to the buyer. The lead time of creating a proposal for a development request is accelerated in the proposed customer journey. A quick indication of how the supplier plans to fulfil the development request contributes positively to the buyer's experience.

15 Implementation Roadmap.

Pezy Group indicates that the commercial department has been professionalised, dividing the responsibility of establishing and maintaining the buyer-supplier relationship solely by the commerce department. Currently, the organisation's focus on billable hours that are directly relatable to revenue restricts the operational employees. However, to enhance the supply organisation's customer orientation, this situation needs to change. The proposed framework, expressed by the designed archetype specific customer journey, commends to share the buyer-supplier dyad with the operational employees.

This framework proposes an investment in enhancing buyer-supplier relationships, which cannot be directly expressed in revenue. Operational contacts should be given the time to invest in the relationships. This thesis advices that the organisation should share the relationships of Sophie buyer-interaction archetype clients with the operation to support conversion phase activities and thereby offer a better service quality. The proposed framework of the archetype specific customer journey and roadmap for implementation enables this.

The main outcome of this graduation research, the customer journey, which can be seen as an organisational design innovation that cannot directly be realised. To implement the Sophie buyer-interaction customer journey, a step is made towards making it operational in practice. A roadmap is presented on how to adapt the organisation to implement the complete framework, including the other SPEC buyer-interaction archetypes, to enhance the supplier organisations' customer orientation. A roadmap provides a visual means to communicate a strategy and provides direction and coordination to realise the customer orientation framework and potential future opportunities (Simonse, 2017). The roadmap is specifically designed for supplier organisations in the B2B service industry of product development. The roadmap visualises the main focus of implementation, namely the redesigned conversion phase for archetype Sophie. The other buyer-interaction archetypes and primary process phases are out of scope for this assignment but are still shown in the roadmap to indicate future research.

The roadmap presents a possible strategy on how to achieve the future vision of customer-oriented organisations, from conceptual framework to reality. The future vision of the roadmap is to develop and implement a customer orientation framework of all four archetypes, which enhances customer orientation in all phases of the supplier organisation.

15.1 Implementation roadmap explained

The implementation strategy is plotted on a timeline, divided into three horizons. The horizons are determined by introducing the customer orientation framework per primary process phases, corresponding with the customer or supplier relationship lifecycle. The roadmap (Fig.29, appendix 10.2) is especially dedicated to the scope of this assignment, implementing horizon 1.

Horizon 1: The presented roadmap first focuses on implementing the specific customer journey per archetype in the conversion phase, which aims to improve the customer understanding and orientation of the commerce and operational department. By the end of 2022, the first horizon of enhancing customer orientation for determining and establishing of all identified buyer-interaction archetypes is achieved.

By the end of 2022, it is known how to be customer-oriented for all archetypes, including their specific customer journey in the conversion phase. In this graduation thesis, the archetype Sophie is further elaborated on. The roadmap describes how to implement the framework for this buyer-interaction archetype in more detail. It is expected that a similar approach is required for the other three archetypes.

The implementation phases, activities, and involved stakeholders for realising the framework in the supplier's organisation, hence enhancing their customer orientation, are in further detail explained in the roadmap.

Horizon 2: The second horizon aims to understand all archetypes and be customer-oriented in the generation phase of the primary process.

Horizon 3: The final horizon focuses on the execution and evaluation phase of the primary process. The supply organisation understands and knows how to be customer-oriented for the various buyer-interaction archetypes once the relationship is retained, recovered or terminated.

Case Pezy Group - Roadmap for supplier - implementing the customer orientation framework of SOPHIE

