

# Delivering B2B experiences that make Exact stand out

A participatory learning approach to  
Customer Journey Management

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Graduation Project

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**“Empathy is at the heart of design.  
Without the understanding of what  
others see, feel, and experience,  
design is a pointless task.”  
Tim Brown, IDEO (2013)**

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# Executive summary

As the B2B environment of the Software as a Service (SaaS) industry is changing more rapidly than ever, Exact needs to constantly adapt to these changes and accommodate to the increasingly complex needs and wishes of their customers. Designing a good customer experience is vital in ensuring a sustainable competitive advantage for Exact.

In order for Exact to try to adapt to this change in environment, a shift towards customer centric initiatives showed over the past years within its organisation. Among these initiatives is the creation of a Customer Journey Management (CJM) team, about half a year ago, within the Customer Success department of Exact. Their aim is to improve customer satisfaction and reduce churn, by optimising the customer experience of Exact solutions. This project was initiated by the CJM team which asked:

“How can Exact bring Customer Journey Management to the next level of maturity?”

As CJM is slowly getting up and running, many quick wins can still be achieved in the Post-Sales process they are currently responsible for. It is debatable, however, whether this is the right approach for the long term, whether they have the right influence to make the desired impact and whether the metrics they are being held accountable for are fitting for its ultimate goal: the optimisation of Exacts end-to-end customer journey. In order to reach this goal, close collaboration between different departments is necessary, by empowering them to positively contribute to their part of the customer journey in an integrated way. This can only be achieved through a shared deep understanding of the customer and their journey and if the value of customer journey management is proven for all stakeholders involved. Ultimately, electing a board member responsible for Exacts customer experience in the form of a Chief Customer Officer (CCO) would be advised.

The challenges that the CJM team face, identified in analysis, all seem to point towards the conclusion that user-centered design thinking is not embedded (enough) into the veins of the company. This does not mean that it's employees do not have the customer at heart though, but it seems that often the customer is not understood well enough and thus mistakes are more easily made. In practise this approach seems harm the customer experience, hurting revenues in the long run. As long as the customer experience is not understood deeply enough by employees, Customer Journey Management does not have the means to impact the customer journey end-to-end, as recommended by literature to bring CJM to the next level. Therefore it was chosen to design a system that enables Exact employees to gain a deeper understanding of their customers.

The solution was found in the design of a Game Development Guide. It enables the CJM team (and other employees) to simulate the customers experience through playing games. It is a step-by-step guide for its development and provides the process and tools necessary to design, play and evaluate the games based on different customer experiences. Once the game is ready to be played it can stimulate participatory learning by having employees temporarily step into the customers shoes. This creates deeper (richer) understanding of the customer's perspective, including his/her (tacit and latent) needs, emotions and contextual factors. The resulting deep customer insights can then be used throughout the innovation process to validate assumptions and prioritize solutions, which results in improved Customer Journey Management. This way Exact will be able to better understand their customers, enabling them to design user-centered solutions that truly benefit their customers experiences. This will ensure that Exact will stay on top, giving them a sustainable competitive advantage over their competitors in the long run.

## Design Challenge

**How can Exact take Customer Journey Management to the next level?**  
By designing the customer journey holistically, end-to-end.

**How does CJM design the Customer Journey in a holistic way?**  
By empowering Exact employees from different departments to positively contribute to their part of the customer journey in an integrated way.

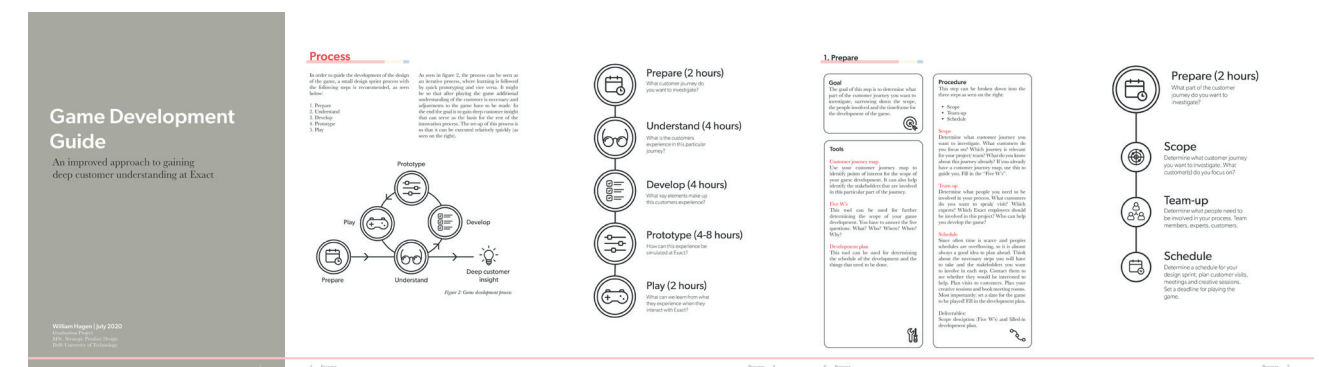
**How can they be empowered to positively contribute to the customer journey?**  
By showing the value of Customer Journey Management and by giving them the tools to gain better understanding of their customers perspective.

**How can Exact gain deeper understanding of their customer?**

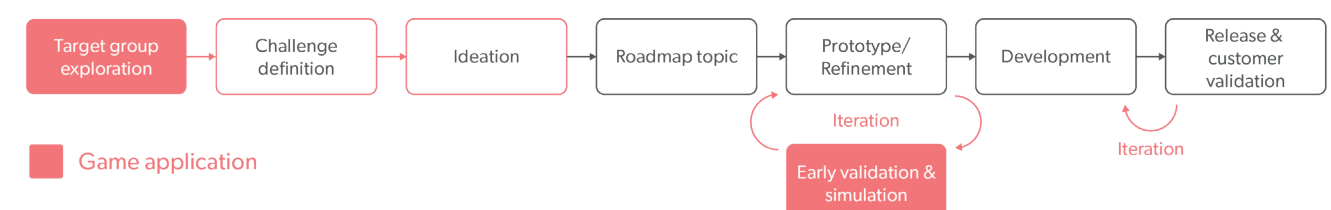
Abstract

Concrete

## Game Development Guide



## Game application





# Introduction

This report showcases the outcome of research and design carried out, in collaboration with Exact, from January to July 2020 as part of a graduation project for the TU Delft within the Strategic Product Design master track.

## Scope

The project was initiated by the Customer Success department of Exact. This department consists of 170 employees that focus on delivering a great experience to 400.000 Exact Online customers. Exact Online is a cloud-based business software service for SME's and accountants. Exact has been a leading business software developer in the Benelux for many years and strives to keep that position. In order to do so, Exact needs to adapt to the changing market of the SaaS (Software as a Service) Business. Although first efforts have created a positive momentum in the organisation, the customer success department would like to further professionalise their customer journey management (CJM) practises in order to generate positive impact on the customer experience of Exact Online. Therefore, this thesis aims to answer the following research question:

*“How can Exact bring Customer Journey Management to the next level of maturity?”*

## Project approach

In order to answer this research question, a triple diamond design process approach was chosen as seen in Figure 1, adapted from Van der Wal (2019): “Human Centered Design Process”. The three stages include an Analysis phase, an Ideation phase and an Implementation phase (which is explained in further detail on the right). This is a common structure for design projects and was tailored to this project of 20 weeks. During this process multiple sub questions relating to the main research question will be answered as described in each phase on the right.

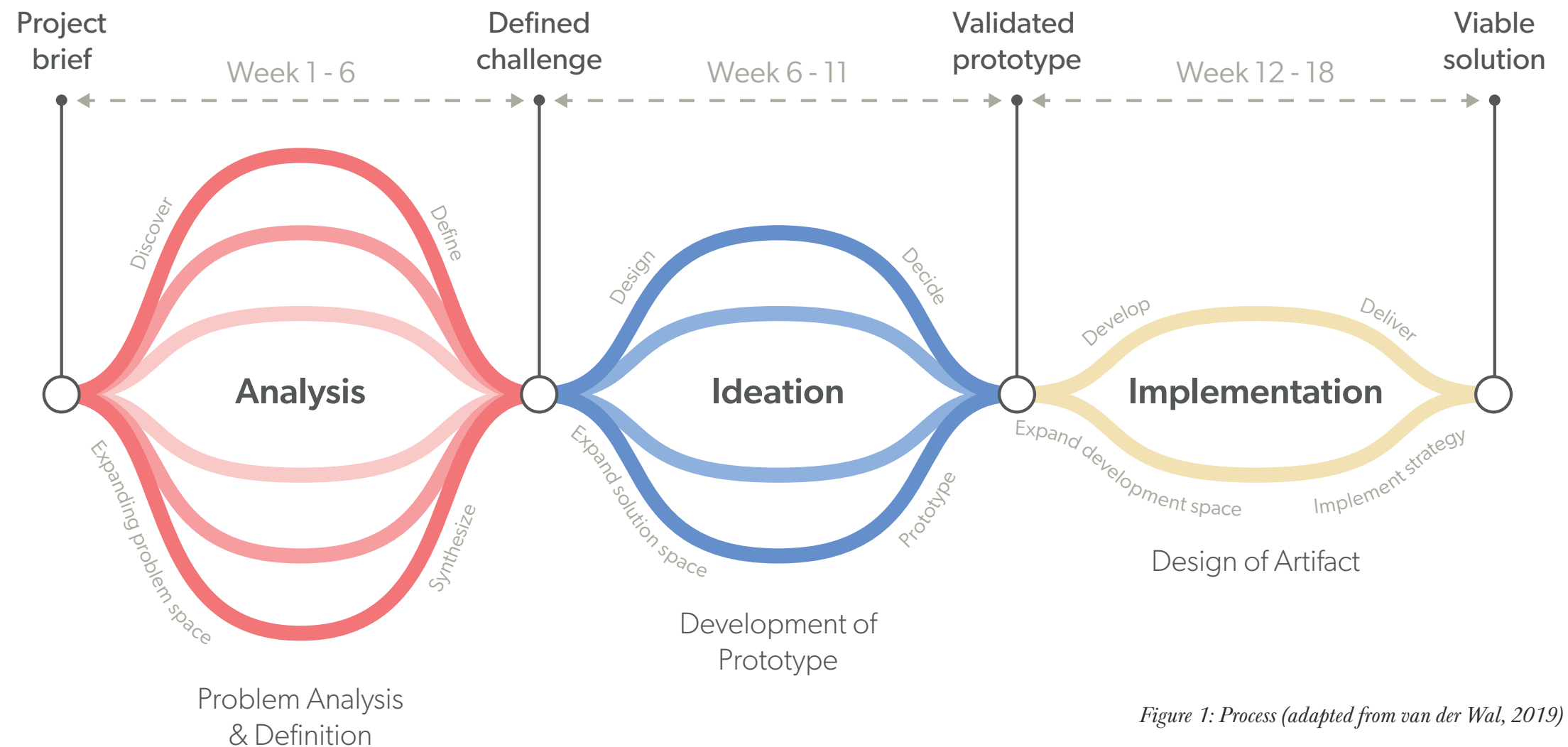


Figure 1: Process (adapted from van der Wal, 2019)

### Analysis

During this phase the goal was to gain deeper understanding of Exact as a company, the problems they face and to further define the design challenge for this graduation project. This required collecting as much information as possible and discovering Exact's underlying culture and drivers. This information was gathered through desk research, informal conversation, interviews and a case study.

- What is the current situation of Customer Journey Management?
- What problems do they face? Which of these problems is the focus of this project?

### Ideation

After the design challenge was defined, the first steps towards a solution were taken. This started with the development of a roadmap towards maturity for customer journey management and was followed by selecting one of its steps for further development in the implementation phase. Criteria were derived from the analysis phase to justify choices made.

- How can Exact gain deeper understanding of their customer?
- How can Exact employees step in the customers shoes?

### Implementation

After the solution was explored, an artefact was selected for further development and implementation. This artefact helps kick-start the implementation of the roadmap for the long-term. Stakeholders were closely involved in this process in order to come to a viable solution.

- How can CJM design their own games?
- What can CJM do with the insights from these games?

# Terms & Abbreviations

Words and especially certain terms or jargon can mean a lot of different things to a lot of different people due to context, culture or background. In order to provide clarity, a list of common terms and abbreviations is mentioned here along with their respective definition and/or meaning. Please note that there can be many different definitions of certain terms and often there is no “one truth” but that these serve as a guide of what is meant in this report.

## Product

“An object or system made available for consumer use; it is anything that can be offered to a market to satisfy the desire or need of a customer.” (Kotler et al., 2006)

## Service

“A means of delivering value to customers by facilitating outcomes customers want to achieve without the ownership of specific costs and risks.” (Rance, 2011)

## Software as a Service

“A method of software delivery and licensing in which software is accessed online via a subscription, rather than bought and installed on individual computers.” (Belighted, n.d.)

## Customer Experience

“The customer’s perception and related feelings caused by the one-off and cumulative effect of interactions with a supplier’s employees, channels, systems or products.” (Gartner, n.d.)

## Customer Journey

“A series of touchpoints, involving all activities and events related to the delivery of a product/service from the customer’s perspective” (Patrício et al., 2011)

**CX:** Customer experience

**CJM:** Customer Journey Management

**CJO:** Customer Journey Owner

**UX:** User Experience (designers)

**CS:** Customer Success

**EOL:** Exact Online

**SME:** Small to Medium Enterprises

**SB&A:** Small businesses and accountants (1-50 employees)

**Mid Market:** Medium to large businesses (50+ employees)

**KPI:** Key Performance Indicator

**SaaS:** Software as a Service

**NPS:** Net Promotor Score

**MRR:** Monthly recurring revenue

**Churn:** Amount moved out of contract

# Analysis

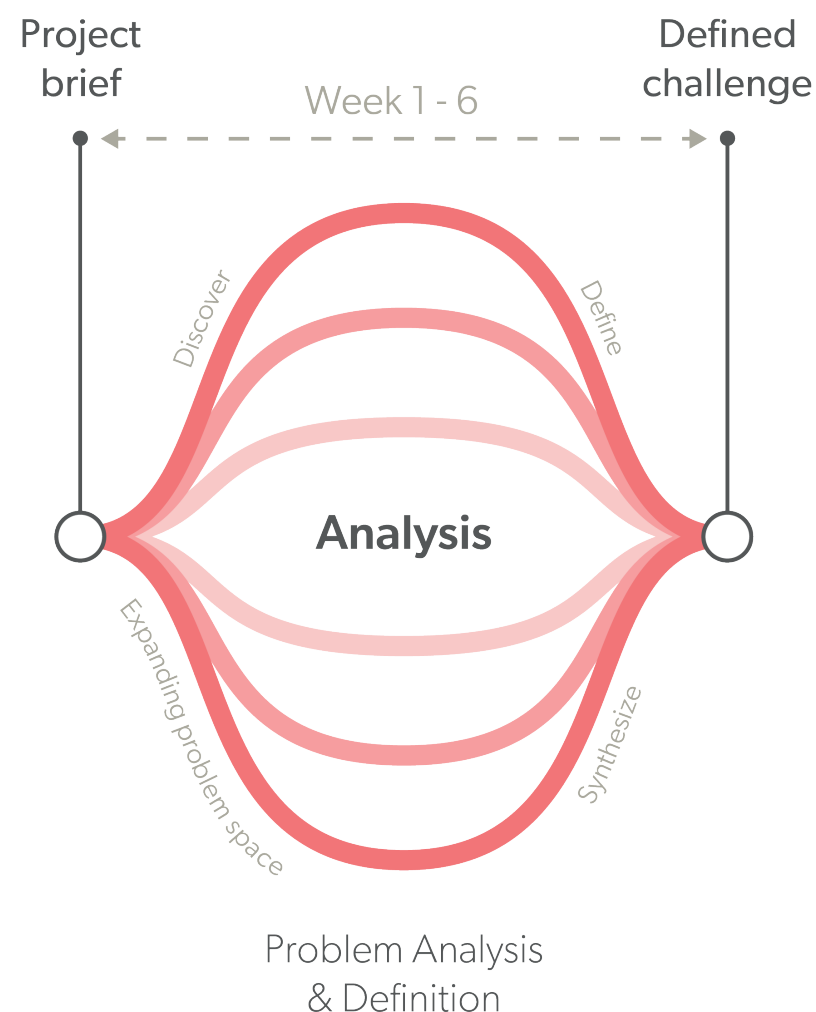
# Approach

The goal of this phase was to gain deeper understanding of Exact as a company, the problems they face and to further define the design challenge for this graduation project.

This section aims to find answers to the following questions:

- *What is the current situation of Customer Journey Management?*
- *What problems do they face? Which of these problems is the focus of this project?*

This information has been collected through multiple methods such as informal conversation, desk research, interviews and a case study. The selected approach was to use these methods to investigate the current situation of Exacts customer journey management practises, find their pain points and compare them with literature in order to come to a design focus (defined challenge). This will be done by integrating the conclusions of each section. This design focus will then serve as the design challenge for further development of this thesis.



## Interviews

Apart from desk research and informal conversation, interviews were conducted. They are essential for gaining a deeper understanding of Exacts culture, it's practises and the problems that employees face. The main goal of these interviews was to understand the "why" behind current practises, to gain insight into the underlying problems and to assess the relation between departments. What moves people to do what they do? Why is there a focus on Customer Journey Management (CJM)? How is it understood within Exact?

These interviews were set-up in a semi-structured way in order to be able to both compare results and give room for natural flow of conversation. For the interview set-up, refer to Appendix A. Participants were selected based on position, department and experience within Exact.

Firstly, the aim was to interview people from within the customer success department directly involved with Customer Journey Management. The goal was to understand their vision on Customer Journey Management and the problems they face. Secondly, high level employees from other departments were selected to gain insight into the cross-departmental view on the Customer Journey Management initiative. Their experience at Exact ranged from less than a year to over 20 years of experience. This was done in order to collect the most varied data and to get both new and old perspectives from different layers of the company. In order to enable participants to speak freely and critically, all participants responses were anonymised. For the transcripts please refer to Appendix J (only available to the company, due to confidentiality).

## Case study

After completing the interviews, a case study was done. It served as a practical example of the innovation process at Exact and the issues that they were facing. The Digital Efficiency Bundle (DEB) case was chosen, as this project resulted in dissatisfied customers, leading to high churn rates. The study was done based on first hand reports (interviews) and documents. The full case study can be found in Appendix K.

## Previous research

Another source of information that was used to gain perspective and insight into Exact were old theses of other TU Delft students. These provided valuable information on recurring problems and provided contextual information on the journey of Exact over the last couple of years.

In 2016, J. Garcia Mateo proposed a new user-centred prioritization method for evaluating user value of backlog topics at Exact. She showed that user impact was not yet part of the decision making process. Through introducing this method she tried to make Exact's design process more user-centred and fact-based.

In early 2018, E. Daanen focussed on implementing Design Thinking at Exact. In order to stay competitive in the future she showed that innovation through Design Thinking practises was necessary. She argued that there was an increased need for design leaders and proposed an implementation strategy of Design Thinking for project teams at Exact.

# About Exact

Before investigating Exact's current practices and challenges regarding Customer Journey Management, a general understanding of Exact as a company is necessary. This section aims to create this understanding by showing the context of the design challenge that is investigated in this thesis. For an elaborate company analysis please refer to Appendix B.

Exact has grown into a market leader for financial and business software in the Benelux, since it was founded by six students in 1984 (Exact, 2020). Serving both internationally operating businesses with enterprise solutions as well as Small to Medium enterprises (SME's) with Exact Online, they aim to help entrepreneurs and accountants manage their numbers and make a difference for their day-to-day business. Exact aims to achieve this goal through their three company values: Empowerment, Customer Centricity and Innovation. From its origin Exact has always been a Product Leadership company (Treacy & Wiersema, 1993) but it is now expanding its strategy towards Customer Intimacy. In the B2B software business, tailoring experiences to the customers' needs, resulting in improved customer loyalty, is becoming increasingly important (Deloitte, 2019). This is manifested at Exact in the inclusion of customer centricity as a company value and the creation of the customer success department and the customer journey management team by which this thesis was issued.

**"In tomorrow's connected world, Exact is a frontrunner in business software. Our people passionately serve SME's and accountants by continuously delivering innovative solutions, that make a difference for their business every day." (Exact, 2020)**

## Organisation

Exact is organised into two business units (as seen in Figure 2): Business Solutions and Cloud Solutions. They are both supported by a mutual corporate structure providing legal and financial structure. This thesis takes place within the Cloud Solutions business unit responsible for Exact online.

Exact Cloud Solutions is divided into the following departments (Figure 2):

- Marketing
- Sales
- Customer Success
- Product strategy
- Technology

More in depth information on each department can be found in Appendix B.

## Customer Success

Customer Success is responsible for the post-sales process (after the product/service has been purchased). This includes the on-boarding phase (getting to know the software), which usually entails the first 6 months of use, daily use, IPM's (in product messaging), training programmes and support. They need to make sure that the customers' wishes and needs are accounted for and that they support them in their learning curve and usage phase with any problems they might encounter. Customer Success is still a relatively new department, founded about two years ago from the support department, to increase the amount of proactive customer support initiatives and to monitor customer satisfaction. Customer Success has many sub-departments as seen in Figure 2. This thesis was initiated and developed in close collaboration with the Customer Journey Owners within Digital Engagement and its manager(s) also known as the Customer Journey Management team.