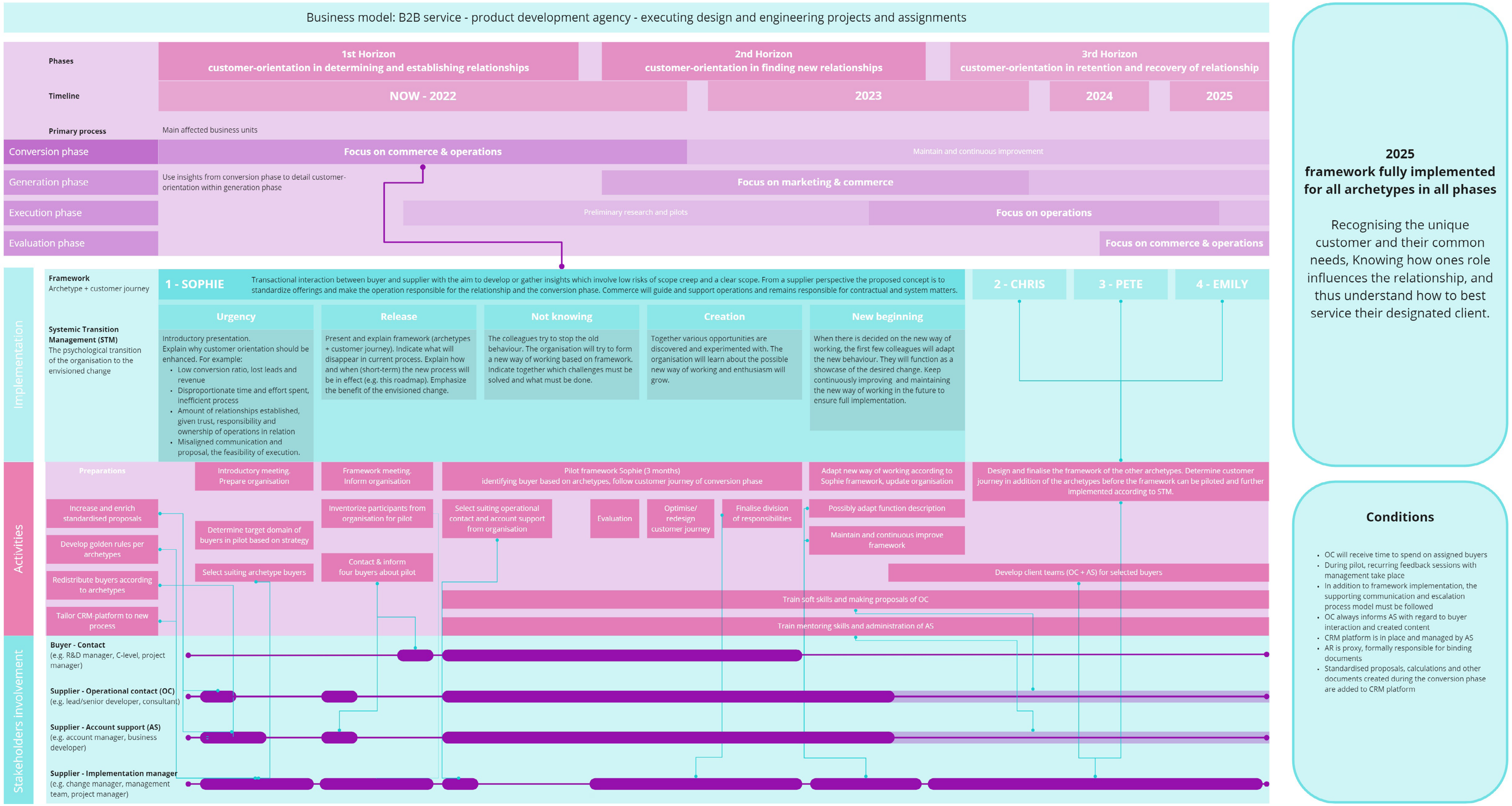


Fig.29 Implementation roadmap for Pezy Group to change customer journey for archeytype Sophie

Horizons and timing explained
The order of the three horizons is based on the relationship lifecycle sequence. However, the first two steps are switched. The conversion phase of Pezy Group scopes this graduation project, but it is also advised in this roadmap that other service supply organisations also begin with this phase. The conversion phase provides a good base for discovering customer orientation principles of the suppliers' buyer interactions, the buyer's expectations, the supplier's organisational challenges, and tailoring the organisational process to these requirements.

The conversion phase aims to turn leads from new or existing contacts into a joint execution of the buyer's development request. The buyer selects their partner, and the supplier tries to understand the buyer's expectations. This phase is part of the first horizon because the customer understanding and, consequently, the customer orientation becomes apparent. These insights can then be applied to the generation phase, part of the second horizon. In this phase, the supplier executes marketing and other commercial activities to find new buyer interactions to start a relationship with, which is valuable for both organisations. Understanding the customers by the archetype segments enables to detail sales targets better, but more importantly, understand how to be customer-oriented in this phase.

After that, the roadmap proposes to enhance the customer orientation in the execution and evaluation phases. The previous insights and learnings should enable the supply organisation to be customer-oriented in the execution phase. In this phase, the buyer and supplier will work together either cooperative(if the interaction is transactional) or collaborative(if the interaction is relational). During the execution, the supplier can manage the buyer to maintain or grow the relationship. Eventually, the relationship will diminish once the development requests have been fulfilled or when a party is dissatisfied. This final part of the third horizon aims to enhance customer orientation when the relationship is evaluated and potentially dissolved. An example of gathering this feedback is through net promoter scores.

Implementing the customer orientation framework and changing the organisation and its people to adopt this new way of working takes time. The time pacing of completing the horizons is based on an estimation, but depends on the barriers and obstacles the supplier will encounter when implementing.

15.2 Advised implementation
To implement the archetype specific customer journey of Sophie, the supplier needs to redesign its organisation by changing and integrating the new structures, processes and roles (Worren, 2021), also known as organisation design. The designed framework results in an archetype specific customer journey and is thus focused on the organisation's process.

However, Worren (2021) also states that organisation design is fundamentally about the people who fulfil their role in the organisation's process. Guiding the employees of service suppliers to adapt to the envisioned change is called "change management". Nevertheless, change management is complex. Studies show that two out of three transformation initiatives fail (Sirkin et al., 2015). Sirkin (2015) mentions that employees' resistance is seen as a barrier to change management's success. This barrier suggests that the failure to engage the affected parties at the beginning of the process ensures resistance to change and the potential failure of the change project itself (Singh, 2020). Therefore the approach of this graduation research applied participatory design methodology, included many contextual enquiry activities (e.g. survey, brainstorm, interviews, analysis current customer journey) which included the stakeholders. This allowed the affected stakeholders to share their ideas and need for the designed solution to meet their requirements. This resulted in the designed framework, which enhances customer orientation, but is also supported by the stakeholders.

To implement the generated solution, the roadmap is presented. The roadmap includes activities that are based on change management. This approach is chosen to support the supplier who is on the brink of engaging in a change project and must overcome the resistance the implementation of the framework will cause. A change management expert of Pezy Group mentioned which change management method could be applied. The systemic transition management (STM) model of Thiecke & van Leeuwen (2018) is therefore included and advised to support the implementation strategy, which is visualised in the roadmap. However, no research has been performed whether this change management method is best suited for implementing the proposed customer journey. Nevertheless, the STM model provides a clear structure to communicate and express which, what and when certain activities need to be accomplished.

The systemic transition management model is used to manage organisational change. A change from the current situation (A) towards an envisioned situation (B), the future vision. The STM model takes into account the context since organisations need to be adaptive to survive. In addition, the STM model sees an organisation as a system in which everything contributes to the organisation's main goal. The current organisational system is also designed to maintain the status quo. The interaction in the system determines the outcome of the system. It can therefore be concluded that challenges are caused and maintained by interaction patterns in the system.

The systemic transition management model makes a distinction between an upper and bottom stream. The upper stream resembles situational change such as structures, processes and roles. The presented Sophie specific customer journey is a situational change affecting the process and indirectly the structures and roles. The bottom stream resembles the psychological transition the affected stakeholders of the supply organisation experience. This psychological transition is based on Bridges (2005) theory and includes; urgency, release, not knowing, creation and the new beginning. To increase the impact of this graduation project, the activities required for implementation are related to these psychological transition phases. The roadmap aims thereby to support change or implementation managers to translate the conceptual framework to reality.

15.2.1 Activities
The proposed activities are in alignment with the STM phases and explain how the implementation by the STM model should occur at Pezy Group. First, the preparation activities are discussed before the urgency of embarking on this change project is explained. After that, the employees are told what and when elements of the old ways will disappear. Together the framework will be tailored to the specific organisation to form the new way of working. The new forms of working are piloted and iterated before one way is decided on and is fully adopted. The most important activities of the roadmap implementation are highlighted and will be further explained.

Preparations
- **Standardised proposals:** For archetype Sophie, standardised proposals are important to ensure an efficient customer journey. Therefore the standardised proposals should be developed in accordance with the operational and commercial employees.
- **Golden archetype rules:** For the account support and operational contact of the supplier to remember all archetype characteristics is be too much to ask. To improve the communication of the archetypes, a brief summary, the golden rules, should be made on how to deal with the archetype. These golden rules should be based on the archetype characteristics, customer orientation principles and enhance relationship opportunities.
- **Redistribute buyers:** The current customer bases must be labelled according to the developed buyer-interaction archetypes in order to offer these existing buyers the fitting experience. A new customer can be divided easily into the respective segment when similar customers are previously divided.

Organisational learning
Organisational routines and managerial skills underpin the ability to integrate, build and reconfigure internal capabilities (Teece, 2007). Adaption to change requires enhancing or altering the strategic assets through innovation and organisational learning (Zollo & Winter, 2002). Organisational learning is the process of creating, maintaining and sharing knowledge in an organisation. The organisational learning is supported by a proposed pilot and training of the account support and operational contact to support the change project.

It is difficult to envision company-wide coordination of adaptive changes in strategic assets. Therefore the management (Helfat and Peteraf, 2015) and its employees (Leybourne, 2016) are involved in the following activities as mentioned in the roadmap.

- **Pilot:** During the release, not knowing and creation phases of the STM-model, the proposed framework is piloted. In this pilot, the framework is tested and iterated upon just as the design process applied in this graduation thesis. Piloting the customer journey of the Sophie archetype will identify challenges that must be overcome before the organisation adopts the framework. The customer journey can be further optimised based on the identified challenges in practice.
- **Training:** As indicated in the validation sessions, the supplier's employees will require training. The account support needs to learn how to support and guide the operational contact to become more of a mentor. Their new role for this archetype requires the account support to be active in the background and fulfil the administrative tasks on the CRM platform. However, they are the escalation contact of the operational contact and will have more high-level contact with the customers to develop business besides the routine projects. The combination of this role in relation to their other roles for other archetypes must be examined.

The operational contact requires the most training. Training with regard to develop soft skills and a commercial perspective to manage their customers and development requests through the conversion phase. In addition, not all suiting and experienced employees of the operation would like to have the role of an operational contact. A possible consequence is a division in functions, and therefore their description should be adapted in the future.

- ***Develop buyer teams***

The Sophie archetype requires continuity of supplier employees to ensure efficiency in the buyer-supplier interaction. A buyer team is a more structured and strategic approach to the buyer-supplier relationship from the supplier's perspective to ensure continuity. The usage of buyer teams mainly comes from the accounting, administration and legal practices.

Typically, project teams are assembled to generate a tailored-made solution for the buyer in the execution phase. Deadlines control the project, and a team is formed to execute specialised time-constrained tasks and, after completion, are disbanded (Kozlowski and Bell, 2003). Often the project is separated into the supplier developing recommended solutions and the buyer implementing them. However, this way of working tends to result in hard to implement solutions. This is because the service supplier is responsible for the technical feasibility and not responsible for the solution's commercial or operational success. The experience of Pezy Group learns that a follow-up project does not occur that often, and the buyer relationship remains underdeveloped.

To reduce the impact of the aforementioned risks, a small buyer team will better understand the buyer, project, and the relationship's enhancement. To solve the buyer's problem, the operational contact and account support needs to gain in-depth knowledge of the buyer organisation, specific context and industry (Appelbaum and Steed, 2005). This work is often highly situation-specific, and the project proposal and work have to adapt to the content and context of the problem (Klarner et al., 2013). By having more buyer interactions, the supplier can gain more information about the buyer and incorporate this into their work (Kakabadse et al., 2006). Thereby contributing to the organisational learning.

A study ((Klarner et al., 2013) indicates that buyer teams require relevant competencies and need to engage in continuous communication with their buyer to achieve adaptability to specific tasks and context to deliver outcomes that strengthen the buyer relationship. Hence the required training for the operational contact to improve the soft skills and commercial perspective to ensure continuous communication and understanding.

The benefits of a buyer team will result in (Schmidt, 2018; Gray-Grant, 2017):

- A relationship with the buyer that is not limited to one employee;
- A more broad and deepened connection with the buyer;
- Better internal communication and coordination among buyer team members (operational contact, account support and others);
- Better understanding of the buyer's needs, expectations and context;
- A more organised approach to the buyer service;
- The ability to plan, manage and expand relationships;
- A better position to identify additional work and cross-selling opportunities.

15.2.2 Conditions

Implementing the framework according to the roadmap, some organisational conditions need to be in place, and these are also touched upon in the preparation activities. The important standardised proposals which enable the operational support to offer efficiency must be developed in collaboration with the sales and operational departments.

Besides the guidance of the change project manager to all affected employees, the employees need to be given time to fulfil their new roles and responsibilities. Especially more time is required of the operational contact and account support for feedback sessions during the pilot and change project than once the framework is fully implemented. Once the framework is implemented and the function description is altered, the operational support receives an as of yet undetermined amount of time per assigned buyer or development request. Allocated time is required since the operational support fulfils this role besides the other activities and needs the time to communicate with the buyer and their colleagues to develop a proposal.

The communication and escalation model must be implemented to ensure the operational contact's service quality. By doing so, the account support and thus the sales department will remain up to date regarding customer developments and opportunities to manage the relationship and make a sales prognosis.