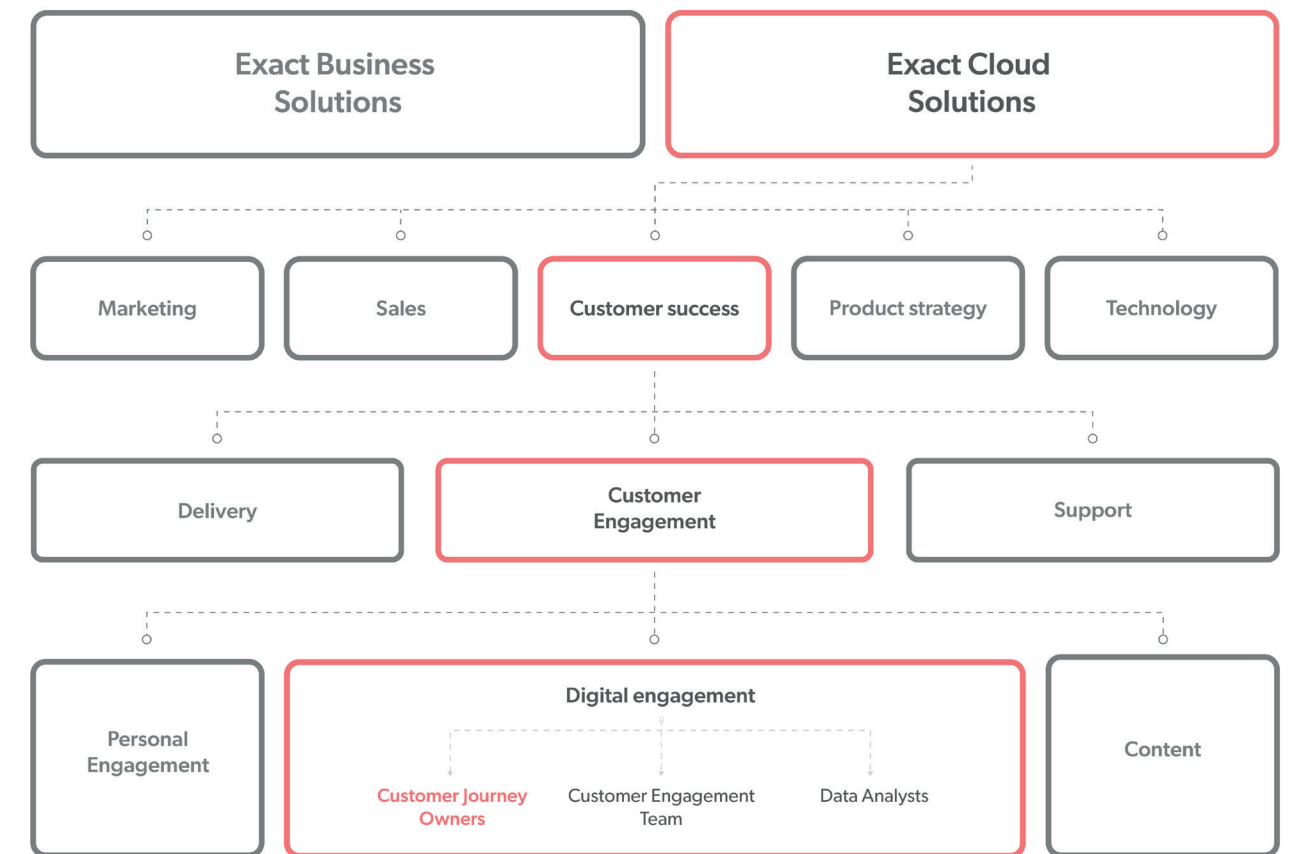


Figure 2: Organisation overview

## Customer Journey Management team

Since the start of 2020, the Customer Journey Management team was founded within the Customer Success department by the Director of Customer Success with the aim of reducing churn and increasing customer satisfaction. This team includes:

- Customer Success Director
- Digital Engagement Manager
- 3 Customer Journey Owners

A new Digital Engagement Manager was hired with experience in customer journey mapping practises to oversee the Customer Journey Owners. The Customer Journey Owners were made responsible for the journey of specific solutions: Accountancy & Payroll,

Industry Solutions and Accounting. For more information on the products and their customers please refer to Appendix B. Together they try to agree on a horizontal alignment of the journeys. They have also started the initiative of customer journey mapping practises within Exact for each of their respective product journeys. More on this subject can be found in the next chapter: Customer Journey Management



# Customer Journey Management

Now that a general understanding of Exact has been established, research into Customer Journey Management can start. Firstly, an exploration of Exact's current customer journey management is necessary before diving deeper into the practises suggested by literature and the challenges that Exact faces implementing customer journey management. How is customer journey management practised at Exact at the moment? How is it organised?

## Current situation

Since the CJM team has only started recently, they are still defining their responsibilities and tasks. At the moment these responsibilities lie mostly within the scope of Customer Success, as the CJM team was founded primarily to reduce churn and increase NPS within the customer success department. One of the main tasks of the Customer Journey Owners is to focus on mapping their respective customer journeys at the moment.

## Journey mapping

The customer journey maps that they make, are made in collaboration with experts from different departments such as sales, marketing or support. This means that the input for these maps is mostly based on their input and user data extracted from the software. Current customer journey maps (see figure 3) at Exact include information on: **the actions, the thoughts, the touchpoints** (with Exact) and possible **emotions** felt by the customer.

A journey map is made for each persona that has been identified by Exact such as a business owner or a bookkeeper for example. These maps are mostly made with post-its on the wall during a workshop and are then transferred to an excel file for easy adjustments. Validation of the mapping with the customer, happens very scarcely. These maps are then used to identify pain points to be addressed by customer success. As shown in the previous chapter (About Exact), CJM is currently situated within the Customer Success department. Therefore, the focus of their journey mapping sessions is mostly on the post-sales process (after the customer has made the purchase).

## Area of influence

The way CJM is currently organised, their influence and the people they work with most closely, are situated within Customer Success as seen in Figure 4. (Based on stakeholder mapping sessions which can be found in Appendix C.) These employees also have a focus and influence over post-sales process mostly. As can be seen, other departments' employees and especially their managers fall on the far right spectrum. This means that the influence that Customer Journey Management has over the innovations that other departments develop for their part of the customer journey is little at the moment. This also means that the changes that they make, often do not take the impact into account on the customer journey as a whole.

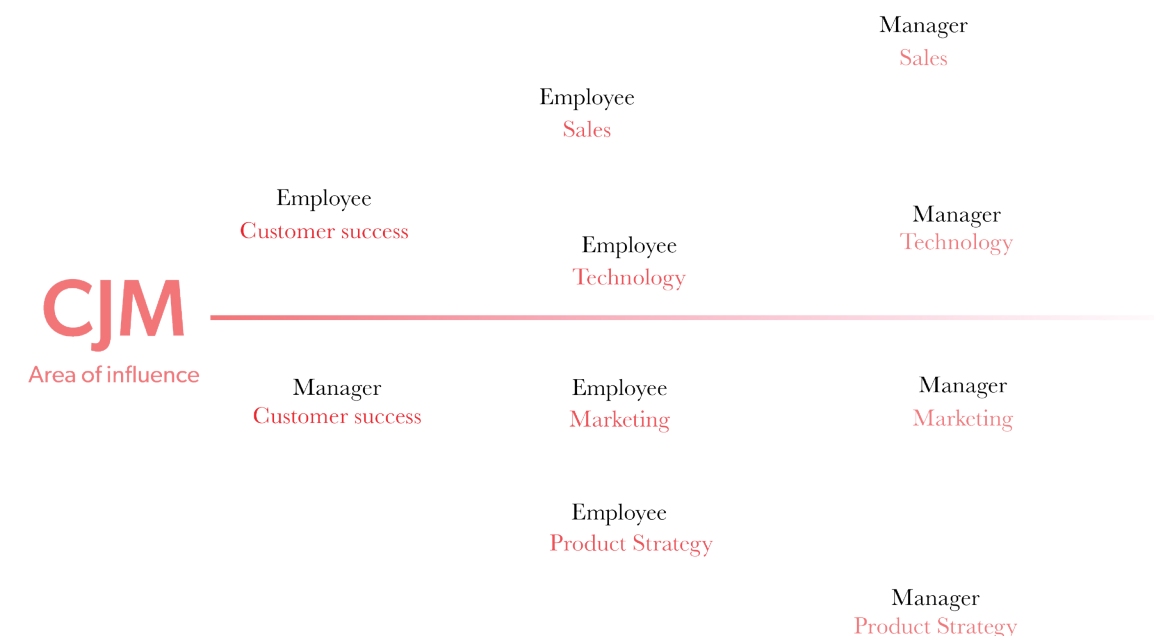


Figure 4: Area of influence

## Drivers

At Exact measuring success is a big part of the company's culture. Since it's built on numbers most of it's decision making and company goals are metric based. Customer Success is held accountable for mainly two important Key Performance Indicators (KPI's): NPS and Churn. NPS (Net promoter score) is a metric that indicates Customer Satisfaction rates and is used to take account of the customers voice as an important measure for success. NPS goals are set by management to ensure that the products they deliver result in high customer satisfaction. This is closely tied together with Churn, as this metric shows the percentage of customers that have downgraded or cancelled their subscriptions. These two measurements therefore can be seen as the two main drivers for success within the Customer Success department. This also means that management is directly held accountable for achieving the set goals regarding these measurements. For an extended explanation and review of these metrics please refer to Appendix A.

## Conclusion

As CJM is slowly getting up and running, many quick wins can be achieved in the Post-Sales process. The question is whether this is the right approach for the long term, whether they have the right influence to make the desired impact and whether the metrics they are being held accountable for are fitting for its purpose: the optimisation of Exacts customer experience. Is the focus on the onboarding process a good choice or should this be expanded? Maybe it would be beneficial if Customer Journey management was placed outside of customer success for example, to have influence over the whole customer journey? Or can this be achieved from within customer success? Maybe NPS and Churn are not the right metrics to measure customer journey management success? Do they drive the right decisions? In the next chapters these topics will be discussed based on literature and the many interviews conducted.

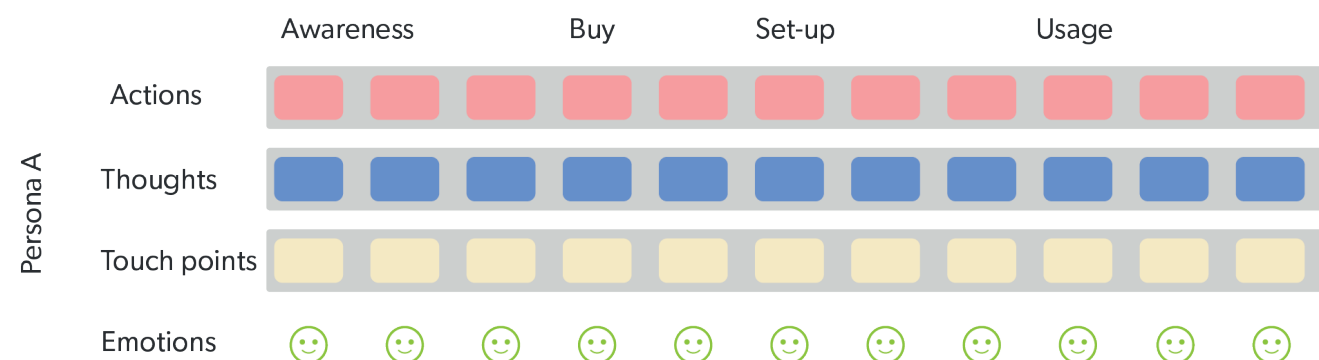


Figure 3: Journey map example

## Literature review

Now that a general understanding of CJM at Exact has been gained, a deeper dive into Customer Journey Management (CJM) as mentioned in literature can begin. What is it and how should it be practised according to literature?

### What is a customer journey?

Before defining what customer journey management is, an understanding of what a customer journey is needs to be established. According to Patrício et al. (2011) a customer journey is: “A series of touchpoints, involving all activities and events related to the delivery of a product/ service from the customer’s perspective” An important factor here is that the customer journey is the journey from the customers perspective. This means that their experience with the brand, intended or unintended, is what shapes their journey.

According to Edelman et al (2015), journeys are central to the experience of a brand, and as important as the products themselves in providing a competitive advantage. This is where customer journey management comes in. Optimising a companies customer journey is vital in creating and sustaining this advantage for future business success. But before being able to manage the customer journey, the customers experience and their respective journey must first be understood. In order to do so, customer journey mapping is often used as a method for creating this understanding.

### What is a customer journey map?

A customer journey map is a visual representation of what a customer experiences throughout their interaction with a company (Salesforce, 2016). Customer journey mapping comes in different shapes and sizes. Usually customer journey maps differentiate different phases in the customers journey as seen in Figure 5. These phases are then filled in with different touchpoints and matched with what the customer does, thinks,

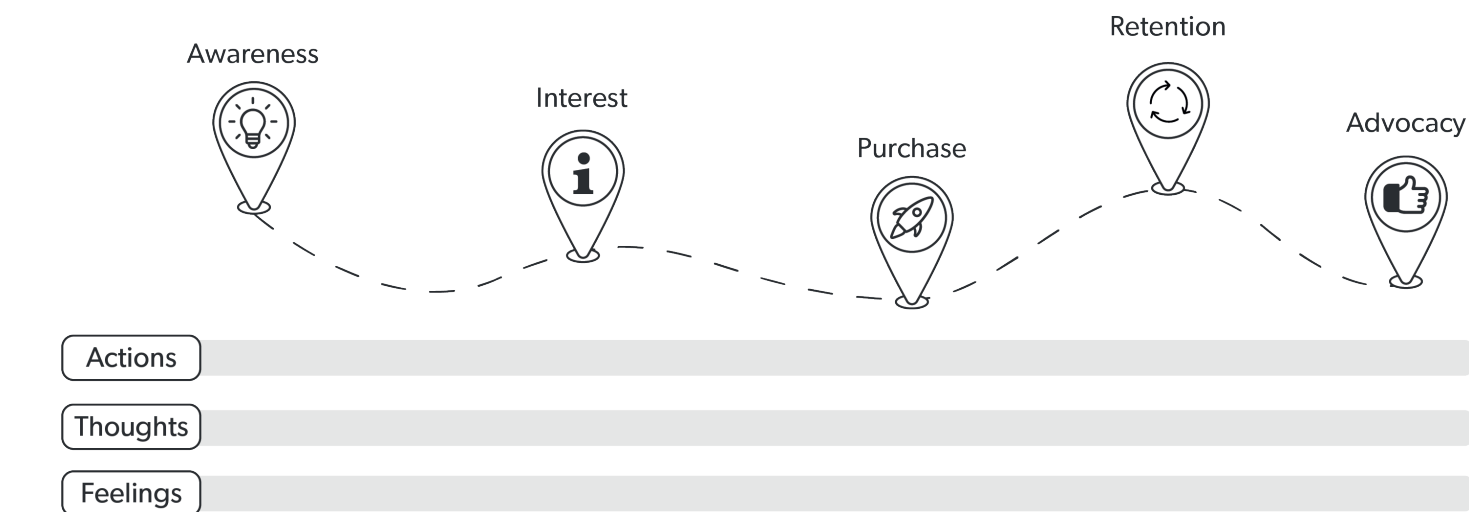


Figure 5: Customer Journey Map stages (adapted from van Rompuy, 2016)

and feels. The aim of such a map is to gain deeper insight in and understanding of the customers experience. Another method that is applied often is that of service blueprinting (Remis et al., 2016), where the back-end and front-end of a company are matched with the interactions of the customer. This technique is more focused on the company and it’s processes and less on the customer however. Once an understanding of the customer experience has been established customer journey management can take place.

### What is customer journey management?

According to Genesys (2020), Customer journey management is: “The practice of using behavioural trends and technology to optimize the customer experience. The goal of customer journey management is to minimize customers’ efforts across all channels and touch points, ensuring a seamless experience every time a customer interacts with your company.”

Nowadays companies are realising that a good product alone is not enough and that creating a good customer experience is the basis for their future business success. Deloitte (2019) states that the future of B2B business is in experience selling since people are exposed increasingly

to excellent experiences in their daily lives (think of spotify, airbnb etc.). This means that demand is shifting from products and solutions to experiences that generate value from the first interaction to long after the sale has ended. In order to cater to this changing demand, companies have to put mechanisms in place to be able to shape their customers experience. That is why Customer Journey Management is being implemented increasingly and customer journey owners are being appointed. They are put in place to make sure the customer experience is optimised to minimize customer efforts. Rawson et al. (2013) even argue that the optimization of a journey is tactical but that shifting a company mindset, culture and

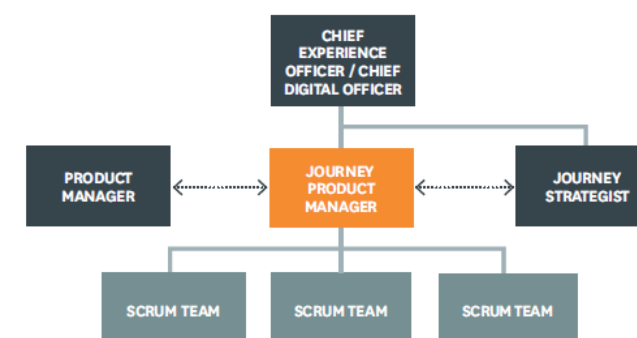


Figure 6: The new journey management organisation (Edelman & Singer, 2015)

its processes is strategic and transformational. It can lead to higher customer and employee satisfaction, increased revenue and even lower cost. It does take time and effort to make this change but a true competitive advantage goes to companies that get it right, according to them.

In order to get it right, Edelman & Singer (2015) suggest an organisational structure as shown in Figure 6. The Journey Product Manager is at the centre, working closely together with the product manager and journey strategist, leading scrum teams of all disciplines. They report directly to a Chief Experience (or Digital) Officer. This way the journey manager has direct influence over the whole product journey he or she is responsible for.

Managing the end-to-end customer journey is vital according to Maechler et al. (2016). Improving single touchpoints is not enough and can lead to a misguided thought that customers have a positive experience whilst in truth they do not. For example if the satisfaction rate for each of four touchpoints is 90%, it can still mean that within the whole customer journey 40% (4x10%) of customers have a negative experience. The problem is not in the individual touchpoints but in the journey as a whole.

### Conclusion

As the market is shifting towards experience selling, customer focused initiatives are on the rise. In order to gain a competitive advantage companies have to invest time and effort into organising the management of their end-to-end journeys so that an excellent customer experience can be delivered. Not just looking at touchpoints but considering the whole journey from start to finish is vital in making sure these initiatives result in the desired outcomes. How does Exact compare to this? What challenges do they face? This will be investigated further based on interviews and a case study in the next chapters.



# Interviews

In order to dive deeper into the current situation of Customer Journey Management at Exact and the challenges it faces, interviews were conducted. Based on these interviews a lot of additional insights came to light. This section will try to summarize the findings and conclude on the most important challenges to be investigated further. For the full transcripts please refer to Appendix J (company only).

As stated in the previous chapter, the focus of the CJM team is mostly on the post-sales process and mapping the journeys that occur within this scope. Since they are situated within Customer Success, this also means that their influence is mostly within said department and that they are being judged on the same KPI's. By analysing the interviews for common concerns, this section explores whether this current situation is desirable and what challenges this relatively new initiative of CJM is facing. Do they feel like they are doing the right thing and are they given the necessary responsibilities? Or should their position and scope be adjusted? How do other departments look at CJM at Exact?

During the interviews, a couple of issues seemed to come up in multiple conversations as seen in Figure 7. When looking closer at these issues they can be grouped into three categories:

- Customers are not involved enough in the design process
- CJM only has an influence over a small part of the Customer Journey
- Different priorities between teams/ departments

## Customer involvement

The first issue that was often raised was customer involvement in the design process. Often innovations are initiated mostly based on an inside-out approach with too little customer

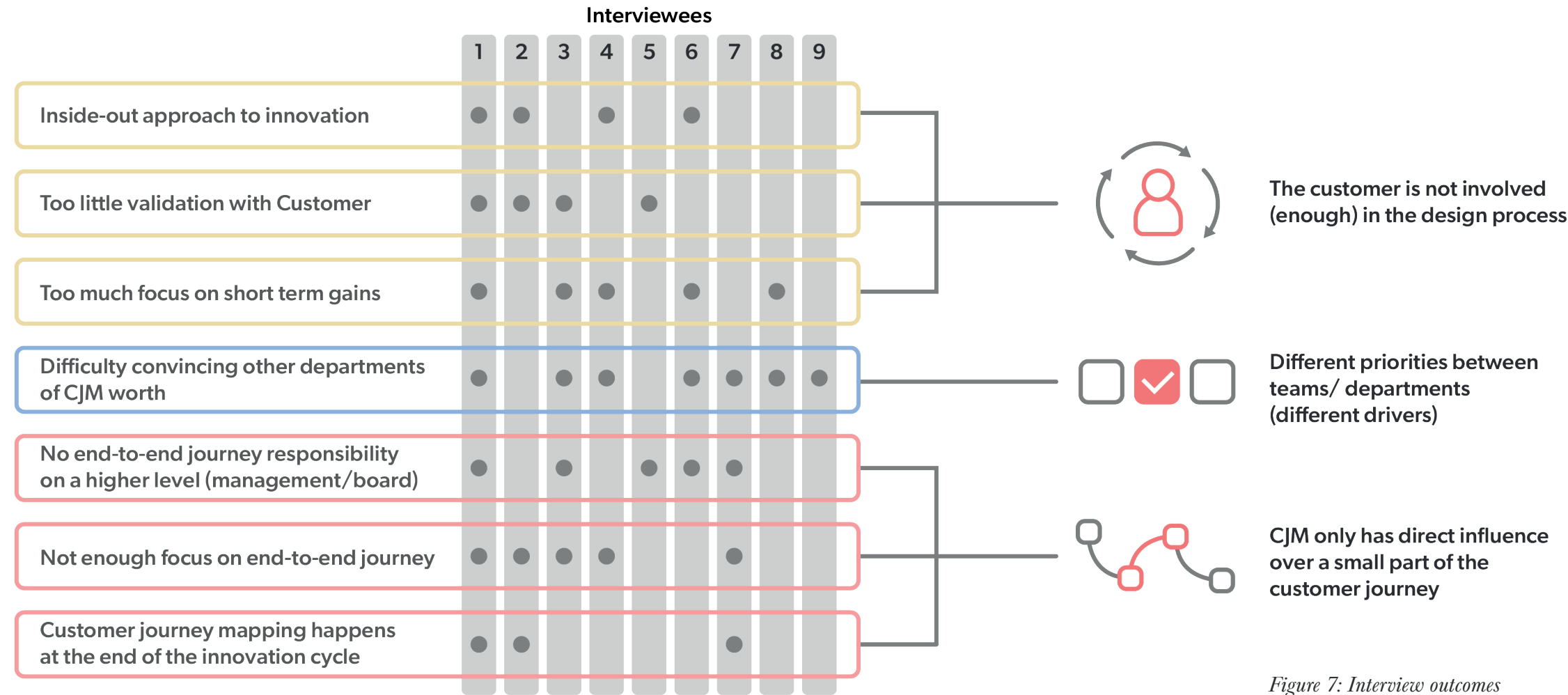


Figure 7: Interview outcomes

validation and a focus on short-term gains as explained by interviewees. This often results in solutions being developed that lack customer fit.