A supporting information technology infrastructure like a CRM platform is required to manage the information and knowledge of the customer and their request (Fearne, 1998; Prasad and Sounderpandian, 2003; Hong-kit Yim et al., 2004).

Once the implementation roadmap is followed by Pezy Group, the envisioned customer-oriented conversion phase process will enhance the buyer-supplier relationships.

16 Reflection.

16.1 Conclusion

This research aimed to design a framework to enhance and implement customer orientation in buyer-supplier dyads. Based on primary and secondary research, including quantitative and qualitative analysis of Pezy Group and its context, four buyer-interaction archetypes of the intended relationship are defined.

The design goals for the selected buyer-interaction archetype Sophie, which aims for routine and efficiency in the interactions, is aimed to answer how to improve the alignment of the buyer's expectations. The alignment concerns the proposal development in the customer journey of the conversion phase and how to implement the designed solution in the supply organisation.

It can be concluded that a supply organisation must organise its conversion phase differently per defined buyer-interaction archetype in order to be customer-oriented.

This graduation thesis shows that the importance of a clear proposal contributes to managing the expectations regarding the activities and deliverables in the execution phase. To be customer-oriented as a supplier, the buyer needs to be convinced of the conveyed expertise and complementing competencies. This is strengthened by direct and continued contact between the same buyer and contact of the supplier, who is knowledgeable of product development and the buyer's product context. The results show that entrusting the operational employees with the responsibilities of managing the buyer account and their request in the conversion phase results in fewer internal handovers and thus a more aligned proposal and a quicker journey. From the participants' feedback, it can be concluded that empowering the operational employee as the main contact is received positively and is predicted to have a big impact on the customer orientation for the Sophie archetype.

The resulted customer journey for archetype Sophie indicates that the operational employees must be empowered to manage these types of accounts and their development requests to be customer-oriented. Supporting these operational employees is enabled through the usage of standardised proposals, which allow some degree of customisation and the guidance by the commercial employees. The consequently changed way of working must be implemented by the designed roadmap that follows the advised systemic transition management methodology phases.

By implementing the proposed archetype specific customer journey for Sophie, the supplier organisation can enhance the customer orientation of the conversion phase and thereby confirm the hypothesis. The framework, based on the archetypes and consisting of a specific customer journey and implementation roadmap, provide a set of rules that support the conversion phase-related activities and interactions, which contribute positively to the service quality and may increase the profitability of the supply organisation.

The customer-oriented customer journey addresses the organisational challenges of Pezy Group: by identifying the buyer-interaction, the commercial approach in the conversion phase is less ad hoc, because of the archetypes and proposed role change, fewer handovers are required resulting in a proposal meeting the buyer's expectations and in which a relationship is built on a product development content level.

Contributing to the literary field of buyer-supplier relationships and customer orientation, it can be concluded that the validated designed framework contributes to a better understanding of buyer interactions and how to enhance and implement customer orientation in a supplier's organisation.

16.1.1 Managerial implications

The customer journey and implementation roadmap, specifically designed for the Sophie archetype and within the context of Pezy Group, provide a multitude of advice for realising the enhancement of the customer orientation in the conversion phase. A summary of the managerial implications for Pezy Group and other supply organisation that want to implement the framework successfully are presented:

- Not all operational support employees are able or willing to bear the responsibilities of being an operational contact. The advised change of roles, in which the operational contact becomes responsible for managing the Sophie type of clients and their request, will most likely result in a division within functions. This will result in, for instance, lead developers who execute the role of operational contact for buyers and lead developers who are not. The organisation should therefore revise the function descriptions and how to reward the operational contacts.
- The role change requires operational contacts to represent the supply organisation, communicate more intensely with the buyer, and approach the buyer's development request from both a technical and a commercial perspective. Therefore training and guidance are required to improve these personal capabilities regarding commerce and soft skills. The same applies to the account support, which to a lower degree, should learn how to support the operational support and how to act in escalation situations.
- The supply organisation must establish (small) client teams per Sophie customer. Per customer, an operational contact and account support must be assigned. This can be compared to a small buyer team. However, a solution must be found to support this cost-efficient and effective interaction between buyer and supplier.
- The communication and escalation model must be introduced, which supports the interaction process between buyer and supplier. The model provides clarity regarding the division of responsibilities, to whom to report, and how to escalate. This is in regard to agreements regarding proxy abilities for making contracts or proposals and a proposal that also fits resource allocation and planning.
- To achieve the envisioned customer journey for the Sophie archetype, the supply organisation should develop an inventory of standardised proposals of frequent low risk, a clear scope and short-term projects and assignments. These standardised proposals should be developed in collaboration between commerce and operation to ensure a feasible and profitable PSA.
- The CRM platform, or IT infrastructure, should label all current and new accounts according to the buyer-interaction archetypes. Thereby the organisation can collect more insight regarding the different buyer-interact types and how to manage them actively. The platform should be adapted so that both the operational contact and account support can manage the customer's information and, consequently, remain up to date.
- A change manager is required to guide the process of testing, adapting and optimising the archetype specific customer journey. The proposed roadmap offers support for implementing the new process.
- Time must be allocated to pilot the framework in the organisation with the participants and structurally for the operational contacts to manage their assigned buyers and adjoined development requests, besides their other activities.

16.2 Limitations and future research

Measuring impact

Measuring the impact of the designed framework of this graduation thesis is complex. Customer orientation is a subjective measurement of the buyer's experience of the supplier's service. For the supplier, customer orientation is the ability to prioritise the needs and expectations of the buyer and act accordingly. The concept of this assignment tries so through a customer process that has been validated by the expected experiences of the participants. However, future research should measure the impact of the proposed framework. Implementing the designed archetype specific customer journey by change management methods might take months. This graduation thesis is limited in time and has therefore not fully measured the impact.

Covid-19

This graduation thesis started and has been completed in times of a worldwide pandemic. Covid-19 causes some limitations in the gathering of information of the participants. Many sessions and interviews have been conducted online, and the lack of offline interactions restricted this assignment from collecting valuable rich information possible in real life. Due to the online restrictions, this could have led to inaccurate interpretations or conclusions.

Generalisation

This graduation thesis is restricted by one case study and includes a limited amount of external participants. In the case of this graduation thesis, it was challenging to find enough external participants willing to participate. It is expected that the research, being restricted to online involvement due to the Covid pandemic, other priorities of the buyers and confidentiality remarks are reasons which restrict the sample size. The resulting framework consisting of the archetype specific customer journey and implementation roadmap is dedicated to Pezy Group. However, future research which includes more case studies of supply organisations might result in different findings. In addition, the insights of the external participants are used to enrich the buyer-interaction archetype characteristics. Once the sample size of external participants is increased to 10, 50 or 100 participants, the defined archetypes might contain different descriptions of the characteristics. In the case of this thesis, only one design iteration was required according to the feedback of the limited amount of participants. However, the richness of feedback might increase, and thus the required iterations, once the sample size is increased.

The other archetypes and lifecycle phases

The proposed framework focuses only on the archetype of buyer-interaction Sophie in the conversion phase. However, future research is required to identify how to be customer-oriented as a supply organisation for the other three defined archetypes. As the proposed roadmap suggests, this graduation thesis should also be repeated for all archetypes for the other primary process phases, which align with the relationship lifecycle.

The customer orientation principles for the other archetypes have been defined in this thesis. These can be found in appendix 6.3. During this thesis, some ideas for the other archetypes are noted: Archetype Pete expects a pragmatic, cost-effective interaction in which the supplier is obedient. A similar customer journey as designed for Sophie can be applied. However, due to the supplier captive relationship, the organisation should consider whether it is willing to embark on this relationship. It is expected that it is difficult to design a specific customer journey that is customer-oriented for archetype Emily. Emily requires equal contributions and investment in the relationship. For example, joint ventures with start-ups or intensive collaborations in C-level projects. The conversion phase for these relationships is highly personal because they are based on interpersonal interactions on a shareowner level. Therefore it is hard to propose a standardised specific customer journey for these relationships. The customer-oriented conversion phase for the Chris archetype, which requires certainty through strong expectation management and intense documentation, aligns with the current process of Pezy Group. Introducing client teams to ensure a strong integration between both parties would be an opportunity.

Other factors to take into account

Each company has a different culture; however, this thesis assumes that all companies based in the Netherlands share similar values and perspectives regarding the customer journey they experience. During this graduation thesis, the assumption is made that the selected participants in the study represent their organisation. Thereby focusing customer orientation on an organisational level and thus excluding the personal factor. It is assumed that the nationality of the supplier or buyer contact is irrelevant because they represent their organisation. In the case of this graduation thesis, all participating organisations are located in the Netherlands. However, future research should investigate whether the organisation's culture, nationality and even the nationality of individual organisation representatives affect the required customer orientation of a supplier's process. Future research could also examine how supply organisations could be organised for customer orientation in other industries, besides the product development service industry, and across the borders of the Netherlands.

This graduation thesis did not consider the size and experience of the participating external organisations because of their limited availability. However, it is expected that multinational buyers have more bureaucracy, which in turn expect lots of documentation for their reassurances and thus determines the requested flexibility of the supplier in their interactions—Visa versa for young start-ups and small or medium enterprises, which might expect a more pragmatic interaction. Future research can include these buyer factors when analysing the expectations regarding the customer orientation of the supplier.

Interpersonal customer orientation

The scope of this graduation thesis has always been determined by organisation design and, more specifically, the organisation's process. Therefore the designed framework, which enhances and implements customer orientation in buyer-supplier dyads, is aimed at the customer journey of the supply organisation.

This graduation thesis has asked its participants to provide input from the perspective of the organisation they represent. However, the participants reflect from a personal perspective and compare situations with their experiences. Consequently, it becomes apparent that interpersonal relationships are an important factor for being customer-oriented in buyer-supplier dyads. As stated earlier, Brendler (2001) claims that the people determine how customer-centric an organisation is. This graduation thesis confirms this to some degree. It, therefore, advises to train and guide the operational employees in acquiring commercial and soft skills. The successful implementation of the designed customer journey is determined by the roadmap. The roadmap considers the psychological transition of the supplier's employees to adopt the new way of working. However, the proposed customer-oriented process for the conversion phase is still made available by the involved stakeholders, and thus the interpersonal relationships between buyer and supplier contacts. Future research is required to identify how interpersonal relationships and adjoined factors influence the customer orientation between buyer and supplier interactions during the conversion phase. Appendix 11 dives deeper into the interpersonal customer orientation and discusses the identified factors that should be included in future research.

16.3 Personal reflection

During this graduation project, many challenges presented themselves. Not only challenges on the topic of customer orientation, but also personal challenges. The focus and envisioned end goal to generate value for both the academic world and the industry only become clear along the way of this endeavour. Now at the end of this journey, I can reflect.

At the beginning of this thesis, a different angle was chosen to research customer orientation. The angle of client teams, psychological transition and change management turned out to be too ambitious within the time frame of graduation. Once the scope changed towards organisation design, focusing on the customer journey, it took some time to process and realise this. In my experience, my gathered insights regarding the "old" focus was a waste of effort. However, the valuable lesson from change management teaches how the end goal only becomes clear along the way. Diving into the topic of customer orientation and buyer-supplier dyads, everything seemed relevant. My desire to add as much value and my work experiences made me realise how much is interconnected to each other. Everything I read, I could place in the perspective of Pezy Group. Plenty of literature try to convey the same message but use different terminology or approach it from another perspective. Converting all these insights within a scope that became clear over time was a personal challenge. But, I learned that this graduation thesis cannot contain everything and must have an end. Knowing that the outcome of this assignment is not finished yet and that I am not able to complete it fully gives some peace of mind now. There is plenty of future research left. Plenty to discover, aspects which I would love to dive in.