## Customer centric initiatives

It seems a lot of initiatives are started to try and gain a better understanding of the customer and it's needs but that it fails to really become embedded into the company. One of the root causes might be in the lack of design mentality on board levels and the abundance of engineers versus a shortage of (UX) designers at Exact as addressed by 2 interviewees. Multiple interviewees think Exact is still more of a Sales/ Marketing led company than a Design-led company. This also has its effect on the collective mindset and the way the company is

run. Maybe this also has to do with the fact that customer centric initiatives are very difficult to measure based on it's business impact directly. An example: One could hide the cancellation option on their website to reduce churn in the short term but this would not result in a better product or customer loyalty in the long run. Being customer centric is a belief or mindset that needs to trickle down from the top layers of the company as stated by two interviewees.

Exact is very comfortable when it comes to measuring and quantifying business gain but it is less comfortable in the fuzzier space of user-centred design and Design Thinking, it seems. Before this project two other design students from the TU Delft have attempted to create a

change in this embedded culture by, for example, proposing a strategy for the implementation of Design Thinking (Daanen, 2018) into the Exact culture. Unfortunately after this project, management changed and most of the UX and design thinking efforts were reverted. They both support the interviewees views that Exact has been struggling with implementing user-centered design practises over the years and that the customers voice is not represented enough in the innovation process. This might be influenced by the short-term versus long-term thinking at Exact, as mentioned before. The consensus under interviewees seems to be that at the moment Exact is still mostly short-term (revenue) focused.

## Current process

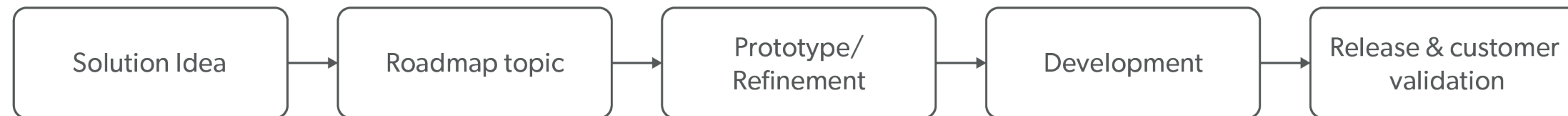


Figure 8: Current NPD process

### Inside-out approach

With this short-term focus comes inside-out thinking where business gain seems more important than delivering a great customer experience. This is also reflected in their current innovation process as seen in Figure 8. The process usually starts with a solution idea and ends with customer validation. A common belief that supports this thinking within Exact was explained by interviewees in the concept of “the flywheel” which is said to be widely adopted in senior levels of management. It is the belief that by adding customer value, a customer is also willing to pay more for their product. While in essence this might have some truth to it, in practise this often does not seem to hold up. As a lot of added functionalities are seen by Exact as added value, they are often not seen as value adding by the customer. In order to become truly customer centric and deliver a great customer experience, four interviewees feel the customer should be involved more often in the innovation process. Now the customer is only involved in the beginning and at the end: coming up with complaints or ideas and trying out the end product.

### CJM Influence

Since the Customer Journey Management team is part of Customer Success, they feel that their area of influence is mostly within the walls of their own department. This means that they only have influence over a particular part of the journey: the post-sales process. As literature (Edelman & Singer, 2015; Maechler et al., 2016) and also interviewed employees suggest this is far from ideal. The Customer Journey spans

from the first moment a need arises within the customer to the moment the value proposition of Exact is no longer of interest. Therefore they question whether its current position within Customer Success is desirable.

### No end-to-end responsibility

This position means they will be held accountable for Customer Success’ metrics, such as Churn and NPS and that they are managed within its scope. This includes many ad-hoc tasks focussed on improving these metrics, through functional improvements. This is also why the CJM team mostly addresses the post-sales process. But as Rawson et al (2013) state: “Touchpoints matter, but it’s the full journey that really counts.” Both management and the Customer journey owners, do state that ideally they should be able to address the whole end-to-end journey holistically, in the long run. Management believes, however, that only addressing the post-sales process is already enough of a handful for now. Relocating CJM to a different department would not be desired. Realignment of the stakeholders involved in their project teams might be the key to managing the end-to-end journey instead. This would require that Product Managers and Strategists are directly involved, as supported by Edelman & Singer (2015), instead of focussing on Customer Success alone. Part of the solution, as proposed by Edelman & Singer and by two interviewees, could also lie in introducing a board member solely responsible for the end-to-end customer journey who CJM report to directly. This way true end-to-end responsibility across different departments might be achieved.

### Mapping happens too late

Another factor that impacts the influence that CJM has as stated by 3 interviewees is the timing of their involvement in the design process. Usually Customer Success is only involved when development is almost over. This means that most of the journey mapping happens after the design process is almost over. As stated by multiple interviewees, this is far from ideal as they are only patching wounds instead of innovating from a journey standpoint. Customer Journey Owners state that they would like to be involved earlier in the design process instead.

### Different priorities

The customer not being involved in the design process and the (lack) influence that CJM has, seems to also be influenced by the different priorities (KPI’s and culture) between departments which makes end-to-end customer journey management difficult. As the customer journey management team is steering on improvements to reduce Churn and improve NPS, other departments are not always incentivised to help them due to their own targets having priority. Each department still works mostly in its own silo with its own performance measures as stated by many interviewees. If a new (free) product feature, that greatly improves the customer experience, does not necessarily drive sales figures, marketing and sales will be less likely to hook on since they are only being held accountable for realising their own targets. The challenge that CJM is facing is aligning these interests by proving the worth of managing the end-to-end journey and the long-term business value it can create.

## Conclusion

Out of the interviews it became clear that there are multiple challenges that CJM is facing in its growth to maturity. The issues surrounding CJM that surfaced from the interviews could be grouped into three categories:

- Customers are not involved enough in the design process
- CJM only has an influence over a small part of the Customer Journey
- Different priorities between teams/departments

They seem to provide evidence that Customer Journey Management at Exact is not yet where it should be and that opinions on the direction it should take differ. Their current culture, which prefers measuring success based on hard KPI’s fueling short-term inside-out thinking, works counterproductive to the CJM initiative. The team struggles between their desire to design the end-to-end customer journey in a holistic way and the responsibilities and tools they are given by company management and its placement within Customer Success. At the moment, Customer Journey Management only has influence over the post sales process, which is only a small part of the customer journey. The differences in drivers between departments are hindering them from managing the end-to-end journey together. Because of this, Exact is not able to involve the customer enough in the design process which can lead to negative customer experiences. These challenges will be investigated further with a practical example in the next chapter: Case study.

## Case study

The DEB (Digital Efficiency Bundle) case is an example in which the customers perspective was not understood well enough which resulted in unhappy customers, thus creating a high churn rate for Exact Online Accountancy. This case study aims to show a practical example of how customer journey management could have been of value. For the full case study, refer to Appendix K (company only).

### What happened?

2018 marked the start for the invention of the Digital Efficiency Bundle (Figure 9). A new product proposition in the form of “No Hands” accounting was formed. Due to new developments in AI technology, Exact saw an opportunity to leverage this technology for automated recognition of receipts & bills and automated booking entries (called “No Hands”). Development continued through till 2019 when the new product proposition was ready for launch. An information campaign was launched to inform customers of the coming changes and in September of 2019, the first customers were being migrated. At this point the first signs of trouble started to show. During the end of 2019 and the beginning of 2020 customers started cancelling or downgrading their subscriptions and complaints started to pop-up.

### Accountants

In order to understand what caused their dissatisfaction, a short insight into the accountancy business is necessary. Generally, there are two stereotypes:

- The classic accountant, payed by the hour, which still works with shoeboxes filled with receipts and loves the old way of doing everything by hand.
- The modern accountant that works with automated systems, gets receipts delivered digitally and has an advisory role over an administrative role with their clients.

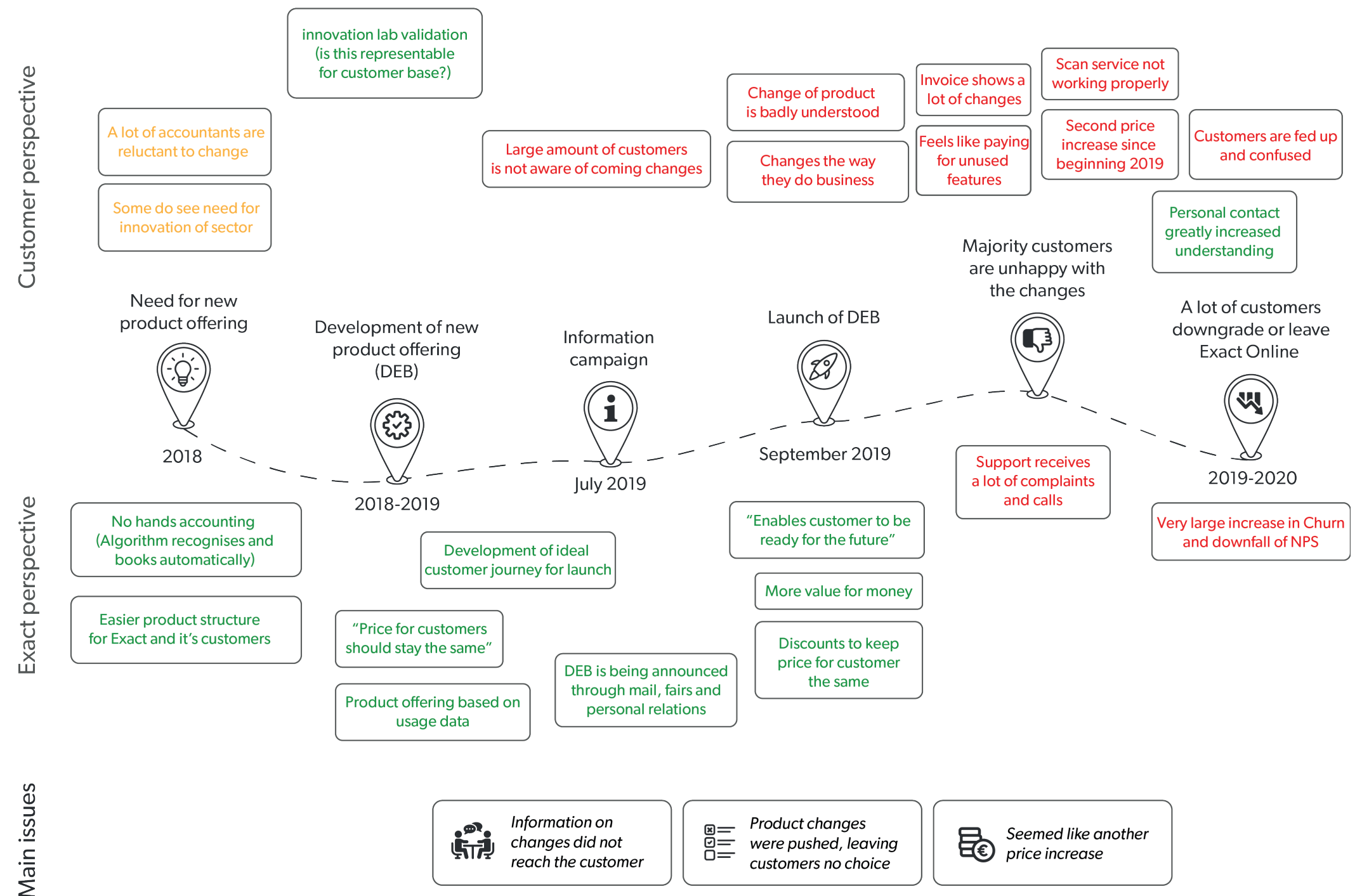


Figure 9: DEB storyline



These two types of accountants have vastly different needs and wishes and also have a different view on the need for innovation of their businesses. In reality of course, there are also many accountants that fit somewhere between these two profiles.

### What went wrong?

Although Exact thought that it had developed a fitting product proposition, customers decided to downgrade or leave. But why?

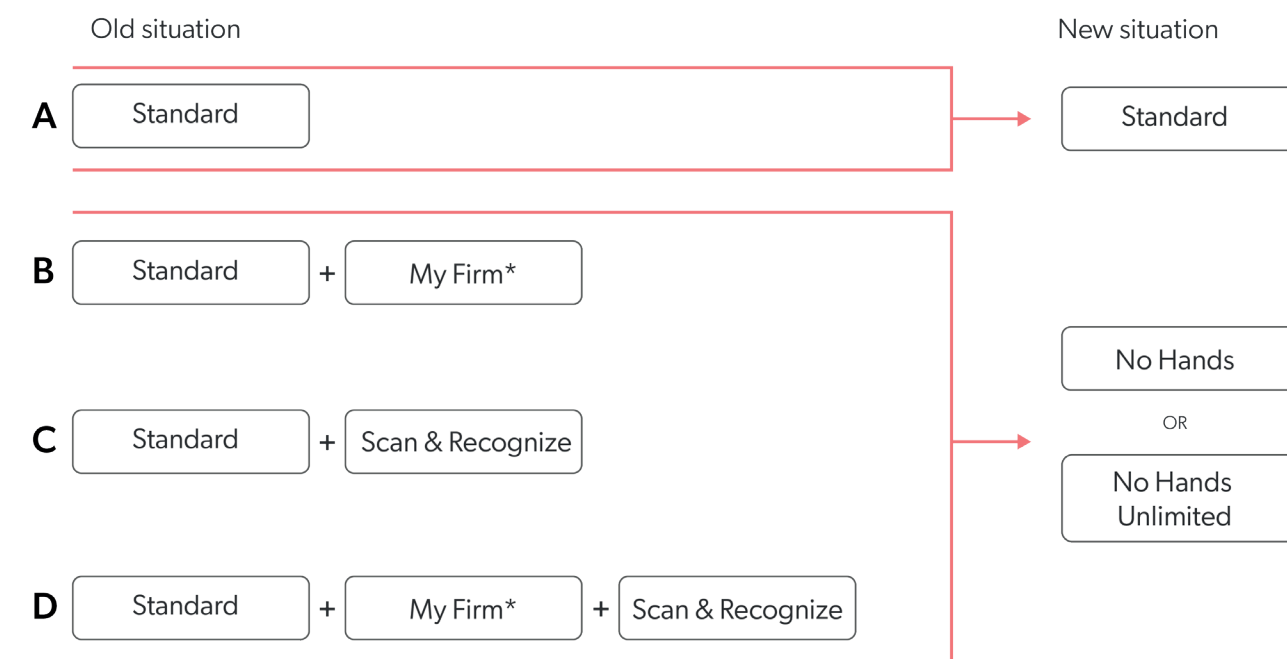
#### Issue #1: Information

As can be seen in Figure 9, most problems (red) started around the information campaign. Although a plan for launch was made through development of a customer journey map this showed only the ideal situation and proved to be far too optimistic. In reality, a lot of customers did not get informed about the coming changes since they had missed the emails and messages that they were sent.

#### Issue #2: Implementation

Due to this lack of information on the customers side, they were taken by surprise when DEB finally launched. A majority of customers did not know they were being migrated and/or did not have a choice as they were pushed into their new packages automatically. On top of that, technical problems surfaced that delayed their migration or resulted in faults in the customers accounts such as missing rights or unwanted features being enabled.

An Example: As seen in Figure 10, accountants subscriptions ranged between options A to D (A being the most classic accountant and D being the most modern accountant) when the old situation was migrated to the new situation customers in category B, C and D were pushed into the “no Hands” or “No Hands Unlimited” proposition. Since these new “No Hands” propositions both include the functionality of My Firm and Scan & Recognize, especially customers in category B and C were pushed into a product package they did not sign up for in



\* = My Firm and My Firm Premium

Figure 10: Customer Migration

the old situation. These types of accountancies were most affected during migration since this resulted in functionalities being enabled that they did not necessarily use or want.

The fact that the invoice they received (which already had some issues regarding legibility) showed a lot of changes they did not understand and/or signed up for, did not help the situation either. Later, problems with the accuracy of scan services also impacted customers negatively.

#### Issue #3: Price

Another factor that played a role in this case was pricing. Since there had already been a price increase in early 2019 and the invoices showed all these changes, a lot of customers thought that this was another way of increasing their prices. Although Exact made sure that almost all customers would pay the same, by adding discounts, the customer perception was different.

### Conclusion

All these factors played an important role in the reasons that led to a lot of dissatisfied and angry customers. This in turn led to the downgrade or cancellation of subscriptions which caused Exact a lot of business harm. To summarize:

- Information changes did not reach the customer
- Product changes were pushed, leaving customers no choice
- It seemed like another price increase

These problems all seem to point to a central conclusion that Exact's intentions do not match the customers perception. The customers perspective was unfortunately not understood well enough and was thus not managed correctly. If their perspective had been understood better, Exact might have been able to manage it more

appropriately, given that the right tools and systems were in place to do so. This is exactly where CJM can be of great value, making sure that these types of issues do not occur again. As also concluded from the interviews, this will require CJM to make sure that they have a seat at the table earlier in the design process, that they have influence over the end-to-end journey and that a deeper understanding of Exact's customers is gained. These topics will be discussed in further detail in the next chapter: Design Focus.

# Design focus

As a greater understanding of Customer Journey Management at Exact and the challenges they face was gained, some conclusions could be made. This section will try to bring these conclusions together and aims to get to the root of the problems that restrict Customer Journey Management from reaching it's full potential. From there, a design focus will be chosen in the form of the design challenge that will tackled in the remainder of this thesis.

## Lack of customer understanding

Whilst Exact is currently comfortable in relying on it's numbers, it is not yet comfortable with the uncertainty of hard-to-measure user-centered design initiatives such as Customer Journey Management. As previous research by Daanen (2018) and Garcia Mateo (2016) shows and interviewees stated, Exact is still trying to get a grip on their customers. They are not able to include the customer and their needs into their processes and decision making enough yet. The issues identified from the interviews all seem to point towards the underlying problem that User-centered design thinking is not yet embedded enough into the veins of the company. This does not mean that it's employees do not have the customer at heart though, but it seems that often the customer is not understood well enough and is thus not represented well enough in the innovation process at Exact.

## Shifting the short term focus

This lack of customer understanding is linked with the way employees are being motivated or being held accountable. It is not based on answering the question: how can we serve the customer the best we can (long term)? It is usually: How can we make sure that the customer is willing to spend the most money (short term)? There is a battle between old ways of working and new ideas. CJM is one of those new ideas that can truly make an impact on the long term growth of Exact, if done right. This means that departments need to start working

together in order to design the end-to-end journey holistically (Edelman & Singer, 2015; Maechler et al., 2016), with the customer at the centre of the innovation process. This does require an organisational shift and a change in the current way of working at Exact.

## Need for a journey orientation

One of the ways to practise Customer Journey Management the "right" way is by managing the customer journey end-to-end in a holistic way. Breaking down old silos and realiging performance measures to drive a user-centered mindset might be the long term solution. This can be done by shifting organizational processes, culture, and mind-sets towards a journey orientation according to Rawson et al. (2013). At the moment Exact's culture is dominated by measurements and KPI's that mostly involve short-term goals (revenue). Research (Rawson et al., 2013) has shown however, that businesses that deliver a great customer experience greatly outperform others in terms of revenue, expenses and employee satisfaction. This will require a long term company wide investment in shifting the company towards a journey orientation. It might be time to shift Exact's purpose from aiming for a doubling in revenue to an authentic customer driven purpose of "why" it does things. Why should people choose exact and what makes it's employees get out of bed in the morning? That probably isn't a higher NPS or lower Churn rate. Customer Journey Management can aid in realising a common goal: enabling Exact to deliver an outstanding customer experience to its most valuable asset, their 500.000 customers.

All these issues seem to point towards a dominant mindset that results in a low implementation of user-centered design practises within Exact. This drives the way that business is organised and decisions are made. The next chapter will elaborate on this mindset within Exact.