Because this thesis is based on one case study, an organisation I am pretty familiar with now made me realise how much seemed too obvious to me. Unknowingly, I made tons of assumptions and identified connections or solutions that seemed logical and seemed too simple to me. I tended to design practical solutions for the case, which were hard to generalise but were obvious to me because of combining the Kraljic and Bensaou models with the insights from this thesis. However, it took some guidance to direct this tendency towards a more generalisable framework. As a result, I was not satisfied with the outcome. It took a lot of "compliments" and remarks to realise that what I have created is of value for Pezy Group, other service suppliers and for customer orientation in buyer-supplier dyads within the product development service industry of the Netherlands.

Worries about being too biased and developing a framework too tailored to the Pezy Group were misplaced. Generalisation actions of this research are still advised for future research. Nevertheless, my bias as a designer enabled me to make an impact at Pezy Group. The defined buyer-interaction archetypes are already used in identifying new and current accounts. In some cases, the framework and customer orientation principles have been used to determine how to interact with a customer and approach the proposal development to meet the buyer's expectations. It took some convincing, but it is a result I am immensely proud of. Conveying the story of this graduation thesis was a personal struggle for me. Once the results and designed outcomes were finished, I found it hard to put it on paper. Being my toughest critic and perfectionist, I had the urge to overexplain, use too much literary argumentation instead of being proud and claiming the result of my work. This may come across as insecure and is something I have to keep working on.

Nevertheless, along this graduation journey, I discovered my passion for improving and growing an organisation instead of working in an organisation. I want to build a great workplace, lead this to the future and achieve this together with amazing colleagues. Being in touch with the people in and out of the organisation provides me with inspiration I wish to use to accel organisations where people grow and innovation blossoms.

"Customer orientation start by employees understanding the expectations of their contacts"

17 References.

Ahuja, G. (2000). The duality of collaboration: Inducements and opportunities in the formation of interfirm linkages. *Strategic management journal*, 21(3), 317-343.

Al-Haddad, S., & Kotnour, T. (2015). Integrating the organizational change literature: a model for successful change. J*ournal of organizational change management*.

Appelbaum, S. H., & Steed, A. J. (2005). The critical success factors in the buyer consulting relationship. *Journal of management development*.

Balachandran, S., & Hernandez, E. (2018). Networks and innovation: Accounting for structural and institutional sources of recombination in brokerage triads. *Organisation Science*, 29(1), 80-99.

Baldwin, C. Y., Clark, K. B., & Clark, K. B. (2000). *Design rules: The power of modularity* (Vol. 1). MIT press.

Barney, Jay B.. (1997). *Gaining and sustaining competitive advantage* . Reading, Massachusetts: Addison-Wesley.

Baum, J. A., Cowan, R., & Jonard, N. (2010). Network-independent partner selection and the evolution of innovation networks. *Management science*, 56(11), 2094-2110.

Bensaou, M. (1999). Portfolios of buyer-supplier relationships. *MIT Sloan Management Review*, 40(4), 35

Blattberg, R. C., & Deighton, J. (1996). Manage marketing by the customer equity test. *Harvard business review*, 74(4), 136.

Blocker, C. P., Flint, D. J., Myers, M. B., & Slater, S. F. (2011). Proactive customer orientation and its role for creating customer value in global markets. *Journal of the Academy of Marketing Science*, 39(2), 216-233

Boulding, W., Staelin, R., Ehret, M., & Johnston, W. J. (2005). A customer relationship management roadmap: What is known, potential pitfalls, and where to go. *Journal of marketing*, 69(4), 155-166.

Bowen, D. E., Siehl, C., & Schneider, B. (1989). A framework for analyzing customer service orientations in manufacturing. *Academy of Management review*, 14(1), 75-95.

Brady, M. K., & Cronin Jr, J. J. (2001). Customer orientation: Effects on customer service perceptions and outcome behaviors. *Journal of service Research*, 3(3), 241-251.

Bragg, R., & Kumar, S. (2003). Building strategic partnerships: between companies and suppliers, the right relationship is everything. *Industrial Engineer*, 35(6), 39-44.

Brannback, M. (1999). The Concept of Customer-Orientation and its Implication for Competence Development. *Innomarket, Turku School of Economics and Business Administration, Technical Reports*, 1.

Brendler, W. (2001), "The human dimension of CRM: the key to success or failure", *The Customer Relationship Primer*, 2nd ed. (online).

Brook, J. (2021, May 21). *What Happens To Businesses Without Customer Insight?* Themarketingcentre.Com. Retrieved October 28, 2021, from https://blog.themarketingcentre.com/barriers-to-growth-and-how-marketing-can-help-customer-insight

Bruhn, M. (2015). *Relationship marketing*. München: Vahlen.

Buijs, J. (2012). The Delft Innovation Method A Design Thinker's Guide to Innovation. In DS 71: *Proceedings of NordDesign 2012, the 9th NordDesign conference, Aarlborg University, Denmark*. 22-24.08. 2012.

Buttle, F. (Ed.). (1996). *Relationship marketing: theory and practice*. Sage.

Buttle, Francis (2004). *Customer relationship management:* concepts and tools. Oxford: Elsevier Butterworth Heinemann

Cameron, K. S., & Quinn, R. E. (2011). *Diagnosing and changing organisational culture: Based on the competing values framework*. John Wiley & Sons.

Chandra, C., & Kumar, S. (2000). Supply chain management in theory and practice: a passing fad or a fundamental change?. *Industrial Management & Data Systems*.

Choy, K. L., Lee, W. B., & Lo, V. (2003). An intelligent supplier relationship management system for selecting and benchmarking suppliers. *International Journal of Technology Management*, 26(7), 717-742.

Conduit, J., & Mavondo, F. T. (2001). How critical is internal customer orientation to market orientation?. *Journal of business research*, 51(1), 11-24.

Curry, A., & Curry, J. (2000). *The customer marketing book: how to implement and profit from customer relationship management*. Simon and Schuster.

Curry, A., & Kkolou, E. (2004). Evaluating CRM to contribute to TQM improvement–a cross case comparison. *The TQM Magazine*.

D'Offay, C. (2018, April 6). *How design thinking can improve change management outcomes*. Inside HR. https://www.insidehr.com.au/change-management-design-thinking/

Dahl, M. S. (2011). Organizational change and employee stress. *Management science*, 57(2), 240-256.

Das, T. K., & Teng, B. S. (2000). A resource-based theory of strategic alliances. *Journal of management*, 26(1), 31-61.

Davis, J. P. (2016). The group dynamics of interorganisational relationships: Collaborating with multiple partners in innovation ecosystems. *Administrative science quarterly*, 61(4), 621-661.

Day, G. S. (1998). What does it mean to be market driven?. *Business Strategy Review*, 9(1), 1-14.

Design Council. (2019, September 10). *What is the framework for innovation? Design Council's evolved Double Diamond*. Retrieved October 21, 2021, from https://www.designcouncil.org.uk/news-opinion/what-framework-innovation-design-councils-evolved-double-diamond

Dorsch, M. J., Carlson, L., Raymond, M. A., & Ranson, R. (2001). Customer equity management and strategic choices for sales managers. *Journal of Personal Selling & Sales Management*, 21(2), 157-166.

Drucker, P. F. (1954). *The practice of management*. New York: Harper & Row.

Dwyer, F. R., Schurr, P. H., & Oh, S. (1987). Developing buyer-seller relationships. *Journal of marketing*, 51(2), 11-27.

Fearne, A. (1998). The evolution of partnerships in the meat supply chain: insights from the British beef industry. *Supply chain management: An international Journal*.

Fischer, M. M., & Varga, A. (2002). Technological innovation and interfirm cooperation: an exploratory analysis using survey data from manufacturing firms in the metropolitan region of Vienna. *International Journal of Technology Management*, 24(7-8), 724-742.

Sanders, E. B.-N., and P. J. Stappers. 2012. *Convivial Toolbox*. Amsterdam: BIS Publishers.

Gadde, L. E., & Snehota, I. (2000). Making the most of supplier relationships. *Industrial marketing management*, 29(4), 305-316.

Gemünden, H. G., Heydebreck, P., & Herden, R. (1992). Technological interweavement: a means of achieving innovation success. *R&D Management*, 22(4), 359-376.

Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American journal of sociology*, 91(3), 481-510.

Gray-Grant, H. (2021, September 27). *What's the Value of a Buyer Team?* Heather Gray Grant. Retrieved November 8, 2021, from http://heathergraygrant.com/whats-the-value-of-a-buyer-team/

Greenberg, P. (2010). *CRM at the speed of light: Social CRM strategies, tools, and techniques*. New York: McGraw-Hill.

Gulati, R. (1995). Social structure and alliance formation patterns: A longitudinal analysis. *Administrative science quarterly*, 619-652.

Gulati, R., & Gargiulo, M. (1999). Where do interorganisational networks come from?. *American journal of sociology*, 104(5), 1439-1493.

Harryson, S. J. (1997). How Canon and Sony drive product innovation through networking and application focused R&D. *Journal of Product Innovation Management: AN INTERNATIONAL PUBLICATION OF THE PRODUCT DEVELOPMENT & MANAGEMENT ASSOCIATION*, 14(4), 288-295.

Helfat, C. E., & Peteraf, M. A. (2015). Managerial cognitive capabilities and the microfoundations of dynamic capabilities. *Strategic management journal*, 36(6), 831-850.

Hong-kit Yim, F., Anderson, R. E., & Swaminathan, S. (2004). Customer relationship management: Its dimensions and effect on customer outcomes. *Journal of Personal Selling & Sales Management*, 24(4), 263-278.

Institute of Management and Administration, Editor (2002), "14 Examples of How Reducing The Supplier Base Does Pay Off," *Supplier Selection & Management Report*,April, 2-4.

Jap, S. D. (1999). Pie-expansion efforts: Collaboration processes in buyer-supplier relationships. *Journal of marketing Research*, 36(4), 461-475.

Jap, S. D., & Ganesan, S. (2000). Control mechanisms and the relationship life cycle: Implications for safeguarding specific investments and developing commitment. *Journal of marketing research*, 37(2), 227-245.

Jeong, J. S., & Hong, P. (2007). Customer orientation and performance outcomes in supply chain management. *Journal of Enterprise Information Management*.

Kakabadse, N. K., Louchart, E., & Kakabadse, A. (2006). Consultant's role: a qualitative inquiry from the consultant's perspective. *Journal of management development*.

Kellen, V. (2002). *CRM measurement frameworks*. Retrieved May, 20, 2010.

Klarner, P., Sarstedt, M., Hoeck, M., & Ringle, C. M. (2013). Disentangling the effects of team competences, team adaptability, and buyer communication on the performance of management consulting teams. *Long range planning*, 46(3), 258-286.

Kohli, A. K., & Jaworski, B. J. (1990). Market orientation: the construct, research propositions, and managerial implications. *Journal of marketing*, 54(2), 1-18.

Kozlowski, S. W., & Bell, B. S. (2013). *Work groups and teams in organizations*.

Kraljic, P. (1983), "Purchasing must become supply management", *Harvard Business Review*, September-October, pp. 109-17.

Kumar, K. (2001). Technology for supporting supply chain management: introduction. *Communications of the ACM*, 44(6), 58-61.

Kumar, V., & Reinartz, W. J. (2006). *Customer relationship management: A databased approach*. Hoboken, NJ: Wiley.

Lambert, D. M., & Schwieterman, M. A. (2012). Supplier relationship management as a macro business process. *Supply chain management: an international journal*.

Lavie, D., Haunschild, P. R., & Khanna, P. (2012). Organisational differences, relational mechanisms, and alliance performance. *Strategic Management Journal*, 33(13), 1453-1479.

Leybourne, S. A. (2016). Emotionally sustainable change: two frameworks to assist with transition. *International Journal of Strategic Change Management*, 7(1), 23-42.

Meyer, C., & Schwager, A. (2007). Understanding customer experience. *Harvard business review*, 85(2), 116.