## Mindset

One of the key systems that seems to drive the challenges that customer journey management is facing, is the mindset within Exact. As concluded from the DEB case and interviews, often times the customer is not put at the centre of the innovation process. Exact often seems to think that it knows it's customers well enough thus relying on self validating ideas and "gut feeling" instead of applying the needed design practises. This might be the reason why customer validation is often overlooked. In practise this does seem to lead to misconceptions, resulting in loss of revenue. So why is it that they rely on this idea of self validation and why is customer validation done so scarcely or at the wrong time?

## Current mindset

Figure 11 (blue) aims to show the mindsets that drive the implementation of design practises. At the moment, there is an emphasis on quantitative data which is maintained by the technology driven approach to new product development (NPD) and vice versa. This in turn maintains room for individuals that have a self-referential approach to NPD. This together with a low design capacity and the perception of existing design practises leads to a low implementation of design practises at Exact. This low implementation works against Customer Journey Management as they form the basis for good journey management and designing customer experiences that fit the customers needs.

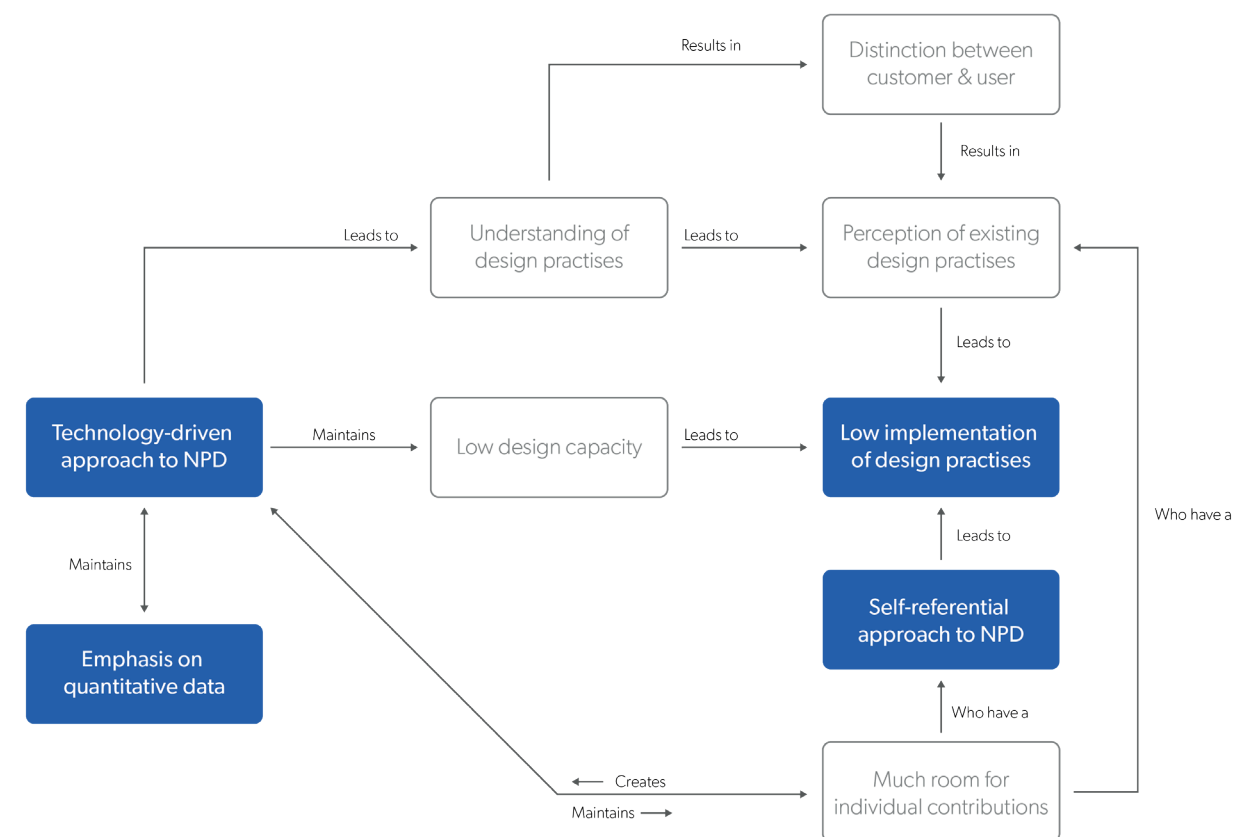


Figure 11: Current mindset; (adapted from Bastiaansen et al., 2018)

Figure 12 (red) proposes a change in emphasis on deep customer insight over quantitative data, which will help create a shift towards a User-centred approach to NPD. This will change the self-referential approach to a user-referential approach which leads to an increased implementation of design practises. This will in turn lead to the design of customer experiences that better fit the customers needs and thus improve Customer Journey Management outcomes. In order to do so, the right methods need to be applied that enable Customer Journey Management to gather these deep customer insights.



The challenges that Customer Journey Management faces in coming to maturity seem to be grounded in the lack of understanding of the customer. As long as there is an emphasis on quantitative data and a technology driven NPD approach at Exact, implementing design practises that benefit Customer Journey Managements efforts, which in turn will lead to improved customer experiences, will not be likely to succeed. So in order for CJM to be able to improve the end-to-end journey in a holistic way, an emphasis shift in the innovation process towards generating deep customer insight (Price & Wrigley, 2016) needs to happen, as shown in Figure 13. This way CJM can slowly change the mindset within Exact, providing the grounds for a culture change towards a journey orientation that benefits the customer experience in the long run.

## Defining the challenge

As concluded from the analysis, in order to bring Customer Journey Management to the next level of maturity, multiple levels of the initial design challenge were identified (as seen in Figure 14).

The initial challenge as defined in the project brief was:

*“How can Exact bring Customer Journey Management to the next level of maturity?”*

Based on the research that was done, it could be concluded that Exact can bring customer journey management to the next level if they design the customer journey end-to-end in a holistic way. The question that follows out of this is:

*“How can Exact deal with their customer journey in a holistic way?”*

As relocation of Customer Journey Management is not desired and will likely not change anything to Exact's current culture, empowering employees from different departments to positively contribute to their part of the customer journey in an integrated way might prove to be more effective. This way Customer Journey Management can be the evangelists of the voice of the customer and help employees incorporate user-centered design practises into their work routine. The main difficulty in this case is convincing other departments to see and accept the value of these design practises, as there is still a strong sales-driven culture within Exact. The subsequent question that follows is:

*“How can Exact employees be empowered to positively contribute to their part of the customer journey in an integrated way?”*

This can be done by proving the value of CJM and giving people the tools to gain better

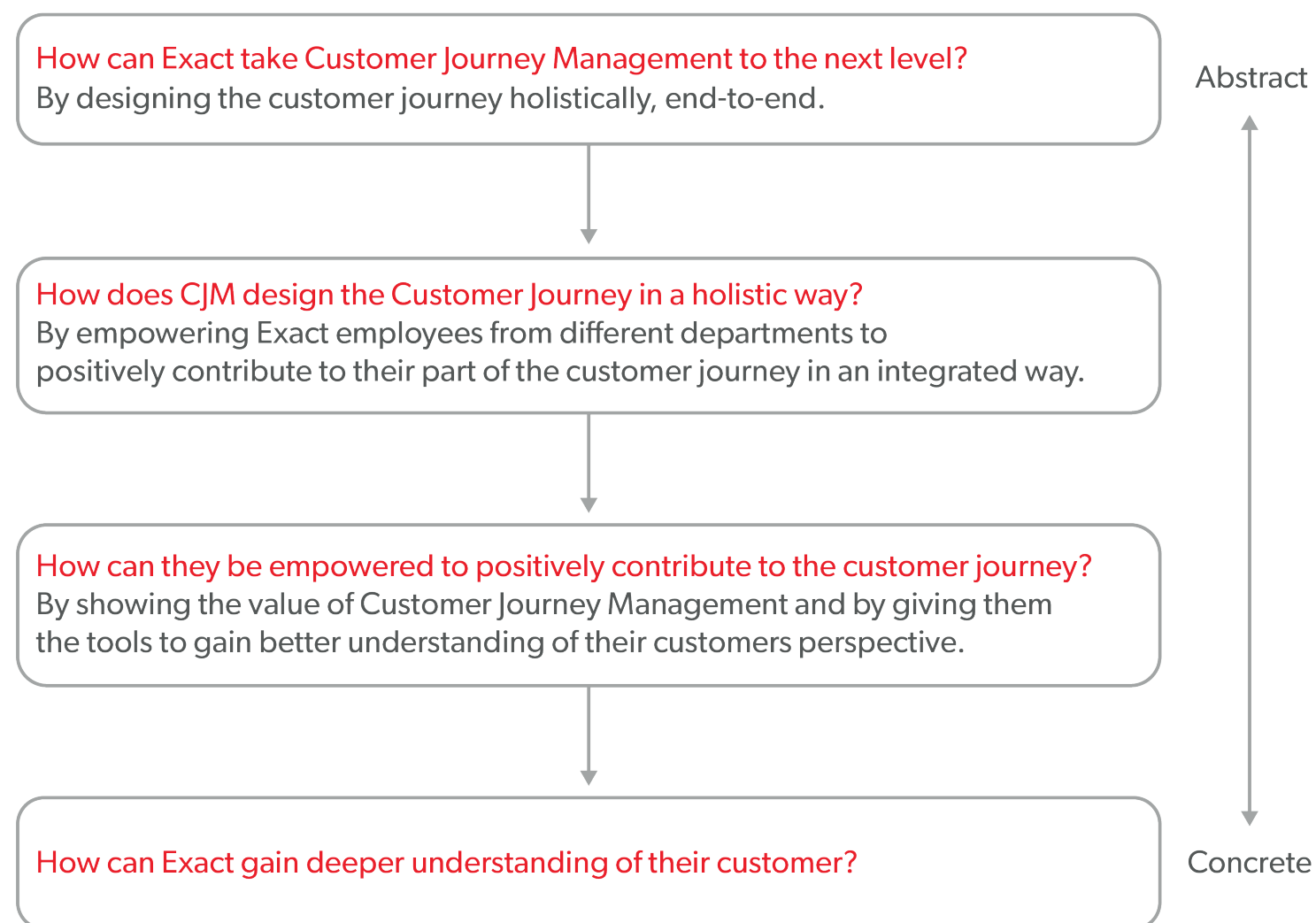


Figure 14: Design challenge breakdown

understanding of their customer. The DEB case gave an example of the possible added value of CJM and the dissatisfaction and churn it could have prevented. From this case study and the interviews it became clear that insufficient understanding of the customer at Exact is the root cause of the challenges that CJM is facing. A shift towards deep understanding of the customer needs to happen in order to start bringing CJM to the next level. If this understanding is spread company wide by CJM, they can start to influence the end-to-end journey through the empowerment of the right stakeholders. In order to address this root problem the following focus for this thesis was chosen to work out further in the ideation phase:

*How can Exact gain deeper understanding of their customer?*

At the moment, the customer's experience is not understood well enough at Exact. The customer is not being put at the centre of the innovation process, due to a lack of user-centered design practises that help employees gain insight into their customer's lives. As long as the customer experience is not felt by employees, Customer Journey Management does not have the means to manage the customer journey effectively.

Therefore the design goal can be identified as: Design of a system that enables Exact employees to gain a deeper understanding of their customers.

This design goal will serve as the basis for the rest of this thesis. Before this root problem will be addressed however, advice will be given on solving the problems on other abstraction levels as well, as shown in Figure 14.



# Ideation

# Approach

The design challenge that will be investigated in this chapter is:

*How can Exact gain deeper understanding of their customer?*

Before diving deeper into this challenge, advice on solving the other levels will be given as well as seen in Figure 15. These will be given in the form of:

- A Roadmap
- A Customer Journey Map redesign

## Roadmap

Firstly an advice in the form of a roadmap towards maturity for CJM was established

that will serve as a guide towards designing the customer journey in a holistic way. The roadmap shows the integration of insights gained from the interviews and literature research towards an in-context approach to the holistic design of the customer journey.

## Customer Journey Map redesign

Afterwards, a redesign of the customer journey mapping method used by CJM is proposed, which gives deeper insight into the interface and back-end processes of Exact and the customer. This enables integration of the contribution of each department into the end-to-end journey, serving as a tool to empower other employees to positively contribute to their part of the customer journey.

## Game design

Once the advice on both levels is given, the main design challenge will be explored further. This is covered in the section: “Game Design”. This section will explore ideation of gaining deep customer understanding at Exact, before choosing the best fitting solution to be explored further, based on criteria derived from analysis. This solution will be tested in practise, which will deliver additional insights that can then be used as the basis for the implementation phase.

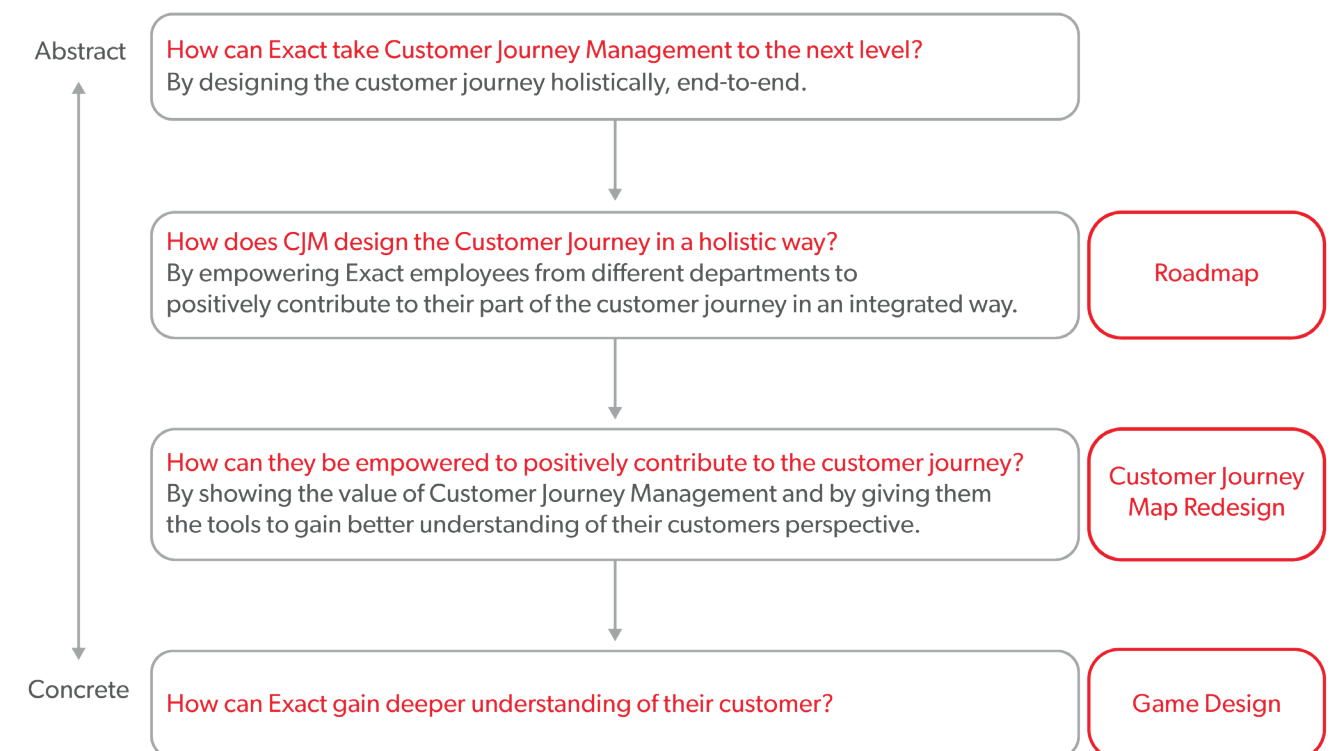
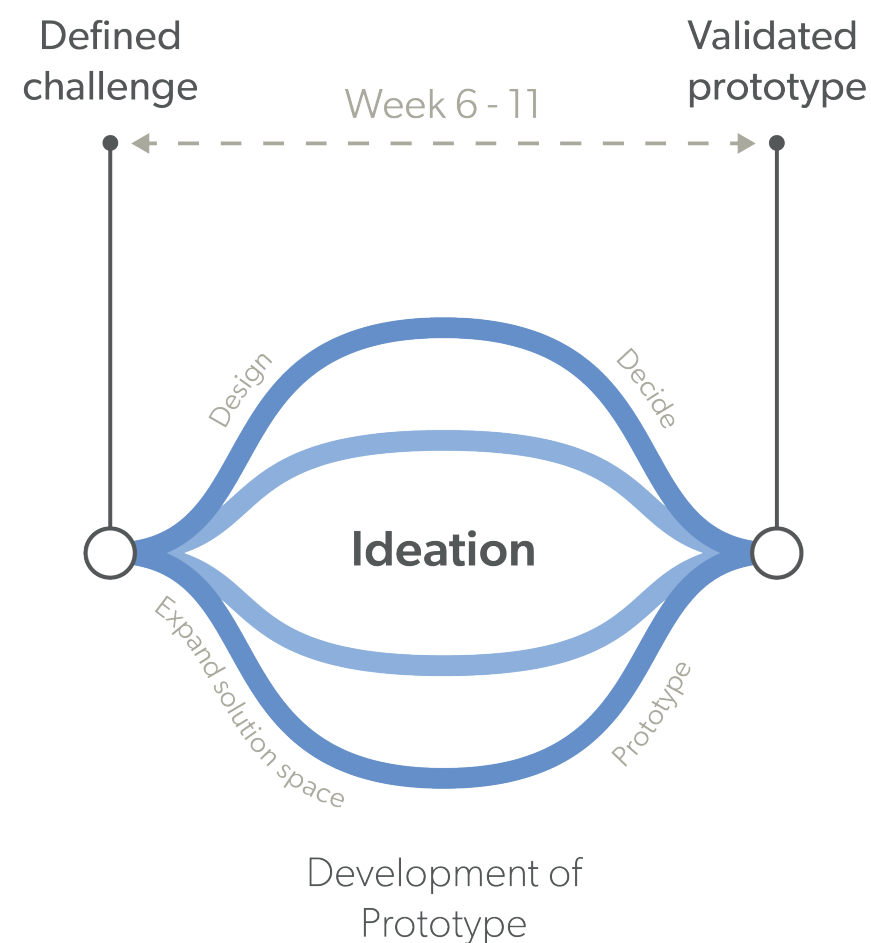


Figure 15: Ideation approach

# Roadmap

Based on the findings and suggestion from the analysis phase, advice was given on the approach that Customer Journey Management should take towards the design of the customer journey in a holistic way. A couple of steps towards a solution were already briefly mentioned during the analysis phase but will be shortly summarized below before coming to the proposed roadmap.

## Solution spaces

During the analysis phase a couple of solutions that could enable holistic design of the customer journey came up:

### Invention of a CCO

At the moment no one on board level has the responsibility for the Customer Experience. Ideally a new position could be created that is entirely focused on the customer. The position of Chief Customer Officer or Chief Experience Officer might be the answer, as it is becoming a new norm in many businesses (Adlard & Bausor, 2019). This is, however, outside of the influence of CJM as this would require board level decision making.

### Showing business value of CJM

In order to align different department interests, it might prove useful to emphasize the business value of Customer Journey Management. Since it is in the DNA of Exact to quantify success, finding a way of quantifying its worth can greatly improve the chances of convincing the more sceptical employees. This could aid in spreading “the virus” of user-centered design thinking into other departments within Exact. The DEB case example can help quantify the impact that CJM can have on a project basis.

### Stakeholder realignment

At the moment CJM does not have the tools to influence the whole journey. This can be changed through the mobilisation of the right influential stakeholders. They need to be empowered to contribute to their part of the

customer journey in an integrated way. For example, the recent introduction of Product Line Managers can provide a great chance for CJM to work together closely to manage the entire journey since they are responsible for an entire product line.

### Generating deeper customer understanding

One of the key factors that will enable CJM to have a lasting impact is through gaining deeper customer understanding. The mindset at Exact needs to change towards a user-centered approach. By acting as the expert on the voice of the customer and by creating a mutual company wide deeper understanding of the customer, a great customer experience can be designed and managed.

## Result

All these proposed solutions showed potential but only implementing one of them would most likely not solve the problem. A combination of them, spread out over time, might be the answer. Not all these proposed solutions were fit for realisation within the scope of this project so a selection had to be made for further exploration and development. As seen below in Figure 16, a roadmap proposition was made, in

collaboration with the CJM team. They are part of a path towards the goal of being able to design the customer journey in a holistic way. Most of these steps can be executed by the Customer Journey Management team over time.

### 1. Define role & strategy

The first goal is to better define the role, purpose and long term strategy for CJM within Exact. Without this step it would be very hard to convince others to join their mission if they do not know what it is that they want to change. What is CJM's ultimate goal and what value will it bring to Exact?

### 2. Create workspace & improve post sales journey

Secondly, establishing a common workspace, both online and offline is necessary in order discuss ideas and communicate and document effectively. Meanwhile they are already working on improving post-sales journeys which should show quick wins and easy improvements, providing first proof of CJM value.

### 3. Prove value of CJM

On top of these quick wins, that provide early evidence, reflecting on old cases such as the DEB case and showing the issues it could have prevented can help prove the value of CJM further. This will help in getting other departments on board for CJM initiatives.

### 4. Select/ Create tools for deeper customer understanding

One of the key insights during the analysis phase was that customers were not understood well enough. This should be improved by gaining deeper customer understanding early on in the design process though the use of the correct tools/ methods. Once the necessary tools & templates are in place, improved customer insight can fuel innovation in these early phases.

### 5. Realign Stakeholders

Armed with these new tools/ methods and tools, the right stakeholders can be brought together to start exploring the end-to-end customer journey. A suggestion, from stakeholder sessions held, for who these stakeholders should be can be found in Appendix C “desired stakeholders”. A great opportunity may lie in close collaboration with newly appointed Product Line Managers.

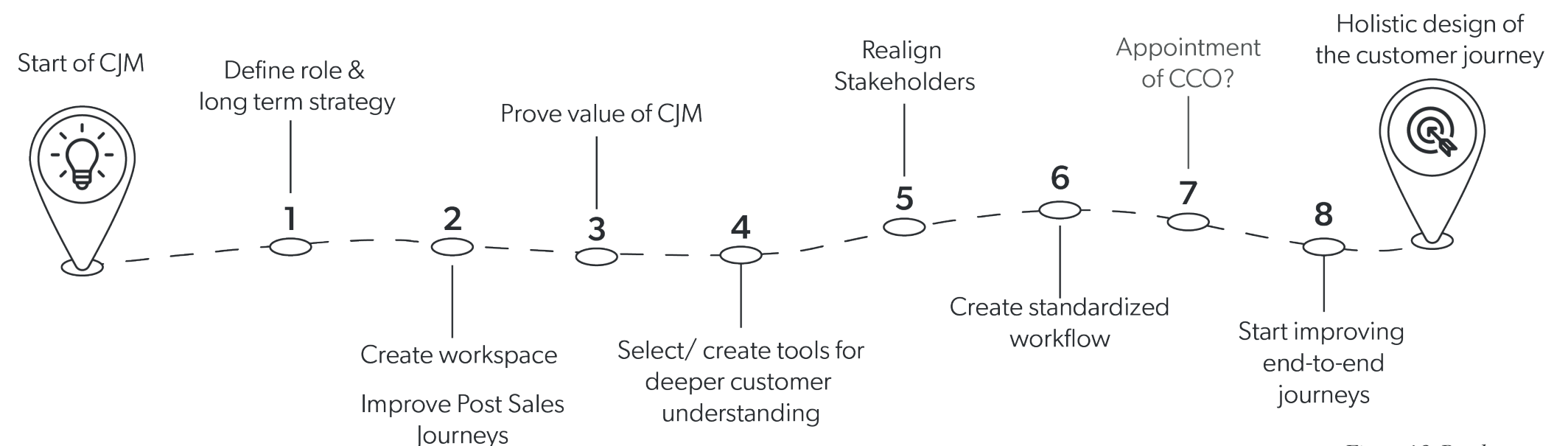


Figure 16: Roadmap

## 6. Create standardized workflow

Together with these stakeholders long term customer journey principles need to be established along with a framework of standard practices that form the basis for making a positive impact on the customer experience. This way a standardized workflow can be established. The framework could be based on the 6 principles described by Manning & Bodine (2012).

The Framework consists of the following factors:

- Strategy
- Customer understanding
- Measurements
- Design
- Governance
- Culture

## 7. Appointment of CCO?

It would be desirable to have a dedicated Chief Customer Officer that is solely responsible for optimizing the Customer Experience. Eventually this CCO would preferably be a design leader that has experience in the field of user-centered design and would be directly overseeing CJM. One of the suggestions from literature is that this can often be formed from the current position of the CMO (Adlard & Bausor, 2019). This person could be the voice of the customer in the board room balancing inside-out sentiment.

## 8. Start improving end-to-end journeys

Once the right stakeholders are activated and ready to go based on their standardized workflow, the improvement of end-to-end journeys can start.

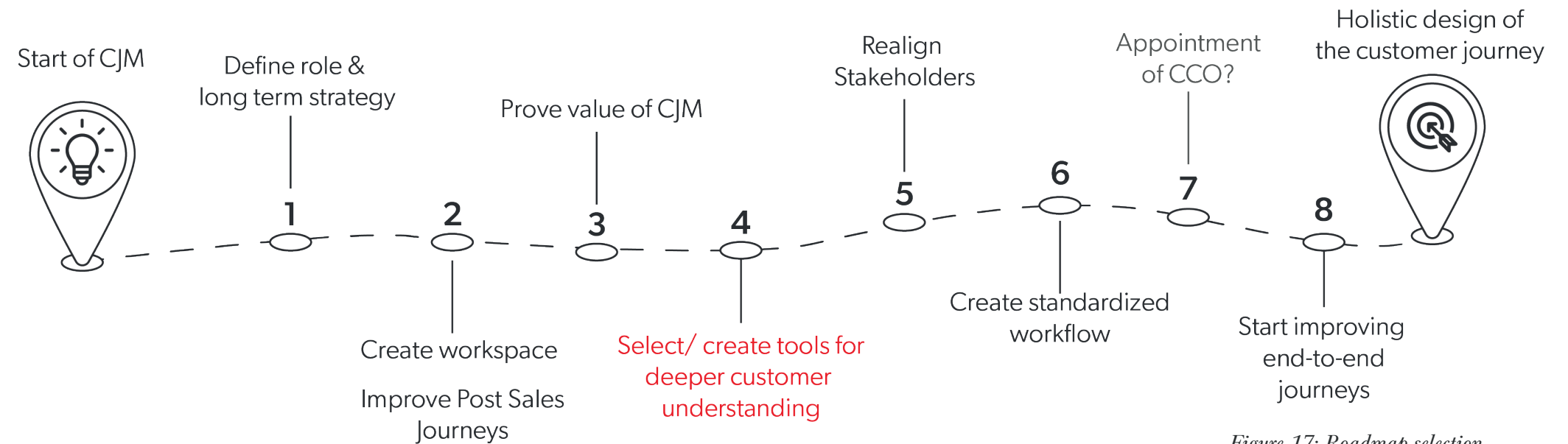


Figure 17: Roadmap selection

## Conclusion

This roadmap (Figure 17) shows an advice on the general steps that the CJM team should take and the topics they should explore. Working out every detail of this roadmap was not an option for this thesis so a selection of what to develop further was made.

For this project a focus on selecting/ creating tools for deeper customer understanding was selected as this is the basis for the steps to follow. Since steps 1 (define role & strategy) and 2 (create workspace & improve post sales journeys) were already in development by the CJM team and step 3 (proving the value of CJM) has been investigated through the DEB case, step 4 is the next one in line. As identified in analysis, it is one of the root problems that needs to be addressed. Before being able to generate this understanding, an insight into the stakeholders that are involved in the customer journey is necessary. What people influence the journey of the customer(s)? What interactions take place (internally and externally)? These questions will be addressed in the next section.

# Customer journey map redesign

In order for employees to gain deeper understanding of the customer, the stakeholders at different stages of the customer journey have to first be identified. This was done through the design of a new customer journey mapping tool that shows the departments and people that are involved in a typical customer journey on both ends (At Exact and the customer). A short recap of the current mapping tool will be done before showing the development of the new tool and it's practical application.

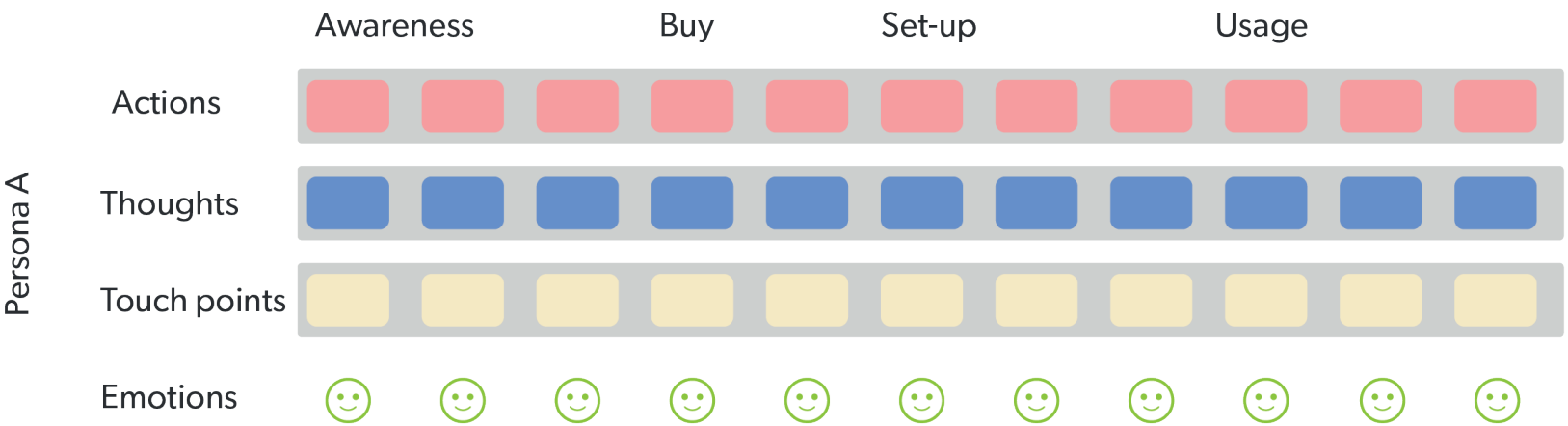
## Redesign

Current customer journey maps at Exact include information on: the actions, the thoughts, the touchpoints (with Exact) and possible emotions felt by the customer. Data input for these maps comes from Exact employees that have direct contact with the customer mostly. A journey map is made for each specific customer (employee). This means that this Customer Journey Map format (Figure 18) only shows the journey of a particular person and does not necessarily give a complete overview of the end-to-end journey. If it is desired to deep dive into a particular customer employee however, this “classic” template should still be used.

## Service blueprint

The standard template was combined with a Service Blueprint (Remis et al., 2016) as seen in Figure 18. A service blueprint visualizes the customers actions over time and the touchpoints and frontstage staff they encounter. It also shows the backstage staff and support processes that operate “behind the scenes” for the customer as indicated with the line of visibility. The goal was to visualize the customers perspective against Exacts perspective to make the processes that happen in the background and foreground for both the customer and Exact more insightful. The result of merging these two tools can be seen on the next page.

### Classic Customer Journey Map (as used by Exact)



### Service blueprint (Remis et al., 2016)

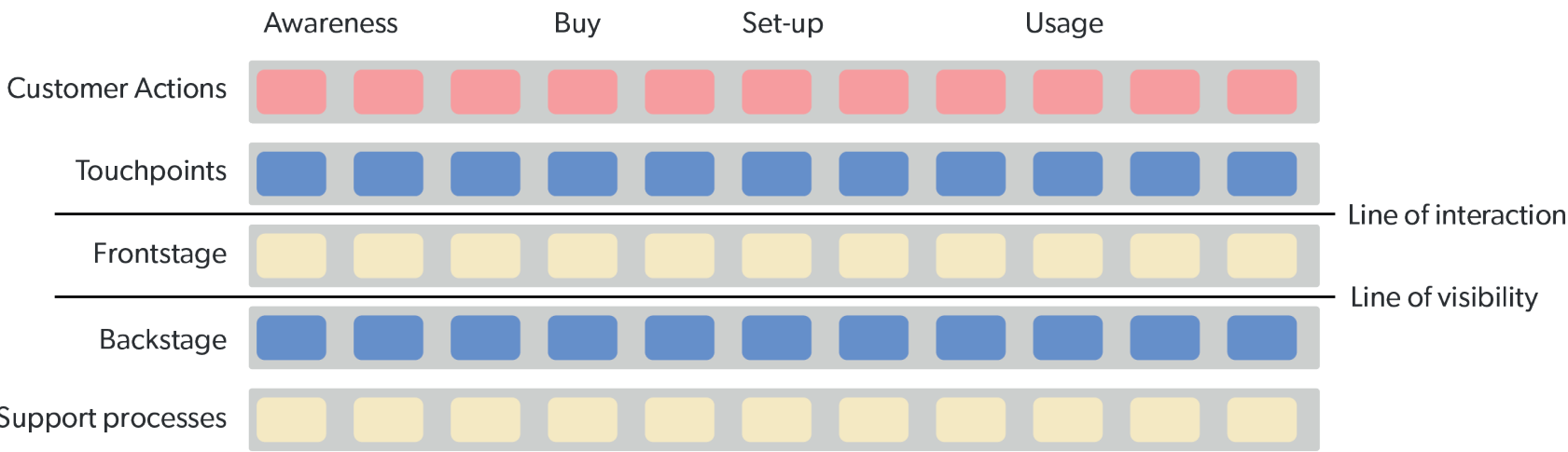


Figure 18: Customer journey map redesign elements



# Concepts

As can be seen in Figure 19, The two tools were combined to form the new tool with the following attributes:

- Customer actions
- Frontstage (customer)
- Touchpoints
- Frontstage (Exact)
- Backstage (Exact)

These elements were selected to showcase both Exacts perspective and the customers perspective of the journey. The thoughts and emotions of the classic customer journey mapping tool were left out as this would create too much detail for this level of abstraction and could simply not be fitted in for readability reasons.

## Final concept

Later this first concept was redesigned to form the final concept as shown in Figure 20. The backstage was added on the side of the customer and customer actions were put between Exact perspective and that of the customer to better visualize the division between the two sides. The final concept has the following elements:

- Backstage (customer)
- Frontstage (customer)
- Customer actions
- Touchpoints
- Frontstage (Exact)
- Backstage (Exact)

As mentioned by one of the CJO's, it might be useful to use the customer action line to visualize emotion (combined with a color range). The issue with this might be, however, that the customer employees involved can experience different emotions at the same action point.

The final concept was developed into a template which can be found in Appendix D. On the next page this template was filled in based on a typical Exact Online journey for practical example.

## Customer Journey Map Redesign (1st concept)

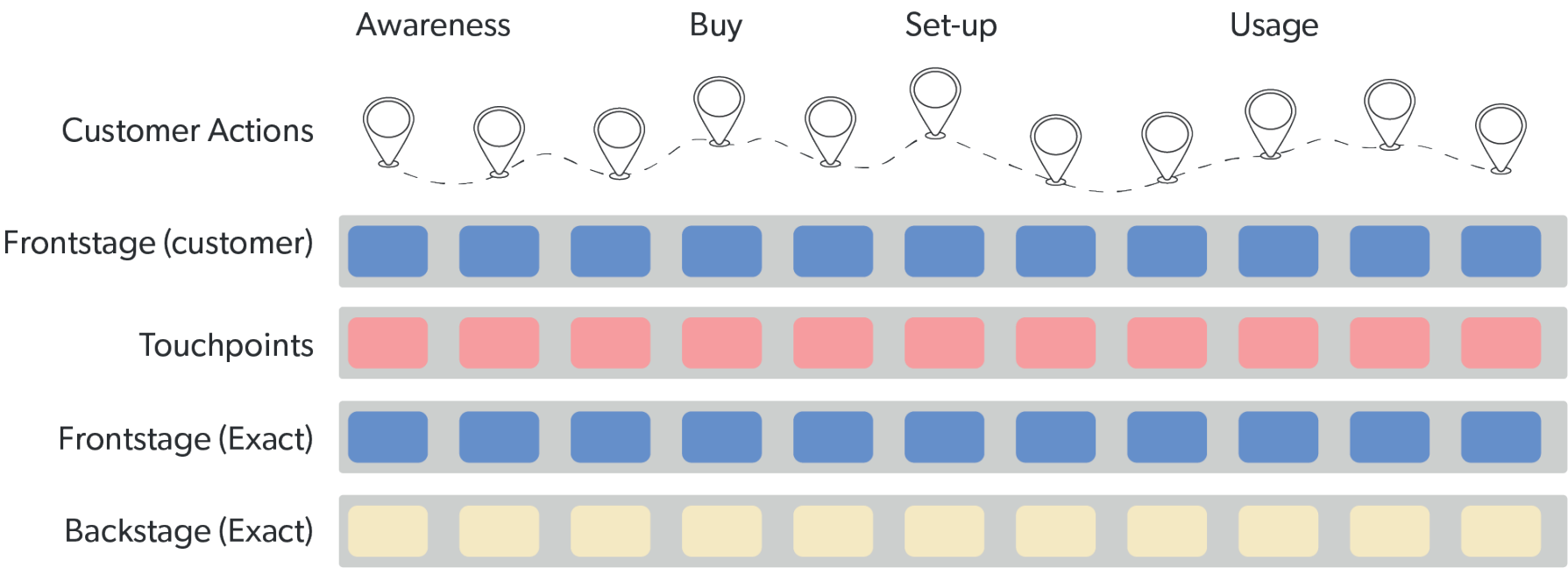


Figure 19: Customer journey map redesign (1st concept)

## Customer Journey Map Redesign (Final concept)

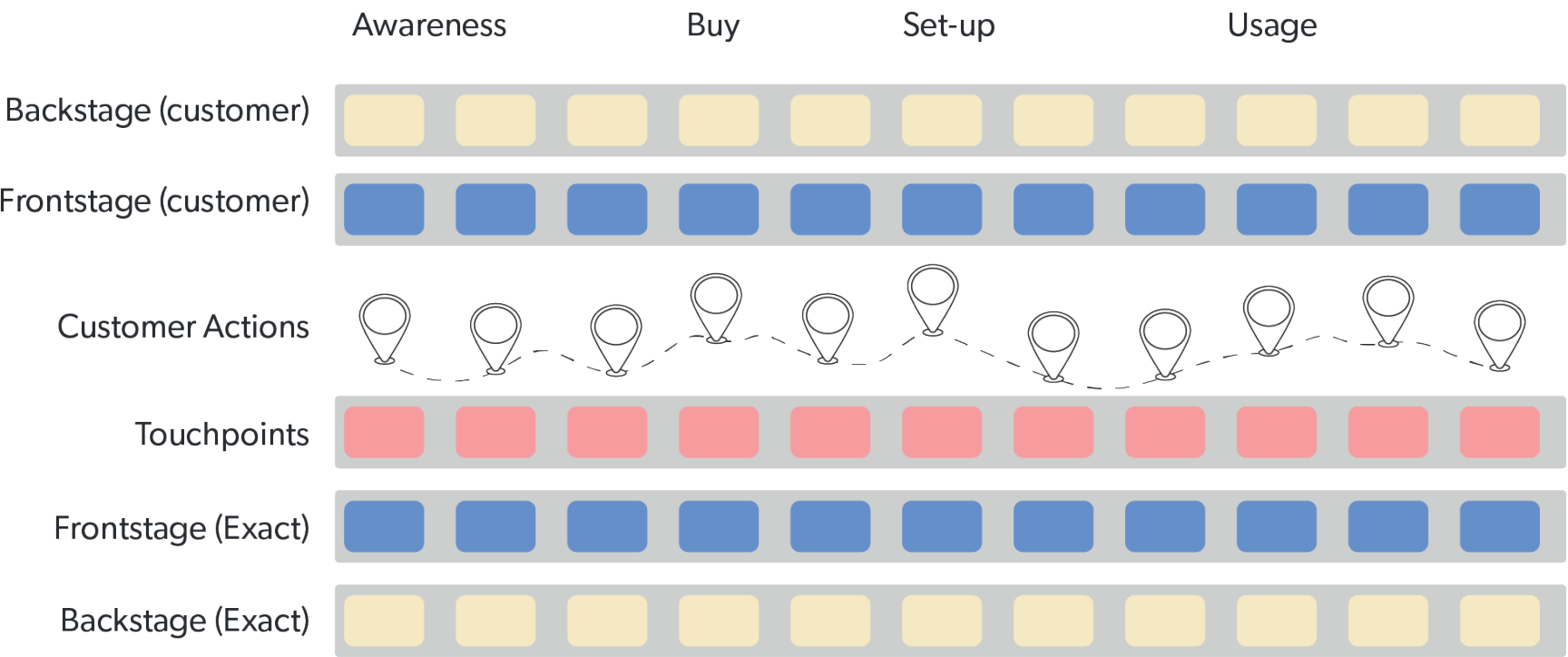


Figure 20: Customer journey map redesign (final concept)

# Template

Based on the final concept of the Customer Journey Map Redesign, a template was developed. This template was filled in with a typical Industry Solutions Journey as seen in Figure 21. This was done in order to show the practical application of the template and to showcase the complexity of dealing with a typical medium sized business client, showing an overview of the whole end-to-end journey. It shows that not only different departments within Exact interact within the journey of the customer but that the customer also has different stakeholders that represent them. This creates small sub-journeys for stakeholders within the customers company which can be worked out in the classic template.

## Application

This template can generate insight into the stakeholders involved in each particular step in the process. All these factors need to be taken into account for designing the customer journey holistically. It can also help empower Exact employees to understand their contribution to the entire customer journey. As Customer Success is only part of that journey after the sale has been done, close collaboration with other departments is necessary in order to get a full grip on the end-to-end customer journey.

## Conclusion

This new tool shows that with managing the journey of a typical customer at Exact comes great complexity and that a big part of the journey happens before the sale as well. In order to be able to understand the customer better, first the mechanisms and stakeholders involved with that customer need to be identified. Based on this information a deeper dive into the customers needs can start. This template can help generate this understanding and can also be used as a tool for empowering other departments to positively contribute to the customer journey in an integrated way.