Moeller, S., Fassnacht, M., & Klose, S. (2006). A framework for supplier relationship management (SRM). *Journal of business-to-business marketing*, 13(4), 69-94.

Moore, J. F. (1996). *The death of competition: Leadership and strategy in the age of business ecosystems*. New York: HarperBusiness.

Morgan, Robert M. and Shelby D. Hunt (1994), "The Commitment-Trust Theory of Relationship Marketing," *Journal of Marketing*, 58, 3, 20-38.

Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of marketing*, 54(4), 20-35.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of marketing*, 49(4), 41-50.

Park, J., Shin, K., Chang, T. W., & Park, J. (2010). An integrative framework for supplier relationship management. *Industrial Management & Data Systems*.

Pelham, A. M. (2000). Market orientation and other potential influences on performance in small and medium-sized manufacturing firms. *Journal of small business management*, 38(1), 48-67.

Peppers, D., & Rogers, M. (2000). Build a one-to-one learning relationship with your customers. *Interactive Marketing*, 1(3), 243-250.

Peppers, D., & Rogers, M. (2004). *Managing customer relationships: A strategic framework*. John Wiley & Sons.

Peppers, D., & Rogers, M. (2011). *Managing customer relationships: A strategic framework*. John Wiley & Sons.

Pérez, M. P., & Sanchez, A. M. (2002). Lean production and technology networks in the Spanish automotive supplier industry. *MIR: Management International Review*, 261-277.

Piller, F. T., Ihl, C., & Vossen, A. (2010). A typology of customer co-creation in the innovation process. *Available at SSRN 1732127*.

Pittaway, L., Robertson, M., Munir, K., Denyer, D., & Neely, A. (2004). Networking and innovation: a systematic review of the evidence. *International journal of management reviews*, 5(3-4), 137-168.

Powers, T.L. and Reagan, W.R. (2007). Factors influencing successful buyer–seller relationships, *Journal of Business Research* 1234–1242.

Prasad, S., & Sounderpandian, J. (2003). Factors influencing global supply chain efficiency: implications for information systems. *Supply Chain Management: An International Journal*.

Ragatz, G.L., Handfield, R.B. and Scannell, T.V. (1997), "Success factors for integrating suppliers into new product development", *Journal of Product Innovation Management*, Vol. 14 No. 3, pp. 190-202.

Roozenburg, N. F., & Eekels, J. (1995). *Product design: fundamentals and methods.*

Santema, S., & Reunis, M. (2003). eTransformation in Supply Chain Perspective. In *Proceedings of the 16th Bled eCommerce Conference* (pp. 831-846).

Schmidt, S. J. (2018, April 25). *Running a Buyer Team.* Attorney at Work. Retrieved November 8, 2021, from https://www.attorneyatwork.com/running-buyer-team/

Sheridan, J.H. (1998), "The supply chain paradox", *Industry Week,* Vol. 247 No. 3, pp. 20-9.

Shin, J., Taylor, M. S., & Seo, M. G. (2012). Resources for change: The relationships of organizational inducements and psychological resilience to employees' attitudes and behaviors toward organizational change. *Academy of Management journal*, 55(3), 727-748.

Simonse, L. (2017). *Design Roadmapping: Guidebook for Future Foresight Techniques.* BIS Publishers.

Singh, S. (2020, April 8). *Goodbye, Change Management; Welcome, Change Design.* Forbes. https://www.forbes.com/sites/forbeshumanresourcescouncil/2020/04/08/goodbye-change-management-welcome-change-design/?sh=3b789e655ef6

Sirkin, H. L., Keenan, P., & Jackson, A. (2015, July 13). The Hard Side of Change Management. *Harvard Business Review.* https://hbr.org/2005/10/the-hard-side-of-change-management

Smolders, A. L. (2019). *Trust unravelled: In inter-organisational relationships in a regulated tender environment.*

Spekman, R. E., Kamauff, J. W., & Myhr, N. (1998). An empirical investigation into supply chain management: a perspective on partnerships. *Supply Chain Management: An International Journal.*

Starbuck, W. H. (1965). Organisational growth and development. *Handbook of organisations,* 111, 451-533.

Storey, J., Emberson, C., & Reade, D. (2005). The barriers to customer responsive supply chain management. *International Journal of Operations & Production Management.*

Teece, D. J. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic management journal*, 28(13), 1319-1350.

Thiecke, M., & Van Leeuwen, B. (2018). *Systemisch transitie management.* Boom Uitgevers Amsterdam.

Van Boeijen, A., Daalhuizen, J., van der Schoor, R., & Zijlstra, J. (2014). *Delft design guide: Design strategies and methods.*

Williams, M. R., & Attaway, J. S. (1996). Exploring salespersons' customer orientation as a mediator of organisational culture's influence on buyer-seller relationships. *Journal of Personal Selling & Sales Management,* 16(4), 33-52.

Worren, N. (2021, February 6). *What is organisation design?* Organisation (Re) Design. https://www.organisationdesign.net/whatisorganisationdesign

Zajac, E. J., & Olsen, C. P. (1993). From transaction cost to transactional value analysis: Implications for the study of interorganizational strategies. *Journal of management studies,* 30(1), 131-145.

Zeithaml, V. A., & Bitner, M. J. (1996). *Services marketing.* New york: The McGraw-hill companies,Inc.

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1988). Communication and control processes in the delivery of service quality. *Journal of marketing, 52(2), 35-48.*

Zentes, J., Morschett, D., & Schramm-Klein, H. (2007). *Strategic retail management.* Betriebswirtschaftlicher Verlag Dr. Th. Gabler GWV Fachverlage GmbH, Wiesbaden (GWV).

Zollo, M., & Winter, S. G. (2002). Deliberate learning and the evolution of dynamic capabilities. *Organization science,* 13(3), 339-351.

Zollo, M., Reuer, J. J., & Singh, H. (2002). Interorganizational routines and performance in strategic alliances. *Organization science,* 13(6), 701-713.