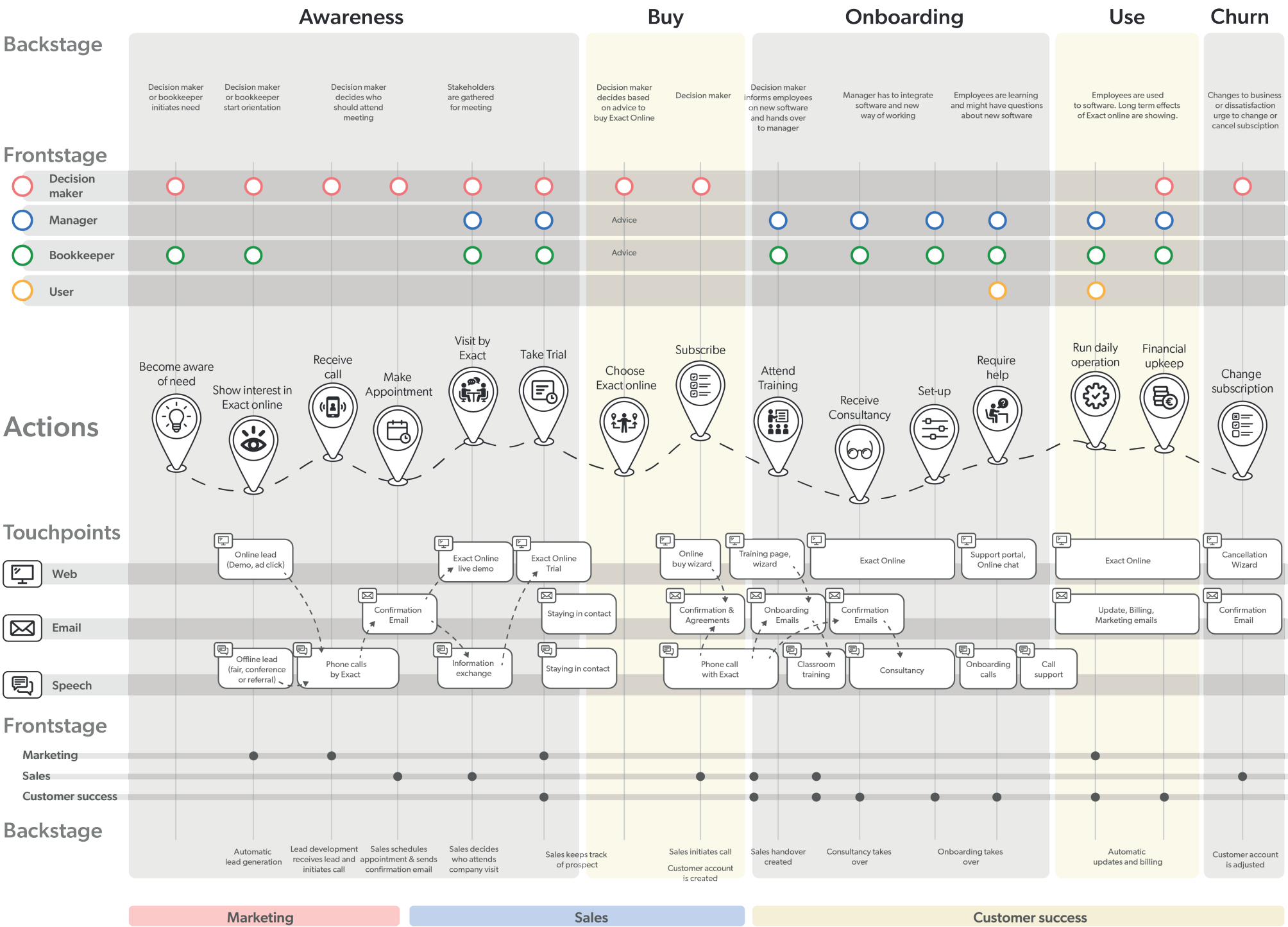


Figure 21: Customer journey map template example



# Game Design

Now that the customer and it's environment can be established based on the new journey map template, a deeper dive into gaining deep customer understanding can begin. Exact employees need to learn more about the customer than they know now. So how does Exact get this deeper customer understanding? How can they truly fulfil the needs and wishes of their customer?

As stated by Kolb (1984), the experiential learning cycle knows 4 stages (as shown in Figure 22):

- Learning from concrete experiences (feeling)
- Learning from reflective observation (watching)
- Learning from abstract conceptualization (thinking)
- Learning from active experimentation (doing)

At the moment Exact mostly practises reflective observation (watching) and abstract conceptualisation (thinking) as shown in red (passive). To truly understand the customer, employees should also learn from active experimentation (doing) and concrete experiences (feeling) shown in blue (active).

This requires stepping into the customers shoes and experiencing what they experience. Only then will they truly have gained deep understanding of the customer. People only know what it is like to ride a bike once they have tried it themselves. So how can exact employees experience what a customer experiences? This will be explored in the next section "Learning by doing".

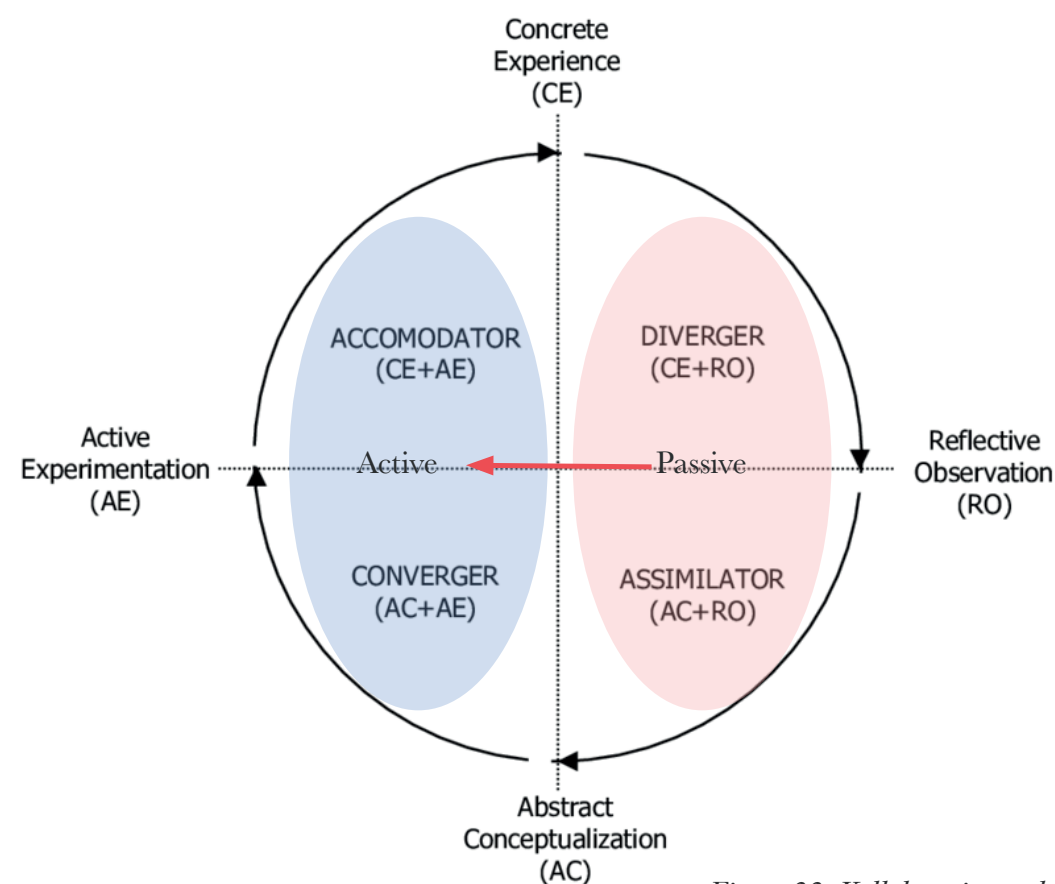


Figure 22: Kolb learning cycles

## Learning by doing

Gaining deeper insight into the life of Exact's customers is one of the steps that enables Customer Journey management to get to the next level. Once the customers perspective is experienced and felt, a mindset shift can happen and journeys can be improved for the better. So how can exact employees step in the customers shoes?

### Ideas

Exact can step in the customers shoes by simulating their environment, activities and interactions. This stimulates learning by doing which educates employees on both the explicit but most importantly the implicit needs of their customer. Through brainstorming (Appendix E) and desk research, a couple of ways to simulate the customers experiences were selected:

- a Game (digital)
- a Game/Role-play (physical)
- Case studies/ training
- an Internship/ A day in the life of..
- Virtual reality

### Game

For this project it was chosen to explore playing games (combination of physical and digital). Exacts customers work within the interface of physical offices/ meetings and the digital environment of Exact Online. Thus a combination would seem most reflective of reality. Another reason for choosing games was that it was a relatively new approach to the way customer insights are gained at Exact. The downside to playing a game could be that it won't be taken seriously, however, but Exact has some history playing games with new employees so that indicates that adoption is possible and the CJM team was also positive about the development of a game.

### Case study/ training

Case studies/ training were not chosen because it would not be able to successfully simulate the

full customer experience. It would be more suited for transferring knowledge between departments rather than gaining new customer insights. It could also be used to transfer gained knowledge to people in higher positions within the company or to serve as input for the design of a game.

### Internship/ a day in the life of..

An internship/ a day in the life of would be a very valuable experience for any Exact employee, especially for managers and executives. They could even use this technique to understand their own employees better by spending a day as one of them. For this project this approach was not chosen for further development due to corona making it difficult to further test the application of this method. A game is easier to develop and test remotely.

### Virtual reality

Development of virtual reality was not chosen due to development costs and time. It would also be hard for CJM to develop/ adjust for each respective journey.

### Criteria

Before starting the exploration towards the development of a game, criteria needed to be established. These criteria are based on information gathered so far on the needs of the CJM team. These criteria will be used to validate choices during the development process:

- It should give Exact deeper insight into their customers needs
- It should be adaptable to different products/ solutions
- It should be adaptable to different customer journeys
- Employees should be able to participate without prior knowledge
- It should have a system for transferring insights into actions

- Must cost as little as possible to develop
- Must cost as little as possible to execute
- Would be desirable to be able to play with customers
- Would be desirable to be able to play with customers online (due to corona)
- Would be desirable to use for validating product development assumptions

Two of the most important criteria are that the game should generate deep customer insight and that it is adaptable. This means that the final concept should not be a one off game but that it should form a basis for many different scenarios in which different rules, factors and roles could take part. The final concept would most likely levitate towards a game that can be adjusted or an advice/ framework for designing games.

## Process redesign

When looking back at the innovation process of Exact as described in the analysis phase (Figure 23), it is important to see where the game could be of value. The user insights it should generate, could either be used for generating ideas or for the validation of prototypes (red squares). In both cases the innovation process needs to be redesigned towards a Design Thinking process as seen in Figure 23 (adapted from Plattner et al., 2011).

In the design thinking process there is more emphasis on understanding your customer. As proposed, the process should no longer start with a solution idea but should resemble a more classic design process approach. It starts with target group exploration. This is one of the key

steps where deep user insights can be gained outside of the current channels such as surveys and usage data. Two steps are added after: Challenge definition, and Ideation. A clear challenge definition should follow out of the target group exploration which aids in setting the stage and scope for the rest of the process.

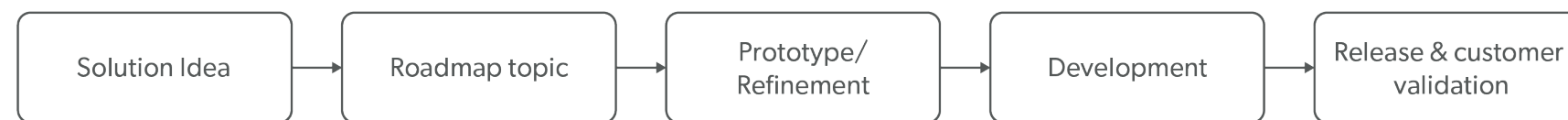
Once this is clearly defined, Ideation can begin. Once Ideation has finished and ideas have been selected, based on the criteria taken from the target group exploration defined in the Challenge definition, it can become a roadmap topic for further development. This also facilitates failing fast as more time is taken before it becomes “set in stone” as a roadmap topic. Another key moment for gaining deep customer insight can happen while validating

in the prototyping/ refinement stage which can be used as input for iteration of the prototypes/ refinements. The game could then be played again for early validation and simulation.

## Conclusion

To enable employees of Exact to gain a deeper understanding of the customer, they have to step into the customers shoes to experience what they experience. Only then can they truly design solutions that positively benefit the customer experience. In order to step into the customers shoes, their environment needs to be simulated. This can best be done through playing a game, enabling active, participatory learning. Since Exact has many different customers, products and services, a single game will probably not be sufficient to inspire change within Exact. Therefore it is most likely that Customer Journey Management will need to be the enabling factor, designing and facilitating these learning by doing experiences. In the long run they might be able to empower others to take over their initiative as the value of implementing the customer insights gained from these experiences starts to show. But how does one design a game within the context of Exact and it's customers? This will be explored in the next chapter.

### Current process



### Proposed process

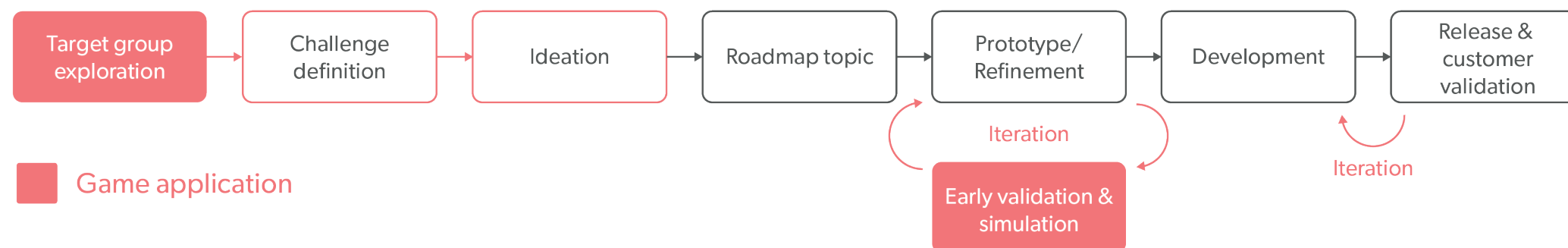


Figure 23: Process improvement (adapted from Plattner et al., 2011)

# Test game

To practise what is preached, learning by doing was taken very literal. Based on the information that was readily available from the DEB case study, a test game was developed to investigate what is necessary to develop a game and how it could be adapted to different situations/ journeys.

In order to be able to test quickly a relatively simple the test game was developed without needing any programming or extensive visualisations. Therefore, it was chosen to keep it as simple and adjustable as possible. A game can take up many shapes or forms but the fundamentals often consist of 4 elements (Jamieson, 2019):

- Challenge
- Choice
- Change
- Chance

## Accountancy game

Based on the DEB case these fundamentals were worked out and adjusted through trial and error. For larger images of of the test game refer to Appendix F.

The goal of the game is to gain better understanding of an accountants experience by simulating the act of acquiring clients and doing their bookkeeping. In order to keep the game manageable, 6 roles were selected: 2 accountants and 4 clients. This enables clients to choose between accountants without the accountant not having any clients instantly. Exacts role is only shown through their products as they do not have influence over this process.

Each role has their own role description and conditions (challenge). The game is played over the course of several months, which is simulated by “turns” (change). At the beginning of the game clients have to choose which accountant they team up with based on the price that the

## Rules

The accountancy game is played with 6 people. Each person plays a role: accountant (2x) or client (4x) which have their own objective(s) and conditions. The game is played in 12 turns as seen on the right.

### Accountants

As an accountant you will be doing the bookkeeping of your clients. There are two types of accountants. One accountant has a pay per hour business model, the other a pay per month. Each accountant gets access to an excel sheet (their administration) and the product list. Their goal is to get payed by clients to do their administration.

You have to throw the dice 1 time each turn

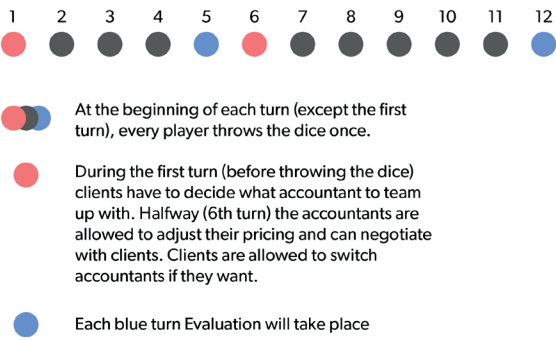
5% of your clients base income is the amount of hours spent by you on their administration

### Clients

As a client you have a business which generates income. You will need to hire an accountant to do your bookkeeping. You may choose one of the two accountants during the first turn. Later you will have the opportunity to switch if you are not satisfied!

You have to throw the dice 1 time each turn

5% of your base income is the amount of hours spent by your accountant on your administration



Evaluation (client)	Evaluation (accountant)
Why did you choose this accountant?	How did you come to your pricing?
Do you prefer paying per hour or per month?	How do you compare to your competition?
Did you switch accountant? Why? Why not?	Would you prefer a different business model?
What would make your life easier?	Would you prefer different products?
	What would make your life easier?

## Roles & Products

Accountants (2x)		Products
Accountant A Objective: Make the most profit Employee cost (per hour): €3.- Business model: pay per hour	Accountant B Objective: Make the most profit Employee cost (per hour): €3.- Business model: pay per month	Product A: Standard €4,50
		Product B: No Hands 10 entry proposals 1 MyFirm User €8,50
		Product C: No Hands Premium 166 entry proposals 1 MyFirm User €15,50
		+ Sales invoicing +€10
		+ Extra MyFirm User +€3

Figure 24: Roles & products

Figure 25: Rules

## Events

Clients	Accountants
You got a better deal with your supplier, +€50 this month	A storm damaged your office, -€50 extra income this month
Your shop needs repairs, -€50 this month	You have sold old hardware, +€50 extra income this month
You have cut down on staff costs: base income +€20	Your employees received a raise, +€1 employee fees
A new fruitshop opened: base income -€10	You have cut employee costs, -€0.50 employee fees
Economic bloom, all client incomes +€20	Product price is increased, +€1 product fee
Economic downturn, all client incomes -€10	Product price is reduced, -€0.50 product fee

Figure 26: Events



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1														
2														
3		Client A: *name*	Turn 1	Turn 2	Turn 3	Turn 4	Turn 5	Turn 6	Turn 7	Turn 8	Turn 9	Turn 10	Turn 11	Turn 12
4		Profit (cumulative)	100	150	150	150	150	150	150	150	150	150	150	150
5														
6														
7														
8														
9														
10														
11														
12														
13		Client	Turn 1	Turn 2	Turn 3	Turn 4	Turn 5	Turn 6	Turn 7	Turn 8	Turn 9	Turn 10	Turn 11	Turn 12
14		Base Income	100	100	0	0	0	0	0	0	0	0	0	0
15		One time payment	50	0	0	0	0	0	0	0	0	0	0	0
16		Accountant cost	50	50	0	0	0	0	0	0	0	0	0	0
17														
18		Profit Margin	100.00%	50.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
19		Profit	100	50	0	0	0	0	0	0	0	0	0	0
20														
21														
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42														

Figure 27: Excel clients

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1														
2		Accountant A: per hour												
3			Turn 1	Turn 2	Turn 3	Turn 4	Turn 5	Turn 6	Turn 7	Turn 8	Turn 9	Turn 10	Turn 11	Turn 12
4		Employee cost per hour	3	3	0	0	0	0	0	0	0	0	0	0
5														
6		Client A	15	15	0	0	0	0	0	0	0	0	0	0
7		Client B	15	15	0	0	0	0	0	0	0	0	0	0
8		Client C	15	15	0	0	0	0	0	0	0	0	0	0
9		Client D	15	15	0	0	0	0	0	0	0	0	0	0
10		Client Cost	60	60	0	0	0	0	0	0	0	0	0	0
11														
12		Client A	50	50	0	0	0	0	0	0	0	0	0	0
13		Client B	50	50	0	0	0	0	0	0	0	0	0	0
14		Client C	50	50	0	0	0	0	0	0	0	0	0	0
15		Client D	50	50	0	0	0	0	0	0	0	0	0	0
16		Extra income/ fees	0	0	0	0	0	0	0	0	0	0	0	0
17		Income	200	200	0	0	0	0	0	0	0	0	0	0
18														
19		Total profit	140	140	0	0	0	0	0	0	0	0	0	0
20		Cumulative profit	140	280	280	280	280	280	280	280	280	280	280	280
21														
22		Client A: *name*	Turn 1	Turn 2	Turn 3	Turn 4	Turn 5	Turn 6	Turn 7	Turn 8	Turn 9	Turn 10	Turn 11	Turn 12
23		Income client	100	100	0	0	0	0	0	0	0	0	0	0
24		Product cost	0	0	0	0	0	0	0	0	0	0	0	0
25		Extra my firm users	0	0	0	0	0	0	0	0	0	0	0	0
26		Sales invoicing	0	0	0	0	0	0	0	0	0	0	0	0
27														
28		Hours spent on administration	5	5	0	0	0	0	0	0	0	0	0	0
29		Total costs	15	15	0	0	0	0	0	0	0	0	0	0
30														
31		Client fee	10	10	0	0	0	0	0	0	0	0	0	0
32		Income	50	50	0	0	0	0	0	0	0	0	0	0
33														
34		Profit Margin	70.00%	70.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
35		Profit	35	35	0	0	0	0	0	0	0	0	0	0
36														
37		Client B: *name*	Turn 1	Turn 2	Turn 3	Turn 4	Turn 5	Turn 6	Turn 7	Turn 8	Turn 9	Turn 10	Turn 11	Turn 12
38		Income client	100	100	0	0	0	0	0	0	0	0	0	0
39		Product cost	0	0	0	0	0	0	0	0	0	0	0	0
40		Extra my firm users	0	0	0	0	0	0	0	0	0	0	0	0
41		Sales invoicing	0	0	0	0	0	0	0	0	0	0	0	0
42														

Figure 28: Excel Accountant

Testing

The goal after conceiving the first version of the game was to quickly test whether it would actually be playable and have valuable results. Since live testing at Exact was not possible due to Corona, the decision was made to test the game at home (with 3 people). In order to simulate the act of bookkeeping, an excel sheet was made to enable players to actually do simple bookkeeping tasks (Figure 27 & 28).

Apart from playability feedback other insights could be taken from testing:

- It could be played by people with no prior knowledge
- Players will constantly give feedback while playing
- Instant quality of life improvement feedback
- Shows differences in risk aversion/ personality
- Players gained better understanding of accounting and/or client perspective
- Would be interesting to actually use Exact Online instead of Excel if possible
- Might be beneficial to have an observer to document interactions

All in all testing proved that, although the game had some minor playability flaws that needed to be sorted out, it still managed to simulate the environment of an accountant in an insightful and playful way. People are quick to accept the role they are given and act accordingly. It also showed that in designing a game there is constant battle between keeping it simple (easily playable) and incorporating all the necessary details that make up the life of an accountant.

Results

By trying to develop a game from scratch for Exact many lessons were learnt. Although this game might preferably be played with the actual Exact Online software it still showed that a customers experience can be simulated

relatively quickly and deep user insights can be gained. This game set-up proved to be quite specific and even after limiting the variables to simplify the game it cannot easily be transferred to other experiences or journeys, which was one of the main criteria. Therefore using this game as a basis for other games might not prove to be a solution but the lessons learnt can help in the development of a toolkit that enables CJM to design their own games. What can be taken from this test are the following components that can be used for the development of other games:

- Objectives/ Drivers (mutual or personal)
- Roles (Stakeholders, Persona’s)
- Interactions (between roles)
- Events (events, positive and negative)
- Timeline
- Rules / Conditions

In order to make the game of use for the innovation process (as described in the process redesign), extracting results and insights from the game should also be investigated further. A suggestion from playing this game would be to have an observer that documents interactions and to include evaluation moments in the game to explain choices or thoughts.

Conclusion

As the decision was made to use the lessons learnt from testing to design a game development guide, the components (building blocks) that were derived from the design of this test game can serve as a input for the basis of designing other games. The goal is to design a tailored guide that includes:

- A game design process
- Guidelines (explaining each process step)
- Templates/ Tools (including building blocks)

These will serve as the basis for the design of the game development guide that will be shown in the next chapter “Implementation”.

# Implementation

# Approach

As a result of ideation phase, the decision was made to design a Game Development Guide. It serves as a way of synthesizing gathered insights from the ideation phase for practical implementation. The main challenge that will be investigated in this chapter is:

*How can Exact develop it's own games?*

## Prototyping

Firstly, exploration of the Game Design Guide is done by developing a testable prototype. This was based on the insights from the test game that was developed during Ideation and is supported by literature research.

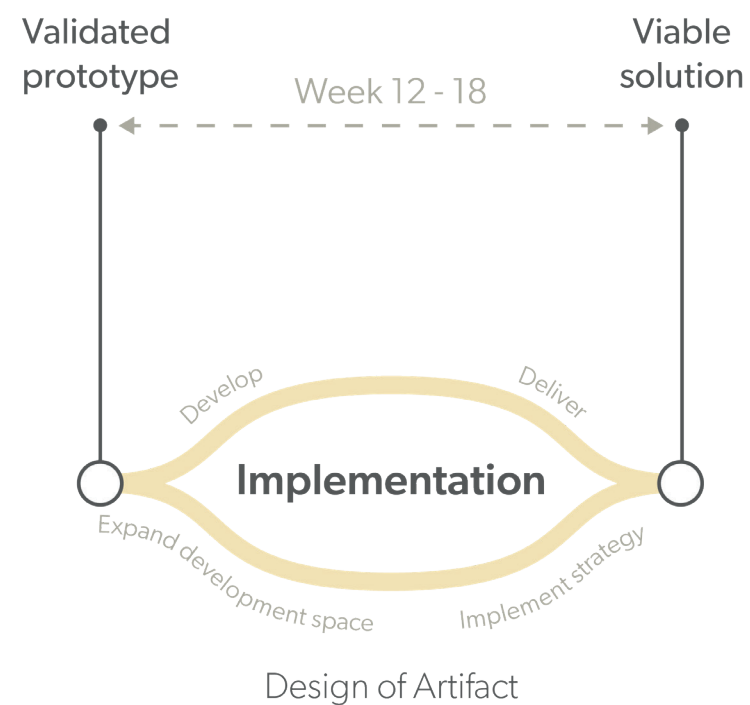
## User testing

The prototype was then tested by designing a game together with one of the Customer

Journey Owners with the help of the guide. The resulting game was played and evaluated with the three Customer Journey Owners. After playing the game the guide was also reevaluated.

## Final Design

Based on the feedback gathered during user testing, the final design of the guide was developed for implementation. Additional research into the necessary design methods and tools for game development was done, to help complete the guide.



# Game Development Guide

As concluded in Ideation, having Customer Journey Management design their own customer experience games could kickstart the generation of deep customer insight at Exact. A comprehensive game development guide could help them design these games more effectively and tailor them to different customer journeys. This chapter will show the development of the Game Development Guide. First, the development of the initial prototype for testing, based on insights gained in the ideation phase, will be discussed. Afterwards, user testing with the CJM team was done, before implementing improvements into the final design. (For the prototype, please refer to Appendix G)

## Prototype

In order to come to a validated design, a prototype for testing was first developed. As mentioned in Ideation, the game design guide has to consist of three components (“test game” conclusion):

- A (game design) process
- Guidelines (explaining each process step)
- Templates/ Tools

## Process

Firstly, a process of development needed to be established. As the development of a game can be seen as a small design process, it was chosen to approach the process as an iterative process, consisting of analysis, ideation and implementation. Based on the experience of developing the test game during ideation, the following process steps were chosen, which are explained in detail in the guidelines (as can be seen in Figure 29):

- Scope (analysis)
- Develop (ideation)
- Prepare (ideation/ implementation)
- Test (implementation)
- Evaluate (implementation/ analysis)

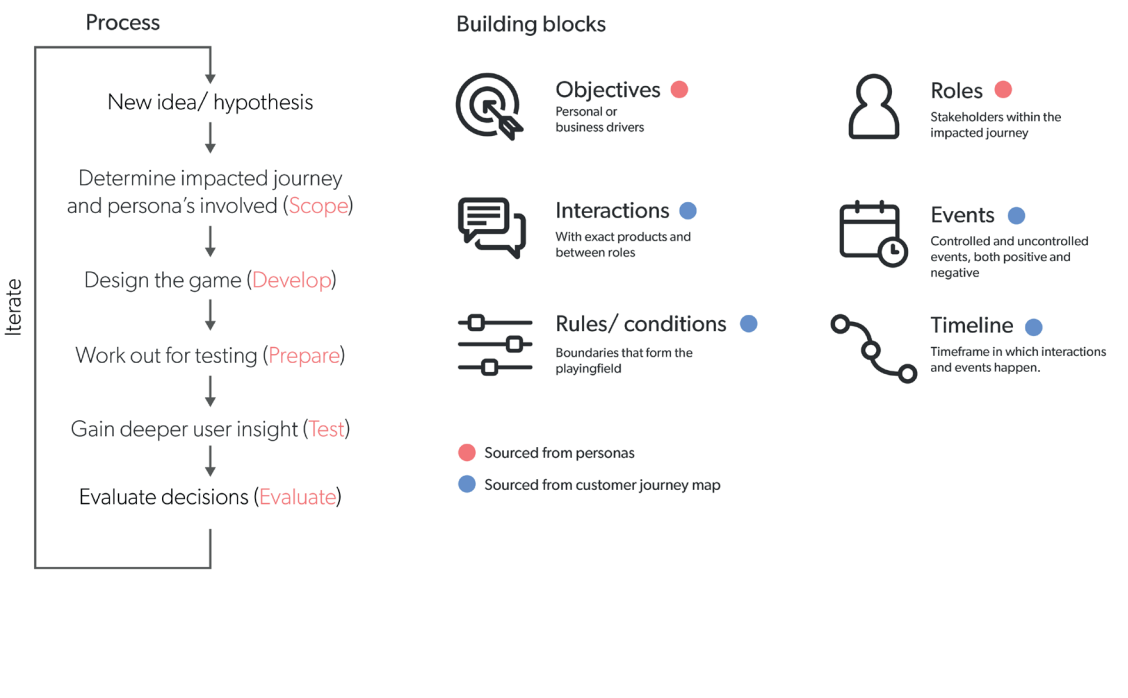


Figure 29: Prototype process & building blocks

## Guidelines

As the process took shape, guidelines needed to be established for executing each step of the process (which are shown in Figure 30 & 31). What happens during each step? How can it be completed?

### Scope

The first step in the process is designed to define the scope of the game that will be developed (Figure 30). What is it exactly that Exact wants to investigate? In order to help define the scope, a template was developed in based on the Five W's (see templates/ tools for more information).

### Develop

Once the scope of the game has been identified, first development of the game can start. What should the game look like? This step is where the building blocks from the test game could be applied. They were incorporated into a tailored

## How to develop the game

### 1. Scope

#### Five w's

Start with determining the scope of the game:  
For what hypothesis, product, feature, event or journey do you want to gain deeper customer understanding?  
Who are involved? Where, When, Why does it take place?

Fill in: What, who, where, when, why.

### 2. Develop

#### Game Design Canvas

Once the scope is set, the game can be developed based on the answers from the Five W's:  
What is the timeframe? What is the goal of the game?  
Which roles should be represented? What interactions, events & rules will play a role?

Fill in:

1. Timeline
2. Objectives
3. Roles (persona's, stakeholders)
4. Interactions (between roles)
5. Events (events, positive and negative)
6. Rules / Conditions

### 3. Prepare

#### Build

Once the basis of the game is determined, preparations for testing can begin:

1. How can the game be executed? Is the game played physically or online (or both)?
2. What do we already have? What needs to be acquired/ made/ simulated? Do we need more information?
3. Which people/ stakeholders do we need? Do we use employees or also customers?
4. How can we best capture and evaluate the customer insights gained? Is there an observer?

Figure 30: Prototype guidelines

## How to develop the game

### 4. Test

#### Generate customer insight

Once the test has been prepared, the first preliminary testing can begin. It might be useful to shortly play the game with the developers so you know whether the game is playable and works as intended. If so, proceed to testing with employees/ customers. Make sure to separate game feedback, and "customer" feedback before going into evaluation. Based on testing the game can be refined, for future playing.

### 5. Evaluate

#### Transfer gained knowledge into action

Once testing has been successful, evaluation is necessary in order to translate the gained insights and knowledge into action for the future. What insights were gained? Which were new? What effect does it have on the journey, product and/or customer?

Figure 31: Prototype guidelines (2)

Game Design Canvas template in order to determine the base elements of the game (see templates/ tools for more information).

### Prepare

Based on the Game Design Canvas preparations for playing the game can begin. The building blocks now need to be worked-out into a playable game. The four questions that should be answered are:

1. How can the game be executed? Is the game played physically or online (or both)?
2. What do we already have? What needs to be acquired/ made/ simulated?

3. Which people/ stakeholders do we need? Do we use employees or also customers?

4. How can we best capture and evaluate the customer insights gained? Is there an observer?

### Test

Once the game has been worked out correctly, generating deep customer insight can begin! The game should be ready to be played with other Exact employees or even customers (depending on the set-up of the game).

### Evaluate

The last important step is to evaluate, during and after playing the game, to extract results and document insights.



Five W's (Scope)

What?	Who?	Where?
When?	Why?	

Figure 32: Five W's template

Templates/ Tools

In order to support the game design process, tools were developed that can help the CJM team design their own games. These tools were visualized in the form of two templates.

Five W's

In order to help define the scope, a template was developed in the form of the Five W's (Workfront, 2018). This tool was chosen as it is often used in journalism & research for capturing the essence of a story.

Game design Canvas

In order to incorporate the building blocks that were taken from the test game, they were used as the basis for a Game Design Canvas tool which can be used during the development phase (Figure 32):

- Objectives/ Drivers (mutual or personal)
- Roles (Stakeholders, Persona's)
- Interactions (between roles)
- Events (events, positive and negative)
- Timeline
- Rules / Conditions

This canvas was inspired by multiple game design canvas adaptations (such as by Royce (2014) & Zavcer et al. (2015)) of the Business Model Canvas by Osterwalder & Pigneur (2010). It was chosen as it provides a framework to summarize and work-out the fundamentals necessary for the game.

Conclusion

As the prototype was developed based on the learnings of the test game and research conducted, the basis of the Game Development Guide was taking shape. Now that the process, the guidelines and tools were in place, evaluation of the prototype could begin. This will be discussed in the next chapter.

Game Design Canvas (Develop)







 <b>Objective</b> What journey do you want to investigate? What is the goal of the journey? When is the journey completed?	 <b>Roles</b> Who do you want to investigate? What stakeholders are involved? What is their role in this scenario? What do they know? What do they not know?	 <b>Events</b> What events take place? What should happen (positive)? What could happen (negative)?	 <b>Rules &amp; conditions</b> What laws, rules or conditions play a role? What are the influences that are outside of the control of the roles defined?
 <b>Interactions</b> What interactions take place between roles? Which roles can interact? Which cannot? What are desired interactions? What are undesired interactions? What types of interaction are they (digital, physical, phone, chat etc.)?			
 <b>Timeline</b> What journey do you want to investigate? What is the timeframe of the scenario? Does this take place in a day, a month a year?			

Figure 33: Game Design Canvas template

User Testing

Once the prototype was developed, testing could start. As the prototype was not perfected yet, the decision was made to start testing with the users (CJM team) as quickly as possible as this would enable quick iteration and testing of assumptions. Based on the user testing, the prototype could be improved and serve as the basis for the final design. For full images, please refer to Appendix H.

Test set-up

The goal of the test was to evaluate the use of the guide and it’s application. Is the guide useful? Are it’s elements (process, guidelines, tools) helping the CJM team to design a game that can simulate the customers experience?

As the initial users of the guide would be members of the CJM team, the testing was done together with the three Customer Journey Owners. Firstly the journey that would be investigated for the test was selected together with the journey owners. The choice was made to use the Payroll onboarding journey (first use of payroll, a solution for paying out employee salaries) as it was thought to be a relatively straightforward journey to test the game with. Together with the respective owner of that journey, the game was then developed.

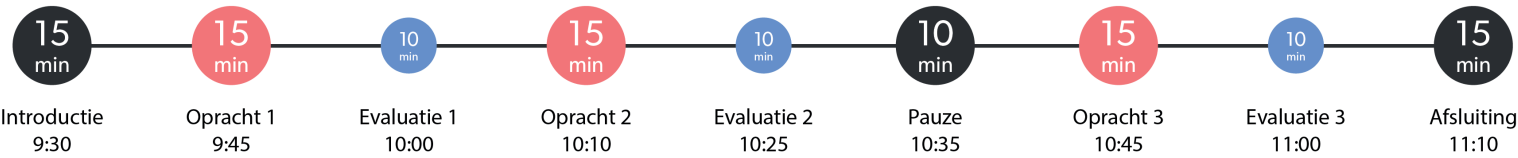
Design of the game

In order to test the prototype, design of the “payroll game” was done as described in the guide. Over the course of three online meetings of an hour, together with the journey owner, and half a day of individual work, the game was developed. Firstly, the scope was identified by using the Five W’s template (scope) and then the elements for the game were selected with the help of the Game Design Canvas (develop). Based on these templates, the game was then worked out, with the necessary Exact Online test accounts, instructions and evaluation forms (prepare). The game (Figure 34) was now ready to be played with the other journey owners.

Welkom!

Bedankt voor jullie aanwezigheid. Vandaag willen we jullie vragen om in de schoenen te gaan staan van een van de klanten van Exact, in dit geval van een salaris administrateur. Als salaris administrateur zullen jullie een aantal opdrachten in Exact Online moeten voltooien die bij deze rol aan bod komen.

Zoals hieronder te zien is, zal deze sessie als volgt verlopen:



Totaal = 2 uur (120 minuten)

We spelen 3 opdrachten, met na elke opdracht een kort evaluatie moment. en zullen de Salaris adminitrateurs spelen en en zullen observeren.

Tijdens het uitvoeren van de opdrachten kan het ongetwijfeld gebeuren dat jullie tegen een of meerdere problemen aanlopen. In dat geval is het mogelijk om hulp te zoeken. Dit kan op twee manieren: door zelf online hulp te zoeken, of door contact te hebben met Exact. vertegenwoordigd hierbij Exact, en kan helpen als jullie een vraag hebben. Zodoende willen wij jullie aansporen om de opdrachten binnen de tijd te voltooien.

Instructies

Bedankt voor je tijd! Vandaag willen we je vragen in de schoenen te gaan staan van een salaris administrateur. Je bent verantwoordelijk voor het verwerken en versturen van de salarissen binnen je bedrijf. Hierbij is het belangrijk dat dit goed en secuur gebeurt, om klachten en vragen van de werknemers te voorkomen. Daarom heeft jouw baas recentelijk besloten om met Exact Online de salaris verwerkingen te gaan doen. Hierbij ben jij gevraagd om de opzet en uitvoering op je te nemen. Om dit voor elkaar te krijgen zal je de volgende taken moeten gaan uitvoeren, waarvoor je elk 15 minuten hebt:

- 1. Eerste keer verlonen
- 2. Bruto vergoeding uitkeren
- 3. Verlof inrichten

Inlog gegevens Exact Online

Gebruikersnaam: xxx Wachtwoord: xxx

Eerste keer verlonen (1)

De inrichting is al gedaan door een consultant, de medewerker en stamgegevens staan al in de administratie. Je gaat nu een salaris strook uitdraaien voor de maand mei. Zorg dat je de berekening van de eerste salarisstrook voltooid en kijk of de gegevens kloppen op de strook.

Bruto vergoeding uitkeren (2)

Je medewerker krijgt een bonus, voeg de bonus toe via componenten en keer deze uit via de variabele mutaties. Kijk of de bonus met de juiste benaming en bedrag op de loonstrook staat.

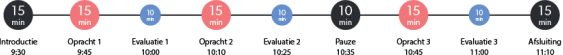
Verlof inrichten (3)

Je medewerker neemt 30 uur historisch verlof mee van voorgaand jaar. Voeg dit toe aan de medewerker via het verlof & verzuim gedeelte. En kijk of je deze gegevens ook op de strook kunt terugvinden.

Evaluatie: Om beter inzicht te krijgen in de problemen die je ondervind tijdens het uitvoeren van deze opdrachten willen we je vragen om na elke opdracht een evaluatie in te vullen. Deze evaluaties kun je vinden op de volgende pagina's in dit document.

Hulp: Mocht je er tijdens het maken van de opdracht niet uitkomen, zoek dan hulp, ofwel door online te zoeken ofwel door de medewerker (xxx) van Exact om hulp te vragen.

Planning



Evaluatie 3  
Evaluatie 2  
Evaluatie 1

Had je eerdere ervaring met het uitvoeren van deze opdracht? (Ja/ Nee)  
Is het gelukt om de opdracht binnen de tijd uit te voeren? (Ja/ Nee)  
Zo niet, waarom niet?

Tegen welke problemen liep je aan?

Hoe zou je deze problemen kunnen verhelpen?

Kon je gemakkelijk hulp vinden als je problemen ondervond? (ja/nee)  
Waarom wel/ niet?

Naar wat voor soort hulp (Online of telefonisch) heb je gezocht?  
Waarom?

Overige suggesties/ opmerkingen?

Figure 34: Payroll game

### Playing the game

The payroll game was played with the three customer journey owners over the course of 2 hours. The two journey owners that had not been involved in the design of the game were instructed to perform three tasks within Exact Online as seen in Figure 34. After each task an evaluation form had to be filled in to record their experiences. At the end of the game, a general discussion and evaluation was done of the game and the results it had showed. A day after playing the game the process of development was also evaluated with the journey owner that had designed the game and one participating journey owner.

### Results

So is the guide useful? Are it's elements (process, guidelines, tools) indeed helping the CJM team to design a game that can simulate the customers experience? Based on the evaluations done, a couple of issues came to light.

#### Usability test instead of experience game

The biggest problem was that the game turned out to be too much of a product usability test, instead of an experience game, as stated by the journey owners. Although the instructions did describe the role they should play, they did not feel like they were truly representing the customer. A better role description or medium to gain empathy and insight into the customer was desired.

#### To little focus on emotion

Tied to this feeling of the game being a usability test was that it was felt customer emotions were not emphasized enough both in the role they had to take on and in the evaluation of the tasks. At the moment the questions were mostly functional so an improvement could be made in that regard. This in turn would also focus the game on a different abstraction level than simply the products features.

### Scoping

Another issue that was raised in the development process was scoping the game. It soon became clear that a narrow scope would often benefit the game, as the complexity of factors rose exponentially when the scope was widened. Therefore it would be desirable to keep the scope of the game relatively small as otherwise the complexity of the game would become too great.

#### Customer data

In order to design a good game, the customer data/ knowledge that is used to design it needs to be rich and plenty. In hindsight it seemed that the research that was readily available (persona's, customer journey maps) was not sufficient to truly simulate the customers experience. Therefore putting extra emphasis on gaining the right input before designing the game was deemed necessary.

### Discussion

All in all the prototype did provide guidance in the development of the game but did not lead to the desired result of a good customer experience game. It seems that the issues raised point towards some problems that need to be addressed in the prototype.

It seems that the process does not emphasize the necessity of focusing on the experience (context, emotion etc.) enough. As the basis of a good game is in the preparation, the customer data that serves as input should be more complete before development can start. This might require additional research into the tacit and latent needs and wishes of the customer before being able to transfer them into a game that can successfully simulate a customers experience. Once this insight is gained, it should then also be transferred to the players effectively, enabling them to empathize with the customer. This will help them take on the role of the customer whilst playing the game.

Although the elements of the guide did seem to help in development and especially the two tools were positively received, additional tools and guidelines should be put into place to make sure that the games that will be developed with a focus on the overall experience (context and emotion) instead of the product and it's usability.

### Conclusion

In general the set-up of the prototype seemed to form a good basis for game development but it did not deliver the desired results. Some improvements need to be made in order to make sure the final design does work as intended:

- Adjust the process to make room for additional research delivering rich customer data.
- Create a focus on the emotional and contextual factors that influence the customers experience.
- Emphasize the importance of the players gaining empathy of the customer to immerse themselves in their roles.

These improvements will be implemented in the final design as described in the next chapter.

## Improvements

After the prototype was developed and subjected to a user test, improvements still needed to be made. Based on these improvements the final design could be created. Most improvements were made by adding tools/ methods from literature and tailoring them to the Game Design Guide.

As concluded from the user testing some improvements needed to be made:

- Adjust the process to make room for additional research delivering rich customer data.
- Create a focus on the emotional and contextual factors that influence the customers experience.
- Emphasize the importance of the players gaining empathy of the customer to immerse themselves in their roles.

### Process redesign

In order to implement these improvements, changes to the prototype were made. First of all the original process (Figure 35) was improved. Before, it consisted of 5 steps: *Scope, Develop, Prepare, Test, Evaluate*.

For the final design, it was chosen to approach the game development as if it were a short design sprint instead. A Design sprint is usually made up of 6 steps (Banfield et al., 2015): *Prepare, Understand, Diverge, Converge, Prototype, Test*.

For this development kit, this process was adapted to (Figure 36):

- Prepare
- Understand
- Develop (diverge/ converge)
- Prototype
- Play (test)

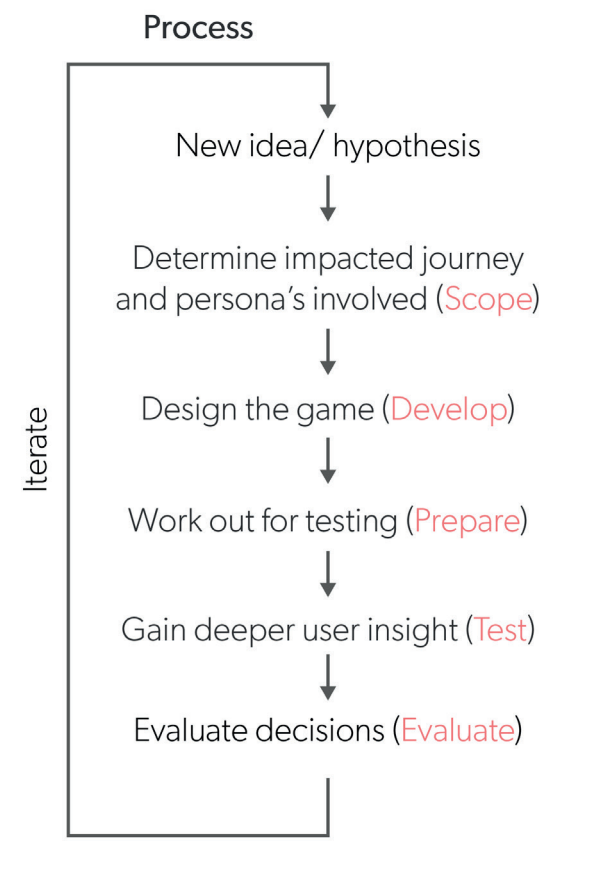


Figure 35: Prototype process

In this process evaluate was included in the process step “play”. This design sprint approach was chosen as it encourages failing fast and learning quickly to get to the desired results in limited time.

### Context mapping

Other improvements were implemented by researching and adding tools/ guidelines that focus on gaining and incorporating information on the emotional and contextual factors that influence the customers experience. These tools were added in the “Understand”, “Develop” and “Play” step. In order to gain insight into the contextual factors that influence product use, the User-centered design method of contextmapping was chosen (Sleeswijk Visser et

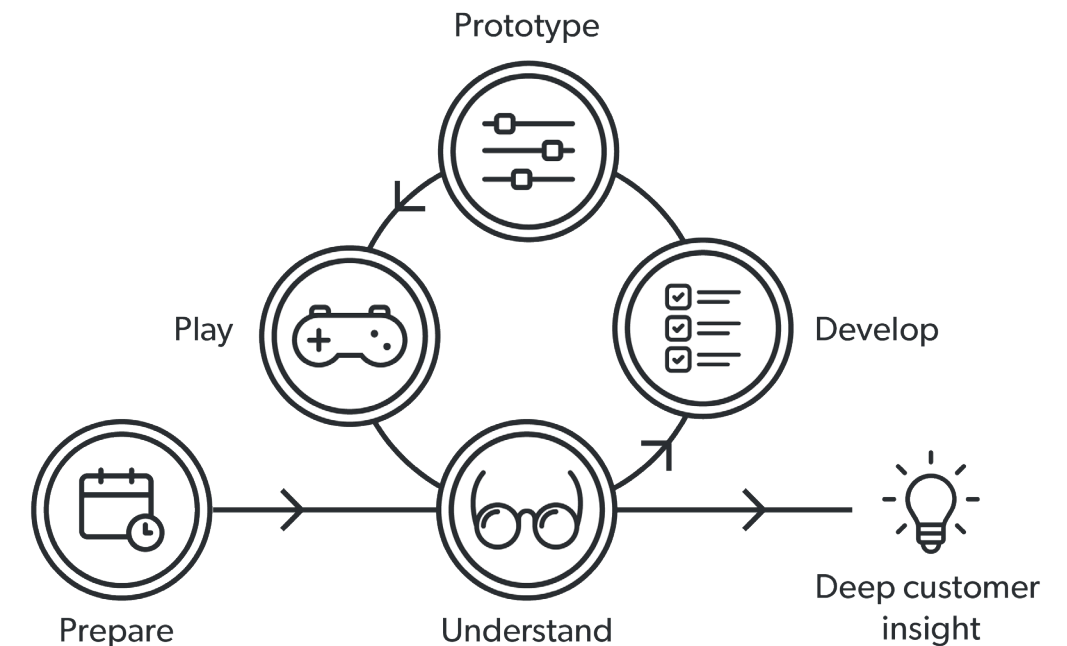


Figure 36: Final process

al., 2005). Here users are seen as the “experts of their own experience” and are asked to participate in creative sessions with the help of generative tools. By using these generative tools, customers latent and tacit needs can be discovered, as shown in Figure 37 (Sanders & Stappers, 2012). Two of these generative tools were therefore implemented into the “Understand” phase of the Guide: Diary studies and Contextual inquiry.

### Empathy mapping

The insights gathered during the understand phase can be integrated into an Empathy Map (Ferreira et al., 2015) and/or Persona for the design of the game (Develop step). It serves as

a summary of the customers profile. This can also be used by players to empathize with the customer before playing the game (Play step).

### PrEmo

In order to increase focus on the emotional effects of the experience, PrEmo (Desmet, 2019) was selected as an evaluation tool to extract information on the emotions that people experience when playing the game (play step).

These improvements & tools were all incorporated into the final design. Some extra tools and tips were added for the convenience of the CJM team. On the next page the final design will be explained.

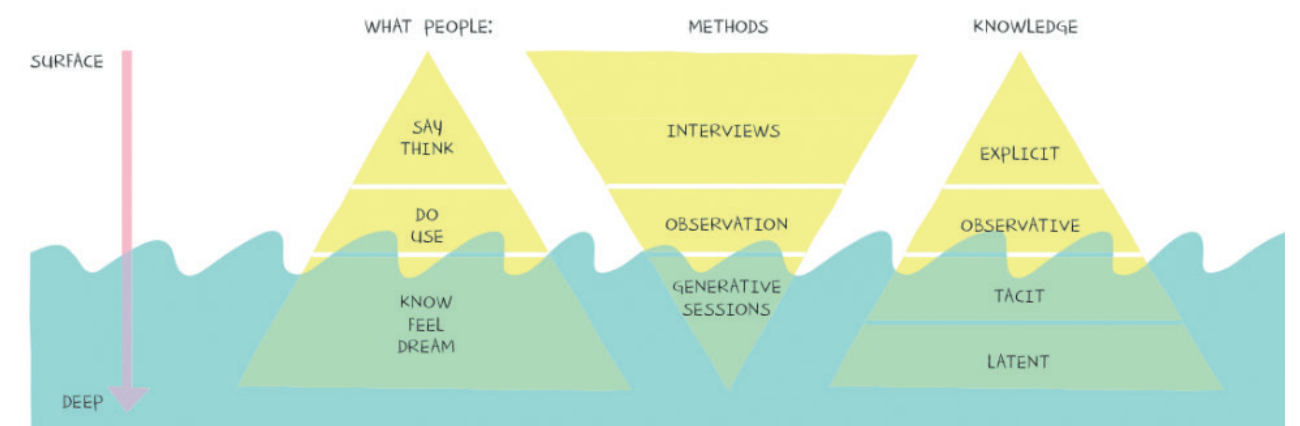


Figure 37: Context mapping (source: <https://www.flowresulting.nl/publication/convivial-toolbox/>)



Final Design

The improvements have been made, so that the final design could take shape. This chapter will discuss the results of the final design of the Game Development Guide through explaining it's process, the tools/templates used and finally it's application for the CJM team. The full guide can be found in Appendix I.

Process

The process is the backbone of the guide, taking the reader by the hand on the steps that should be followed. As shown in Figure 38, the process can be seen as an iterative process, where understanding is followed by quick prototyping and vice versa. It might be so that after playing the game, additional understanding of the customer is necessary and adjustments to the game have to be made. In the end, the goal is to gain deep customer insight that can serve as the basis for the rest of the innovation process. The set-up of this process is so that it can be executed relatively quickly (20 hours max). Each process step (Figure 39) is defined in the guide by it's goal, the procedure and the tools used (Figure 40). It also provides a visual overview that shows the tasks that need to be carried out in order to complete the step.

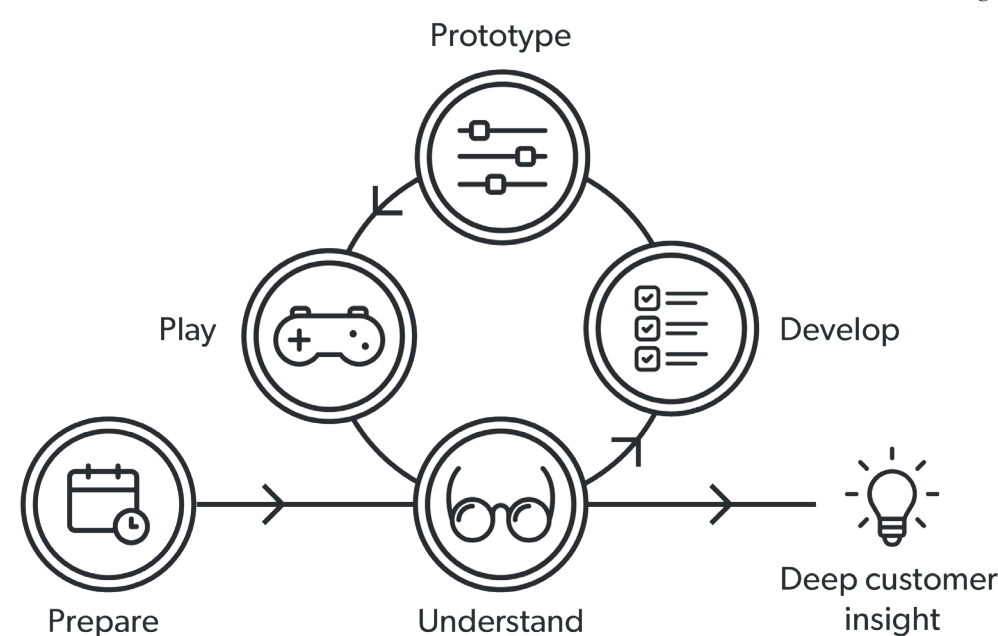


Figure 38: Final process



Figure 39: Final process steps

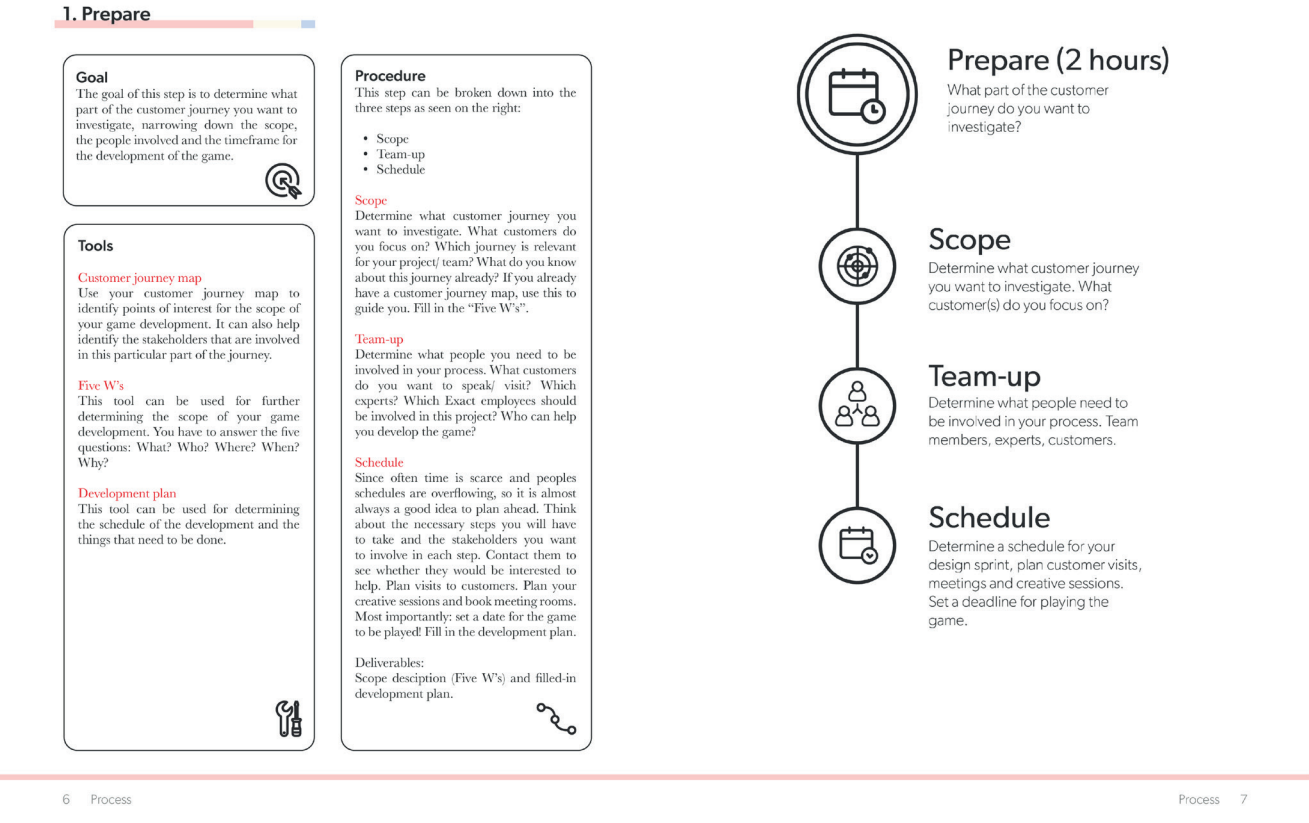


Figure 40: Step example page

Prepare

The goal of this step is to determine what part of the customer journey needs to be investigated, narrowing down the scope, the people involved and the timeframe for the development of the game. This step is broken down into three tasks: Scope, Team-up and Schedule.

Understand

The goal of this step is to gain deeper understanding of the customers experience, not only through what they say and do, but also what they feel and think. This will enable CJM to recreate this experience at Exact later. This step is broken down into three tasks: What, How and Why.

Develop

The goal of this step is to determine what key elements of the experience that was investigated

so far, needs to be incorporated into the game. This step is broken down into three tasks: Focus, Fill-in, Discuss.

Prototype

The goal of this step is to determine how the selected experience can be simulated at Exact. The details will be worked out into a prototype that is ready to play. This step is broken down into three tasks: Simulate, Work-out, Plan.

Play

The goal of this step is to finally play the game! This is done in order for Exact employees to gain deeper understanding of the customer, so that they are able to deliver improved user-centered design solutions. This step is broken down into three tasks: Experience, Evaluate, Share.

## Tools & Templates

For each step in the process tools & templates were created or selected to make it easier to execute the game development process (Figure 41). As this guide was designed as a very practical, hands-on solution, these tools & templates could not be missed. The tools and templates are provided in a zip. file along with the Game Development guide to the CJM team. For more details on the tools & templates please refer to the guide in Appendix H

## Application

The Game Development Guide was developed to facilitate gaining deeper customer insight by the CJM team and other Exact employees, enabling them to bring Customer Journey Management to the next level through the development of an interactive game. It should result in additional understanding of the customer outside of the traditional methods that are used for customer research at Exact. It is an addition to customer journey mapping practises as it puts the customers experience into practise, by stimulating participatory learning

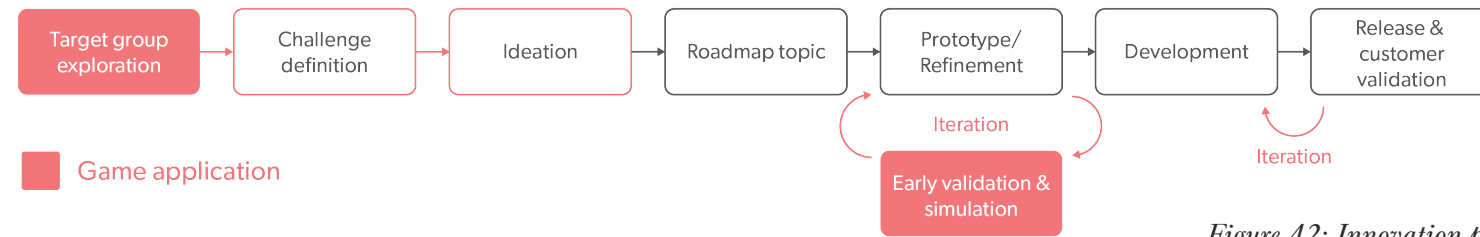


Figure 42: Innovation process

within Exact. This can lead to new customer understanding and can help transfer knowledge between employees more effectively. The guide is aimed at providing the tools and procedures necessary to reach this goal. The CJM team can use the insights they gain to represent the voice of the customer more effectively in the innovation process. This should lead to improved customer experiences and more mature customer journey management.

### When?

The game development guide can be used in two stages of the innovation process as seen in Figure 42. The main focus is, however, on the first stage (target group exploration) as this is where the first exploration towards deep user

insight should be done. Once the game has been developed in this stage, it can be re-used/ adapted as part of the prototype & refinement stage.

### Who?

This guide was designed specifically for the Customer Journey Management team but can be used by other employees with an interest in generating Deep Customer Insights (with their project teams) as well. The development process is designed to stimulate collaboration with different stakeholders, so working together is key for the success of the game! (Having some experience with facilitating creative sessions might be useful, if the choice is made to lead the development process)

## Conclusion

The final Game Development Guide turned out to be a practical step-by-step guide towards the development of customer insight games at Exact. It serves as the basis for bringing Exacts customer journey management to the next level by involving different stakeholders in- and outside of Exact, engaging them in creating a participatory learning environment. This way Exact will be able to better understand their customers, enabling them to design user-centered solutions that benefit their customers experiences and their end-to-end journeys. This will ensure that Exact will stay on top in the long run, giving them a sustainable competitive advantage over their competitors.

## Recommendations

As development never stops, this guide is yet to be fully optimised and implemented. After initial testing of the prototype, testing the full application of the guide into practise was unfortunately not possible within the scope of this project. This is where the CJM team will take over to further validate and implement the guides practises and the surrounding advice given in this report. Recommendations for further implementation:

- Test the guide within the CJM team once more and discuss it's applications.
- Define an approach for implementation: What elements can be implemented into our existing workflow? What projects are suited, who should be involved?
- CJM should be involved in the innovation process as soon as possible, so the games can be implemented as intended.
- Once a game has been successfully developed, try to play it with high level employees (such as management or C-level) to have them step in the customers shoes.



## Prepare

- Customer journey map
- Five W's
- Development plan



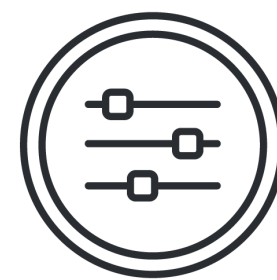
## Understand

- Storyboard/ scenario
- Diary study
- Contextual inquiry
- 5 Why's



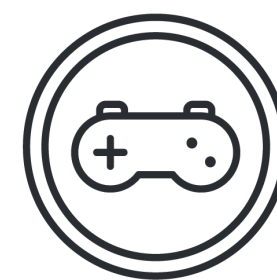
## Develop

- Empathy map
- Personas
- Game Design Canvas



## Prototype

- How might we?
- Game elements checklist



## Play

- Observations
- Questionnaire
- PrEmo

Figure 41: Tools & templates



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